



**DEPARTMENT OF THE AIR FORCE**  
**AIR FORCE CIVIL ENGINEER CENTER**

JAN 20 2014

MEMORANDUM FOR: U.S. Environmental Protection Agency – Region 2

Attn: Robert Morse  
Federal Facilities Section  
290 Broadway, 18<sup>th</sup> Floor  
New York, NY 10007-1866

New York State Department of  
Environmental Conservation  
Attn: Ms. Heather Bishop  
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New York State Department of Health  
Attn: Ms. Kristin Kulow  
Bureau of Environmental Exposure  
Investigation  
28 Hill Street, Suite 201  
Oneonta, NY 13820

FROM: AFCEC/CIBE - Griffiss  
Building 45  
706 Brooks Road  
Rome, New York 13441

SUBJECT: Final Site Closure Report; SS060 Building 35 Area of Concern  
Former Griffiss Air Force Base, Rome, New York  
Contract No. FA8903-10-D-8595, Delivery Order No. 0014  
January 2014

1. Enclosed is the “Final Site Closure Report for SS060 Building 35 Area of Concern”, for your review and comment. The draft report was submitted on November 1, 2013.
2. Request final concurrence that further sampling is not required and that the groundwater restriction “No water from the subsurface aquifer within the boundaries of the portions of the Property in .... SS-60, Buildings 35 and 36, as described and depicted in **Exhibit E** shall be extracted, utilized or consumed without prior written approval of the New York State Department of Health” be eliminated.
3. Request that final concurrence be provided by February 17, 2014.
4. Should you have any questions or concerns please contact me at 315 356 0810 ex 202.

MICHAEL F. MCDERMOTT  
Air Force Civil Engineer Center  
AFCEC/CIBE – Griffiss

Enclosures: As noted

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**FINAL  
SITE CLOSURE REPORT  
SS060 BUILDING 35 AREA OF CONCERN**

**FORMER GRIFFISS AIR FORCE BASE SITE  
ROME, NEW YORK**

*Prepared for:*



**Air Force Civil Engineer Center  
Building 45  
706 Brooks Road  
Rome, New York 13441**

*Prepared by:*

*FPM*

**FPM Remediations Inc.  
584 Phoenix Drive  
Rome, NY 13441**

*In association with:*

**CAPE<sup>SM</sup>**

**10901 Lowell Avenue, Suite 271  
Overland Park, Kansas 66210**

**Contract Number FA8903-10-D-8595/Delivery Order 0014**

**January 2014**

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## LIST OF ACRONYMS AND ABBREVIATIONS

<b>AFB</b>	Air Force Base
<b>AFCEC</b>	Air Force Civil Engineer Center
<b>AOC</b>	Area of Concern
<b>bgs</b>	below ground surface
<b>CAPE</b>	CAPE Environmental Management, Inc.
<b>COC</b>	Contaminant of Concern
<b>CQCR</b>	Chemical Quality Control Report
<b>DCE</b>	dichloroethylene/dichloroethene
<b>DRMO</b>	Defense Reutilization Marketing Office
<b>FPM</b>	FPM Remediations, Inc.
<b>ft</b>	feet
<b>HRC<sup>®</sup></b>	Hydrogen Release Compound
<b>HWSA</b>	Hazardous Waste Storage Area
<b>IRA</b>	Interim Remedial Action
<b>LTM</b>	long term monitoring
<b>LUC/ICs</b>	Land Use Control/ Institutional Controls
<b>MSL</b>	mean sea level
<b>µg/L</b>	micrograms per liter
<b>mg/L</b>	milligrams per liter
<b>NYSDEC</b>	New York State Department of Environmental Conservation
<b>OHM</b>	OHM Remediation Services Corporation
<b>PCB</b>	polychlorinated biphenyl
<b>ppm</b>	parts per million
<b>QAPP</b>	Quality Assurance Project Plan
<b>RCRA</b>	Resource Conservation and Recovery Act of 1976
<b>SS</b>	Spill Site
<b>SVOC</b>	semi-volatile organic compound
<b>TAGM</b>	Technical and Administrative Guidance Memorandum
<b>TOC</b>	total organic carbon

## LIST OF ACRONYMS AND ABBREVIATIONS (continued)

<b>USEPA</b>	United States Environmental Protection Agency
<b>VC</b>	Vinyl Chloride
<b>VOC</b>	volatile organic compound

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# 1 INTRODUCTION

FPM Remediations, Inc. (FPM), in association with CAPE Environmental Management, Inc. (CAPE), under contract with the Air Force Civil Engineer Center (AFCEC), conducted groundwater remediation and monitoring at Spill Site (SS)060 Building 35 Area of Concern (AOC) at the former Griffiss Air Force Base (AFB), New York (Figure 1-1). The SS060 Building 35 AOC is illustrated in Figure 1-2. The objective of the groundwater remediation and monitoring was to achieve site closure with restricted use. Site closure will include the removal of the site groundwater restriction; however, the nonresidential use restriction will remain in association with site soils.

This Site Closure Report describes the groundwater remediation conducted in December 2012 and provides the most recent annual groundwater monitoring data from June 2013. This report also includes a summary of previous groundwater remediation activities and LTM data. This work was conducted in accordance with the SS060 Building 35 AOC Optimization Plan (FPM/CAPE, July 2011).

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## 2 SS060 BUILDING 35 AOC

### 2.1 SITE LOCATION AND HISTORY

Building 35 was located in the southeast-central section of the base (Figure 1-2), near an area that was used for outside storage of drums and scrap material during the 1940s. An unknown quantity of drums and transformers were also stored in this area during the late 1960s and 1970s. Site closure was a requirement under the Building 35 Resource Conservation and Recovery Act (RCRA) Hazardous Waste Storage permit and the closure activities were performed in the late 1990s (OHM Remediation Services Corporation [OHM], July 1997).

The former Hazardous Waste Storage Area (HWSA) was located in the southwest corner of Building 35 and had dimensions of approximately 30 feet (ft) by 50 ft, or 1,500 square ft. Although a hazardous waste inventory is not available for the area, the area was assumed to contain waste associated with aircraft maintenance activities such as corrosion control painting, degreasing, and routine engine, wheel and tire services. There is no record of any spills at the HWSA.

The former polychlorinated biphenyl (PCB) storage area was located in the northwest corner of Building 35 and had approximate dimensions of 37 ft by 46 ft (1,702 square ft). Inspection reports indicate that PCB-containing items were stored in the area since at least 1985. A spill in the PCB area was recorded on October 25, 1991, when approximately one quart of transformer oil leaked from a damaged terminal to part of a wooden pallet and a 2-inch diameter area on the concrete floor. The oil was tested and was reported below 5 parts per million (ppm) PCBs. Base records also indicate that a small PCB spill occurred on March 16, 1995. This spill reportedly occurred when a PCB-containing transformer was moved from the containment area within Building 35. The spill area, approximately 20 square ft in area, was properly remediated.

### 2.2 HYDROGEOLOGICAL SETTING

The Building 35 complex covered an approximate 1 acre area and is now utilized as a parking lot for Birnie Bus Service, Inc. The site has a topographic relief of 3 to 4 ft. The soils are predominantly composed of silty, fine to coarse sands with gravel. Surface water drainage from the site enters a shallow drainage swale, which leads southerly to a culvert drainage ditch informally referred to as Rainbow Creek, and ultimately flows east to Six Mile Creek.

During the Building 35 RCRA closure activities, groundwater elevations were recorded in May and July 1998. The depth to groundwater was approximately 6.9 to 7.2 ft below ground surface (bgs) [approximately 456.4 – 456.1 ft mean sea level (MSL)]. Groundwater contours interpreted from ground water elevation data collected show the groundwater flow direction to be northeast in 1998 (OHM, April 2000). This groundwater flow direction was confirmed during the subsequent March 2002, March 2003, and June 2004 sampling rounds.

It was noted in the reports from the April 2010 sampling event that monitoring well B035MW-4 water level measurement could not be obtained due to riser deformation. The well riser was hit by a snowplow during the winter season, which bent the riser. The riser was excavated and the

well head was reconstructed as a flush mount. The three remaining wells at the site were also reconstructed as flush mounts when the parking lot was paved for use as a bus storage lot for the building tenant, Birnie Bus services. All monitoring wells (B035MW-1, -2, -3, -4) at the site were resurveyed on July 13, 2010, and depth to groundwater was also measured on this date. The groundwater flow changed from previous sampling events where the hydraulic gradient was minimal with a general southerly flow. Monitoring Well B035MW-4 exhibited recharge from two adjacent 48-inch storm drains. Therefore the hydraulic grade at this point was the highest. Also, the other wells are in a paved parking lot allowing for minimum infiltration from surface water runoff. The depths to groundwater were measured on June 26, 2012 at monitoring wells B035MW-1, -2, -3, and -4. The mean depth was 6.0 ft bgs.

## 2.3 SUMMARY OF PREVIOUS INVESTIGATIONS

Closure activities for the HWSA and PCB areas in association with RCRA New York State Department of Environmental Conservation (NYSDEC) Permit #6-3-13-00063/00020-0 were conducted by OHM in 1996 in accordance with Closure Plans approved by the NYSDEC in 1995. The Closure Plans were designed to ensure that the Building 35 storage areas would require no further maintenance after clean closure, and threats to human health and the environment would be minimized or eliminated. The closure activities included the collection of pre-closure wipe samples from each storage area and surface soil samples (0 to 1 ft bgs) from the outside perimeter of the building. Twelve surface soil samples were analyzed for PCBs, and all twelve samples indicated elevated concentrations of PCBs above the recommended action level of 1 ppm (OHM, July 1997).

An extensive soil investigation was conducted from January to March 1997 to delineate the extent of contaminated soil in the vicinity of Building 35 that were above the cleanup levels, which were established at 1 ppm in surface soil and 10 ppm in subsurface soil to meet United States Environmental Protection Agency (USEPA) and NYSDEC guidelines. A total of 140 Geoprobe<sup>®</sup> borings were installed in both the surface and subsurface soils surrounding Building 35, including three borings advanced underneath the building floor. Soil samples were analyzed for total PCBs in the field using a gas chromatograph with an electron capture detector. In addition, eight groundwater samples were collected during the Geoprobe<sup>®</sup> activities, and were analyzed for total PCBs, Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), pesticides, and metals (OHM, July 1997).

Results indicated widespread PCB contamination throughout the subsurface soils and also indicated possible groundwater contamination. Soil detections for PCBs ranged from non-detectable levels to 3,079 ppm. Several hot spots were identified during the investigation, with PCB concentrations recorded above regulatory action levels at a depth interval of 6 to 7 ft bgs. No correlation was found between PCB concentration and sample depth or between PCB concentration and distance from the building, indicating that the contamination may have been due to numerous sources, or the result of using imported fill at the site which potentially contained PCBs (OHM, July 1997).

Of the eight groundwater samples collected, seven indicated PCB concentrations above the PCB action level (0.1 micrograms per liter [ $\mu\text{g/L}$ ]). The highest total PCB concentration (210  $\mu\text{g/L}$ )

was reported from sample B035-GW05, located near the southeast corner of Building 35. No VOCs or SVOCs were detected above regulatory action levels. Two pesticides, dieldrin and endrin, and several metals were detected at concentrations above action levels. Two chlorinated VOCs, total 1,2-dichloroethylene (DCE) at 5 µg/L, and vinyl chloride (VC) at 1 µg/L, were also reported above detection limits at B035-GW07. Results indicated that previous waste storage activities had potentially impacted the local groundwater conditions, but were inconclusive as the Geoprobe® samples collected were characterized with high suspended solids content, which is associated with higher concentrations of pesticides and metals due to the adsorption of these contaminants to fine particulates (OHM, July 1997).

An Interim Remedial Action was conducted in 1997 at the adjacent Defense Reutilization Marketing Office (DRMO) Area. The interim remedial action was performed to excavate, transport, and dispose of PCB-contaminated soil and debris, and backfill the area with clean soil. Building 35 was also demolished during this action. Following excavation at the DRMO Area, 30 confirmatory samples were collected using a sampling grid system comprised of 18 grid cells. Two of the 18 grids had PCB exceedances. One additional round of soil excavation occurred; where in total, 32 confirmatory samples were collected. Confirmatory samples were compared to state recommended cleanup levels from the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046. All values were reported in Table 3.1-2 DRMO Area Confirmatory Sample Results Summary of Positive Hits and Validation Qualifiers, Appendix E of the Closeout Report Interim Remedial Action (IRA) DRMO Area (IT, May 1999). A total of 5,318 tons of nonhazardous PCB-contaminated soil/concrete was removed from the DRMO Area during the IRA.

In Spring 1998, OHM installed four groundwater monitoring wells within the Building 35 area to characterize groundwater conditions and to determine the local groundwater flow direction. B035MW-4 is located near the intersection of two storm drains within the site boundaries – two 48-inch storm drains running from the northwest to the southeast near the northeast corner of the former Building 35 footprint and one 30-inch drain running perpendicular from the southwest to the two 48-inch drains – to assess any impacts the storm drains might have on groundwater flow. B035MW-3 is located near the highest concentration of PCBs detected in the soil samples, which was the same location with the highest PCB concentration in groundwater samples collected with the Geoprobe®. B035MW-1 and -2 are located north and southwest of Building 35, respectively. The total depth of each well is approximately 14 ft bgs. These wells are the current wells that have been monitored throughout site long term monitoring (LTM) activities.

Two groundwater monitoring rounds were conducted in May and July 1998, when samples were submitted for PCBs, VOCs, SVOCs, pesticides, and metals analyses. Results indicated two VOCs – VC and total 1,2-DCE (including both the cis- and trans- isomers) – at levels above NYS Class GA Groundwater Standards in B035MW-4; total 1,2-DCE only was reported above the NYS Class GA Groundwater Standard in B035MW-3 (8 µg/L). Concentrations were reported up to 6 µg/L and 42 µg/L for vinyl chloride and 1,2-DCE, respectively, both in B035MW-4. No PCBs were reported above the detection limit during either sampling round (1 µg/L [2 µg/L for aroclor 1221] for May 1998 and 0.06 µg/L for July 1998) (OHM, April 2000).

In addition, during the two groundwater sampling rounds, several metals were reported at levels above NYS Class GA Groundwater Standards, including iron, manganese, sodium, lead, antimony, copper, zinc, chromium, arsenic, and thallium. Samples were collected using a disposable bailer and were submitted as unfiltered groundwater samples for total metals analysis.

In accordance with the closure requirements under the RCRA Permit for Building 35, threats to human health and the environment have been minimized or eliminated (i.e., source areas have been removed). In addition, Land Use Control/Institutional Controls (LUC/ICs) were implemented at the site (OHM, April 2000). Closure under the RCRA Permit was approved by the NYSDEC in a letter dated December 8, 1999. The LUC/ICs are inspected annually and reported in a separate report. Additionally, groundwater monitoring was implemented at the site in 2002 as part of the On-Base Groundwater AOCs.

## **2.4 LONG TERM MONITORING – 2002 TO 2012**

FPM performed annual Long Term Monitoring in March 2002, March 2003, June 2004, March 2005, March 2006, April 2007, April 2008, March 2009, April 2010, June 2011, and June 2012. From March 2002 to June 2004, the groundwater at the Building 35 site was monitored for VOCs [SW8260 AFCEE Quality Assurance Project Plan (QAPP) 3.1 List], SVOCs (SW8270 AFCEE QAPP 3.1 List), and total and dissolved metals (SW6010 AFCEE QAPP 3.1 List plus lead and mercury) at monitoring wells B035MW-1, -2, -3, and -4. The Building 35 AOC monitoring well locations are illustrated on Figure 2-1. VOC concentrations were detected above NYS Class GA Groundwater Standards at only B035MW-4. No SVOCs were detected. Total metals analysis was performed on groundwater that contained suspended solids and dissolved metals analysis was performed on the groundwater after filtration removed the suspended solids. SVOC and metals analysis were discontinued after June 2004. Because of analytical trends from 2002 to 2004, the Revised On-Base Groundwater Report (FPM, November 2004) recommended that future sampling events include only well B035MW04, and include only VOC analysis. Analyses for alkalinity, chloride, nitrate, sulfate, and total organic carbon (TOC) were also performed to evaluate groundwater chemistry starting in 2008.

### Historical VOC Results:

The March 2002 through March 2009 VOC results indicated one exceedance. cis-1,2-DCE concentrations ranged from 7.8 µg/L to 32 µg/L. The NYS Class GA Groundwater Standard for cis-1,2-DCE is 5 µg/L. The historical cis-1,2-DCE concentration trends for all monitoring wells at the site are illustrated on Figure 2-2.

The April 2010, June 2011, and June 2012 VOC results indicated two exceedances. The two exceedances included cis-1,2-DCE and vinyl chloride. The cis-1,2-DCE concentrations ranged from 8.7 µg/L to 15 µg/L and the VC concentrations ranged from 3.03 µg/L to 4.5 µg/L. The NYS Class GA Groundwater Standard for VC is 2 µg/L. The historical VC concentration trends for all monitoring wells at the site are illustrated on Figure 2-3.

## 2.5 GROUNDWATER REMEDIATION

Based on LTM sampling results, direct injection of remedial compounds was performed to remediate contaminant of concern (COCs). The purpose of the direct injection activities is to degrade and remediate the chlorinated hydrocarbon plume. The following describes the four injection events conducted at the site.

Injection 1: Hydrogen Release Compound (HRC<sup>®</sup>) releases lactic acid for fermentation by microorganisms producing hydrogen as an electron donor. Hydrogen then degrades chlorinated hydrocarbons. HRC<sup>®</sup> was injected in December 2005 in a 50-ft wall with five injection points. HRC<sup>®</sup> was injected from 10 to 20 ft bgs at a rate of eight pounds of product per foot at each of the injection points.

Injection 2: HRC<sup>®</sup> was injected in August 2006 in two 50-ft walls with five injection points. HRC<sup>®</sup> was injected from 10 to 20 ft bgs at a rate of eight pounds of product per foot.

Injection 3: Newman Zone<sup>®</sup> releases emulsified vegetable oil for fermentation by microorganisms producing hydrogen as an electron donor. Hydrogen then degrades chlorinated hydrocarbons. Newman Zone<sup>®</sup> was injected at two percent solution in December 2008 in monitoring well B035MW-4. 1,000 pounds of product was injected.

Injection 4: 640 pounds of Newman Zone<sup>®</sup> was injected at four injection points on July 6 and 7, 2011 in accordance with the Draft-Final SS060 Building 35 AOC Optimization Plan (FPM/CAPE, July 2011). The injection points are illustrated on Figure 2-1. Newman Zone<sup>®</sup> solution (two percent solution) was injected at the injection points positioned in a 15-foot arc southwest of B035MW-4 in 1-foot intervals from 8 to 16 ft bgs. The Newman Zone<sup>®</sup> solution for each injection point consisted of 16 gallons of Newman Zone<sup>®</sup> to 984 gallons of water.

Injection 5: 1,000 pounds of Newman Zone<sup>®</sup> was injected at five injection points on December 18<sup>th</sup>, 19<sup>th</sup>, and 20<sup>th</sup>, 2012. The injection points are illustrated on Figure 2-1. The Newman Zone<sup>®</sup> was dissolved in water at a 2% solution. The injections were performed from 8 to 16 ft bgs at each location. Appendix A includes the field notes and field photos from the injection event. Appendix A also includes the Authorization to Injection from the USEPA Groundwater Compliance Section.

## 2.6 GROUNDWATER MONITORING - 2013

Groundwater samples were collected from B035MW-4 and analyzed for the VOCs as identified during previous investigations in June 2013. Both existing data and the information from new sampling are utilized for overall performance evaluation. Sample collection and analysis was conducted in accordance with the Updated 2013 Uniform Federal Policy Quality Assurance Project Plan (UFP QAPP) for Performance Based-Remediation at the Former Griffiss AFB (CAPE/FPM, May 2013).

Daily Chemical Quality Control Reports (CQCRs) completed during the June 2013 sampling round are provided in Appendix B. The complete list of analytes and the validated laboratory

data are attached in Appendix C and the raw laboratory data are available in Appendix D. The analytical results for compounds detected in the groundwater at the SS060 Building 35 AOC are shown in Table 2-1.

#### June 2013:

Monitoring well B035MW-4 was sampled on June 25, 2013. Analyses were performed for VOCs, alkalinity, chloride, nitrate, sulfate, and total organic carbon (TOC) to evaluate groundwater chemistry.

Analytical results indicated that VC slightly exceeded the NYS Class GA Groundwater Standard with a concentration of 3.7 µg/L. Cis-1,2-DCE was detected but at 2.6 µg/L which is below the NYS Class GA Groundwater Standard.

Groundwater chemistry results indicated an increase in chloride concentration from 60 milligram per liter (mg/L) in June 2012 to 230 mg/L in June 2013. Sulfate also decreased from 16 mg/L in June 2012 to 2.9 J mg/L in June 2013, and TOC increased from 1.2 mg/L in June 2012 to 2.3 mg/L in June 2013. The J data qualifier indicated that the detection is an estimation. cis-1,2-DCE and VC concentration trends for LTM results at B035MW-4 are illustrated on Figure 2-4.

## **2.7 CONCLUSIONS**

LTM results indicate that remedial actions completed for groundwater have removed contaminant mass and reduced contaminant concentrations at the SS060 Building 35 AOC. At present, cis-1,2-DCE is below the NYS Groundwater Standard. VC, a by-product of the dechlorination of cis-1,2-DCE, has decreased since the 2012 sampling event and is within one order of magnitude of the NYS Groundwater Standard at B035MW-4. VOC results for the June 2013 sampling round indicate that the 2012 Newman Zone<sup>®</sup> injection has continued to promote enhanced biological breakdown of chlorinated hydrocarbons. Reductive dechlorination is exhibited by the decrease of cis-1,2-DCE.

## **2.8 RECOMMENDATIONS**

No further sampling and removal of the groundwater restriction are recommended for the SS060 Building 35 AOC. Restrictions will remain at the site as a result of soil chemical concentrations above residential use criteria (below industrial/commercial use criteria), however, the groundwater restriction is not warranted given that the target contamination (cis-1,2-DCE) has declined below NYS Groundwater Standard while the breakdown contamination (VC) is declining and within one order of magnitude of the NYS Groundwater Standard. The soil restrictions will continue to be monitored in association with the former Griffiss AFB LUC/IC Site program. Following the approval of no further sampling, all monitoring wells will be decommissioned in accordance with NYSDEC protocol.



### 3 REFERENCES

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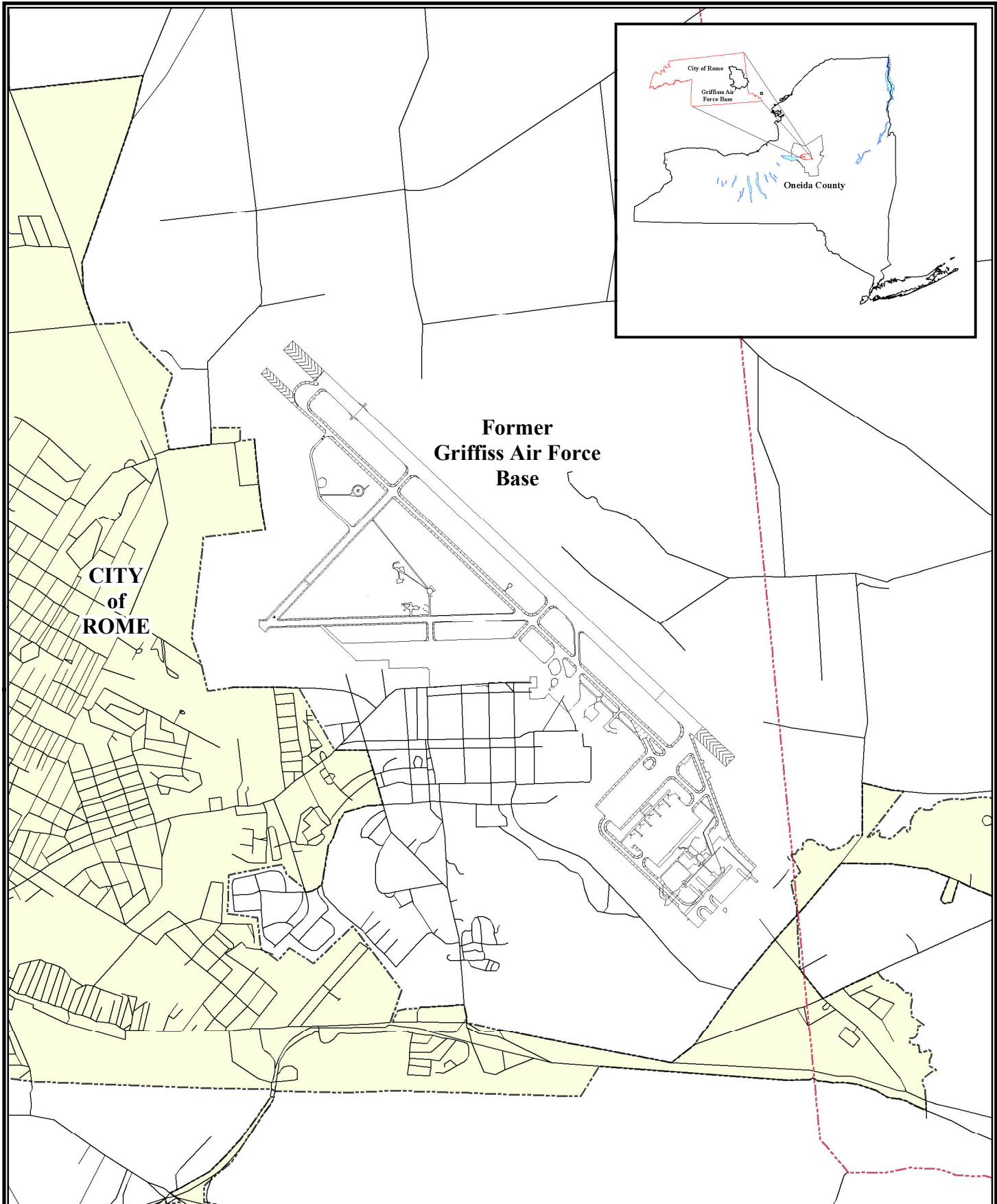
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IT Corporation, Final Closure Report, Interim Remedial Action, Building 35 Area, former Griffiss Air Force Base, Rome, New York, May 1999.

OHM Remediation Services Corporation, Remedial Investigation Results and Action Plan for the Building 35 and 36 Closure Area at the former Griffiss Air Force Base, Rome, New York, July 1997.

OHM Remediation Services Corporation, Final Building 35 Closure Report, former Griffiss Air Force Base, Rome, New York, April 2000.

## Figures



**FIGURE 1-1**  
**Base Location Map**

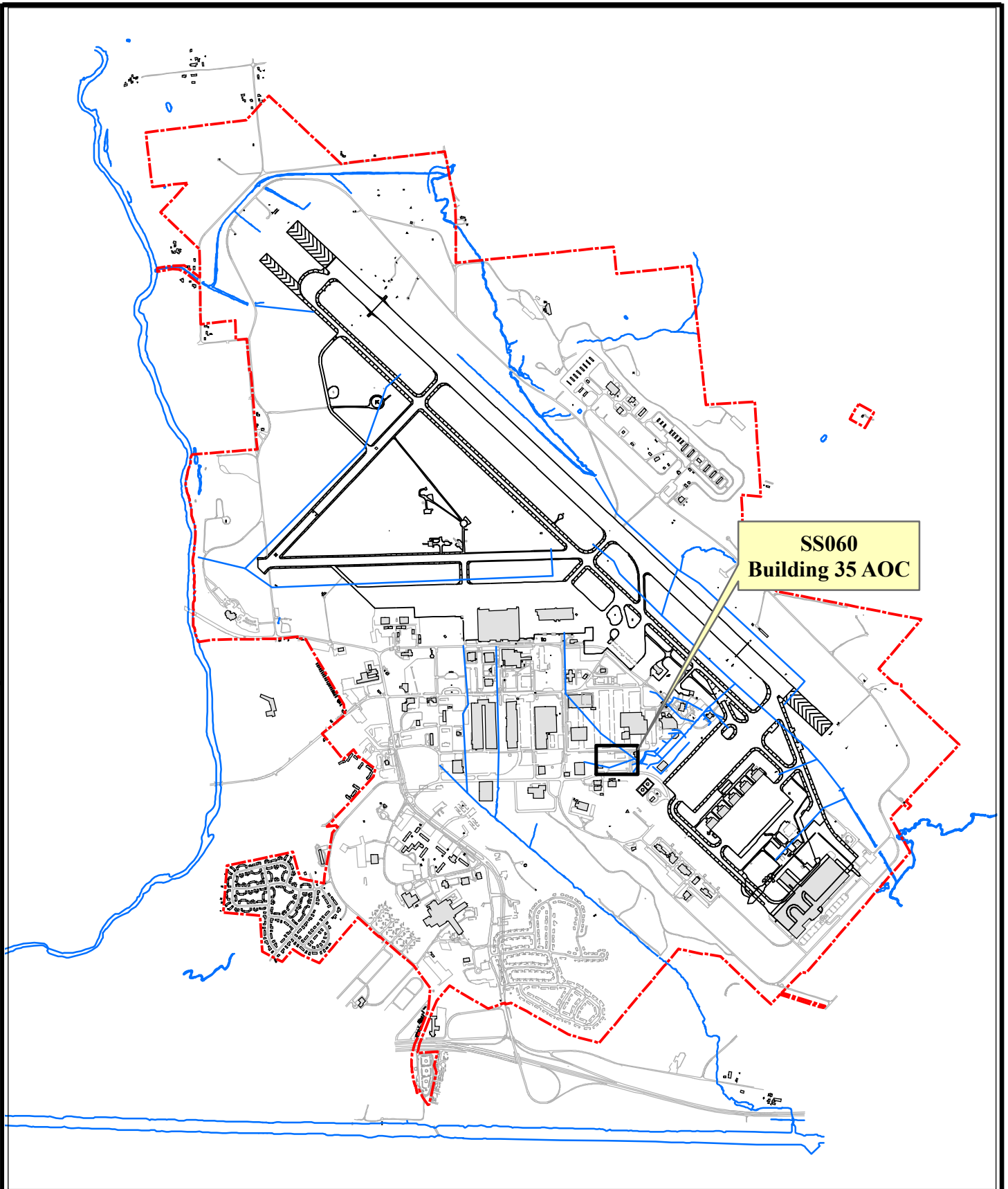


**UNITED STATES AIR FORCE**  
**GRIFFISS AIR FORCE BASE**  
**ROME, NEW YORK**

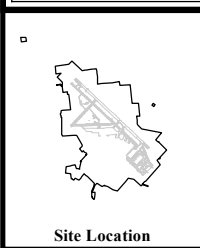


**FPM** Remediations, Inc

**CAPE**

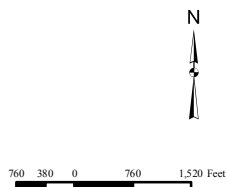


**SS060  
Building 35 AOC**



**Legend**

- - - Boundary
- Hydro
- Airfield
- Road
- Existing
- Demolished



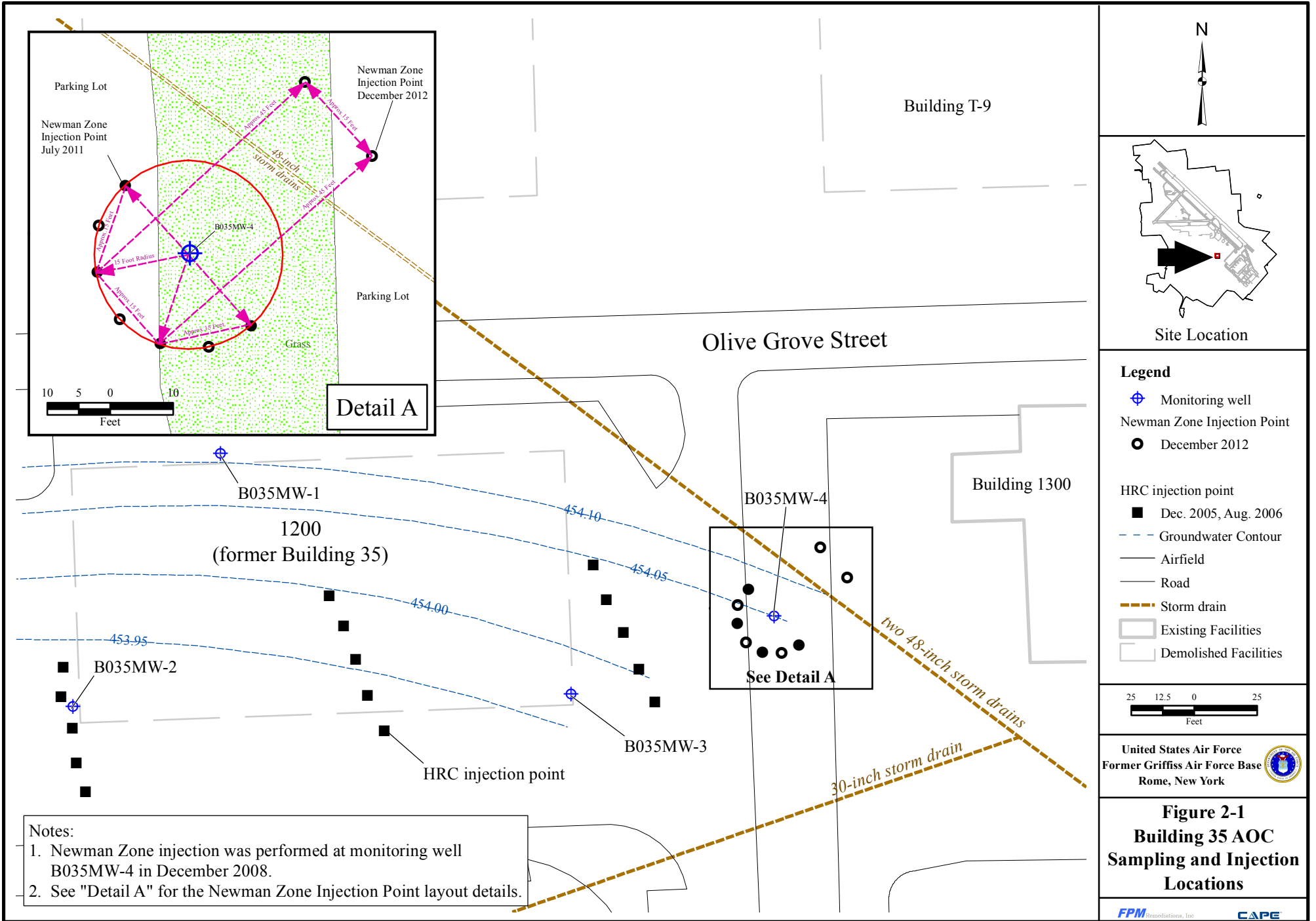
United States Air Force  
Former Griffiss Air Force Base  
Rome, New York



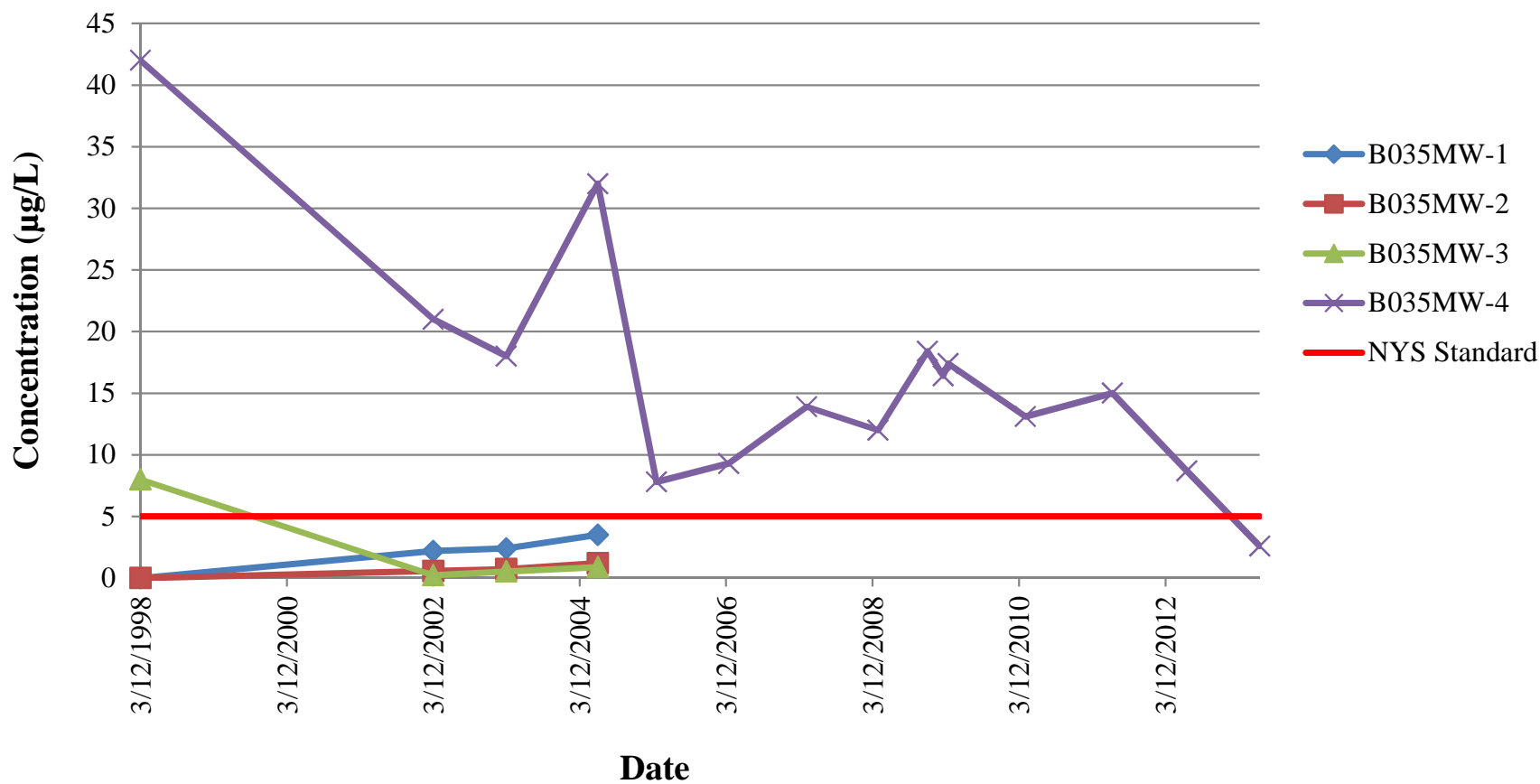
**Figure 1-2  
SS060 Building 35 AOC  
Location Map**

FPM Remediations, Inc.

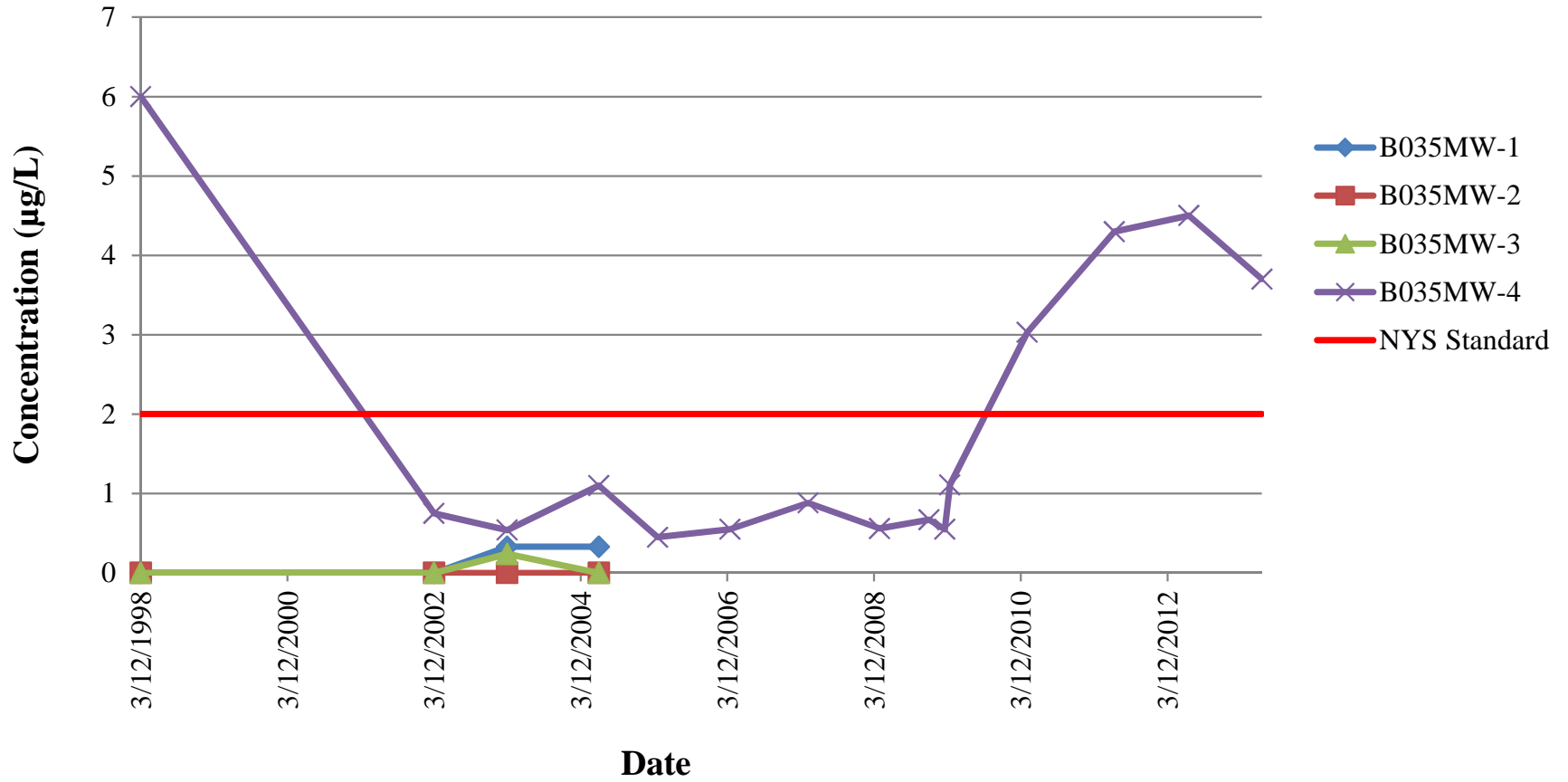
CAPE



**Figure 2-2**  
**SS060 Building 35 AOC**  
**cis-1,2-DCE Concentration Trends**

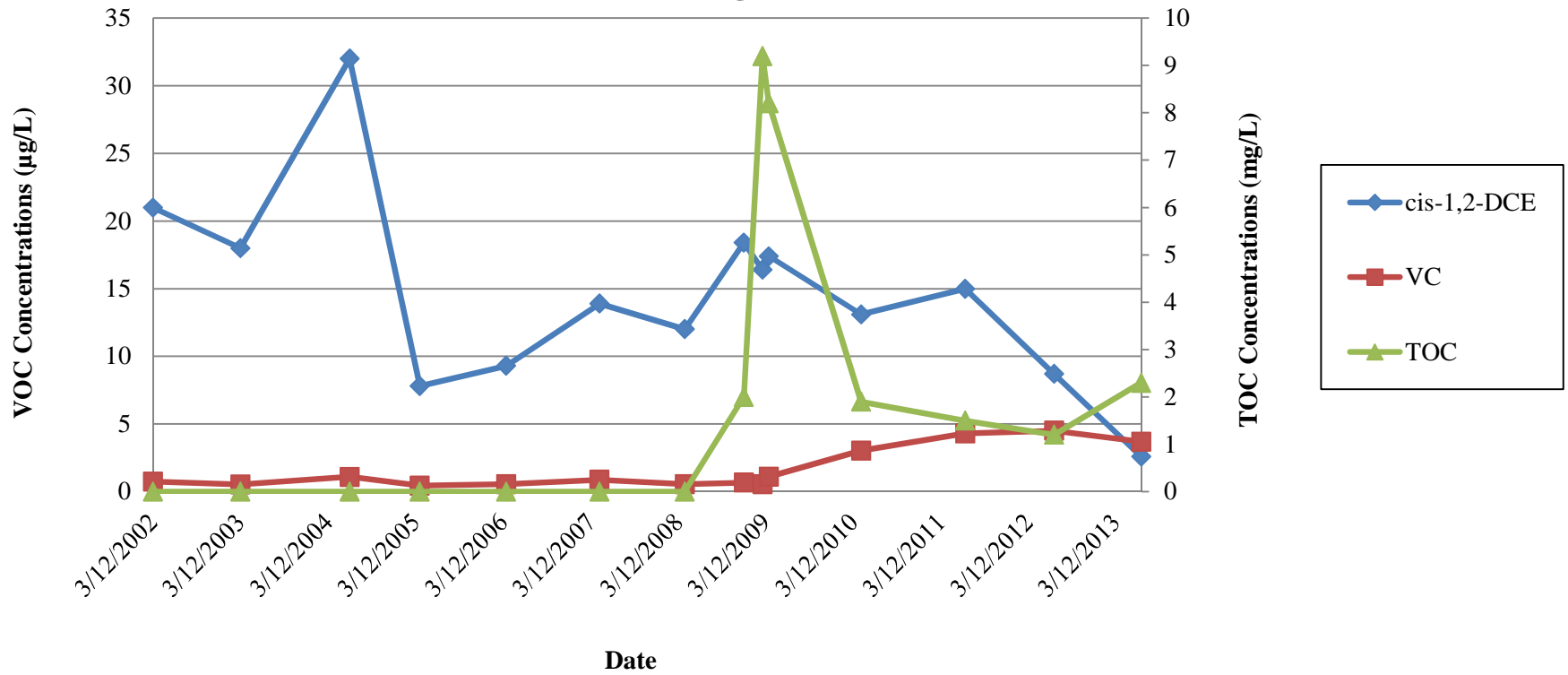


**Figure 2-3**  
**SS060 Building 35 AOC**  
**Vinyl Chloride Concentration Trends**





**Figure 2-4**  
**cis-1,2-DCE and VC Concentration Trends**  
**at Monitoring Well B035MW-4**



## **Tables**

**Table 2-1  
Building 35 AOC Groundwater Sampling Results**

<b>Sample Location</b>	<b>NYSDEC Class GA Groundwater Standards and Guidances (µg/L)</b>	<b>B035MW-1</b>			<b>B035MW-2</b>		
<b>Sample ID</b>		<b>B035M0115AA</b>	<b>B03M0115BA</b>	<b>B035M0115CA</b>	<b>B035M0215AA</b>	<b>B03M0215BA</b>	<b>B035M0215CA</b>
<b>Date of Collection</b>		<b>3/12/2002</b>	<b>3/11/2003</b>	<b>6/9/2004</b>	<b>3/12/2002</b>	<b>3/11/2003</b>	<b>6/9/2004</b>
<b>Sample Depth (ft TOIC)</b>		<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>
<b>VOCs (µg/L)</b>							
acetone	5	U	U	U	U	U	1.4 F
cis-1,2-dichloroethylene	5	2.2	2.4	3.5	0.58	0.73	1.2
tetrachloroethylene (PCE)	5	U	U	U	U	U	U
trans-1,2-dichloroethylene	5	U	U	U	U	U	U
trichloroethylene (TCE)	5	0.48 F	0.48 F	0.82 F	0.48 F	0.33 F	U
vinyl chloride	2	U	0.33 F	0.33 F	U	U	U
<b>Wet Chemistry Data (mg/L)</b>							
Alkalinity	--	N/S	N/S	N/S	N/S	N/S	N/S
Chloride	250	N/S	N/S	N/S	N/S	N/S	N/S
Nitrogen, Nitrate	10	N/S	N/S	N/S	N/S	N/S	N/S
Sulfate	250	N/S	N/S	N/S	N/S	N/S	N/S
TOC	--	N/S	N/S	N/S	N/S	N/S	N/S

**Table 2-1  
Building 35 AOC Groundwater Sampling Results**

<b>Sample Location</b>	<b>NYSDEC Class GA Groundwater Standards and Guidances (µg/L)</b>	<b>B035MW-3</b>		
<b>Sample ID</b>		<b>B035M0315AA</b>	<b>B03M0315BA</b>	<b>B035M0315CA</b>
<b>Date of Collection</b>		<b>3/12/2002</b>	<b>3/11/2003</b>	<b>6/9/2004</b>
<b>Sample Depth (ft TOIC)</b>		<b>15</b>	<b>15</b>	<b>15</b>
<b>VOCs (µg/L)</b>				
acetone	5	U	U	U
cis-1,2-dichloroethylene	5	0.23 F	0.54 ^	0.88 F
tetrachloroethylene (PCE)	5	U	U	U
trans-1,2-dichloroethylene	5	U	U	U
trichloroethylene (TCE)	5	U	U	U
vinyl chloride	2	U	0.24 F ^	U
<b>Wet Chemistry Data (mg/L)</b>				
Alkalinity	--	N/S	N/S	N/S
Chloride	250	N/S	N/S	N/S
Nitrogen, Nitrate	10	N/S	N/S	N/S
Sulfate	250	N/S	N/S	N/S
TOC	--	N/S	N/S	N/S



**Table 2-1  
Building 35 AOC Groundwater Sampling Results**

Sample Location	NYSDEC Class GA Groundwater Standards and Guidances (µg/L)	B035MW-4						
Sample ID		B035M0416HA <>	B035M0416GB <>	B035M0416HA	B035M0416IA	B035M0416JA	B035M0411KA	B035M0409LA
Date of Collection		12/10/2008	2/26/2009	3/24/2009	4/13/2010	6/21/2011	6/26/2012	6/25/2013
Sample Depth (ft TOIC)		16	16	16	16	11	11	9
VOCs (µg/L)								
acetone	5	N/A	N/A	N/A	N/A	U	U	N/A
cis-1,2-dichloroethylene	5	18.4	16.4	17.4	13.1	15	8.7	2.6
tetrachloroethylene (PCE)	5	0.52 F	0.59 F	0.62 F	0.21 F	U	U	U
trans-1,2-dichloroethylene	5	0.36 F	0.4 F	0.38 F	0.46 F	0.52 F	0.32 J	0.35 J
trichloroethylene (TCE)	5	0.45 F	0.51 F	0.52 F	0.39 F	0.38 F	0.25 J	0.22 J
vinyl chloride	2	0.67 F	0.55 F	1.11	3.03	4.3	4.5	3.7
Wet Chemistry Data (mg/L)								
Alkalinity	--	280	290	280	270	210	210	240
Chloride	250	2.4	60 J	73	96	230	60	230
Nitrogen, Nitrate	10	U	U	U	U	U	U	U
Sulfate	250	13	1.4	2.7	11	14	16	2.9 J
TOC	--	2.0	9.2	8.2	1.9	1.5	1.2	2.3

## Data Qualifiers and Table Notes

Qualifier/Table Note	Definition
F	The Analyte was detected above the method detection limit but below the reporting limit.
ft	Feet
J	The Analyte was positively identified; the quantitation is an estimation.
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter
N/A	not analyzed
N/S	not sampled
TOIC	Top of Inner Casing
U	The Analyte was analyzed for, but not detected.
--	Indicates no NYS Class GA Groundwater Standard.
^	Concentrations are from duplicate sample, which was greater than the primary sample.
◇	Sample was not included in the annual sampling round, sample was collected to monitor groundwater before and after Newman Zone <sup>®</sup> injections.
<b>X</b>	Bold and red indicates an exceedance of the NYS Class GA Groundwater Standards.

## **Appendix A**



Location 1015-11-01 B35 Date 12/18/12

Project / Client B35 Injections  
Rain / 40°F0830 arrive @ FPM  
meet Zebra Env. @ site.0900 water dept arrives to  
open fire hydrant.  
zebra sets up on first  
up gradient point - hand  
auger to 5 ft.0930 B035MW-4  
TOIC - 6.29 ft bgs1000 zebra advances w) Geoprobe  
to 16 ft bgs.0.625 bucket per Foot  
 $5 \text{ gal} \times 0.625 = 3.125 \text{ gal / Foot}$   
of Newman zone.

$$\frac{3 \text{ gal}}{0.02} = \frac{x}{0.98} \quad x = 147 \text{ gals}$$

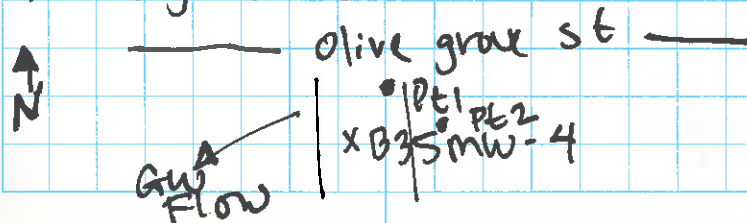
Apprx 150 gals / Foot.

350 gal tank, plus 1 1/4 pails  
Newman zoneLocation 1015-11-01 B35 Date 12/18/12<sup>83</sup>Project / Client B35 Injections  
Rain / 40°Fset up to  
1040 start injection  
into pt #1zebra sets up on  
up gradient pt #2.  
Advances through asphalt.  
move Geoprobe back to pt. 1 for1100 use 300 gal tank inject.  
with trash pump for  
shear mixing of Newman  
zone and water.Inject through double diaphragm  
pump. From 16 - 8 ft bgs

pump rate 12 gal / min

1230 Lunch

1245 B35MW-4 TOIC - 6.29 ft bgs

1300 move Geoprobe pt. 2  
for injections.

Location 105-11-01 B35 Date 12/18/12

Project / Client B35 Injections  
Rain / 40°F

- 1515 pump rate is 14 gal/min  
(16-8ft) on last 1 foot interval  
② 2% Newman Zone  $\approx$  150 gal/ft
- 1530 Water dept shut  
OFF hydrant.
- 1545 B035MW-4 TOL = 6.20 ft  
bsp  
(product reached well)
- 1600 pack up equipment
- 1700 end of day

12-18-12

LPM

Location 1015-11-01 B35 Date 12/19/12 85

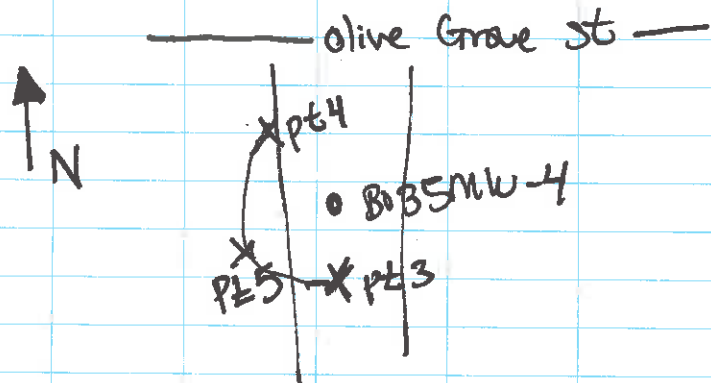
Project / Client B35 Injections Overcast / 40°F

- 0800 Arrive @ FPM, meet Zebra em.  
at site
- 0810 Water dept. arrives and turns on  
hydrant
- 0830 B035MW-4  
TOIC - 6.24 ft. bgs
- 0845 Zebra set up Geoprobe on  
downgradient pt. 3 post  
hand auger to 5 ft  
Flow rate: 9 gpm  
② 2% Newman Zone  $\approx$  150 gal/ft  
inject 16 - 8 ft bgs
- 1100 B035MW-4  
TOIC - 6.18 ft. bgs
- 1105 Moved to downgradient pt. 4  
Post hand auger to 5 ft.
- 1130 Flow rate: 9 gpm  
inject 16 - 8 ft bgs
- 1400 B035MW-4  
TOIC - 6.18 ft. bgs

Location 1015-11-01 B35 Date 12/19/12

Project / Client B35 Injections

1405 Moved to downgradient pt. 5  
 advance through asphalt  
 hand clear to 5 ft bgs  
 advance to 16 ft  
 pump rate 7.7 gpm  
 inject 16 to 8 ft bgs



Zebra informs pump rate slow  
 down due to slower delivery  
 in the subsurface. injected  
 4/ out of 5 pails. Return  
 tomorrow to inject last  
 Pail approx 2 feet (9 to 8 ft).

B035MW-4 TOIC - 6.16 ft

Location 1015-11-01 B35 Date 12/19/12 87

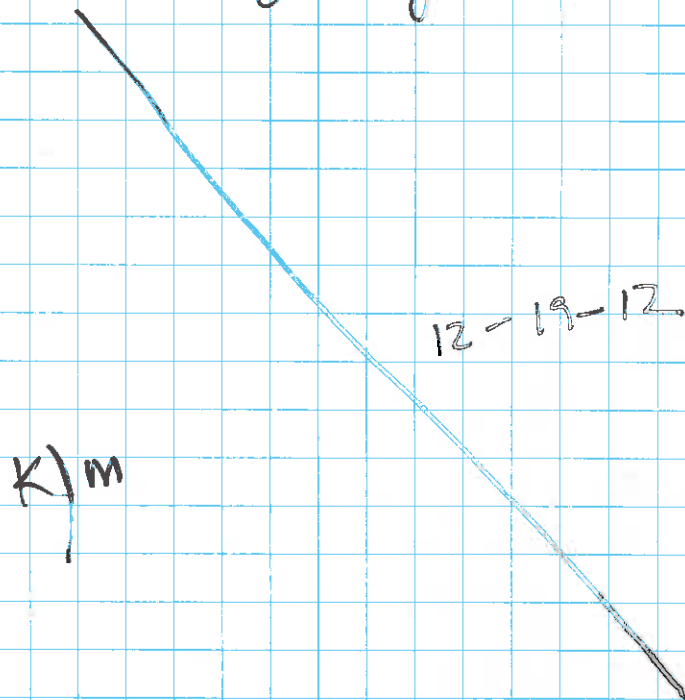
Project / Client B35 Injections

1430 water dept. shuts  
 off hydrant.

1445 pack equipments.

1500 Return to office

1700 end of day.



Location 1015-11-01 B35 Date 12-20-12  
 Project / Client B35 Injections / B150 soil sample.

0800 Arrive @ FPM, meet Zebra @ site  
 0810 Water dept. turns on hydrant

0830 B035 MW-4  
 TOIC - 6.29 ft. lgs

0845 set up on pt # 5 to  
 Finish last 2 intervals (7-8 ft)  
 pump rate = 12.5 gpm.

0930 B035 MW-4  
 TOIC - 6.29 ft lgs

complete injection event.

1000 mob to office to  
 get supplies for B150  
 soil sample @ GP-7

1005 122012AR Trip blank

1010 calibrate PID  
 Fresh air

1015 122012AF Ambient blank

1020 122012AB equipments blank  
 (glove)

Location B150 site Date 12/20/12 89  
 Project / Client soil sample

DEPTH	Recovery	PID (PPM)	soil identification
0-5	2.5'	25	1' C-F sand & silt cobles 2' concrete cuttings 3-5' brown clay w/ trace silty sands
5-10	2.5'	4.2	5-7' clay w/ gravel (moist) 7-10' silty sands w/ cobbles
10-15	2.5'	38.6	10-12' moist silty sand w/ gravel 12-15' silty sands w/ trace clay (38.6 ppm)

1030 sample 150SS07B12BA

1100 Pack equipment, Return to

FPM. ab day 12/20/12



Water Source



Newman Zone Slurry Mixture



Injection Point Installation



Newman Zone Injection



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2  
290 BROADWAY  
NEW YORK, NY 10007-1866

DEC 19 2012

Katrina Mattice, EIT  
FPM Remediations, Inc.  
584 Phoenix Drive  
Rome, NY 13441

Re: Underground Injection Control (UIC) Program Regulation  
Former Griffiss Airforce Base Building 35 (**Reference UICID: 13NY06508002**)  
Ellsworth Road  
Rome, NY 13441  
Oneida County  
Authorization to Inject

Dear Ms. Mattice:

This letter serves to inform you that the U.S. Environmental Protection Agency is in receipt of inventory information addressing wells authorized by rule located at the above-referenced facility in accordance with 40 Code of Federal Regulations (CFR) §144.26. The operation of the following Underground Injection Control wells are authorized by rule, pursuant to 40 CFR §144.24:

**Each of five temporary injection points authorized to inject 1,250 gallons of 2% Newman Zone solution.**

Should any conditions change in the operation of any of the wells listed above (such as injectate composition, closure of the well, injection of cooling water greater than 150 degrees Fahrenheit, construction of additional wells, etc.) you are required to notify this office within five (5) days. Any accidental spills into a well should be reported within twenty-four (24) hours after the event. Change in operation information should be addressed to:

Nicole Foley Kraft, Chief  
Ground Water Compliance Section  
United States Environmental Protection Agency  
290 Broadway, 20<sup>th</sup> Floor  
New York, NY 10007-1866  
Re: 13NY06508002  
Attn: Frank Brock

Should you own or operate **other** facilities using underground injection wells, please use the enclosed inventory form (EPA Form 7520-16) and instructions, copy for multiple facilities, and submit them to the address listed above. These documents can also be found on the internet at:

<http://www.epa.gov/safewater/uic/pdfs/7520-16.pdf>

[http://www.epa.gov/region02/water/compliance/supplemental\\_instructions\\_inventory.pdf](http://www.epa.gov/region02/water/compliance/supplemental_instructions_inventory.pdf)

[http://www.epa.gov/region02/water/compliance/wellclasstypetable\\_inventoryc\\_form](http://www.epa.gov/region02/water/compliance/wellclasstypetable_inventoryc_form)

Failure to respond to this letter truthfully and accurately within the time provided may subject you to sanctions authorized by federal law. Please also note that all information submitted by you may be used in an administrative, civil judicial, or criminal action. In addition, making a knowing submission of materially false information to the U.S. Government may be a criminal offense.

Should you have any questions, please contact Frank Brock of my staff at (212) 637-3762 or [brock.frank@epa.gov](mailto:brock.frank@epa.gov).

Sincerely,



Nicole Foley Kraft, Chief  
Ground Water Compliance Section

Enclosure

cc: Steven Botsford, P.E.  
NYSDEC, Region 6  
317 Washington St.  
Watertown, NY 13601-3787

Nick Caruso  
Oneida County Health Dept.  
800 Park Avenue  
Utica, NY 13501

## **Appendix B**



**Daily Chemical Quality Control Report**

Project/Delivery Order Number: 1015-11-01 Date: 6/25/13

Project Name/Site Number: Landfill 1, Landfill 7, Building 35

Weather conditions: Temperature: 80 F Barometric reading: 29.87  
Wind speed and direction: 9 mph NW  
Significant wind changes: None

General description of tasks completed: Groundwater sampling LF001 Landfill 1, LF003 Landfill 7 and Building 35 ( LF7MW-100, LF1MW-1R, MWSAR03, and B035MW04).

Explain any departures from the SAP or deviations from approved procedures during the day's field activities: Samples collected at LF1MW-1R and MWSAR03 were recollects due to missed hold times on 6/12/2013.

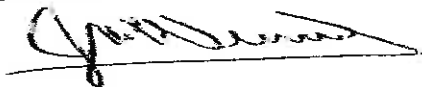
Explain any technical problems encountered in the field or field equipment/field analytical instrument malfunction: None

Corrective actions taken or instructions obtained from AFCEC personnel: No corrective actions necessary.  
None

Sampling shipment completed:  Yes  No Airbill #: .... ..

DCQCR Prepared by: Josh Wenzel Date: 6/25/2013

CQCC Signature:



Date: 6/25/2013

**ATTACHMENTS:**

Checklist	Daily Chemical Quality Control Report Attachments
	<input checked="" type="checkbox"/> Field sampling forms
	<input checked="" type="checkbox"/> Equipment Calibration Log
	<input checked="" type="checkbox"/> Copies of COCs
	<input checked="" type="checkbox"/> SDG Table (See accompanying COCs).
	<input checked="" type="checkbox"/> Daily Health and Safety Meeting Form

## WELL PURGING & SAMPLING FORM

Project: 1015-11-01      Sampled by: JW/KW/JT  
 Location and Site Code (SITEID): LF7  
 Well No. (LOCID): WL-LF7-100      Well Diameter (SDIAM): 3.4"  
 Date (LOGDATE): 6/27/13      Weather: 54-80°

**CASING VOLUME INFORMATION:**

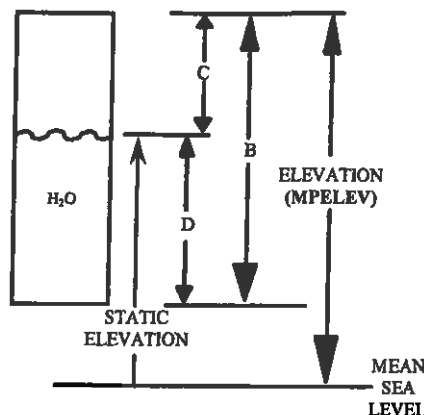
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 45.40 ft.  
 Measured Water Level Depth (C) (STATDEP) 43.60 ft.  
 Length of Static Water Column (D) =  $\frac{(B)}{(C)} - \frac{(C)}{(D)} = \frac{1.8}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{(A)}{(D)} \times (D) = 1.17$  gal

Minimum Purge Volume = 3.51 gal (3 well volumes)



Purge Date and Method: Bailer, 6/24/13

Physical Appearance/Comments: Clear, no odor

**FIELD MEASUREMENTS:**

Allowable Range:      ± 0.1      ± 5%      ± 1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
<u>1145</u>	<u>.75</u>	<u>7.47</u>	<u>3.61</u>	<u>20.39</u>	<u>11.1</u>	<u>0.0</u>	<u>107</u>
	<u>1.50</u>						
		<u>Bailed dry at 1.00 gallons</u>					

Sample Time: 1020      Sample ID: LF7M10044VA

*\* collected on 6/25/13 \**

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM (LOW FLOW)

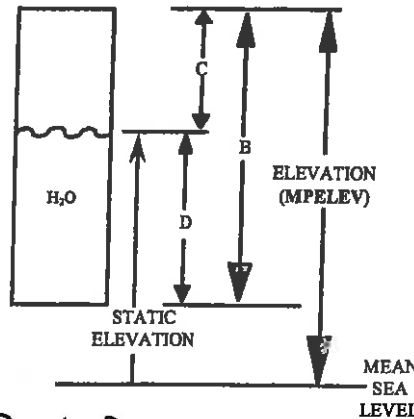
Project: 1015-11-01      Sampled by: JW/ML/KW/ST  
 Location and Site Code (SITEID): LF1  
 Well No. (LOCID): WL-LFIMW-1R      Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/25/13      Weather: Sun/75°

**CASING VOLUME INFORMATION:**

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) \_\_\_\_\_ ft. (optional)  
 Measured Water Level Depth (C) (STATDEF) 4.71 ft.  
 Length of Static Water Column (D) =  $\frac{(B)}{(C)} = \frac{(\quad)}{(D)}$  ft. (optional)  
 Pump Intake Depth (ft): 11  
 Depth during Purging/Sampling: \_\_\_\_\_ ft.  
 (provide range)  
 Comments (re: Depth during purging/sampling): \_\_\_\_\_



Purge Date and Method: BLADDER PUMP      Sample Pro  
 Physical Appearance/Comments: cloudy, silty, no odor  
 Dissolved Ferrous Iron (mg/L): Remain 642 mL H2O prior to readings

**FIELD MEASUREMENTS:**

Allowable Range:      ± 0.1      ± 3%      ± 10%      ± 10%      ± 10mV

Time	Depth to Water (ft BTOC)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)	Flow Rate (mL/min)
<u>1116</u>	<u>4.71</u>	<u>6.17</u>	<u>0.134</u>	<u>13.34</u>	<u>277</u>	<u>0.00</u>	<u>-59</u>	<u>200</u>
<u>1118</u>	<u>4.71</u>	<u>6.20</u>	<u>0.133</u>	<u>14.42</u>	<u>281</u>	<u>0.00</u>	<u>-68</u>	<u>200</u>
<u>1120</u>	<u>4.71</u>	<u>6.16</u>	<u>0.133</u>	<u>14.60</u>	<u>279</u>	<u>0.00</u>	<u>-74</u>	<u>200</u>
<u>1122</u>	<u>4.71</u>	<u>6.28</u>	<u>0.131</u>	<u>14.73</u>	<u>268</u>	<u>0.00</u>	<u>-73</u>	<u>200</u>
<u>1124</u>	<u>4.71</u>	<u>6.26</u>	<u>0.132</u>	<u>14.49</u>	<u>251</u>	<u>0.00</u>	<u>-74</u>	<u>200</u>
<u>1126</u>	<u>4.71</u>	<u>6.33</u>	<u>0.131</u>	<u>14.29</u>	<u>242</u>	<u>0.00</u>	<u>-78</u>	<u>200</u>

Sample Time: 1130      Sample ID: LFIMW1R116      VA

\* Resample for Anions, color, & BOD \*

Note: Maintain a flow rate of 200-500 mL/min during purging. Collect samples at a flow rate between 100-250 mL/min. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM (LOW FLOW)

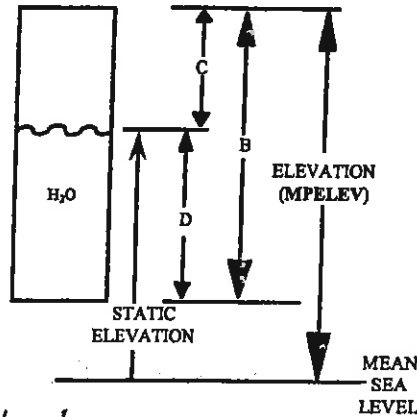
Project: 1015-11-01      Sampled by: JW/MG/KW/JT  
 Location and Site Code (SITEID): LE1  
 Well No. (LOCID): MWSAR03      Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/25/13      Weather: Sun/80'

**CASING VOLUME INFORMATION:**

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) \_\_\_\_\_ ft. (optional)  
 Measured Water Level Depth (C) (STATDEP) 18.71 ft.  
 Length of Static Water Column (D) =  $\frac{(B)}{(B)} - \frac{(C)}{(C)} = \frac{(D)}{(D)}$  ft. (optional)  
 Pump Intake Depth (ft): 24  
 Depth during Purging/Sampling: \_\_\_\_\_ ft.  
 (provide range)  
 Comments (re: Depth during purging/sampling): \_\_\_\_\_



Purge Date and Method: BLADDER PUMP 6/25/13  
 Physical Appearance/Comments: Cloudy, no odor  
 Dissolved Ferrous Iron (mg/L): Remove 928 mL H<sub>2</sub>O prior to readings

**FIELD MEASUREMENTS:**

Allowable Range:      ± 0.1      ± 3%      ± 10%      ± 10%      ± 10mV

Time	Depth to Water (ft BTOC)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)	Flow Rate (mL/min)
1355	18.71	6.83	0.283	15.47	87.8	2.30	0	200
1357	18.71	6.51	0.280	15.22	86.4	0.63	-1	200
1359	18.71	6.38	0.279	15.44	70.6	0.00	-2	200
1401	18.71	6.20	0.277	14.72	52.4	0.00	-3	200
1403	18.71	6.22	0.276	14.95	42.0	0.00	-4	200
1405	18.71	6.21	0.275	14.89	37.1	0.00	-2	200
1407	18.71	6.19	0.271	14.70	49.3	0.00	-6	200

Sample Time: 1410      Sample ID: MWSAR0324VA

\*Resample for Arsenic color ~~800~~ 800\*

Note: Maintain a flow rate of 200-500 mL/min during purging. Collect samples at a flow rate between 100-250 mL/min. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM (LOW FLOW)

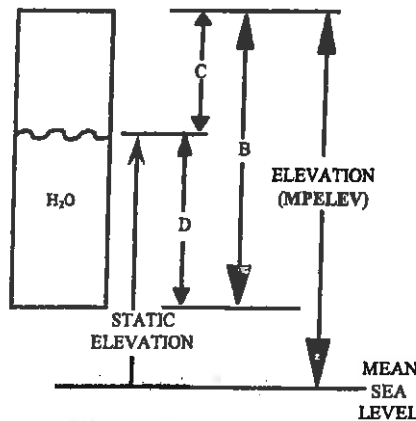
Project: 1015-11-01      Sampled by: JW/mg/kw/JF  
 Location and Site Code (SITEID): Bldg 35  
 Well No. (LOCID): B035mw04      Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/25/13      Weather: ☁ rain/75°

**CASING VOLUME INFORMATION:**

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 10.76 ft. (optional)  
 Measured Water Level Depth (C) (STATDEP) 6.18 ft.  
 Length of Static Water Column (D) =  $\frac{(B)}{(C)} = \frac{10.76}{6.18} = 1.74$  ft. (optional)  
 Pump Intake Depth (ft): 9  
 Depth during Purging/Sampling: \_\_\_\_\_ ft.  
 (provide range)  
 Comments (re: Depth during purging/sampling): \_\_\_\_\_



Purge Date and Method: BLADDER PUMP      Sample Pro.  
 Physical Appearance/Comments: dark grey, strong organic odor  
 Dissolved Ferrous Iron (mg/L): Remove 600 mL H<sub>2</sub>O prior to reading<sup>s</sup>

**FIELD MEASUREMENTS:**

Allowable Range:      ± 0.1      ± 3%      ± 10%      ± 10%      ± 10mV

Time	Depth to Water (ft BTOC)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)	Flow Rate (mL/min)
1522	6.18	6.87	2.68	17.67	11.2	0.00	-109	200
1524	6.18	6.92	2.54	17.51	18.3	0.00	-112	200
1526	6.18	6.93	2.39	17.30	14.2	0.00	-114	200
1528	6.18	6.96	2.27	17.13	13.3	0.00	-115	200
1530	6.18	6.97	2.15	16.91	10.7	0.00	-116	200
1532	6.18	7.02	2.05	16.61	11.9	0.00	-117	200
1534	6.18	7.04	1.96	16.59	10.4	0.00	-120	200
1536	6.18	7.00	1.86	16.48	9.9	0.00	-121	200
1538	6.18	7.07	1.75	16.40	8.1	0.00	-121	200
1540	6.18	7.04	1.68	16.26	8.2	0.00	-123	200
1542	6.18	7.08	1.62	16.44	1.6	0.00	-125	200

Sample Time: \_\_\_\_\_      Sample ID: B035mw04<sup>09</sup> LA

Note: Maintain a flow rate of 200-500 mL/min during purging. Collect samples at a flow rate between 100-250 mL/min. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM (LOW FLOW)

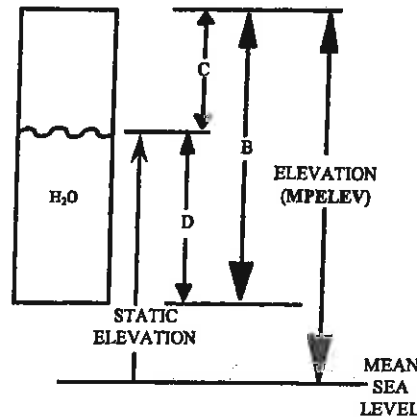
Project: 1015-11-01 Sampled by: JW/MG/KU/JY  
 Location and Site Code (SITEID): Blkg. 35  
 Well No. (LOCID): B035M104 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/25/13 Weather: rain / 75°

**CASING VOLUME INFORMATION:**

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) \_\_\_\_\_ ft. (optional)  
 Measured Water Level Depth (C) (STATDEP) \_\_\_\_\_ ft.  
 Length of Static Water Column (D) =  $\frac{\text{_____}}{\text{(B)}} - \frac{\text{_____}}{\text{(C)}} = \frac{\text{_____}}{\text{(D)}}$  ft. (optional)  
 Pump Intake Depth (ft): \_\_\_\_\_  
 Depth during Purging/Sampling: \_\_\_\_\_ ft.  
 (provide range)  
 Comments (re: Depth during purging/sampling): \_\_\_\_\_



Purge Date and Method: BLADDER PUMP  
 Physical Appearance/Comments: \_\_\_\_\_  
 Dissolved Ferrous Iron (mg/L): \_\_\_\_\_

**FIELD MEASUREMENTS:**

Allowable Range:                      ± 0.1                      ± 3%                      ± 10%                      ± 10%                      ± 10mV

Time	Depth to Water (ft BTOC)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)	Flow Rate (mL/min)
1544	6.18	7.03	1.55	16.22	6.0	0.00	-126	200
1546	6.18	7.04	1.50	16.26	6.1	0.00	-127	200
1548	6.18	7.08	1.45	16.36	5.4	0.00	-126	200
1550	6.18	7.05	1.39	16.24	5.4	0.00	-130	200
1552	6.18	7.12	1.35	16.27	5.0	0.00	-127	200
1554	6.18	7.07	1.28	16.06	5.3	0.00	-132	200
1556	6.18	7.11	1.27	16.14	5.7	0.00	-133	200
1558	6.18	7.11	1.29	16.01	4.6	0.00	-134	200

Sample Time: 10:15:00 Sample ID: B035M04091A  
1600

Note: Maintain a flow rate of 200-500 mL/min during purging. Collect samples at a flow rate between 100-250 mL/min. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

Daily Health and Safety Meeting Form

Date: 6/25/13 Time: 0900

Location: FPM office (sample room)

Weather Conditions: Overcast w/ T-storms, Humid, Highs near 80°

Meeting Type: Daily Health and Safety

Personnel Present:

Josh Wenzel, Mark Grifasi, John Twomey, Karl Wilhelmsen

Visitors Present: NONE

Visitor Training: NONE

PPE Required: Modified D safety glasses, steel toe boots, bug spray, sunscreen

Possible risks, injuries, concerns:

Biological, slip/trip/fall, lightning, sunburn, dehydration

Anticipated Releases to Environment (if so, describe and detail response action/control measures implemented):

NONE

Property Damage:

NONE

Description (include sequence of events describing step by step how incident happened):

NONE

Analysis for, and Implementation of Corrective/Preventative Procedure to Prevent Future Occurrences (to be formulated by SSHO + FOM, approved by PM, and SSHO implemented):

NONE

Report made by (Name): Josh Wenzel

SSHP Organization Title: Site Safety and Health Officer





# AFCEC CHAIN OF CUSTODY RECORD

COC#: 1 SDG#: 292 Cooler ID#: A

Ship to: Elaine Walker Test America Laboratories, Inc. 4955 Yarrow Street Arvada, Colorado Tel: 303-736-0156 Carrier: Test America Inc. courier.	Project Name: Griffiss AFB LF7 LTM Sampler Name: Josh Wenzel Sampler Signature:	Send Results to: Daniel Baldyga FPM Remediations, Inc. 584 Phoenix Drive Rome, NY 13441 Phone: (315) 336-7721 Ext. 207
--	---	--

### Analyses requested

Field Sample ID	LocID	Date	Time	MATRIX	SMCODE	SACODE	SBD/SED	# of Containers	Hardness note 2	250 mL poly (HNO <sub>3</sub> )	Anions, TDS, color, Alkalinity note 4	500 mL poly	NH <sub>3</sub> , COD, TKN note 5	500 mL poly (H <sub>2</sub> SO <sub>4</sub> )	TOC note 6	250 mL amber (H <sub>2</sub> SO <sub>4</sub> )	BOD Note 7	1 L Poly	Comments
LF7M10044VA	WL-LF7MW-100	6/25	1020	WG	LF	N	0/0	2	--	--	1	--	--	1	1	--	--	Lack of water	

### Sample Condition Upon Receipt at Laboratory:

Special Instructions/Comments: Parameter List: (According to AFCEE QAPP 4.0 and NYSDEC Landfill Part 360 Baseline Parameters)

Note 1: VOCs: SW8260 AFCEE QAPP 4.0 List + NYS Part 360 Baseline Parameters.

Note 2: Hardness: 130.2.

Note 3: Phenols: SW9065.

Note 4: Anions: SW9056, TDS: SM2540C, Color: 110.2, Alkalinity: SM2320B.

Note 5: NH<sub>3</sub>: 350.2, COD: 410.4, TKN: 351.2.

Note 6: TOC: SW9060.

Note 7: BOD: 405.1.

Note 8: Alkalinity: 310.1

Note 9: Cyanide: SW9012.

Cooler temperature:

#1 Released by: (Sig)	Date:	#2 Released by: (Sig)	Date:	#3 Released by: (Sig)	Date:
Company Name:	Time:	Company Name:	Time:	Company Name:	Time:
#1 Received by: (Sig) Niels van Hoesel	Date: :	#2 Received by: (Sig) <i>RF-14/11/14</i>	Date: 6-25-13	#3 Received by: (Sig)	Date:
Company Name: FPM Remediations, Inc.	Time:	Company Name: <i>TA Sga</i>	Time: 16:30	Company Name:	Time:

### MATRIX

WG = Ground water  
 WQ = Water Quality Control Matrix  
 SO = Soil

### SMCODE

B = Bailor  
 G = Grab (only for EIB)  
 NA = Not Applicable (only for AB/TB)

### SACODE

N = Normal Sample  
 AB = Ambient Blank  
 TB = Trip Blank

PP = Peristaltic Pump  
BP = Bladder Pump  
SP = Submersible Pump  
SS = Split Spoon

EB = Equipment Blank  
FD = Field Duplicate  
MS = Matrix Spike  
SD = Matrix Spike Duplicate

# AFCEE CHAIN OF CUSTODY RECORD

COC#: 1 SDG#: \_\_\_\_\_ Cooler ID#: A

Ship to: Elaine Walker Test America Laboratories, Inc. 4955 Yarrow Street Arvada, Colorado Tel: 303-736-0156 Carrier: Test America Inc. courier.	Project Name: Griffiss AFB LFI LTM Sampler Name: Josh Wenzel Sampler Signature: _____	Send Results to: Daniel Baldyga FPM Remediations, Inc. 584 Phoenix Drive Rome, NY 13441 Phone: (315) 336-7721 Ext. 207
--	---	--

Field Sample ID	LocID	Date	Time	MATRIX	SMCODE	SACODE	SBD/SED	# of Containers	Analyses requested						Comments
									VOCs note 1 40mL vials (HCl)	Hardness note 2 250 mL poly (HNO <sub>3</sub> )	Anions, TDS, color, Alkalinity note 6 500 mL poly	NH <sub>3</sub> , COD, TKN note 7 250 mL poly (H <sub>2</sub> SO <sub>4</sub> )	TOC notes 250 mL amber (H <sub>2</sub> SO <sub>4</sub> )	BOD, note 10 1 L poly	
LF1M01R11VA	WL-LF1MW-1R	6/25	1130	WG	LF	N	0/0	2	--	--	1	--	--	1	Recollects
MWSAR0324VA	MWSAR03	6/25	1410	WG	LF	N	0/0	2	--	--	1	--	--	1	↓
062513VE	FIELDQC	6/25	1620	WQ	LF	EB	0/0	6	--	1	1	2	1	1	

Sample Condition Upon Receipt at Laboratory: \_\_\_\_\_ Cooler temperature: \_\_\_\_\_

**Special Instructions/Comments: Parameter List: (According to AFCEE QAPP 4.0 and NYSDEC Landfill Part 360 Baseline Parameters)**

Note 1: VOCs: 8260B AFCEE QAPP 4.0 List + NYS Part 360 Baseline Parameters.  
 Note 2: Hardness: 130.2.  
 Note 3: Metals: SW6010 AFCEE QAPP 4.0 List (Dissolved).  
 Note 4: PCBs: SW8082.  
 Note 5: Phenols: SW9065.  
 Note 6: Anions: SW9056, TDS: SM2540C, color: 110.2, Alkalinity: SM2320B.  
 Note 7: NH<sub>3</sub>: 350.1, COD: 410.4, TKN: 351.2.  
 Note 8: TOC: SW9060.  
 Note 9: Cyanide: SW9012.  
 Note 10: BOD: 405.1.

#1 Released by: (Sig) _____	Date: _____	#2 Released by: (Sig) <i>[Signature]</i>	Date: <u>6/25/13</u>	#3 Released by: (Sig) _____	Date: _____
Company Name: _____	Time: _____	Company Name: FPM Remediations, Inc.	Time: <u>16:30</u>	Company Name: _____	Time: _____
#1 Received by: (Sig) _____	Date: _____	#2 Received by: (Sig) <i>[Signature]</i>	Date: <u>6-25-13</u>	#3 Received by: (Sig) _____	Date: _____
Company Name: FPM Remediations, Inc.	Time: _____	Company Name: <u>TA 572</u>	Time: <u>16:30</u>	Company Name: _____	Time: _____

**MATRIX**

WG = Ground water  
WQ = Water Quality Control Matrix  
SO = Soil

**SMCODE**

B = Bailor  
G = Grab (only for EB).  
NA = Not Applicable (only for AB/TB)  
PP = Peristaltic Pump  
BP = Bladder Pump  
SP = Submersible Pump  
SS = Split Spoon

**SACODE**

N = Normal Sample  
AB = Ambient Blank  
TB = Trip Blank  
EB = Equipment Blank  
FD = Field Duplicate  
MS = Matrix Spike  
SD = Matrix Spike Duplicate

# AFCEC CHAIN OF CUSTODY RECORD

COC#: 1 SDG#: 292 Cooler ID: A

Ship to: Elaine Walker Test America Laboratories, Inc. 4955 Yarrow Street Arvada, Colorado Tel: 303-736-0156 Carrier: Test America Inc. courier.	Project Name: Griffiss AFB B 35 LTM Sampler Name: Daniel Baldyga Send Results to: Daniel Baldyga FPM Remediations, Inc. 584 Phoenix Drive Rome, NY 13441 Phone: (315) 336-7721 Ext. 207
Sampler Signature: _____	

Field Sample ID	Location ID (LOCID)	Date	Time	MATRIX	SMCODE	SBD/SED	SACODE	Preservative	Filt./Unfilt.	No. of Containers	Analyses Requested			Comments
											VOCs Note 1 40 mL vial (HCl)	Anions, Alkalinity note 2 500 mL poly	TOC note 3 250 mL amber (H <sub>2</sub> SO <sub>4</sub> )	
B035MW04	B035MW04	6/25	1600	WG	LF	0/0	N	HCl	Unf.	6	3	1	2	
06 2513LE	FIELDQC	6/25	1615	WQ	LF	0/0	EB	HCl	Unf.	6	3	1	2	
062513LF	FIELDQC	6/25	1505	WQ	LF	0/0	AB	HCl	Unf.	3	3	-	-	
062513LR	FIELDQC	6/25	0855	WQ	LF	0/0	TB	HCl	Unf.	2	2	-	-	

**ALL MONITORING WELLS GROUNDWATER ELEVATIONS SHOULD BE MEASURED.**

Sample Condition Upon Receipt at Laboratory: \_\_\_\_\_ Cooler Temperature: \_\_\_\_\_

Special Instructions/Comments: Analyses to be conducted in compliance with AFCEE QAPP 4.0

Note 1: VOC: method SW 8260: Target COCs: PCE, TCE, DCE, Vinyl Chloride and Chloroform.

Note 2: Anions: SW9056 CHLORIDE, SULFATE AND NITRATE ONLY

Note 3: TOC: SW9060.

Note 4: Alkalinity: SM2320B.

#1 Released by: (Sig)	Date:	#2 Released by: (Sig)	Date:	#3 Released by: (Sig)	Date:
Company Name:	Time:	Company Name: FPM Remediations, Inc.	Time:	Company Name:	Time:
#1 Received by: (Sig)	Date:	#2 Received by: (Sig)	Date:	#3 Received by: (Sig)	Date:
Company Name: FPM Remediations, Inc.	Time:	Company Name: <i>RECEIVED</i>	Time:	Company Name:	Time:

**MATRIX**  
 WG = Ground water  
 WQ = Water Quality Control Matrix  
 SO = Soil

**SMCODE**  
 B = Bailor  
 G = Grab (only for EB)  
 NA = Not Applicable (only for AB/TB)  
 PP = Peristaltic Pump

**SACODE**  
 N = Normal Sample  
 AB = Ambient Blank  
 TB = Trip Blank  
 EB = Equipment Blank

BP = Bladder Pump  
SP = Submersible Pump  
SS = Split spoon

FD = Field Duplicate  
MS = Matrix Spike  
SD = Matrix Spike Duplicate

## **Appendix C**

**FPM-GROUP**  
**Data Verification and Usability Report**  
**GRIFFISS AIR FORCE BASE**  
**Site Griffiss AFB Building 35**  
**Water Sampling**  
**Contract No. FA8903-10-D-8595, Delivery Order No. 0014**

**FPM Project No. 1015-11-01**

**TestAmerica Job #280-43753-1**

Laboratory: TestAmerica Laboratories, Inc.  
Sample Matrix: Water  
Number of Samples: 4  
Analytical Protocol: DOD QSM, version 4.2, as per project-specific UFP QAPP  
Data Reviewer: Connie van Hoesel  
Sample Date: June 25, 2013

---

**LIST OF DATA VERIFICATION SAMPLES**

This verification report pertains to the following environmental samples and corresponding QC samples:

Sample ID	Date	QC Samples	Date
B035M0409LA	6/25/13	062513LE, 062513LF, 062513LR	6/25/13

Notes:

Refer to attached chain-of-custody for detailed sampling information and sample specific analyses requested.  
LA – Primary environmental samples  
LE – Equipment blank  
LF – Ambient blank  
LF – Trip blank



## **DELIVERABLES**

The data deliverable report was per requirements of the DOD QSM, version 4.2, as specified in the project-specific QAPP. The report consisted of the following major sections: lab attachment letter, case narrative, chain-of-custody, lab qualifier definitions, analytical results (sheet 2) based on analytical batch, calibration summaries, method blank summaries, laboratory control sample summaries, matrix spike/matrix spike duplicate summaries, holding time forms, performance checks, surrogate and internal standard recoveries, as applicable.

## **ANALYTICAL METHODS**

The analytical test methods and QA/QC requirements used for the sample analyses were per methods as specified in the DOD QSM, version 4.2, with project-specific modifications as listed in the project-specific QAPP. The analytical methods employed included SW-846: Volatile Organic Compounds (VOC) by Method SW8260B (short list), Total Organic Carbon (TOC) by Method SW 9060A, Total Alkalinity by Method SM 2320B, and Anions (nitrate, chloride, and sulfate only) by Method SW9056.

## **VERIFICATION GUIDANCE**

The analytical work was performed by TestAmerica Laboratories, Inc. in accordance with the DOD QSM, version 4.2, and QC requirements of the respective analytical methods and of the project-specific QAPP. The data usability analysis was based on the reviewer's professional judgment and on an assessment of how this data would fare with respect to the DOD QSM, and the criteria as listed in the project-specific QAPP.

## **QA/QC CRITERIA**

The following QA/QC criteria were reviewed, as applicable and available:

- Method detection limits (DLs) and limits of quantitation (LOQs)
- Holding times, sample preservation and storage
- Second source calibration verification summary
- Initial and Continuing calibration summaries
- Method blanks
- Field duplicate results
- Matrix spike/matrix spike duplicate (MS/MSD) analysis
- Laboratory control samples (LCS)
- Results reported between DL and LOQ (J-flag)
- MS tune performance
- Ambient, equipment, and trip blanks (as applicable)
- Surrogate spike recoveries
- Internal standard areas counts and retention times
- Sample storage and preservation
- Data system printouts

- Qualitative and quantitative compound identification
- Chain-of-custody (COC)
- Case narrative and deliverables compliance

The items listed above were in compliance with DOD QSM, version 4.2, and project-specific QAPP criteria and protocols with exceptions discussed in the text below. The data have been verified according to the procedures outlined above and qualified accordingly.

***GENERAL NOTES:***

**MISSING SAMPLES**

None. All samples documented on the chain of custody were received by the laboratory.

**BLANKS**

Whenever blanks, including method, ambient, equipment, and trip, contained low levels of contaminants (between the DL and LOQ), the laboratory and/or data verifier qualified the subject results with a “J” flag. Since no qualification of associated field samples are required for blanks less than half the LOQ, no further action was taken in such instances.

## VOLATILE ORGANIC COMPOUNDS (VOCs)

- The following blank sample analyses indicated blank contaminants present at concentrations equal to or greater than half the limit of quantitation (LOQ). The Blank ID, detected contaminant, and concentration are listed.

Blank ID	Analyte	Concentration (mg/L)	LOQ (mg/L)	Samples Affected
062513LE	Chloroform	1.3	1.0	None; associated results non-detect

The purpose of laboratory, equipment or trip blank analysis is to determine the existence and magnitude of contamination resulting from lab or field activities. If contamination is found in blanks the associated sample results for these analytes may be considered suspect. As per the UFP QAPP, based on the blank contaminants present above half the RL, results for the specific analytes in the associated environmental samples are qualified with a “U” flag, for only those sample results that are less than five times (5x) the blank concentration.

**Corrective Action:** Chloroform was not reported above the detection limit in the associated field sample. Using professional judgment, it appears that the source of the chloroform is likely laboratory contamination.

## WET CHEMISTRY ANALYTES

- According to the case narrative, sample B035M0409LA required a 1:10 dilution for chloride after original results were above the calibration curve. Use diluted sample results for this compound only. Original sample results are modified accordingly.

## **DATA USABILITY RESULTS**

### **VOCs**

Based on the evaluation of all information in the analytical data groups, the results of the samples for VOCs are highly usable with the data qualifiers as noted. Using the verification approach as presented above, the results for all above samples are 100% usable.

### **WET CHEMISTRY ANALYTES**

Based on the evaluation of all information in the analytical data groups, the results of the samples for wet chemistry analytes are highly usable with the data qualifiers as noted. Using the verification approach as presented above, the results for all above samples are 100% usable.

## **AFCEE SUMMARY**

All data in Job # 280-43753-1 are valid and usable with qualifications as noted in the data review.

Signed: Concordia van Hoesel

Date: 9/26/13

## ***ATTACHMENTS***

- Chain-of-Custody
- Laboratory's Case Narrative
- Qualified final data verification results on annotated Lab Sheet 2s

## ANALYTICAL REPORT

Job Number: 280-43753-1

Job Description: Griffiss AFB B 35 LTM

For:

FPM Remediations Inc

584 Phoenix Drive

Rome, NY 13441

Attention: Daniel Baldyga

*M. Elaine Walker*

Approved for release.  
Elaine M Walker  
Project Manager I  
7/24/2013 5:39 PM

---

Elaine M Walker, Project Manager I  
4955 Yarrow Street, Arvada, CO, 80002  
(303)736-0156  
elaine.walker@testamericainc.com  
07/24/2013

The test results in this report relate only to the samples in this report and meet all requirements of NELAP, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is E87667.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

**TestAmerica Laboratories, Inc.**

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002

Tel (303) 736-0100 Fax (303) 431-7171 [www.testamericainc.com](http://www.testamericainc.com)



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**CASE NARRATIVE**  
**Client: FPM Remediations Inc**  
**Project: Griffiss AFB B 35 LTM**  
**Report Number: 280-43753-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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**

Four samples were received on 06/26/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.7°C.

**VOLATILE ORGANIC COMPOUNDS (GC-MS)**

Samples B035M0409LA (280-43753-1), 062513LE (280-43753-2), 062513LF (280-43753-3) and 062513LR (280-43753-4) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/04/2013.

No difficulties were encountered during the VOC analyses.

All quality control parameters were within the acceptance limits.

**ALKALINITY**

Samples B035M0409LA (280-43753-1) and 062513LE (280-43753-2) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 06/27/2013.

Alkalinity was detected in method blank MB 280-180826/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". However, because the result concentration was less than ½ the reporting limit, no corrective action was necessary.

No other difficulties were encountered during the alkalinity analyses.

All other quality control parameters were within the acceptance limits.

**ANIONS**

Samples B035M0409LA (280-43753-1) and 062513LE (280-43753-2) were analyzed for anions in accordance with EPA SW-846 Method 9056. The samples were analyzed on 06/26/2013.

Chloride was detected in method blank MB 280-180677/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". However, because the result concentration was less than ½ the reporting limit, no corrective action was necessary.

Sample B035M0409LA (280-43753-1) required a dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the anions analyses.

All other quality control parameters were within the acceptance limits.

**TOTAL ORGANIC CARBON**

Samples B035M0409LA (280-43753-1) and 062513LE (280-43753-2) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 07/18/2013.

No difficulties were encountered during the TOC analyses.

All quality control parameters were within the acceptance limits.

---

Methods 8260/624/8270/625

No Manual Integrations Performed

*UP*

## SAMPLE SUMMARY

Client: FPM Remediations Inc

Job Number: 280-43753-1

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Client Matrix</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>
280-43753-1	B035M0409LA	Water	06/25/2013 1600	06/26/2013 0915
280-43753-2EB	062513LE	Water	06/25/2013 1615	06/26/2013 0915
280-43753-3	062513LF	Water	06/25/2013 1505	06/26/2013 0915
280-43753-4TB	062513LR	Water	06/25/2013 0855	06/26/2013 0915

## EXECUTIVE SUMMARY - Detections

Client: FPM Remediations Inc

Job Number: 280-43753-1

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-43753-1</b>	<b>B035M0409LA</b>					
cis-1,2-Dichloroethene		2.6		1.0	ug/L	8260C
trans-1,2-Dichloroethene		0.35	J	1.0	ug/L	8260C
Trichloroethene		0.22	J	1.0	ug/L	8260C
Vinyl chloride		3.7		1.5	ug/L	8260C
Chloride		230		30	mg/L	9056A
Sulfate		2.9	J	5.0	mg/L	9056A
Total Organic Carbon - Quad		2.3		1.0	mg/L	9060A
Alkalinity		240		5.0	mg/L	SM 2320B
<b>280-43753-2EB</b>	<b>062513LE</b>					
Chloroform		1.3		1.0	ug/L	8260C
Chloride		0.33	J	3.0	mg/L	9056A
Sulfate		0.37	J	5.0	mg/L	9056A
Total Organic Carbon - Quad		0.41	J	1.0	mg/L	9060A

## METHOD SUMMARY

Client: FPM Remediations Inc

Job Number: 280-43753-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260C	
Purge and Trap	TAL DEN		SW846 5030B
Anions, Ion Chromatography	TAL DEN	SW846 9056A	
Organic Carbon, Total (TOC)	TAL DEN	SW846 9060A	
Alkalinity	TAL DEN	SM SM 2320B	

### Lab References:

TAL DEN = TestAmerica Denver

### Method References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

## METHOD / ANALYST SUMMARY

Client: FPM Remediations Inc

Job Number: 280-43753-1

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
SW846 8260C	Tinkham, Sarah A	SAT
SW846 9056A	Kudla, Ewa M	EMK
SW846 9060A	Bandy, Darlene F	DFB
SM SM 2320B	Smith, Matthew P	MPS

**Analytical Data**

Client: FPM Remediations Inc

Job Number: 280-43753-1

Client Sample ID: B035M0409LA

Lab Sample ID: 280-43753-1

Date Sampled: 06/25/2013 1600

Client Matrix: Water

Date Received: 06/26/2013 0915

**8260C Volatile Organic Compounds (GC/MS)**

Analysis Method:	8260C	Analysis Batch:	280-181535	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3269.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	07/04/2013 0252			Final Weight/Volume:	20 mL
Prep Date:	07/04/2013 0252				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Chloroform	0.20	U	0.16	1.0
cis-1,2-Dichloroethene	2.6		0.15	1.0
Tetrachloroethene	0.40	U	0.20	1.0
trans-1,2-Dichloroethene	0.35	J	0.15	1.0
Trichloroethene	0.22	J	0.16	1.0
Vinyl chloride	3.7		0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		85 - 115
1,2-Dichloroethane-d4 (Surr)	99		70 - 120
4-Bromofluorobenzene (Surr)	98		75 - 120
Toluene-d8 (Surr)	95		85 - 120

**Analytical Data**

Client: FPM Remediations Inc

Job Number: 280-43753-1

Client Sample ID: 062513LE

Lab Sample ID: 280-43753-2EB

Date Sampled: 06/25/2013 1615

Client Matrix: Water

Date Received: 06/26/2013 0915

**8260C Volatile Organic Compounds (GC/MS)**

Analysis Method:	8260C	Analysis Batch:	280-181535	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3270.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	07/04/2013 0314			Final Weight/Volume:	20 mL
Prep Date:	07/04/2013 0314				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Chloroform	1.3		0.16	1.0
cis-1,2-Dichloroethene	0.20	U	0.15	1.0
Tetrachloroethene	0.40	U	0.20	1.0
trans-1,2-Dichloroethene	0.20	U	0.15	1.0
Trichloroethene	0.20	U	0.16	1.0
Vinyl chloride	0.40	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	105		85 - 115
1,2-Dichloroethane-d4 (Surr)	108		70 - 120
4-Bromofluorobenzene (Surr)	107		75 - 120
Toluene-d8 (Surr)	104		85 - 120



## Analytical Data

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Client Sample ID:** 062513LF

Lab Sample ID: 280-43753-3

Date Sampled: 06/25/2013 1505

Client Matrix: Water

Date Received: 06/26/2013 0915

### 8260C Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C	Analysis Batch:	280-181535	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3272.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	07/04/2013 0357			Final Weight/Volume:	20 mL
Prep Date:	07/04/2013 0357				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Chloroform	0.20	U	0.16	1.0
cis-1,2-Dichloroethene	0.20	U	0.15	1.0
Tetrachloroethene	0.40	U	0.20	1.0
trans-1,2-Dichloroethene	0.20	U	0.15	1.0
Trichloroethene	0.20	U	0.16	1.0
Vinyl chloride	0.40	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	99		85 - 115
1,2-Dichloroethane-d4 (Surr)	103		70 - 120
4-Bromofluorobenzene (Surr)	98		75 - 120
Toluene-d8 (Surr)	96		85 - 120

**Analytical Data**

Client: FPM Remediations Inc

Job Number: 280-43753-1

Client Sample ID: 062513LR

Lab Sample ID: 280-43753-4TB

Date Sampled: 06/25/2013 0855

Client Matrix: Water

Date Received: 06/26/2013 0915

**8260C Volatile Organic Compounds (GC/MS)**

Analysis Method:	8260C	Analysis Batch:	280-181535	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3273.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	07/04/2013 0419			Final Weight/Volume:	20 mL
Prep Date:	07/04/2013 0419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Chloroform	0.20	U	0.16	1.0
cis-1,2-Dichloroethene	0.20	U	0.15	1.0
Tetrachloroethene	0.40	U	0.20	1.0
trans-1,2-Dichloroethene	0.20	U	0.15	1.0
Trichloroethene	0.20	U	0.16	1.0
Vinyl chloride	0.40	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	102		85 - 115
1,2-Dichloroethane-d4 (Surr)	107		70 - 120
4-Bromofluorobenzene (Surr)	105		75 - 120
Toluene-d8 (Surr)	102		85 - 120

**Analytical Data**

Client: FPM Remediations Inc

Job Number: 280-43753-1

---

**General Chemistry**

Client Sample ID: **B035M0409LA**

Lab Sample ID: 280-43753-1

Date Sampled: 06/25/2013 1600

Client Matrix: Water

Date Received: 06/26/2013 0915

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Nitrate as N	0.10	U	mg/L	0.042	0.50	1.0	9056A
	Analysis Batch: 280-180678		Analysis Date: 06/26/2013 1411				
Chloride	230		mg/L	2.5	30	10	9056A
	Analysis Batch: 280-180677		Analysis Date: 06/26/2013 2016				
Sulfate	2.9	J	mg/L	0.23	5.0	1.0	9056A
	Analysis Batch: 280-180677		Analysis Date: 06/26/2013 1411				
Total Organic Carbon - Quad	2.3		mg/L	0.16	1.0	1.0	9060A
	Analysis Batch: 280-183453		Analysis Date: 07/18/2013 2027				
Alkalinity	240		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-180826		Analysis Date: 06/27/2013 1445				

**Analytical Data**

Client: FPM Remediations Inc

Job Number: 280-43753-1

---

**General Chemistry**

Client Sample ID: 062513LE

Lab Sample ID: 280-43753-2EB

Client Matrix: Water

Date Sampled: 06/25/2013 1615

Date Received: 06/26/2013 0915

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Nitrate as N	0.10	U	mg/L	0.042	0.50	1.0	9056A
	Analysis Batch: 280-180678		Analysis Date: 06/26/2013 1427				
Chloride	0.33	J	mg/L	0.25	3.0	1.0	9056A
	Analysis Batch: 280-180677		Analysis Date: 06/26/2013 1427				
Sulfate	0.37	J	mg/L	0.23	5.0	1.0	9056A
	Analysis Batch: 280-180677		Analysis Date: 06/26/2013 1427				
Total Organic Carbon - Quad	0.41	J	mg/L	0.16	1.0	1.0	9060A
	Analysis Batch: 280-183453		Analysis Date: 07/18/2013 2041				
Alkalinity	2.0	U	mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-180826		Analysis Date: 06/27/2013 1453				



## **Appendix D**

## ANALYTICAL REPORT

Job Number: 280-43753-1

Job Description: Griffiss AFB B 35 LTM

For:

FPM Remediations Inc  
584 Phoenix Drive  
Rome, NY 13441

Attention: Daniel Baldyga

*M. Elaine Walker*

Approved for release.  
Elaine M Walker  
Project Manager I  
7/24/2013 5:39 PM

---

Elaine M Walker, Project Manager I  
4955 Yarrow Street, Arvada, CO, 80002  
(303)736-0156  
elaine.walker@testamericainc.com  
07/24/2013

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is E87667.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

**TestAmerica Laboratories, Inc.**

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002  
Tel (303) 736-0100 Fax (303) 431-7171 [www.testamericainc.com](http://www.testamericainc.com)



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**CASE NARRATIVE**  
**Client: FPM Remediations Inc**  
**Project: Griffiss AFB B 35 LTM**  
**Report Number: 280-43753-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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**

Four samples were received on 06/26/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.7°C.

**VOLATILE ORGANIC COMPOUNDS (GC-MS)**

Samples B035M0409LA (280-43753-1), 062513LE (280-43753-2), 062513LF (280-43753-3) and 062513LR (280-43753-4) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/04/2013.

No difficulties were encountered during the VOC analyses.

All quality control parameters were within the acceptance limits.

**ALKALINITY**

Samples B035M0409LA (280-43753-1) and 062513LE (280-43753-2) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 06/27/2013.

Alkalinity was detected in method blank MB 280-180826/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". However, because the result concentration was less than ½ the reporting limit, no corrective action was necessary.

No other difficulties were encountered during the alkalinity analyses.

All other quality control parameters were within the acceptance limits.

**ANIONS**

Samples B035M0409LA (280-43753-1) and 062513LE (280-43753-2) were analyzed for anions in accordance with EPA SW-846 Method 9056. The samples were analyzed on 06/26/2013.

Chloride was detected in method blank MB 280-180677/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". However, because the result concentration was less than ½ the reporting limit, no corrective action was necessary.

Sample B035M0409LA (280-43753-1) required a dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the anions analyses.

All other quality control parameters were within the acceptance limits.

**TOTAL ORGANIC CARBON**

Samples B035M0409LA (280-43753-1) and 062513LE (280-43753-2) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 07/18/2013.

No difficulties were encountered during the TOC analyses.

All quality control parameters were within the acceptance limits.

---

Methods 8260/624/8270/625

No Manual Integrations Performed



## SAMPLE SUMMARY

Client: FPM Remediations Inc

Job Number: 280-43753-1

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Client Matrix</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>
280-43753-1	B035M0409LA	Water	06/25/2013 1600	06/26/2013 0915
280-43753-2EB	062513LE	Water	06/25/2013 1615	06/26/2013 0915
280-43753-3	062513LF	Water	06/25/2013 1505	06/26/2013 0915
280-43753-4TB	062513LR	Water	06/25/2013 0855	06/26/2013 0915

## EXECUTIVE SUMMARY - Detections

Client: FPM Remediations Inc

Job Number: 280-43753-1

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-43753-1</b>	<b>B035M0409LA</b>					
cis-1,2-Dichloroethene		2.6		1.0	ug/L	8260C
trans-1,2-Dichloroethene		0.35	J	1.0	ug/L	8260C
Trichloroethene		0.22	J	1.0	ug/L	8260C
Vinyl chloride		3.7		1.5	ug/L	8260C
Chloride		230		30	mg/L	9056A
Sulfate		2.9	J	5.0	mg/L	9056A
Total Organic Carbon - Quad		2.3		1.0	mg/L	9060A
Alkalinity		240		5.0	mg/L	SM 2320B
<b>280-43753-2EB</b>	<b>062513LE</b>					
Chloroform		1.3		1.0	ug/L	8260C
Chloride		0.33	J	3.0	mg/L	9056A
Sulfate		0.37	J	5.0	mg/L	9056A
Total Organic Carbon - Quad		0.41	J	1.0	mg/L	9060A

## METHOD SUMMARY

Client: FPM Remediations Inc

Job Number: 280-43753-1

<b>Description</b>	<b>Lab Location</b>	<b>Method</b>	<b>Preparation Method</b>
<b>Matrix: Water</b>			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260C	
Purge and Trap	TAL DEN		SW846 5030B
Anions, Ion Chromatography	TAL DEN	SW846 9056A	
Organic Carbon, Total (TOC)	TAL DEN	SW846 9060A	
Alkalinity	TAL DEN	SM SM 2320B	

### Lab References:

TAL DEN = TestAmerica Denver

### Method References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

## METHOD / ANALYST SUMMARY

Client: FPM Remediations Inc

Job Number: 280-43753-1

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
SW846 8260C	Tinkham, Sarah A	SAT
SW846 9056A	Kudla, Ewa M	EMK
SW846 9060A	Bandy, Darlene F	DFB
SM SM 2320B	Smith, Matthew P	MPS

Analytical Data

Client: FPM Remediations Inc

Job Number: 280-43753-1

Client Sample ID: B035M0409LA

Lab Sample ID: 280-43753-1

Date Sampled: 06/25/2013 1600

Client Matrix: Water

Date Received: 06/26/2013 0915

8260C Volatile Organic Compounds (GC/MS)

Analysis Method: 8260C                      Analysis Batch: 280-181535                      Instrument ID: VMS\_H  
Prep Method: 5030B                      Prep Batch: N/A                      Lab File ID: H3269.D  
Dilution: 1.0                      Initial Weight/Volume: 20 mL  
Analysis Date: 07/04/2013 0252                      Final Weight/Volume: 20 mL  
Prep Date: 07/04/2013 0252

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Chloroform	0.20	U	0.16	1.0
cis-1,2-Dichloroethene	2.6		0.15	1.0
Tetrachloroethene	0.40	U	0.20	1.0
trans-1,2-Dichloroethene	0.35	J	0.15	1.0
Trichloroethene	0.22	J	0.16	1.0
Vinyl chloride	3.7		0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		85 - 115
1,2-Dichloroethane-d4 (Surr)	99		70 - 120
4-Bromofluorobenzene (Surr)	98		75 - 120
Toluene-d8 (Surr)	95		85 - 120



**Analytical Data**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Client Sample ID: 062513LE**

Lab Sample ID: 280-43753-2EB

Date Sampled: 06/25/2013 1615

Client Matrix: Water

Date Received: 06/26/2013 0915

---

**8260C Volatile Organic Compounds (GC/MS)**

Analysis Method:	8260C	Analysis Batch:	280-181535	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3270.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	07/04/2013 0314			Final Weight/Volume:	20 mL
Prep Date:	07/04/2013 0314				

---

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Chloroform	1.3		0.16	1.0
cis-1,2-Dichloroethene	0.20	U	0.15	1.0
Tetrachloroethene	0.40	U	0.20	1.0
trans-1,2-Dichloroethene	0.20	U	0.15	1.0
Trichloroethene	0.20	U	0.16	1.0
Vinyl chloride	0.40	U	0.10	1.5

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	105		85 - 115
1,2-Dichloroethane-d4 (Surr)	108		70 - 120
4-Bromofluorobenzene (Surr)	107		75 - 120
Toluene-d8 (Surr)	104		85 - 120

**Analytical Data**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Client Sample ID: 062513LF**

Lab Sample ID: 280-43753-3

Date Sampled: 06/25/2013 1505

Client Matrix: Water

Date Received: 06/26/2013 0915

---

**8260C Volatile Organic Compounds (GC/MS)**

Analysis Method:	8260C	Analysis Batch:	280-181535	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3272.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	07/04/2013 0357			Final Weight/Volume:	20 mL
Prep Date:	07/04/2013 0357				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Chloroform	0.20	U	0.16	1.0
cis-1,2-Dichloroethene	0.20	U	0.15	1.0
Tetrachloroethene	0.40	U	0.20	1.0
trans-1,2-Dichloroethene	0.20	U	0.15	1.0
Trichloroethene	0.20	U	0.16	1.0
Vinyl chloride	0.40	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	99		85 - 115
1,2-Dichloroethane-d4 (Surr)	103		70 - 120
4-Bromofluorobenzene (Surr)	98		75 - 120
Toluene-d8 (Surr)	96		85 - 120

**Analytical Data**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Client Sample ID: 062513LR**

Lab Sample ID: 280-43753-4TB

Date Sampled: 06/25/2013 0855

Client Matrix: Water

Date Received: 06/26/2013 0915

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**8260C Volatile Organic Compounds (GC/MS)**

Analysis Method:	8260C	Analysis Batch:	280-181535	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H3273.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	07/04/2013 0419			Final Weight/Volume:	20 mL
Prep Date:	07/04/2013 0419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Chloroform	0.20	U	0.16	1.0
cis-1,2-Dichloroethene	0.20	U	0.15	1.0
Tetrachloroethene	0.40	U	0.20	1.0
trans-1,2-Dichloroethene	0.20	U	0.15	1.0
Trichloroethene	0.20	U	0.16	1.0
Vinyl chloride	0.40	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	102		85 - 115
1,2-Dichloroethane-d4 (Surr)	107		70 - 120
4-Bromofluorobenzene (Surr)	105		75 - 120
Toluene-d8 (Surr)	102		85 - 120

Client: FPM Remediations Inc

Job Number: 280-43753-1

General Chemistry

Client Sample ID: B035M0409LA

Lab Sample ID: 280-43753-1

Date Sampled: 06/25/2013 1600

Client Matrix: Water

Date Received: 06/26/2013 0915

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Nitrate as N	0.10	U	mg/L	0.042	0.50	1.0	9056A
	Analysis Batch: 280-180678	Analysis Date: 06/26/2013 1411					
Chloride	230		mg/L	2.5	30	10	9056A
	Analysis Batch: 280-180677	Analysis Date: 06/26/2013 2016					
Sulfate	2.9	J	mg/L	0.23	5.0	1.0	9056A
	Analysis Batch: 280-180677	Analysis Date: 06/26/2013 1411					
Total Organic Carbon - Quad	2.3		mg/L	0.16	1.0	1.0	9060A
	Analysis Batch: 280-183453	Analysis Date: 07/18/2013 2027					
Alkalinity	240		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-180826	Analysis Date: 06/27/2013 1445					

Client: FPM Remediations Inc

Job Number: 280-43753-1

General Chemistry

Client Sample ID: 062513LE

Lab Sample ID: 280-43753-2EB

Date Sampled: 06/25/2013 1615

Client Matrix: Water

Date Received: 06/26/2013 0915

Analyte	Result	Qual	Units	DL	LOQ	Dil	Method
Nitrate as N	0.10	U	mg/L	0.042	0.50	1.0	9056A
	Analysis Batch: 280-180678	Analysis Date: 06/26/2013 1427					
Chloride	0.33	J	mg/L	0.25	3.0	1.0	9056A
	Analysis Batch: 280-180677	Analysis Date: 06/26/2013 1427					
Sulfate	0.37	J	mg/L	0.23	5.0	1.0	9056A
	Analysis Batch: 280-180677	Analysis Date: 06/26/2013 1427					
Total Organic Carbon - Quad	0.41	J	mg/L	0.16	1.0	1.0	9060A
	Analysis Batch: 280-183453	Analysis Date: 07/18/2013 2041					
Alkalinity	2.0	U	mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-180826	Analysis Date: 06/27/2013 1453					

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Surrogate Recovery Report**

**8260C Volatile Organic Compounds (GC/MS)**

**Client Matrix: Water**

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-43753-1	B035M0409LA	98	99	95	98
280-43753-2	062513LE	105	108	104	107
280-43753-3	062513LF	99	103	96	98
280-43753-4	062513LR	102	107	102	105
MB 280-181535/27		107	106	102	104
LCS 280-181535/26		94	99	99	92

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	85-115
DCA = 1,2-Dichloroethane-d4 (Surr)	70-120
TOL = Toluene-d8 (Surr)	85-120
BFB = 4-Bromofluorobenzene (Surr)	75-120

## Quality Control Results

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Method Blank - Batch: 280-181535**

**Method: 8260C  
Preparation: 5030B**

Lab Sample ID: MB 280-181535/27  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 07/03/2013 2043  
 Prep Date: 07/03/2013 2043  
 Leach Date: N/A

Analysis Batch: 280-181535  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H3252.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	DL	LOQ
Chloroform	0.20	U	0.16	1.0
cis-1,2-Dichloroethene	0.20	U	0.15	1.0
Tetrachloroethene	0.40	U	0.20	1.0
trans-1,2-Dichloroethene	0.20	U	0.15	1.0
Trichloroethene	0.20	U	0.16	1.0
Vinyl chloride	0.40	U	0.10	1.5

Surrogate	% Rec	Acceptance Limits
Dibromofluoromethane (Surr)	107	85 - 115
1,2-Dichloroethane-d4 (Surr)	106	70 - 120
4-Bromofluorobenzene (Surr)	104	75 - 120
Toluene-d8 (Surr)	102	85 - 120

**Lab Control Sample - Batch: 280-181535**

**Method: 8260C  
Preparation: 5030B**

Lab Sample ID: LCS 280-181535/26  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 07/03/2013 2022  
 Prep Date: 07/03/2013 2022  
 Leach Date: N/A

Analysis Batch: 280-181535  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H3251.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloroform	5.00	4.89	98	65 - 135	
cis-1,2-Dichloroethene	5.00	4.90	98	70 - 125	
Tetrachloroethene	5.00	4.89	98	45 - 150	
trans-1,2-Dichloroethene	5.00	5.12	102	60 - 140	
Trichloroethene	5.00	4.93	99	70 - 125	
Vinyl chloride	5.00	4.78	96	50 - 145	

Surrogate	% Rec	Acceptance Limits
Dibromofluoromethane (Surr)	94	85 - 115
1,2-Dichloroethane-d4 (Surr)	99	70 - 120
4-Bromofluorobenzene (Surr)	92	75 - 120
Toluene-d8 (Surr)	99	85 - 120

**Quality Control Results**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Method Blank - Batch: 280-180677**

**Method: 9056A  
Preparation: N/A**

Lab Sample ID:	MB 280-180677/6	Analysis Batch:	280-180677	Instrument ID:	WC_IC10
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062613.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/26/2013 1148	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Chloride	0.334	J	0.25	3.0
Sulfate	0.50	U	0.23	5.0

**Method Reporting Limit Check - Batch: 280-180677**

**Method: 9056A  
Preparation: N/A**

Lab Sample ID:	MRL 280-180677/3	Analysis Batch:	280-180677	Instrument ID:	WC_IC10
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062613.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/26/2013 1100	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride	1.00	1.13	113	50 - 150	J
Sulfate	1.00	1.15	115	50 - 150	J

**Lab Control Sample/**

**Method: 9056A  
Preparation: N/A**

**Lab Control Sample Duplicate Recovery Report - Batch: 280-180677**

LCS Lab Sample ID:	LCS 280-180677/4	Analysis Batch:	280-180677	Instrument ID:	WC_IC10
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062613.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/26/2013 1116	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-180677/5	Analysis Batch:	280-180677	Instrument ID:	WC_IC10
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062613.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/26/2013 1132	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Chloride	104	104	89 - 110	0	10		
Sulfate	104	102	86 - 110	2	10		



**Quality Control Results**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 280-180677**

**Method: 9056A  
Preparation: N/A**

LCS Lab Sample ID: LCS 280-180677/4      Units: mg/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/26/2013 1116  
Prep Date: N/A  
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-180677/5  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/26/2013 1132  
Prep Date: N/A  
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Chloride	25.0	25.0	25.9	25.9
Sulfate	25.0	25.0	25.9	25.5

**Quality Control Results**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Method Blank - Batch: 280-180678**

**Method: 9056A  
Preparation: N/A**

Lab Sample ID:	MB 280-180678/6	Analysis Batch:	280-180678	Instrument ID:	WC_IC10
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062613.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/26/2013 1148	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Nitrate as N	0.10	U	0.042	0.50

**Method Reporting Limit Check - Batch: 280-180678**

**Method: 9056A  
Preparation: N/A**

Lab Sample ID:	MRL 280-180678/3	Analysis Batch:	280-180678	Instrument ID:	WC_IC10
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062613.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/26/2013 1100	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	0.200	0.239	120	50 - 150	J

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 280-180678**

**Method: 9056A  
Preparation: N/A**

LCS Lab Sample ID:	LCS 280-180678/4	Analysis Batch:	280-180678	Instrument ID:	WC_IC10
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062613.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/26/2013 1116	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-180678/5	Analysis Batch:	280-180678	Instrument ID:	WC_IC10
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062613.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/26/2013 1132	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Nitrate as N	102	102	87 - 110	0	10		

**Quality Control Results**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 280-180678**

**Method: 9056A  
Preparation: N/A**

LCS Lab Sample ID: LCS 280-180678/4      Units: mg/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/26/2013 1116  
Prep Date: N/A  
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-180678/5  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/26/2013 1132  
Prep Date: N/A  
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Nitrate as N	5.00	5.00	5.11	5.11

**Quality Control Results**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Method Blank - Batch: 280-183453**

**Method: 9060A  
Preparation: N/A**

Lab Sample ID:	MB 280-183453/5	Analysis Batch:	280-183453	Instrument ID:	WC_SHI3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	071813a.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	07/18/2013 1857	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Total Organic Carbon - Quad	0.40	U	0.16	1.0

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 280-183453**

**Method: 9060A  
Preparation: N/A**

LCS Lab Sample ID:	LCS 280-183453/3	Analysis Batch:	280-183453	Instrument ID:	WC_SHI3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	071813a.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	07/18/2013 1827	Units:	mg/L	Final Weight/Volume:	200 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-183453/4	Analysis Batch:	280-183453	Instrument ID:	WC_SHI3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	071813a.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	07/18/2013 1842	Units:	mg/L	Final Weight/Volume:	200 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Total Organic Carbon - Quad	102	102	86 - 114	0	12		

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 280-183453**

**Method: 9060A  
Preparation: N/A**

LCS Lab Sample ID:	LCS 280-183453/3	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-183453/4
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	07/18/2013 1827			Analysis Date:	07/18/2013 1842
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Total Organic Carbon - Quad	25.0	25.0	25.5	25.5

**Quality Control Results**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Method Blank - Batch: 280-180826**

**Method: SM 2320B**

**Preparation: N/A**

Lab Sample ID: MB 280-180826/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/27/2013 1441  
 Prep Date: N/A  
 Leach Date: N/A

Analysis Batch: 280-180826  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: mg/L

Instrument ID: WC-AT3  
 Lab File ID: 062713a.TXT  
 Initial Weight/Volume:  
 Final Weight/Volume:

Analyte	Result	Qual	DL	LOQ
Alkalinity	1.24	J	1.1	5.0

**Lab Control Sample/**

**Method: SM 2320B**

**Lab Control Sample Duplicate Recovery Report - Batch: 280-180826**

**Preparation: N/A**

LCS Lab Sample ID: LCS 280-180826/4  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/27/2013 1432  
 Prep Date: N/A  
 Leach Date: N/A

Analysis Batch: 280-180826  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: mg/L

Instrument ID: WC-AT3  
 Lab File ID: 062713a.TXT  
 Initial Weight/Volume:  
 Final Weight/Volume:

LCSD Lab Sample ID: LCSD 280-180826/5  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/27/2013 1437  
 Prep Date: N/A  
 Leach Date: N/A

Analysis Batch: 280-180826  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: mg/L

Instrument ID: WC-AT3  
 Lab File ID: 062713a.TXT  
 Initial Weight/Volume:  
 Final Weight/Volume:

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Alkalinity	95	106	90 - 110	10	10		

**Laboratory Control/**

**Method: SM 2320B**

**Laboratory Duplicate Data Report - Batch: 280-180826**

**Preparation: N/A**

LCS Lab Sample ID: LCS 280-180826/4  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/27/2013 1432  
 Prep Date: N/A  
 Leach Date: N/A

Units: mg/L

LCSD Lab Sample ID: LCSD 280-180826/5  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/27/2013 1437  
 Prep Date: N/A  
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Alkalinity	200	200	191	211

**Quality Control Results**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Duplicate - Batch: 280-180826**

**Method: SM 2320B**

**Preparation: N/A**

Lab Sample ID: 280-43753-1  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/27/2013 1450  
Prep Date: N/A  
Leach Date: N/A

Analysis Batch: 280-180826  
Prep Batch: N/A  
Leach Batch: N/A  
Units: mg/L

Instrument ID: WC-AT3  
Lab File ID: 062713a.TXT  
Initial Weight/Volume:  
Final Weight/Volume:

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Alkalinity	240	244	0.3	10	

## DATA REPORTING QUALIFIERS

Client: FPM Remediations Inc

Job Number: 280-43753-1

<b>Lab Section</b>	<b>Qualifier</b>	<b>Description</b>
GC/MS VOA	J	Estimated: The analyte was positively identified; the quantitation is an estimation
	U	Undetected at the Limit of Detection.
General Chemistry	J	Estimated: The analyte was positively identified; the quantitation is an estimation
	U	Undetected at the Limit of Detection.

## Quality Control Results

Client: FPM Remediations Inc

Job Number: 280-43753-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-181535</b>					
LCS 280-181535/26	Lab Control Sample	T	Water	8260C	
MB 280-181535/27	Method Blank	T	Water	8260C	
280-43753-1	B035M0409LA	T	Water	8260C	
280-43753-2EB	062513LE	T	Water	8260C	
280-43753-3	062513LF	T	Water	8260C	
280-43753-4TB	062513LR	T	Water	8260C	
<b>Report Basis</b>					
T = Total					
<b>General Chemistry</b>					
<b>Analysis Batch:280-180677</b>					
LCS 280-180677/4	Lab Control Sample	T	Water	9056A	
LCSD 280-180677/5	Lab Control Sample Duplicate	T	Water	9056A	
MB 280-180677/6	Method Blank	T	Water	9056A	
280-43753-1	B035M0409LA	T	Water	9056A	
280-43753-2EB	062513LE	T	Water	9056A	
<b>Analysis Batch:280-180678</b>					
LCS 280-180678/4	Lab Control Sample	T	Water	9056A	
LCSD 280-180678/5	Lab Control Sample Duplicate	T	Water	9056A	
MB 280-180678/6	Method Blank	T	Water	9056A	
280-43753-1	B035M0409LA	T	Water	9056A	
280-43753-2EB	062513LE	T	Water	9056A	
<b>Analysis Batch:280-180826</b>					
LCS 280-180826/4	Lab Control Sample	T	Water	SM 2320B	
LCSD 280-180826/5	Lab Control Sample Duplicate	T	Water	SM 2320B	
MB 280-180826/6	Method Blank	T	Water	SM 2320B	
280-43753-1	B035M0409LA	T	Water	SM 2320B	
280-43753-1DU	Duplicate	T	Water	SM 2320B	
280-43753-2EB	062513LE	T	Water	SM 2320B	
<b>Analysis Batch:280-183453</b>					
LCS 280-183453/3	Lab Control Sample	T	Water	9060A	
LCSD 280-183453/4	Lab Control Sample Duplicate	T	Water	9060A	
MB 280-183453/5	Method Blank	T	Water	9060A	
280-43753-1	B035M0409LA	T	Water	9060A	
280-43753-2EB	062513LE	T	Water	9060A	

**Report Basis**

T = Total

TestAmerica Denver



**Quality Control Results**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Laboratory Chronicle**

Lab ID: 280-43753-1

Client ID: B035M0409LA

Sample Date/Time: 06/25/2013 16:00

Received Date/Time: 06/26/2013 09:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-43753-D-1		280-181535		07/04/2013 02:52	1	TAL DEN	SAT
A:8260C	280-43753-D-1		280-181535		07/04/2013 02:52	1	TAL DEN	SAT
A:9056A	280-43753-A-1		280-180677		06/26/2013 14:11	1	TAL DEN	EMK
A:9056A	280-43753-A-1		280-180678		06/26/2013 14:11	1	TAL DEN	EMK
A:9056A	280-43753-A-1		280-180677		06/26/2013 20:16	10	TAL DEN	EMK
A:9060A	280-43753-B-1		280-183453		07/18/2013 20:27	1	TAL DEN	DFB
A:SM 2320B	280-43753-A-1		280-180826		06/27/2013 14:45	1	TAL DEN	MPS

Lab ID: 280-43753-1 DU

Client ID: B035M0409LA

Sample Date/Time: 06/25/2013 16:00

Received Date/Time: 06/26/2013 09:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2320B	280-43753-A-1 DU		280-180826		06/27/2013 14:50	1	TAL DEN	MPS

Lab ID: 280-43753-2

Client ID: 062513LE

Sample Date/Time: 06/25/2013 16:15

Received Date/Time: 06/26/2013 09:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-43753-E-2		280-181535		07/04/2013 03:14	1	TAL DEN	SAT
A:8260C	280-43753-E-2		280-181535		07/04/2013 03:14	1	TAL DEN	SAT
A:9056A	280-43753-A-2		280-180677		06/26/2013 14:27	1	TAL DEN	EMK
A:9056A	280-43753-A-2		280-180678		06/26/2013 14:27	1	TAL DEN	EMK
A:9060A	280-43753-B-2		280-183453		07/18/2013 20:41	1	TAL DEN	DFB
A:SM 2320B	280-43753-A-2		280-180826		06/27/2013 14:53	1	TAL DEN	MPS

Lab ID: 280-43753-3

Client ID: 062513LF

Sample Date/Time: 06/25/2013 15:05

Received Date/Time: 06/26/2013 09:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-43753-B-3		280-181535		07/04/2013 03:57	1	TAL DEN	SAT
A:8260C	280-43753-B-3		280-181535		07/04/2013 03:57	1	TAL DEN	SAT

Lab ID: 280-43753-4

Client ID: 062513LR

Sample Date/Time: 06/25/2013 08:55

Received Date/Time: 06/26/2013 09:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-43753-B-4		280-181535		07/04/2013 04:19	1	TAL DEN	SAT
A:8260C	280-43753-B-4		280-181535		07/04/2013 04:19	1	TAL DEN	SAT

**Quality Control Results**

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Laboratory Chronicle**

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
P:5030B	MB 280-181535/27		280-181535		07/03/2013 20:43	1	TAL DEN	SAT
A:8260C	MB 280-181535/27		280-181535		07/03/2013 20:43	1	TAL DEN	SAT
A:9056A	MB 280-180677/6		280-180677		06/26/2013 11:48	1	TAL DEN	EMK
A:9056A	MB 280-180678/6		280-180678		06/26/2013 11:48	1	TAL DEN	EMK
A:9060A	MB 280-183453/5		280-183453		07/18/2013 18:57	1	TAL DEN	DFB
A:SM 2320B	MB 280-180826/6		280-180826		06/27/2013 14:41	1	TAL DEN	MPS

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
P:5030B	LCS 280-181535/26		280-181535		07/03/2013 20:22	1	TAL DEN	SAT
A:8260C	LCS 280-181535/26		280-181535		07/03/2013 20:22	1	TAL DEN	SAT
A:9056A	LCS 280-180677/4		280-180677		06/26/2013 11:16	1	TAL DEN	EMK
A:9056A	LCS 280-180678/4		280-180678		06/26/2013 11:16	1	TAL DEN	EMK
A:9060A	LCS 280-183453/3		280-183453		07/18/2013 18:27	1	TAL DEN	DFB
A:SM 2320B	LCS 280-180826/4		280-180826		06/27/2013 14:32	1	TAL DEN	MPS

Lab ID: LCSD

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:9056A	LCSD 280-180677/5		280-180677		06/26/2013 11:32	1	TAL DEN	EMK
A:9056A	LCSD 280-180678/5		280-180678		06/26/2013 11:32	1	TAL DEN	EMK
A:9060A	LCSD 280-183453/4		280-183453		07/18/2013 18:42	1	TAL DEN	DFB
A:SM 2320B	LCSD 280-180826/5		280-180826		06/27/2013 14:37	1	TAL DEN	MPS

Lab ID: MRL

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:9056A	MRL 280-180677/3		280-180677		06/26/2013 11:00	1	TAL DEN	EMK
A:9056A	MRL 280-180678/3		280-180678		06/26/2013 11:00	1	TAL DEN	EMK

**Lab References:**

TAL DEN = TestAmerica Denver

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
<b>Alk daily lcs_00338</b>	08/25/13	06/25/13	Di Water, Lot na	1000 mL	Alk stk std_00007	4 mL	Alkalinity	200 mg/L
.Alk stk std_00007	05/31/14		Fischer, Lot 122344		(Purchased Reagent)		Alkalinity	50 g/L
<b>Freon_A_00001</b>	11/29/14	05/29/13	P&T Methanol, Lot DH955	10 mL	MV-568037_00001	400 uL	1,1,1-Trifluoro-2,2-dichloroethane	40 ug/mL
.MV-568037_00001	04/30/16		Restek, Lot A094928		(Purchased Reagent)		1,1,1-Trifluoro-2,2-dichloroethane	1000 ug/mL
<b>IC CAL INT1_00217</b>	07/02/13	06/25/13	Di Water, Lot na	100 mL	IC CL cal_00013	25 mL	Chloride	250 mg/L
					IC N03 cal_00009	5 mL	Nitrate as N	50 mg/L
					IC sulfatocal_00011	25 mL	Sulfate	250 mg/L
.IC CL cal_00013	07/30/14		Ricca, Lot 1301412		(Purchased Reagent)		Chloride	1000 mg/L
.IC N03 cal_00009	04/30/14		Ricca, Lot 1210493		(Purchased Reagent)		Nitrate as N	1000 mg/L
.IC sulfatocal_00011	02/28/14		RICCA, Lot 1208581		(Purchased Reagent)		Sulfate	1000 mg/L
<b>IC daily cal_01137</b>	06/27/13	06/26/13	Di Water, Lot na	100 mL	IC CAL INT1_00217	10 mL	Chloride	25 mg/L
							Nitrate as N	5 mg/L
							Sulfate	25 mg/L
.IC CAL INT1_00217	07/02/13	06/25/13	Di Water, Lot na	100 mL	IC CL cal_00013	25 mL	Chloride	250 mg/L
					IC N03 cal_00009	5 mL	Nitrate as N	50 mg/L
					IC sulfatocal_00011	25 mL	Sulfate	250 mg/L
..IC CL cal_00013	07/30/14		Ricca, Lot 1301412		(Purchased Reagent)		Chloride	1000 mg/L
..IC N03 cal_00009	04/30/14		Ricca, Lot 1210493		(Purchased Reagent)		Nitrate as N	1000 mg/L
..IC sulfatocal_00011	02/28/14		RICCA, Lot 1208581		(Purchased Reagent)		Sulfate	1000 mg/L
<b>IC ICV weekly_00210</b>	07/02/13	06/25/13	Di Water, Lot na	10 mL	IC CL ICV_00004	2.5 mL	Chloride	250 mg/L
					IC SO4 ICV_00004	2.5 mL	Sulfate	250 mg/L
.IC CL ICV_00004	07/15/13		LAB CHEM, Lot A195-13		(Purchased Reagent)		Chloride	1000 mg/L
.IC SO4 ICV_00004	07/15/13		LAB CHEM, Lot A195-12		(Purchased Reagent)		Sulfate	1000 mg/L
<b>IC ICV weekly_00211</b>	07/02/13	06/25/13	Di Water, Lot na	10 mL	IC N03 ICV_00006	0.5 mL	Nitrate as N	50 mg/L
.IC N03 ICV_00006	06/17/15		LAB CHEM, Lot C163-25		(Purchased Reagent)		Nitrate as N	1000 mg/L
<b>MV-2 Cleve_00015</b>	01/03/14	07/03/13	P&T Methanol, Lot 38701	10 mL	MV-861206_00020	200 uL	2-Chloroethyl vinyl ether	40 ug/mL
.MV-861206_00020	05/31/14		Supelco, Lot LB85080		(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
<b>MV-567649_00001</b>	12/31/17		RESTEK, Lot A092461		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
<b>MV-ARCH SS A_00004</b>	09/08/13	05/07/13	P&T Methanol, Lot dh955	50 mL	MV-567650_00007	5 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MV-567650_00007	02/28/18		Restek, Lot A093505		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
<b>MV-ARCH SS A_00005</b>	12/14/13	06/14/13	P&T Methanol, Lot 38701	50 mL	MV-567650_00007	5 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MV-567650_00007	02/28/18		Restek, Lot A093505			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MV-Gas/Ket A_00008	07/31/13	06/24/13	P&T Methanol, Lot 38701	10 mL	MV-567642_00008	160 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-567644_00011	400 uL	Acrolein	400 ug/mL
							Acrolein	400 ug/mL
					MV-567645_00006	200 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Dichlorofluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
MV-567648_00010	400 uL	Cyclohexanone	1600 ug/mL					
		Cyclohexanone	1600 ug/mL					
.MV-567642_00008	12/31/15		RESTEK, Lot A092220			(Purchased Reagent)	2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
.MV-567644_00011	07/31/13		RESTEK, Lot A094427			(Purchased Reagent)	Acrolein	5000 ug/mL
.MV-567644_00012	07/31/13		RESTEK, Lot A094427			(Purchased Reagent)	Acrolein	5000 ug/mL
.MV-567645_00006	02/28/15		RESTEK, Lot A093341			(Purchased Reagent)	Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
Vinyl chloride	2000 ug/mL							
.MV-567648_00010	12/31/15		RESTEK, Lot A092211			(Purchased Reagent)	Cyclohexanone	20000 ug/mL
.MV-567648_00011	12/31/15		RESTEK, Lot A092211			(Purchased Reagent)	Cyclohexanone	20000 ug/mL
MV-Gas/Ket B_00003	07/31/13	06/24/13	P&T Methanol, Lot 38707	10 mL	MV-567645.sec_00002	200 uL	Vinyl chloride	40 ug/mL
							(Purchased Reagent)	Vinyl chloride
MV-Main A_00003	08/31/13	05/14/13	P&T Methanol, Lot dh755	10 mL	MV-567641_00004	200 uL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	800 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							2-Methyl-2-propanol	400 ug/mL
							3-Chloro-1-propene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							4-Isopropyltoluene	40 ug/mL
							Acrylonitrile	400 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chlorobromomethane	40 ug/mL
							Chlorodibromomethane	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Cyclohexane	40 ug/mL
							Dibromomethane	40 ug/mL
							Dichlorobromomethane	40 ug/mL
							Ethyl ether	40 ug/mL
							Ethyl methacrylate	40 ug/mL
							Ethylbenzene	40 ug/mL
							Ethylene Dibromide	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexane	40 ug/mL
							Iodomethane	40 ug/mL
							Isobutyl alcohol	1000 ug/mL
							Isopropylbenzene	40 ug/mL
							m-Xylene & p-Xylene	40 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylcyclohexane	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							sec-Butylbenzene	40 ug/mL
							Styrene	40 ug/mL
							tert-Butylbenzene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Tetrahydrofuran	80 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							trans-1,4-Dichloro-2-butene	40 ug/mL
							Trichloroethene	40 ug/mL
					MV-567646_00003	200 uL	Vinyl acetate	80 ug/mL
					MV-568034_00001	400 uL	1-Chlorohexane	40 ug/mL
							2-Pentanone	160 ug/mL
							sec-Butyl Alcohol	1200 ug/mL
.MV-567641_00004	02/29/16		RESTEK, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromoform	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorobromomethane	2000 ug/mL
							Chlorodibromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Dichlorobromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Ethylene Dibromide	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
.MV-567646_00003	08/31/13		RESTEK, Lot A093363			(Purchased Reagent)	Vinyl acetate	4000 ug/mL
.MV-568034_00001	05/14/14		RESTEK, Lot A094874			(Purchased Reagent)	1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
<b>MV-Main B_00001</b>	08/31/13	05/14/13	P&T Methanol, Lot dh755	10 mL	MV-567641.sec_00001	200 uL	Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
.MV-567641.sec_00001	02/29/16		RESTEK, Lot A093733			(Purchased Reagent)	Trichloroethene	40 ug/mL		
							Chloroform	2000 ug/mL		
							cis-1,2-Dichloroethene	2000 ug/mL		
							Tetrachloroethene	2000 ug/mL		
							trans-1,2-Dichloroethene	2000 ug/mL		
							Trichloroethene	2000 ug/mL		
MV-Supp A_00004	11/15/13	05/15/13	P&T Methanol, Lot dh755	10 mL		MV-567647_00003	200 uL	2-Chloro-1,3-butadiene	40 ug/mL	
								2-Nitropropane	80 ug/mL	
								Acetonitrile	400 ug/mL	
								Ethanol	2000 ug/mL	
								Ethyl acetate	80 ug/mL	
								Isopropyl alcohol	400 ug/mL	
								Isopropyl ether	40 ug/mL	
								Methacrylonitrile	400 ug/mL	
								Methyl methacrylate	80 ug/mL	
								Propionitrile	400 ug/mL	
								Tert-amyl methyl ether	40 ug/mL	
								Tert-butyl ethyl ether	40 ug/mL	
							MV-568035_00002	400 uL	Propene oxide	2000 ug/mL
							MV-568036_00001	400 uL	cis-1,4-Dichloro-2-butene	40 ug/mL
.MV-567647_00003	08/30/14		RESTEK, Lot A093634			(Purchased Reagent)	2-Chloro-1,3-butadiene	2000 ug/mL		
							2-Nitropropane	4000 ug/mL		
							Acetonitrile	20000 ug/mL		
							Ethanol	100000 ug/mL		
							Ethyl acetate	4000 ug/mL		
							Isopropyl alcohol	20000 ug/mL		
							Isopropyl ether	2000 ug/mL		
							Methacrylonitrile	20000 ug/mL		
							Methyl methacrylate	4000 ug/mL		
							Propionitrile	20000 ug/mL		
							Tert-amyl methyl ether	2000 ug/mL		
							Tert-butyl ethyl ether	2000 ug/mL		
							.MV-568035_00001	04/30/14		RESTEK, Lot A094880
.MV-568035_00002	04/30/14		RESTEK, Lot A094880			(Purchased Reagent)	Propene oxide	25000 ug/mL		
.MV-568036_00001	10/31/14		RESTEK, Lot A094886			(Purchased Reagent)	cis-1,4-Dichloro-2-butene	1000 ug/mL		
TOC ICV Std_00016	02/28/14		Ricca, Lot 1302747			(Purchased Reagent)	Total Organic Carbon - Quad	1000 ppm		
TOC LCS Std_00018	03/31/15		Ultra Scientific, Lot R00176			(Purchased Reagent)	Total Organic Carbon - Quad	1001 ppm		



# Certification Summary

Client: FPM Remediations Inc  
 Project/Site: Griffiss AFB B 35 LTM

TestAmerica Job ID: 280-43753-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alaska (UST)	State Program	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas DEQ	State Program	6	88-0687
TestAmerica Denver	Colorado	State Program	8	N/A
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Florida	NELAP	4	E87667
TestAmerica Denver	Idaho	State Program	10	CO00026
TestAmerica Denver	Illinois	NELAP	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Kansas	NELAP	7	E-10166
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Maryland	State Program	3	268
TestAmerica Denver	Minnesota	NELAP	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New Hampshire	NELAP	1	205310
TestAmerica Denver	New Jersey	NELAP	2	CO004
TestAmerica Denver	New Mexico	State Program	6	CO00026
TestAmerica Denver	New York	NELAP	2	11964
TestAmerica Denver	North Carolina DENR	State Program	4	358
TestAmerica Denver	North Dakota	State Program	8	R-034
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAP	10	CO200001
TestAmerica Denver	Pennsylvania	NELAP	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002
TestAmerica Denver	Texas	NELAP	6	T104704183-08-TX
TestAmerica Denver	USDA	Federal		P330-13-00202
TestAmerica Denver	Utah	NELAP	8	CO000262012-4
TestAmerica Denver	Virginia	NELAP	3	460232
TestAmerica Denver	Washington	State Program	10	C583
TestAmerica Denver	West Virginia DEP	State Program	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430
TestAmerica Denver	Wyoming (UST)	A2LA	8	

Accreditation may not be offered or required for all methods and analytes reported in this package Please contact your project manager for the laboratory's current list of certified methods and analytes.

# Method 8260B DOD

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Volatile Organic Compounds (GC/MS)  
by Method 8260B/DOD

FORM II  
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
B035M0409LA	280-43753-1	98	99	95	98
062513LE	280-43753-2	105	108	104	107
062513LF	280-43753-3	99	103	96	98
062513LR	280-43753-4	102	107	102	105
	MB 280-181535/27	107	106	102	104
	LCS 280-181535/26	94	99	99	92

DBFM = Dibromofluoromethane (Surr)  
DCA = 1,2-Dichloroethane-d4 (Surr)  
TOL = Toluene-d8 (Surr)  
BFB = 4-Bromofluorobenzene (Surr)

QC LIMITS  
85-115  
70-120  
85-120  
75-120

# Column to be used to flag recovery values

FORM II 8260C

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: H3251.D  
 Lab ID: LCS 280-181535/26 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloroform	5.00	4.89	98	65-135	
cis-1,2-Dichloroethene	5.00	4.90	98	70-125	
Tetrachloroethene	5.00	4.89	98	45-150	
trans-1,2-Dichloroethene	5.00	5.12	102	60-140	
Trichloroethene	5.00	4.93	99	70-125	
Vinyl chloride	5.00	4.78	96	50-145	

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: H3252.D Lab Sample ID: MB 280-181535/27  
 Matrix: Water Heated Purge: (Y/N) N  
 Instrument ID: VMS\_H Date Analyzed: 07/03/2013 20:43  
 GC Column: DB-624 (75.53) ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-181535/26	H3251.D	07/03/2013 20:22
B035M0409LA	280-43753-1	H3269.D	07/04/2013 02:52
062513LE	280-43753-2	H3270.D	07/04/2013 03:14
062513LF	280-43753-3	H3272.D	07/04/2013 03:57
062513LR	280-43753-4	H3273.D	07/04/2013 04:19

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: H3220.D BFB Injection Date: 07/03/2013  
 Instrument ID: VMS\_H BFB Injection Time: 08:04  
 Analysis Batch No.: 181419

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	19.2
75	30.0 - 60.0 % of mass 95	46.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.0
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	70.6
175	5.0 - 9.0 % of mass 174	5.6 (8.0) 1
176	95.0 - 101.0 % of mass 174	69.4 (98.3) 1
177	5.0 - 9.0 % of mass 176	4.5 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD003 280-181419/2	H3221.D	07/03/2013	08:12
	STD01 280-181419/3	H3222.D	07/03/2013	08:33
	STD02 280-181419/4	H3223.D	07/03/2013	08:55
	STD05 280-181419/5	H3224.D	07/03/2013	09:16
	STD10 280-181419/6	H3225.D	07/03/2013	09:38
	STD30 280-181419/7	H3226.D	07/03/2013	09:59
	STD60 280-181419/8	H3227.D	07/03/2013	10:21
	STD01 280-181419/9	H3228.D	07/03/2013	10:43
	STD02 280-181419/10	H3229.D	07/03/2013	11:04
	STD05 280-181419/11	H3230.D	07/03/2013	11:26
	ICIS 280-181419/12	H3231.D	07/03/2013	11:47
	STD30 280-181419/13	H3232.D	07/03/2013	12:09
	STD60 280-181419/14	H3233.D	07/03/2013	12:31
	ICV 280-181419/16	H3235.D	07/03/2013	13:27
	ICV 280-181419/15	H3236.D	07/03/2013	13:49
	ICV 280-181419/17	H3237.D	07/03/2013	14:11
	STD003 280-181419/18	H3239.D	07/03/2013	15:16
	STD01 280-181419/19	H3240.D	07/03/2013	15:38
	STD02 280-181419/20	H3241.D	07/03/2013	16:00
	STD05 280-181419/21	H3242.D	07/03/2013	16:22
	STD10 280-181419/22	H3243.D	07/03/2013	16:44
	STD30 280-181419/23	H3244.D	07/03/2013	17:05
	STD60 280-181419/24	H3245.D	07/03/2013	17:27
	ICV 280-181419/25	H3247.D	07/03/2013	18:11

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: H3248.D BFB Injection Date: 07/03/2013  
 Instrument ID: VMS\_H BFB Injection Time: 19:12  
 Analysis Batch No.: 181535

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	19.1
75	30.0 - 60.0 % of mass 95	45.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	72.3
175	5.0 - 9.0 % of mass 174	5.4 (7.5) 1
176	95.0 - 101.0 % of mass 174	71.8 (99.2) 1
177	5.0 - 9.0 % of mass 176	4.6 (6.4) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-181535/2	H3249.D	07/03/2013	19:38
	CCV 280-181535/3	H3250.D	07/03/2013	20:00
	LCS 280-181535/26	H3251.D	07/03/2013	20:22
	MB 280-181535/27	H3252.D	07/03/2013	20:43
B035M0409LA	280-43753-1	H3269.D	07/04/2013	02:52
062513LE	280-43753-2	H3270.D	07/04/2013	03:14
062513LF	280-43753-3	H3272.D	07/04/2013	03:57
062513LR	280-43753-4	H3273.D	07/04/2013	04:19

FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: ICIS 280-181419/12 Date Analyzed: 07/03/2013 11:47  
 Instrument ID: VMS\_H GC Column: DB-624 (75.53) ID: 0.53(mm)  
 Lab File ID (Standard): H3231.D Heated Purge: (Y/N) N  
 Calibration ID: 14677

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	310506	3.84	1389174	6.57	397680	10.89	
UPPER LIMIT	621012	4.34	2778348	7.07	795360	11.39	
LOWER LIMIT	155253	3.34	694587	6.07	198840	10.39	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-181419/16	347690	3.85	1432051	6.59	406336	10.90	
ICV 280-181419/15	325221	3.85	1444952	6.59	390328	10.90	
ICV 280-181419/17	346752	3.85	1460475	6.59	416751	10.90	
ICV 280-181419/25	313445	3.86	1370587	6.59	366271	10.91	
CCV 280-181535/2	407326	3.84	1361152	6.59	378549	10.91	
CCV 280-181535/3	356378	3.85	1417753	6.59	416292	10.90	
LCS 280-181535/26	370892	3.84	1423471	6.59	388318	10.91	
MB 280-181535/27	373441	3.86	1434185	6.58	417396	10.91	
280-43753-1	B035M0409LA	401332	3.84	1556554	6.57	451359	10.89
280-43753-2	062513LE	380631	3.84	1555263	6.57	442042	10.89
280-43753-3	062513LF	404050	3.84	1615598	6.57	463869	10.89
280-43753-4	062513LR	361195	3.84	1602139	6.57	455149	10.89

TBA = TBA-d9 (IS)  
 FB = Fluorobenzene  
 CBZ = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits



FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: ICIS 280-181419/12 Date Analyzed: 07/03/2013 11:47  
 Instrument ID: VMS\_H GC Column: DB-624 (75.53) ID: 0.53(mm)  
 Lab File ID (Standard): H3231.D Heated Purge: (Y/N) N  
 Calibration ID: 14677

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		579674	14.00				
UPPER LIMIT		1159348	14.50				
LOWER LIMIT		289837	13.50				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-181419/16		611514	14.02				
ICV 280-181419/15		588077	14.02				
ICV 280-181419/17		621137	14.02				
ICV 280-181419/25		576454	14.02				
CCV 280-181535/2		580901	14.02				
CCV 280-181535/3		628294	14.02				
LCS 280-181535/26		608370	14.02				
MB 280-181535/27		625626	14.02				
280-43753-1	B035M0409LA	647456	14.00				
280-43753-2	062513LE	641290	14.00				
280-43753-3	062513LF	687035	14.01				
280-43753-4	062513LR	672527	14.00				

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: B035M0409LA Lab Sample ID: 280-43753-1  
 Matrix: Water Lab File ID: H3269.D  
 Analysis Method: 8260C Date Collected: 06/25/2013 16:00  
 Sample wt/vol: 20 (mL) Date Analyzed: 07/04/2013 02:52  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 (75.53) ID: 0.53 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 181535 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-66-3	Chloroform	0.20	U	1.0	0.20	0.16
156-59-2	cis-1,2-Dichloroethene	2.6		1.0	0.20	0.15
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
156-60-5	trans-1,2-Dichloroethene	0.35	J	1.0	0.20	0.15
79-01-6	Trichloroethene	0.22	J	1.0	0.20	0.16
75-01-4	Vinyl chloride	3.7		1.5	0.40	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
1868-53-7	Dibromofluoromethane (Surr)	98		85-115
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-120
460-00-4	4-Bromofluorobenzene (Surr)	98		75-120
2037-26-5	Toluene-d8 (Surr)	95		85-120

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3269.D  
 Lims ID: 280-43753-D-1 Client ID: B035M0409LA  
 Inject. Date: 04-Jul-2013 02:52:30 Dil. Factor: 1.0000  
 Sample Type: Client  
 Sample ID: 280-43753-d-1 pH<2  
 Misc. Info.:  
 Operator: tinkhams Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 21  
 Lims Batch ID: 181535 Lims Sample ID: 46  
 Detector: MS SCAN

Method: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\AQ\_VMSH\_8260.m  
 Last Update: 05-Jul-2013 09:31:44 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

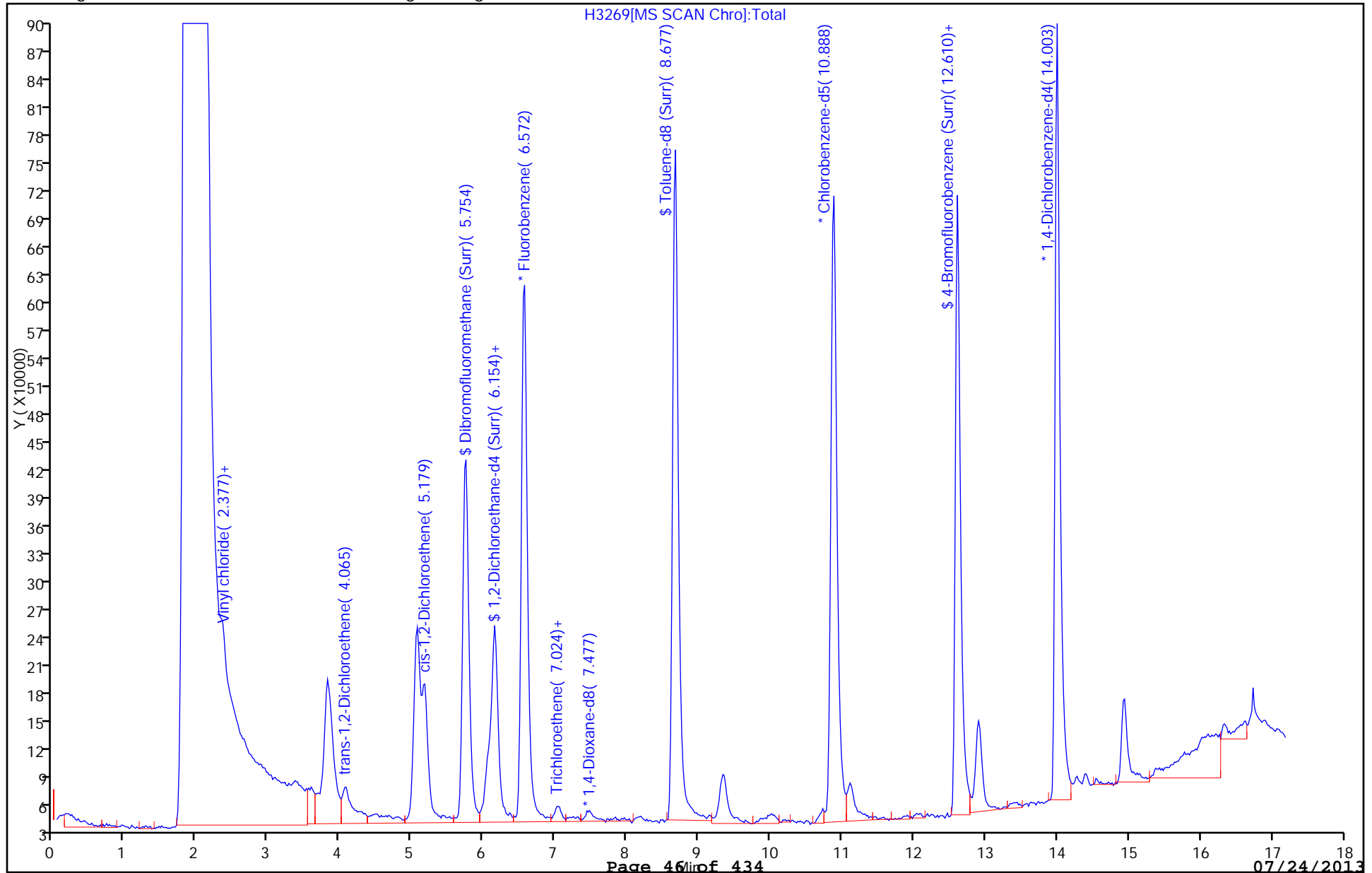
Date: 05-Jul-2013 11:43:34

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.839	3.853	-0.014	78	401332	250.0	
* 2 Fluorobenzene	96	6.572	6.586	-0.014	98	1556554	12.5	
* 3 1,4-Dioxane-d8	96	7.477	7.473	0.003	4	19147	250.0	
* 4 Chlorobenzene-d5	119	10.888	10.902	-0.014	87	451359	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.003	14.017	-0.014	96	647456	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.754	5.768	-0.014	71	750295	8.81	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.154	6.185	-0.031	98	325831	8.91	
\$ 10 Toluene-d8 (Surr)	98	8.677	8.691	-0.014	93	1518328	8.55	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.610	12.624	-0.014	86	755187	8.82	
32 Vinyl chloride	62	2.360	2.362	-0.002	81	170380	3.71	
58 trans-1,2-Dichloroethene	96	4.083	4.102	-0.019	94	19079	0.3452	
65 cis-1,2-Dichloroethene	96	5.179	5.199	-0.020	61	148600	2.65	
75 Chloroform	83		5.564					
86 Trichloroethene	95	7.024	7.061	-0.037	76	14960	0.2214	
103 Tetrachloroethene	164		9.567					

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3269.D  
Injection Date: 04-Jul-2013 02:52:30 Limit Group: MSV - 8260B Water and Solid  
Client ID: B035M0409LA Instrument ID: VMS\_H  
Lims Batch ID: 181535 Lims Sample ID: 46  
Operator ID: tinkhams Purge Vol: 20.000 mL  
Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3269.D

Injection Date: 04-Jul-2013 02:52:30

Limit Group: MSV - 8260B Water and Solid

Client ID: B035M0409LA

Instrument ID: VMS\_H

Lims Batch ID: 181535

Lims Sample ID: 46

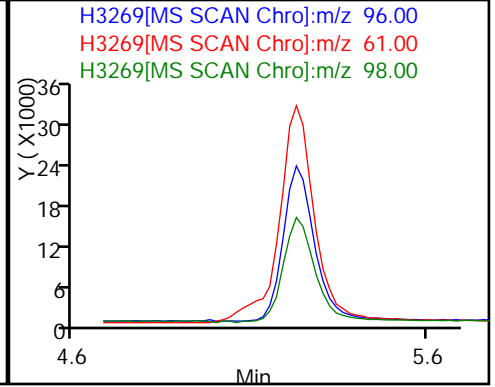
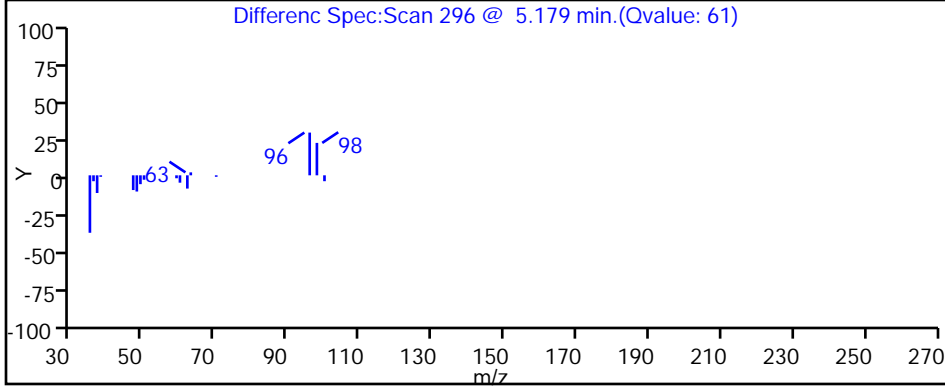
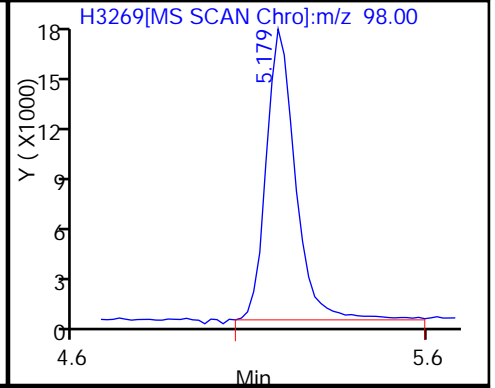
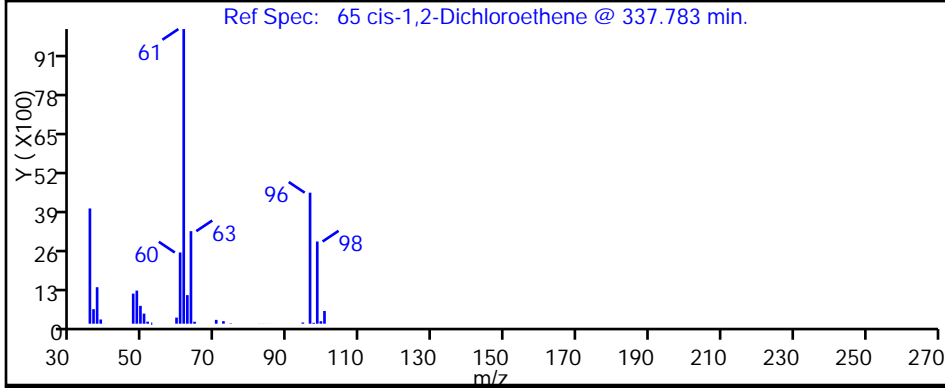
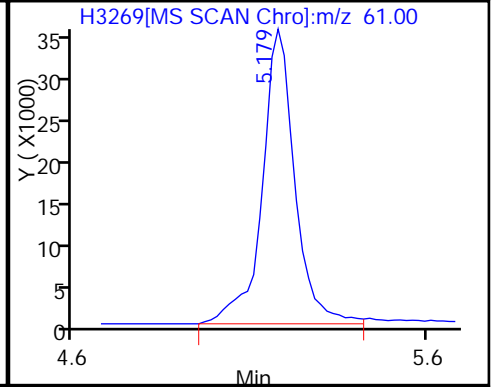
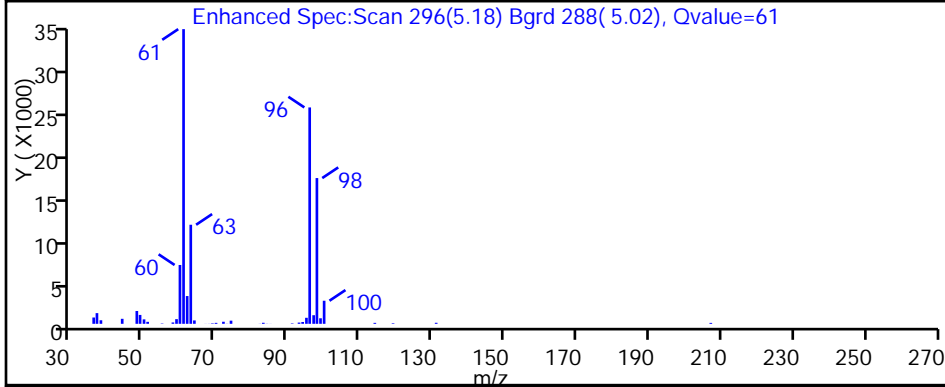
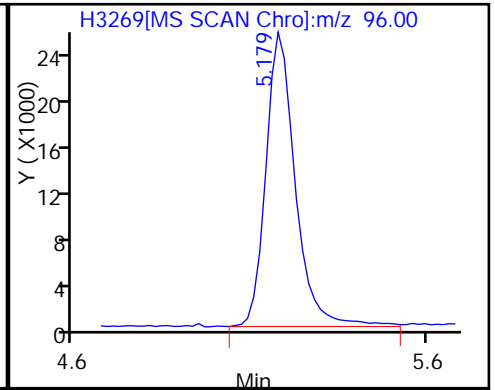
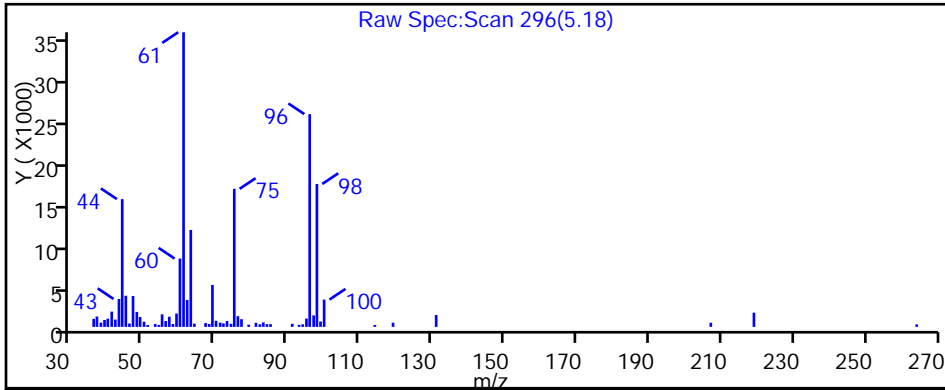
Operator ID: tinkhams

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

65 cis-1,2-Dichloroethene



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3269.D

Injection Date: 04-Jul-2013 02:52:30

Limit Group: MSV - 8260B Water and Solid

Client ID: B035M0409LA

Instrument ID: VMS\_H

Lims Batch ID: 181535

Lims Sample ID: 46

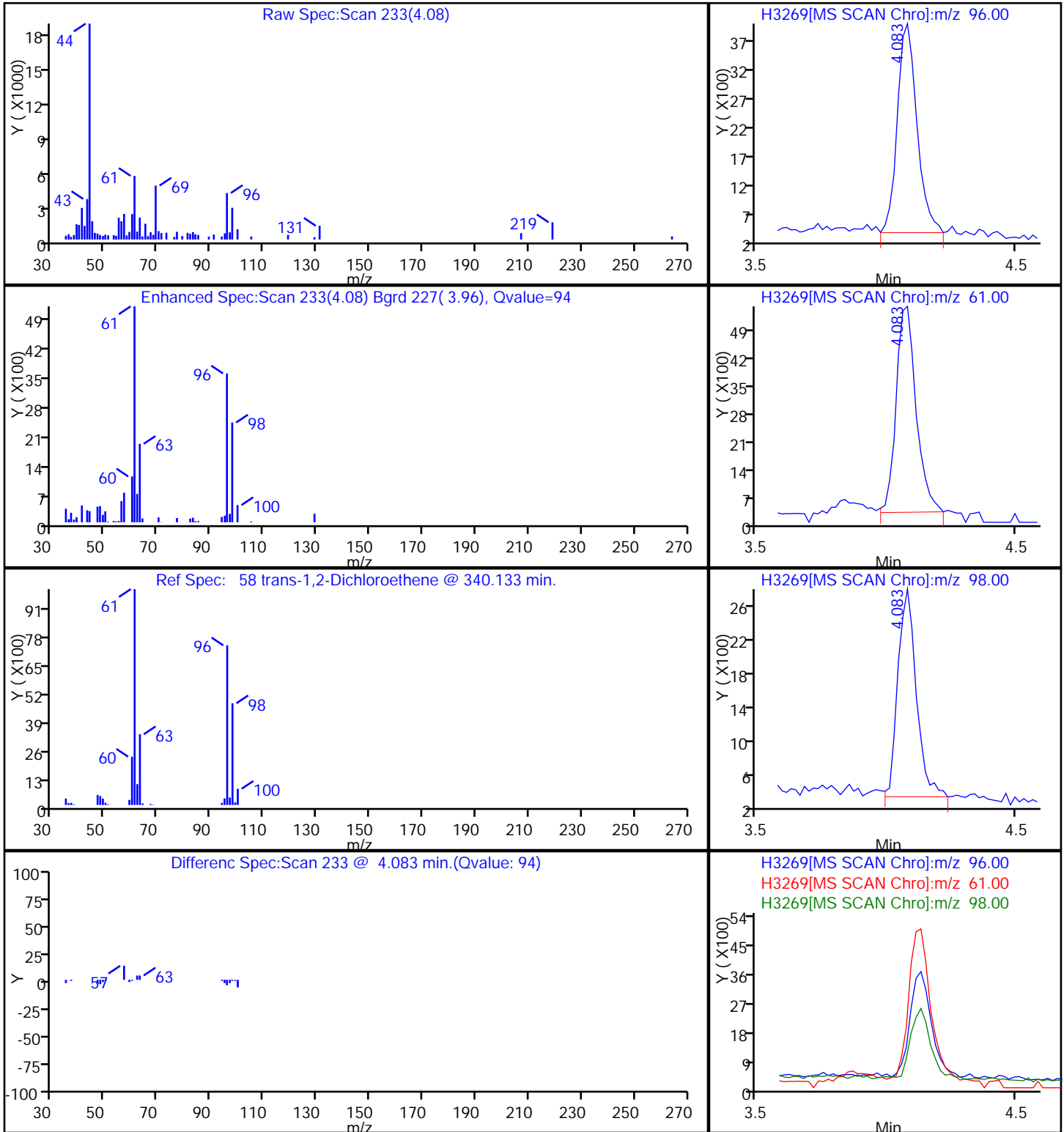
Operator ID: tinkhams

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

58 trans-1,2-Dichloroethene



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3269.D

Injection Date: 04-Jul-2013 02:52:30

Limit Group: MSV - 8260B Water and Solid

Client ID: B035M0409LA

Instrument ID: VMS\_H

Lims Batch ID: 181535

Lims Sample ID: 46

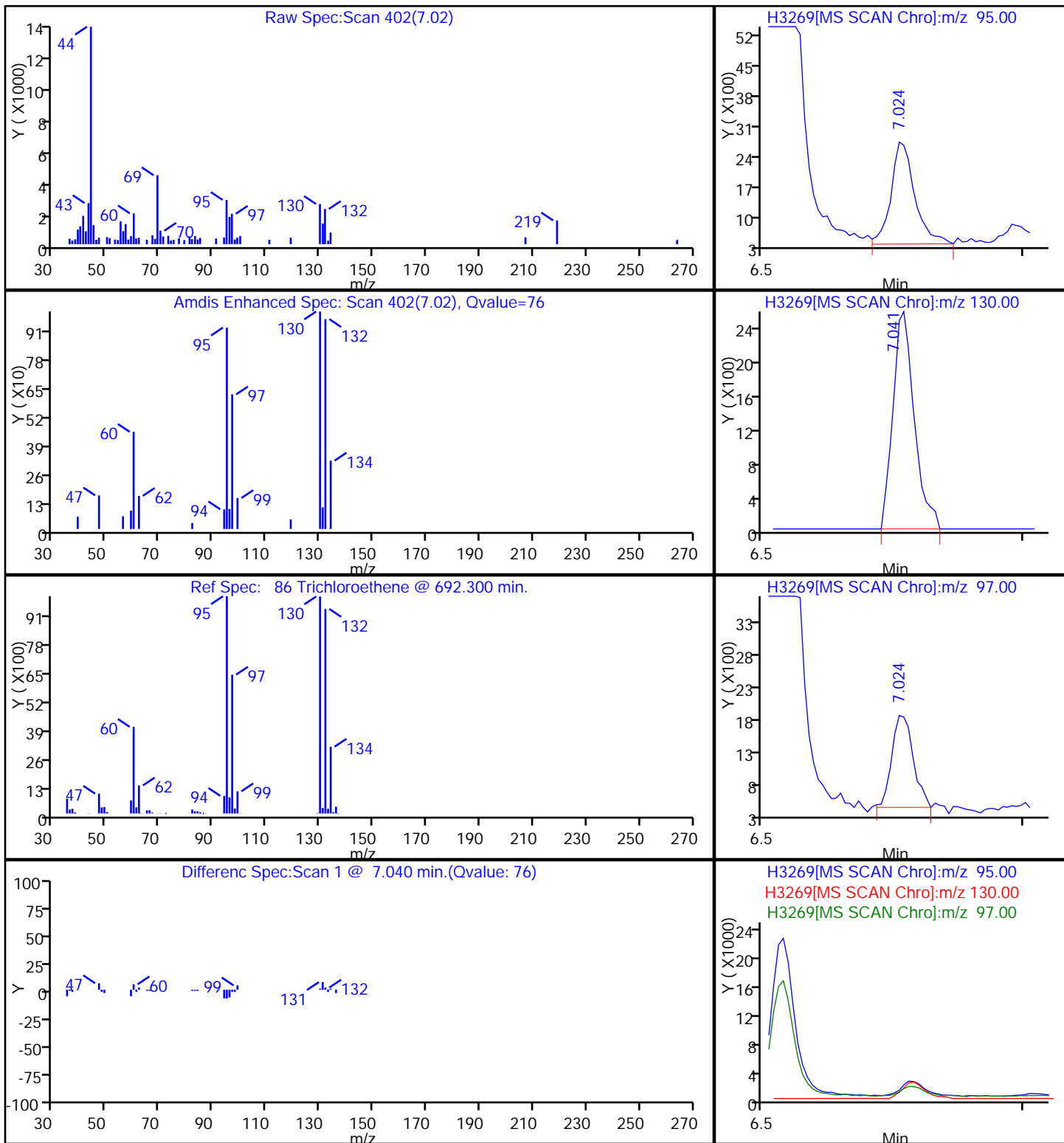
Operator ID: tinkhams

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

86 Trichloroethene



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3269.D

Injection Date: 04-Jul-2013 02:52:30

Limit Group: MSV - 8260B Water and Solid

Client ID: B035M0409LA

Instrument ID: VMS\_H

Lims Batch ID: 181535

Lims Sample ID: 46

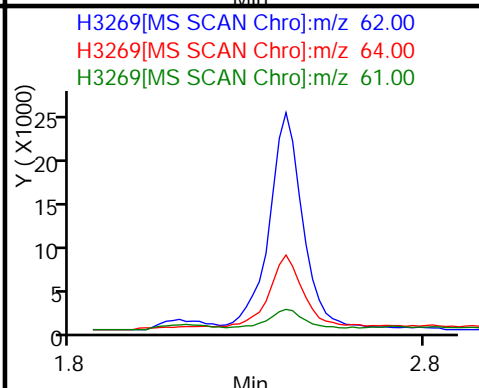
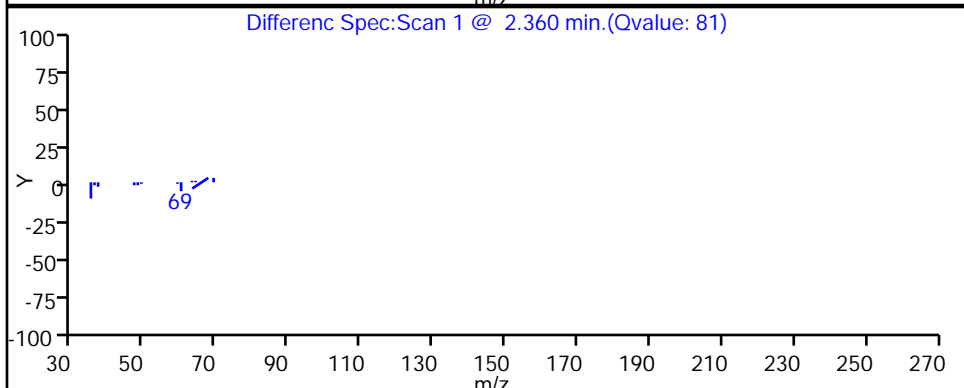
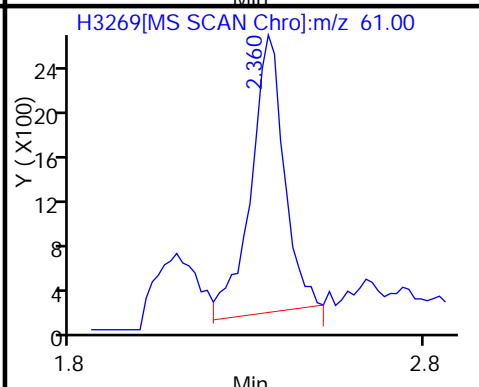
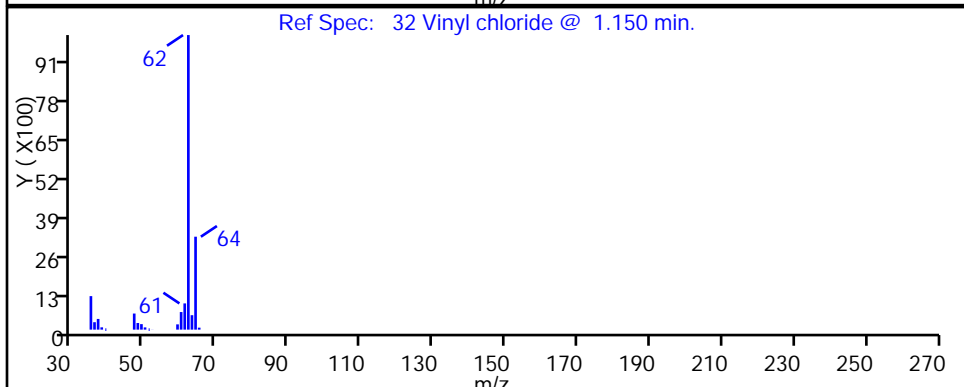
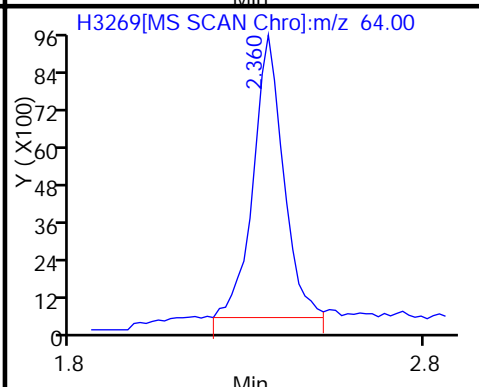
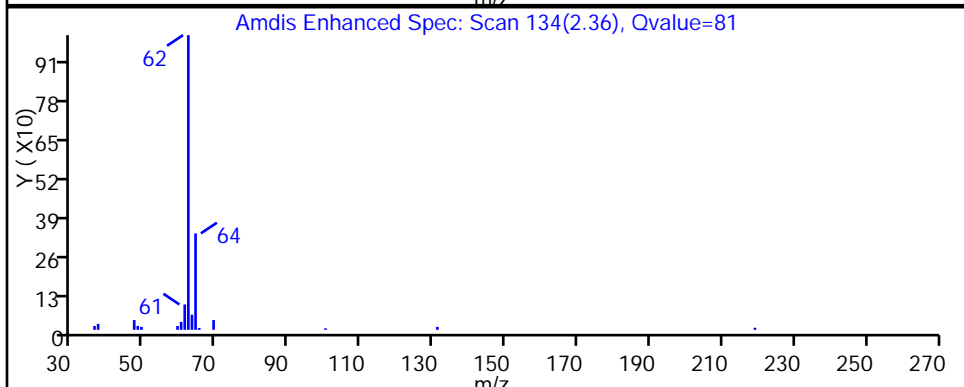
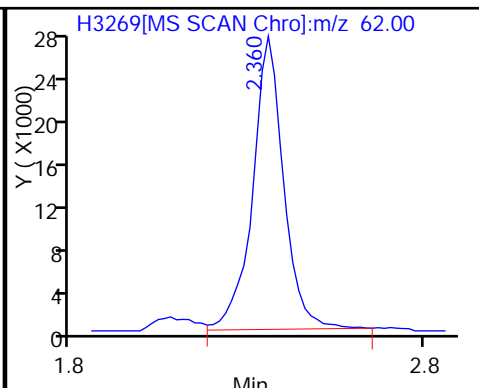
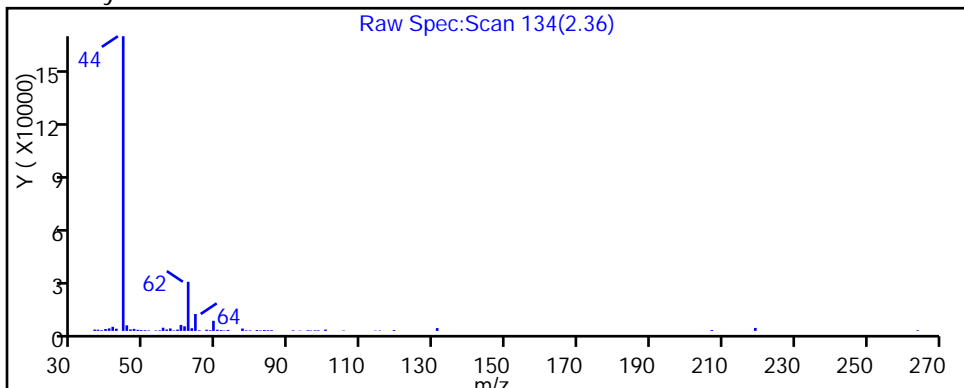
Operator ID: tinkhams

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

32 Vinyl chloride





FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: 062513LE Lab Sample ID: 280-43753-2  
 Matrix: Water Lab File ID: H3270.D  
 Analysis Method: 8260C Date Collected: 06/25/2013 16:15  
 Sample wt/vol: 20 (mL) Date Analyzed: 07/04/2013 03:14  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 (75.53) ID: 0.53 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 181535 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-66-3	Chloroform	1.3		1.0	0.20	0.16
156-59-2	cis-1,2-Dichloroethene	0.20	U	1.0	0.20	0.15
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	1.0	0.20	0.15
79-01-6	Trichloroethene	0.20	U	1.0	0.20	0.16
75-01-4	Vinyl chloride	0.40	U	1.5	0.40	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
1868-53-7	Dibromofluoromethane (Surr)	105		85-115
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		70-120
460-00-4	4-Bromofluorobenzene (Surr)	107		75-120
2037-26-5	Toluene-d8 (Surr)	104		85-120

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3270.D  
 Lims ID: 280-43753-E-2 Client ID: 062513LE  
 Inject. Date: 04-Jul-2013 03:14:30 Dil. Factor: 1.0000  
 Sample Type: Client  
 Sample ID: 280-43753-e-2 pH<2  
 Misc. Info.:  
 Operator: tinkhams Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 22  
 Lims Batch ID: 181535 Lims Sample ID: 47  
 Detector: MS SCAN

Method: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\AQ\_VMSH\_8260.m  
 Last Update: 05-Jul-2013 09:31:44 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

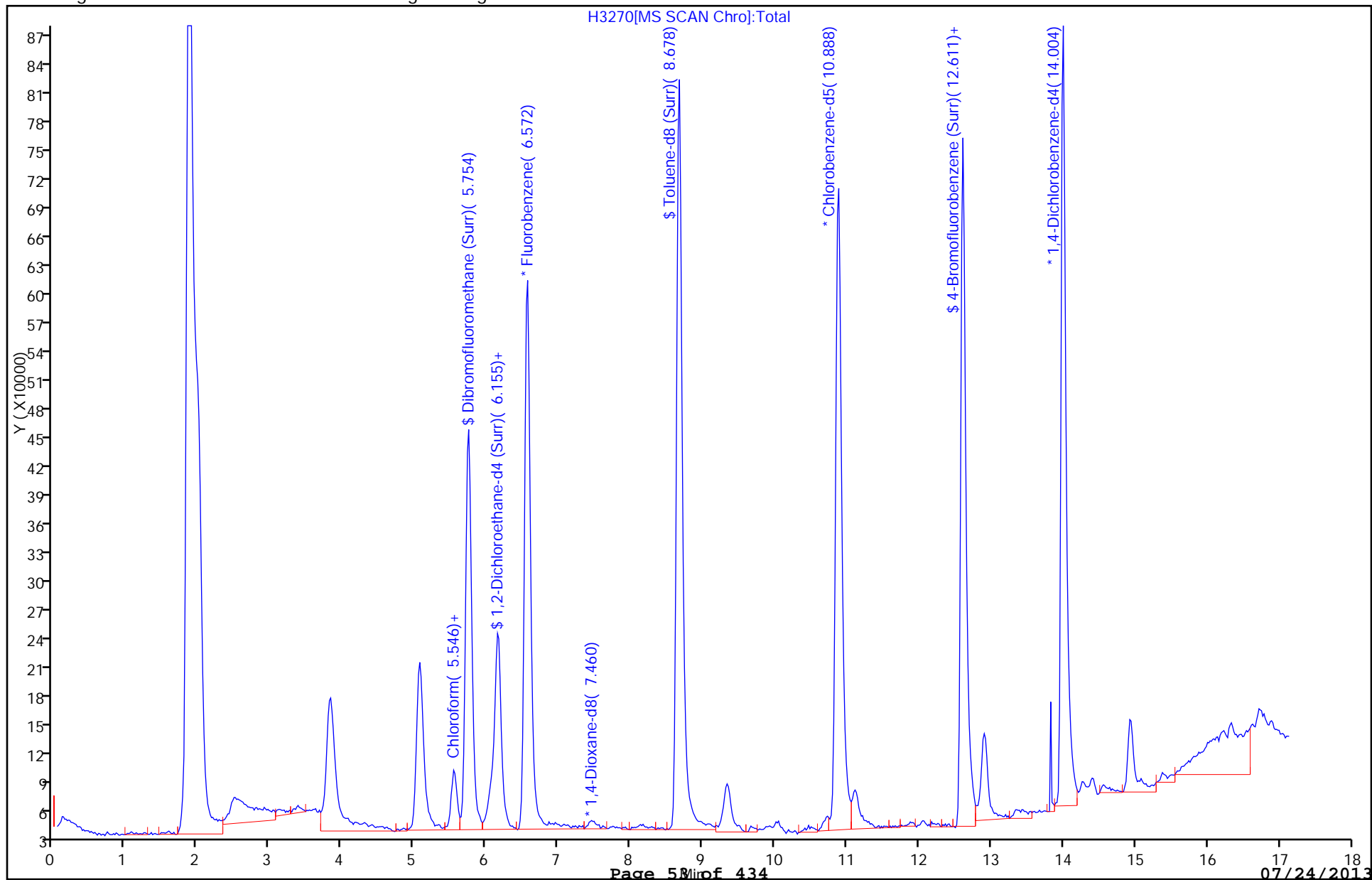
Date: 05-Jul-2013 09:04:15

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.840	3.853	-0.013	79	380631	250.0	
* 2 Fluorobenzene	96	6.572	6.586	-0.014	98	1555263	12.5	
* 3 1,4-Dioxane-d8	96	7.460	7.473	-0.013	1	21953	250.0	
* 4 Chlorobenzene-d5	119	10.888	10.902	-0.014	86	442042	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.004	14.017	-0.013	97	641290	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.754	5.768	-0.014	69	807614	9.49	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.155	6.185	-0.030	99	354474	9.70	
\$ 10 Toluene-d8 (Surr)	98	8.678	8.691	-0.013	93	1629327	9.37	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.611	12.624	-0.013	86	819015	9.66	
32 Vinyl chloride	62		2.362					
58 trans-1,2-Dichloroethene	96		4.102					
65 cis-1,2-Dichloroethene	96		5.199					
75 Chloroform	83	5.563	5.564	-0.001	95	129968	1.29	
86 Trichloroethene	95		7.061					
103 Tetrachloroethene	164		9.567					

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3270.D  
Injection Date: 04-Jul-2013 03:14:30 Limit Group: MSV - 8260B Water and Solid  
Client ID: 062513LE Instrument ID: VMS\_H  
Lims Batch ID: 181535 Lims Sample ID: 47  
Operator ID: tinkhams Purge Vol: 20.000 mL  
Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3270.D

Injection Date: 04-Jul-2013 03:14:30

Limit Group: MSV - 8260B Water and Solid

Client ID: 062513LE

Instrument ID: VMS\_H

Lims Batch ID: 181535

Lims Sample ID: 47

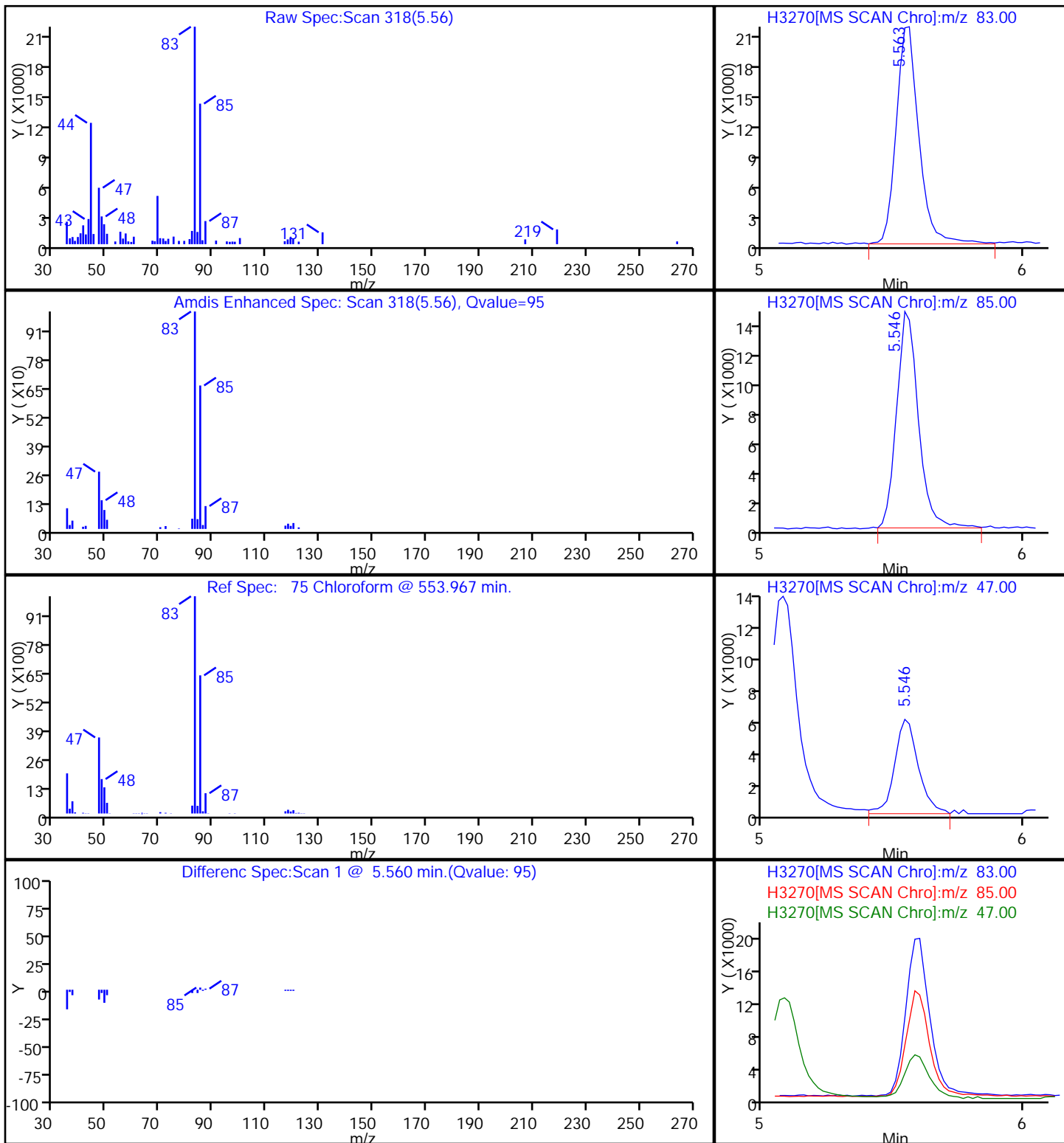
Operator ID: tinkhams

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

75 Chloroform



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: 062513LF Lab Sample ID: 280-43753-3  
 Matrix: Water Lab File ID: H3272.D  
 Analysis Method: 8260C Date Collected: 06/25/2013 15:05  
 Sample wt/vol: 20 (mL) Date Analyzed: 07/04/2013 03:57  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 (75.53) ID: 0.53 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 181535 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-66-3	Chloroform	0.20	U	1.0	0.20	0.16
156-59-2	cis-1,2-Dichloroethene	0.20	U	1.0	0.20	0.15
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	1.0	0.20	0.15
79-01-6	Trichloroethene	0.20	U	1.0	0.20	0.16
75-01-4	Vinyl chloride	0.40	U	1.5	0.40	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
1868-53-7	Dibromofluoromethane (Surr)	99		85-115
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-120
460-00-4	4-Bromofluorobenzene (Surr)	98		75-120
2037-26-5	Toluene-d8 (Surr)	96		85-120

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3272.D  
 Lims ID: 280-43753-B-3 Client ID: 062513LF  
 Inject. Date: 04-Jul-2013 03:57:30 Dil. Factor: 1.0000  
 Sample Type: Client  
 Sample ID: 280-43753-b-3 pH<2  
 Misc. Info.:  
 Operator: tinkhams Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 24  
 Lims Batch ID: 181535 Lims Sample ID: 49  
 Detector: MS SCAN

Method: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\AQ\_VMSH\_8260.m  
 Last Update: 05-Jul-2013 09:31:44 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams Date: 05-Jul-2013 09:05:12

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.842	3.853	-0.011	86	404050	250.0	
* 2 Fluorobenzene	96	6.574	6.586	-0.012	98	1615598	12.5	
* 3 1,4-Dioxane-d8	96	7.462	7.473	-0.011	1	18005	250.0	
* 4 Chlorobenzene-d5	119	10.890	10.902	-0.012	85	463869	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.006	14.017	-0.011	96	687035	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.756	5.768	-0.012	58	784614	8.88	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.157	6.185	-0.028	98	352712	9.29	
\$ 10 Toluene-d8 (Surr)	98	8.680	8.691	-0.011	93	1578556	8.65	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.613	12.624	-0.011	86	798800	8.79	
32 Vinyl chloride	62		2.362					19
58 trans-1,2-Dichloroethene	96		4.102					
65 cis-1,2-Dichloroethene	96		5.199					
75 Chloroform	83		5.564					
86 Trichloroethene	95		7.061					
103 Tetrachloroethene	164		9.567					

QC Flag Legend

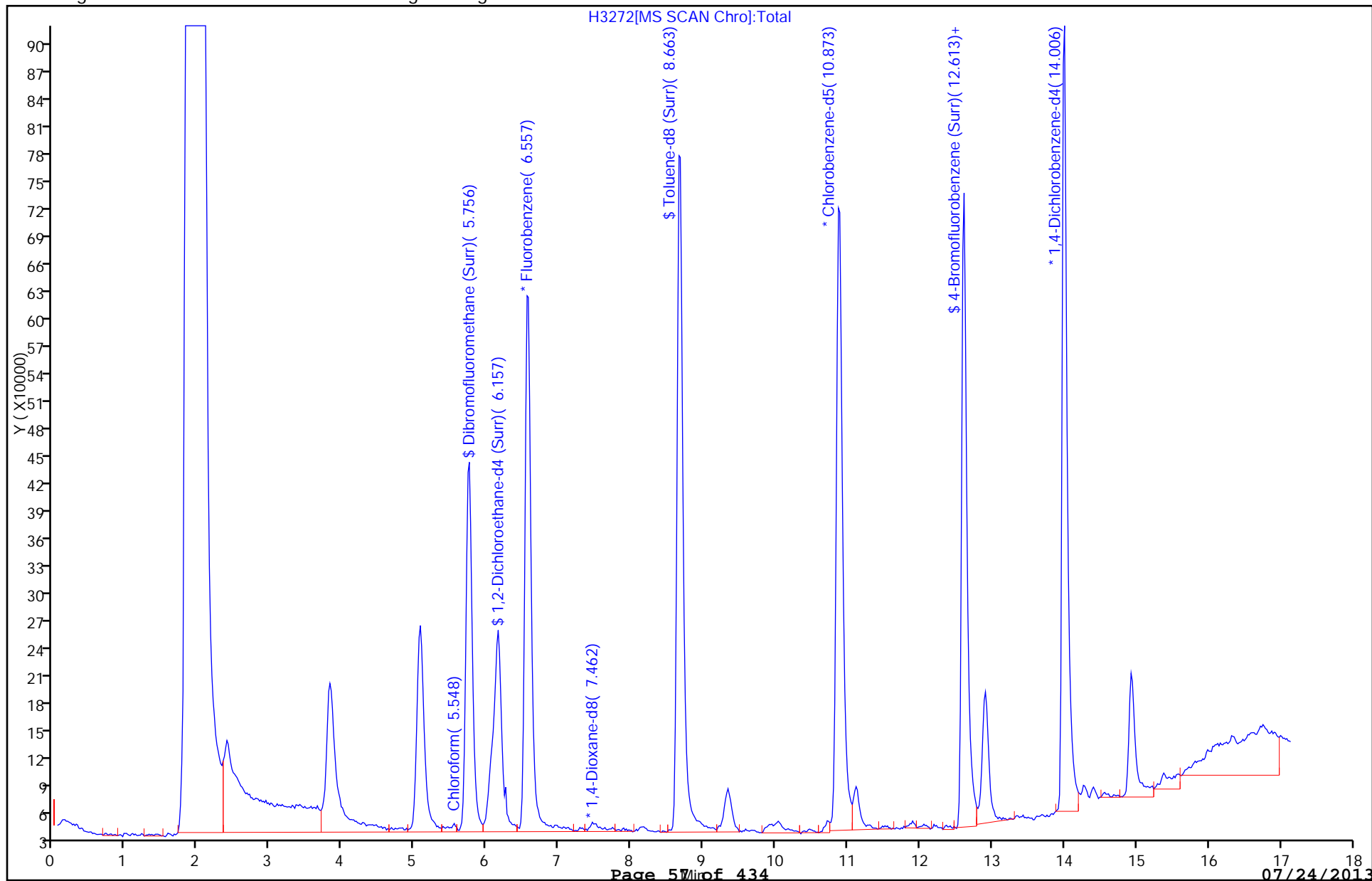
Processing Flags

- 1 - Missing Peaks
- 9 - Failed A Reference Spectral Test

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3272.D  
Injection Date: 04-Jul-2013 03:57:30 Limit Group: MSV - 8260B Water and Solid  
Client ID: 062513LF Instrument ID: VMS\_H  
Lims Batch ID: 181535 Lims Sample ID: 49  
Operator ID: tinkhams Purge Vol: 20.000 mL  
Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: 062513LR Lab Sample ID: 280-43753-4  
 Matrix: Water Lab File ID: H3273.D  
 Analysis Method: 8260C Date Collected: 06/25/2013 08:55  
 Sample wt/vol: 20 (mL) Date Analyzed: 07/04/2013 04:19  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 (75.53) ID: 0.53 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 181535 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-66-3	Chloroform	0.20	U	1.0	0.20	0.16
156-59-2	cis-1,2-Dichloroethene	0.20	U	1.0	0.20	0.15
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	1.0	0.20	0.15
79-01-6	Trichloroethene	0.20	U	1.0	0.20	0.16
75-01-4	Vinyl chloride	0.40	U	1.5	0.40	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
1868-53-7	Dibromofluoromethane (Surr)	102		85-115
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		70-120
460-00-4	4-Bromofluorobenzene (Surr)	105		75-120
2037-26-5	Toluene-d8 (Surr)	102		85-120



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3273.D  
 Lims ID: 280-43753-B-4 Client ID: 062513LR  
 Inject. Date: 04-Jul-2013 04:19:30 Dil. Factor: 1.0000  
 Sample Type: Client  
 Sample ID: 280-43753-b-4 pH<2  
 Misc. Info.:  
 Operator: tinkhams Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 25  
 Lims Batch ID: 181535 Lims Sample ID: 50  
 Detector: MS SCAN

Method: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\AQ\_VMSH\_8260.m  
 Last Update: 05-Jul-2013 09:31:44 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

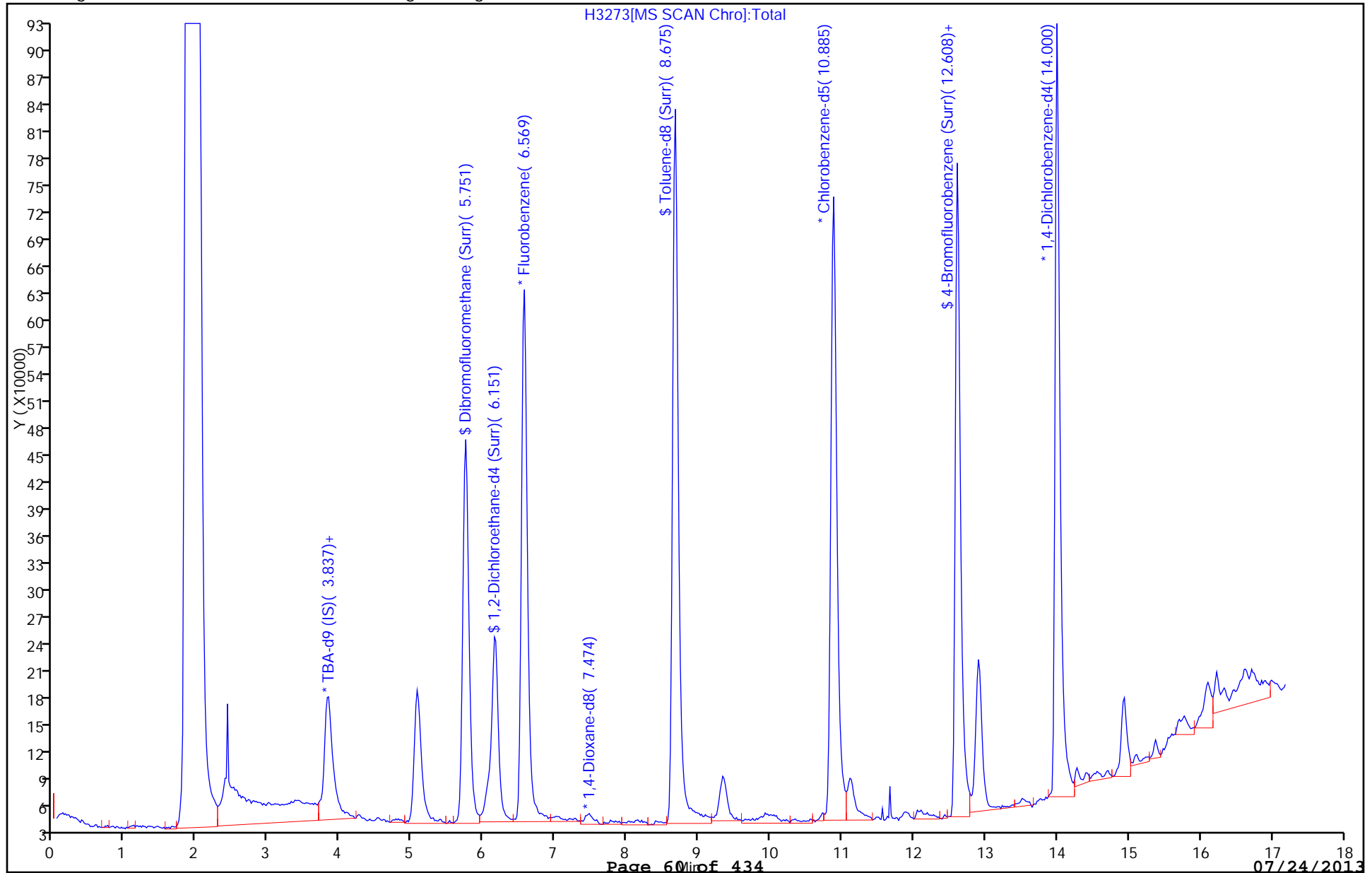
Date: 05-Jul-2013 09:05:27

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.837	3.853	-0.016	86	361195	250.0	
* 2 Fluorobenzene	96	6.569	6.586	-0.017	98	1602139	12.5	
* 3 1,4-Dioxane-d8	96	7.474	7.473	0.001	1	17099	250.0	
* 4 Chlorobenzene-d5	119	10.885	10.902	-0.017	86	455149	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.000	14.017	-0.017	97	672527	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.751	5.768	-0.017	67	805998	9.20	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.151	6.185	-0.034	97	362545	9.63	
\$ 10 Toluene-d8 (Surr)	98	8.675	8.691	-0.016	93	1650247	9.21	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.608	12.624	-0.016	85	838136	9.42	
32 Vinyl chloride	62		2.362					
58 trans-1,2-Dichloroethene	96		4.102					
65 cis-1,2-Dichloroethene	96		5.199					
75 Chloroform	83		5.564					
86 Trichloroethene	95		7.061					
103 Tetrachloroethene	164		9.567					

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3273.D  
Injection Date: 04-Jul-2013 04:19:30 Limit Group: MSV - 8260B Water and Solid  
Client ID: 062513LR Instrument ID: VMS\_H  
Lims Batch ID: 181535 Lims Sample ID: 50  
Operator ID: tinkhams Purge Vol: 20.000 mL  
Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-43753-1 Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 08:12 Calibration End Date: 07/03/2013 10:21 Calibration ID: 14676

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD003 280-181419/2	H3221.D
Level 2	STD01 280-181419/3	H3222.D
Level 3	STD02 280-181419/4	H3223.D
Level 4	STD05 280-181419/5	H3224.D
Level 5	STD10 280-181419/6	H3225.D
Level 6	STD30 280-181419/7	H3226.D
Level 7	STD60 280-181419/8	H3227.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	0.4949 0.5625	0.4335 0.5443	0.3857	0.5792	0.5857	Ave	0.5123				15.0		15.0				
Chloromethane	0.5419 0.4500	0.4364 0.4319	0.3699	0.4409	0.4535	Ave	0.4463			0.1000	11.0		15.0				
Vinyl chloride	0.3827 0.3776	0.3493 0.3683	0.3273	0.3841	0.3929	Ave	0.3689				6.2		30.0				
Bromomethane	0.4101 0.3756	0.3750 0.3655	0.3120	0.3697	0.3832	Ave	0.3702				8.0		15.0				
Chloroethane	0.2416 0.2627	0.2389 0.2545	0.2306	0.2576	0.2623	Ave	0.2497				5.1		15.0				
Dichlorofluoromethane	0.8951 0.9226	0.8495 0.9262	0.8176	0.8897	0.9219	Ave	0.8889				4.7		15.0				
Trichlorofluoromethane	0.8727 0.8004	0.7913 0.8004	0.7482	0.8058	0.8179	Ave	0.8052				4.6		15.0				
Acrolein	0.0095 0.0122	0.0095 0.0114	0.0090	0.0108	0.0118	Ave	0.0108				12.0		15.0				
Acetone	0.0308	0.0289	0.0349	0.0315	0.0325	Ave	0.0317				7.0		15.0				
2-Butanone (MEK)	0.0546 0.0636	0.0546 0.0604	0.0501	0.0570	0.0672	Ave	0.0588				11.0		15.0				
2-Chloroethyl vinyl ether	0.0909 0.0894	0.0824 0.0879	0.0783	0.0887	0.0837	Ave	0.0859				5.3		15.0				
4-Methyl-2-pentanone (MIBK)	0.1733 0.2054	0.1983 0.1874	0.1935	0.1798	0.2106	Ave	0.1926				7.0		15.0				
2-Hexanone	0.3893 0.5232	0.3889 0.4769	0.3667	0.4064	0.5038	Ave	0.4364				14.0		15.0				
Cyclohexanone	0.0168 0.0194	0.0168 0.0177	0.0165	0.0186	0.0201	Ave	0.0182				8.0		15.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-43753-1 Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 08:12 Calibration End Date: 07/03/2013 10:21 Calibration ID: 14676

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD003 280-181419/2	H3221.D
Level 2	STD01 280-181419/3	H3222.D
Level 3	STD02 280-181419/4	H3223.D
Level 4	STD05 280-181419/5	H3224.D
Level 5	STD10 280-181419/6	H3225.D
Level 6	STD30 280-181419/7	H3226.D
Level 7	STD60 280-181419/8	H3227.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	15069 1807712	44275 3389508	79583	304833	624171	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chloromethane	FB	Ave	16501 1446136	44570 2689445	76337	232016	483213	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl chloride	FB	Ave	11653 1213595	35674 2293488	67546	202135	418700	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromomethane	FB	Ave	12487 1207065	38304 2276318	64382	194571	408385	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chloroethane	FB	Ave	7357 844210	24402 1584891	47577	135570	279483	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	27256 2964691	86763 5768191	168708	468226	982430	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	26574 2572018	80825 4984380	154392	424064	871582	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Acrolein	FB	Ave	9657 392376	711948	18478	56646	126262	300	10.0 600	20.0	50.0	100
Acetone	FB	Ave	396336	719196	28781	66217	138496	120	240	8.00	20.0	40.0
2-Butanone (MEK)	FB	Ave	22296 818017	1504607	41346	120074	286254	120	4.00 240	8.00	20.0	40.0
2-Chloroethyl vinyl ether	FB	Ave	2767 287394	8415 547269	16161	46696	89206	0.300 30.0	1.00 60.0	2.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	21111 2640596	81034 4667423	159748	378492	897758	1.20 120	4.00 240	8.00	20.0	40.0
2-Hexanone	CBZ	Ave	13845 1767389	42908 3121141	81187	223466	569140	1.20 120	4.00 240	8.00	20.0	40.0
Cyclohexanone	CBZ	Ave	18534 656936	1155175	36479	102131	227554	1200	40.0 2400	80.0	200	400

Curve Type Legend:

Ave = Average ISTD

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3221.D  
 Lims ID: std003 Client ID:  
 Inject. Date: 03-Jul-2013 08:12:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 1  
 Sample ID: std003  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 1  
 Lims Batch ID: 181419 Lims Sample ID: 2  
 Sublist: chrom-AQ\_VMSH\_8260\*sub48  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 18:59:59 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 08:55:52

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.838	3.854	-0.016	92	281271	250.0	
* 2 Fluorobenzene	96	6.553	6.587	-0.034	98	1268721	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.869	10.903	-0.034	87	370491	12.5	
* 5 1,4-Dichlorobenzene-d4	152	13.985	14.018	-0.034	97	519889	12.5	
28 Dichlorodifluoromethane	85	2.081	2.102	-0.021	73	15069	0.2898	
30 Chloromethane	50	2.203	2.224	-0.021	72	16501	0.3642	
31 Butadiene	54	2.307	2.328	-0.021	0	9684	0.3515	
32 Vinyl chloride	62	2.324	2.345	-0.021	69	11653	0.3112	
35 Bromomethane	94	2.603	2.606	-0.003	76	12487	0.3324	
36 Chloroethane	64	2.655	2.659	-0.004	70	7357	0.2902	
37 Dichlorofluoromethane	67	2.829	2.850	-0.021	80	27256	0.3021	
38 Trichlorofluoromethane	101	2.881	2.885	-0.004	73	26574	0.3251	
44 Acrolein	56		3.250					
47 Acetone	43	3.369	3.390	-0.021	85	13866	4.31	
67 2-Butanone (MEK)	43		5.182					
96 2-Chloroethyl vinyl ether	63	8.102	8.088	0.014	37	2767	0.3173	
98 4-Methyl-2-pentanone (MIBK)	43	8.520	8.523	-0.003	59	21111	1.08	
105 2-Hexanone	43	9.721	9.724	-0.003	55	13845	1.07	
120 Cyclohexanone	55	12.557	12.544	0.013	36	9833	18.2	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3221.D

Injection Date: 03-Jul-2013 08:12:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 2

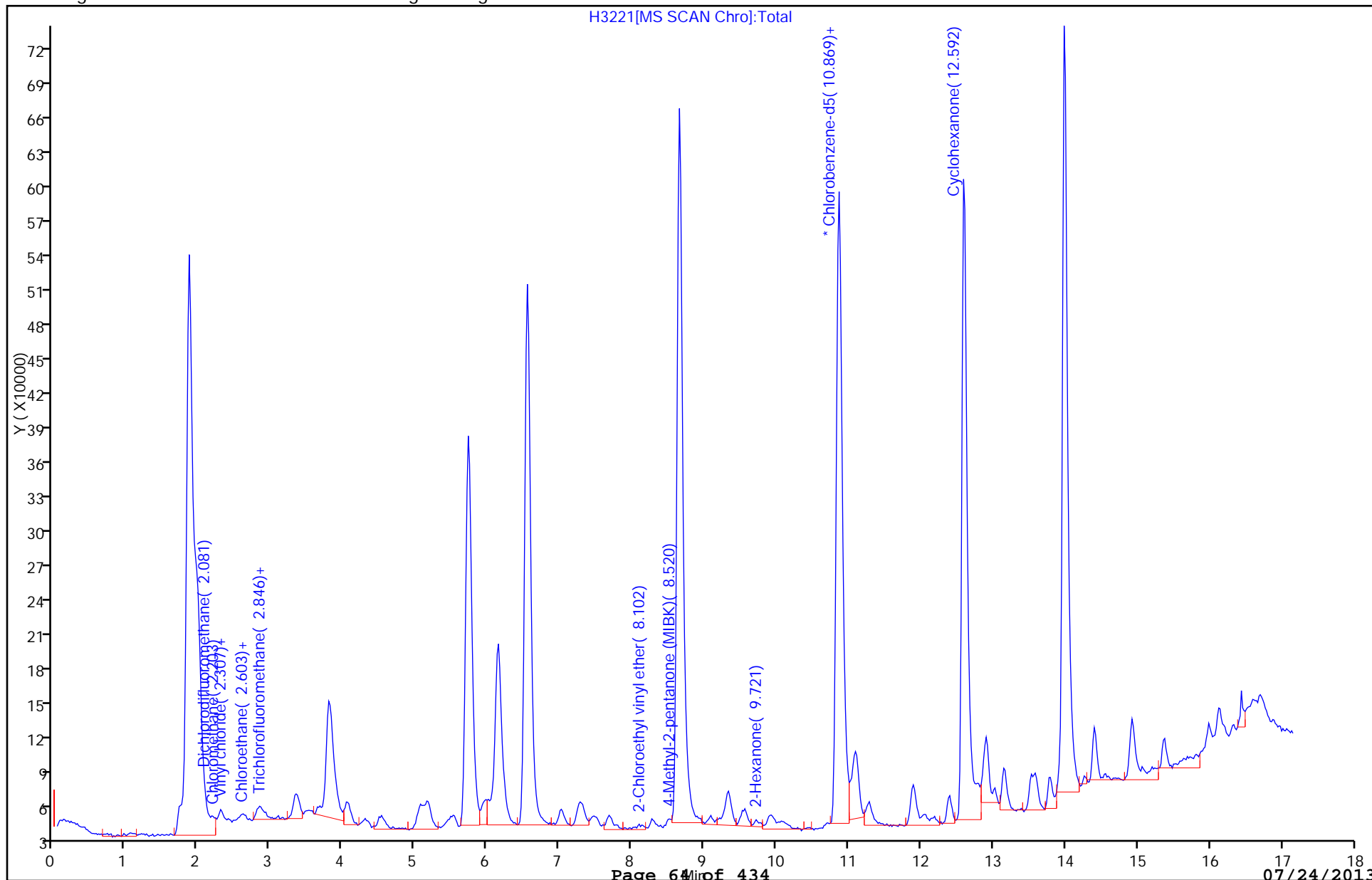
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3222.D  
 Lims ID: std01 Client ID:  
 Inject. Date: 03-Jul-2013 08:33:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 2  
 Sample ID: std01  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 2  
 Lims Batch ID: 181419 Lims Sample ID: 3  
 Sublist: chrom-AQ\_VMSH\_8260\*sub48  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:01 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 09:22:35

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.824	3.854	-0.030	96	243770	250.0	
* 2 Fluorobenzene	96	6.556	6.587	-0.031	98	1276703	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.872	10.903	-0.031	85	344801	12.5	
* 5 1,4-Dichlorobenzene-d4	152	13.987	14.018	-0.031	97	527434	12.5	
28 Dichlorodifluoromethane	85	2.084	2.102	-0.018	84	44275	0.8462	
30 Chloromethane	50	2.205	2.224	-0.019	84	44570	0.9777	
31 Butadiene	54	2.310	2.328	-0.018	0	24046	0.8673	
32 Vinyl chloride	62	2.327	2.345	-0.018	87	35674	0.9468	
35 Bromomethane	94	2.588	2.606	-0.018	86	38304	1.01	
36 Chloroethane	64	2.658	2.659	-0.001	89	24402	0.9567	
37 Dichlorofluoromethane	67	2.832	2.850	-0.018	97	86763	0.9556	
38 Trichlorofluoromethane	101	2.884	2.885	-0.001	85	80825	0.9827	
44 Acrolein	56	3.250	3.250	0.0	66	9657	8.77	
47 Acetone	43	3.389	3.390	-0.001	68	23573	7.28	
67 2-Butanone (MEK)	43	5.181	5.182	-0.001	60	22296	3.71	
96 2-Chloroethyl vinyl ether	63	8.105	8.088	0.017	72	8415	0.9591	
98 4-Methyl-2-pentanone (MIBK)	43	8.523	8.523	0.0	89	81034	4.12	
105 2-Hexanone	43	9.724	9.724	0.0	90	42908	3.56	
120 Cyclohexanone	55	12.543	12.544	-0.001	88	18534	37.0	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3222.D

Injection Date: 03-Jul-2013 08:33:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 3

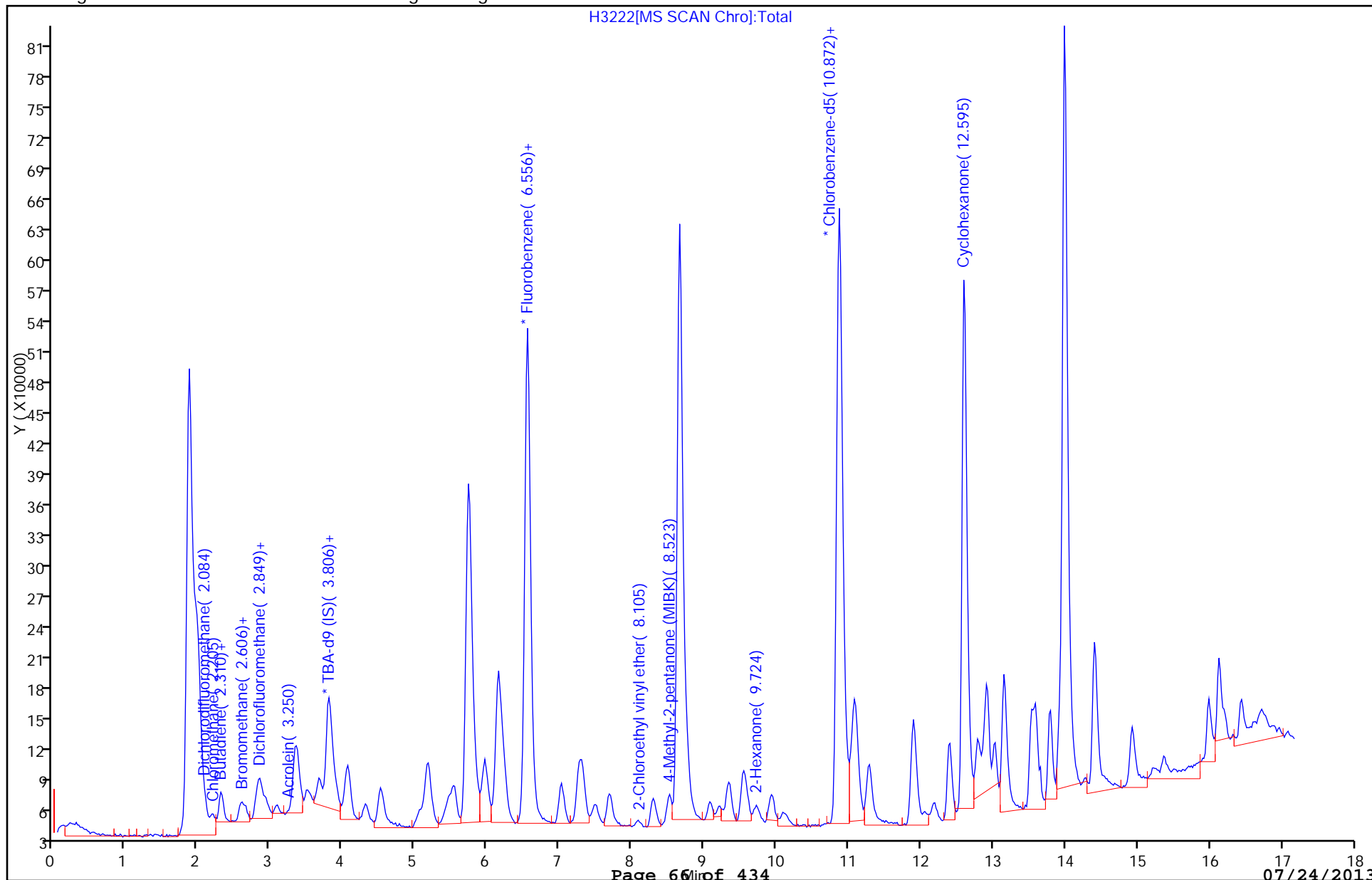
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1





TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3223.D  
 Lims ID: std02 Client ID:  
 Inject. Date: 03-Jul-2013 08:55:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 3  
 Sample ID: std02  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 3  
 Lims Batch ID: 181419 Lims Sample ID: 4  
 Sublist: chrom-AQ\_VMSH\_8260\*sub48  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:04 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

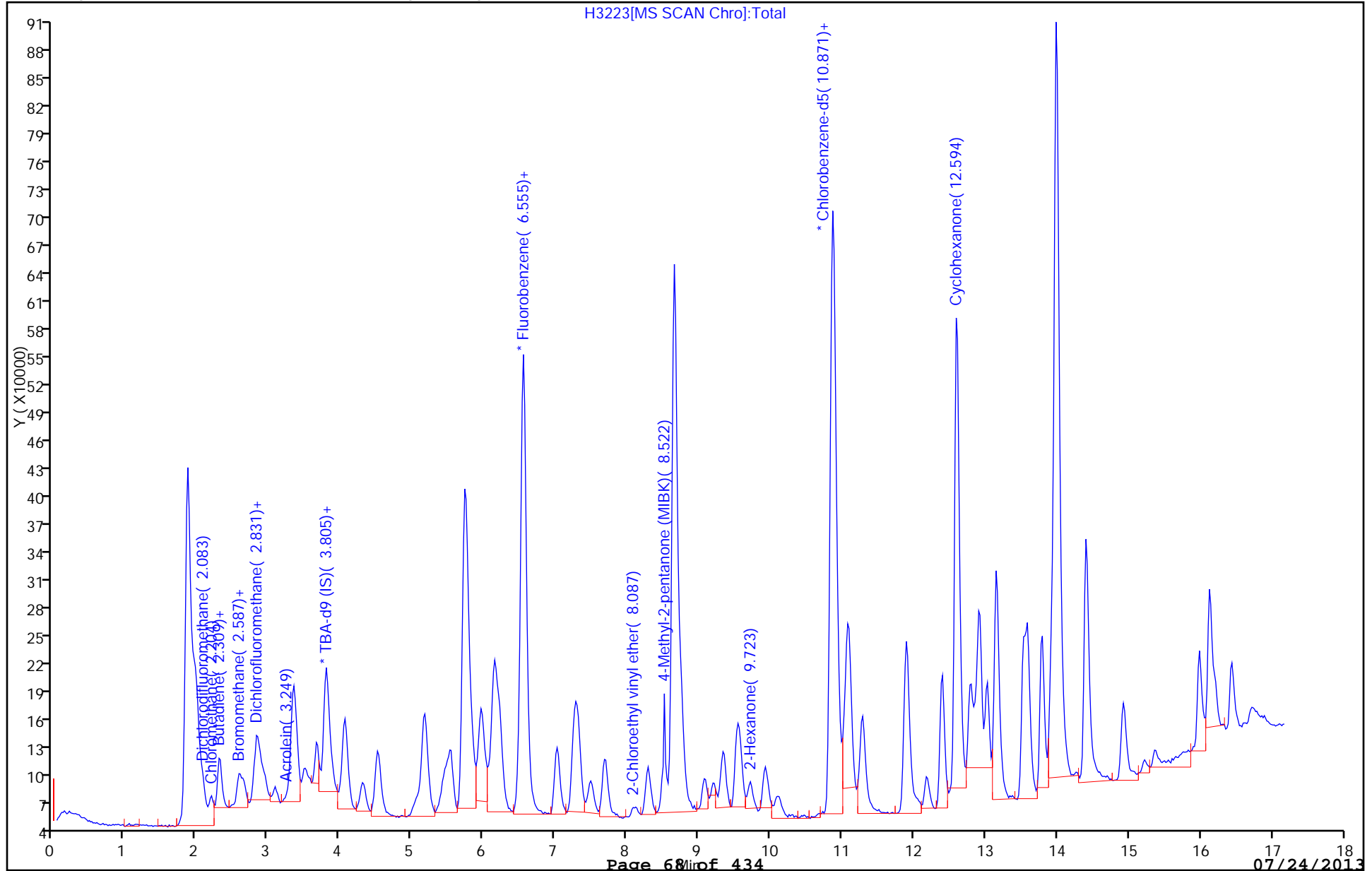
Date: 03-Jul-2013 09:23:27

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.823	3.854	-0.031	97	258888	250.0	
* 2 Fluorobenzene	96	6.555	6.587	-0.032	98	1289660	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.871	10.903	-0.032	87	345927	12.5	
* 5 1,4-Dichlorobenzene-d4	152	13.986	14.018	-0.032	97	526477	12.5	
28 Dichlorodifluoromethane	85	2.083	2.102	-0.020	85	79583	1.51	
30 Chloromethane	50	2.204	2.224	-0.020	98	76337	1.66	
31 Butadiene	54	2.309	2.328	-0.019	0	46869	1.67	
32 Vinyl chloride	62	2.326	2.345	-0.019	82	67546	1.77	
35 Bromomethane	94	2.587	2.606	-0.019	89	64382	1.69	
36 Chloroethane	64	2.657	2.659	-0.002	95	47577	1.85	
37 Dichlorofluoromethane	67	2.831	2.850	-0.019	97	168708	1.84	
38 Trichlorofluoromethane	101	2.866	2.885	-0.019	84	154392	1.86	
44 Acrolein	56	3.249	3.250	-0.001	78	18478	16.6	
47 Acetone	43	3.388	3.390	-0.002	43	28781	8.80	
67 2-Butanone (MEK)	43	5.180	5.182	-0.002	68	41346	6.81	
96 2-Chloroethyl vinyl ether	63	8.087	8.088	-0.001	73	16161	1.82	
98 4-Methyl-2-pentanone (MIBK)	43	8.522	8.523	-0.001	87	159748	8.04	
105 2-Hexanone	43	9.723	9.724	-0.002	93	81187	6.72	
120 Cyclohexanone	55	12.542	12.544	-0.002	84	36479	72.5	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3223.D  
 Injection Date: 03-Jul-2013 08:55:30 Limit Group: MSV - 8260B Water and Solid  
 Client ID: Instrument ID: VMS\_H  
 Lims Batch ID: 181419 Lims Sample ID: 4  
 Operator ID: meierg Purge Vol: 20.000 mL  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3224.D  
 Lims ID: std05 Client ID:  
 Inject. Date: 03-Jul-2013 09:16:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 4  
 Sample ID: std05  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 4  
 Lims Batch ID: 181419 Lims Sample ID: 5  
 Sublist: chrom-AQ\_VMSH\_8260\*sub48  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:06 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 09:59:12

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.842	3.842	0.0	94	292284	250.0	
* 2 Fluorobenzene	96	6.557	6.557	0.0	97	1315721	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.873	10.873	0.0	87	343686	12.5	
* 5 1,4-Dichlorobenzene-d4	152	13.989	13.989	0.0	97	530841	12.5	
28 Dichlorodifluoromethane	85	2.102	2.102	0.0	99	304833	5.65	
30 Chloromethane	50	2.224	2.224	0.0	97	232016	4.94	
31 Butadiene	54	2.328	2.328	0.0	0	146980	5.14	
32 Vinyl chloride	62	2.346	2.346	0.0	82	202135	5.21	
35 Bromomethane	94	2.607	2.607	0.0	89	194571	4.99	
36 Chloroethane	64	2.659	2.659	0.0	90	135570	5.16	
37 Dichlorofluoromethane	67	2.850	2.850	0.0	97	468226	5.00	
38 Trichlorofluoromethane	101	2.885	2.885	0.0	98	424064	5.00	
44 Acrolein	56	3.251	3.251	0.0	92	56646	49.9	
47 Acetone	43	3.390	3.390	0.0	86	66217	19.8	
67 2-Butanone (MEK)	43	5.200	5.200	0.0	49	120074	19.4	
96 2-Chloroethyl vinyl ether	63	8.089	8.089	0.0	86	46696	5.16	
98 4-Methyl-2-pentanone (MIBK)	43	8.524	8.524	0.0	96	378492	18.7	
105 2-Hexanone	43	9.725	9.725	0.0	93	223466	18.6	
120 Cyclohexanone	55	12.544	12.544	0.0	88	102131	204.3	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3224.D

Injection Date: 03-Jul-2013 09:16:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 5

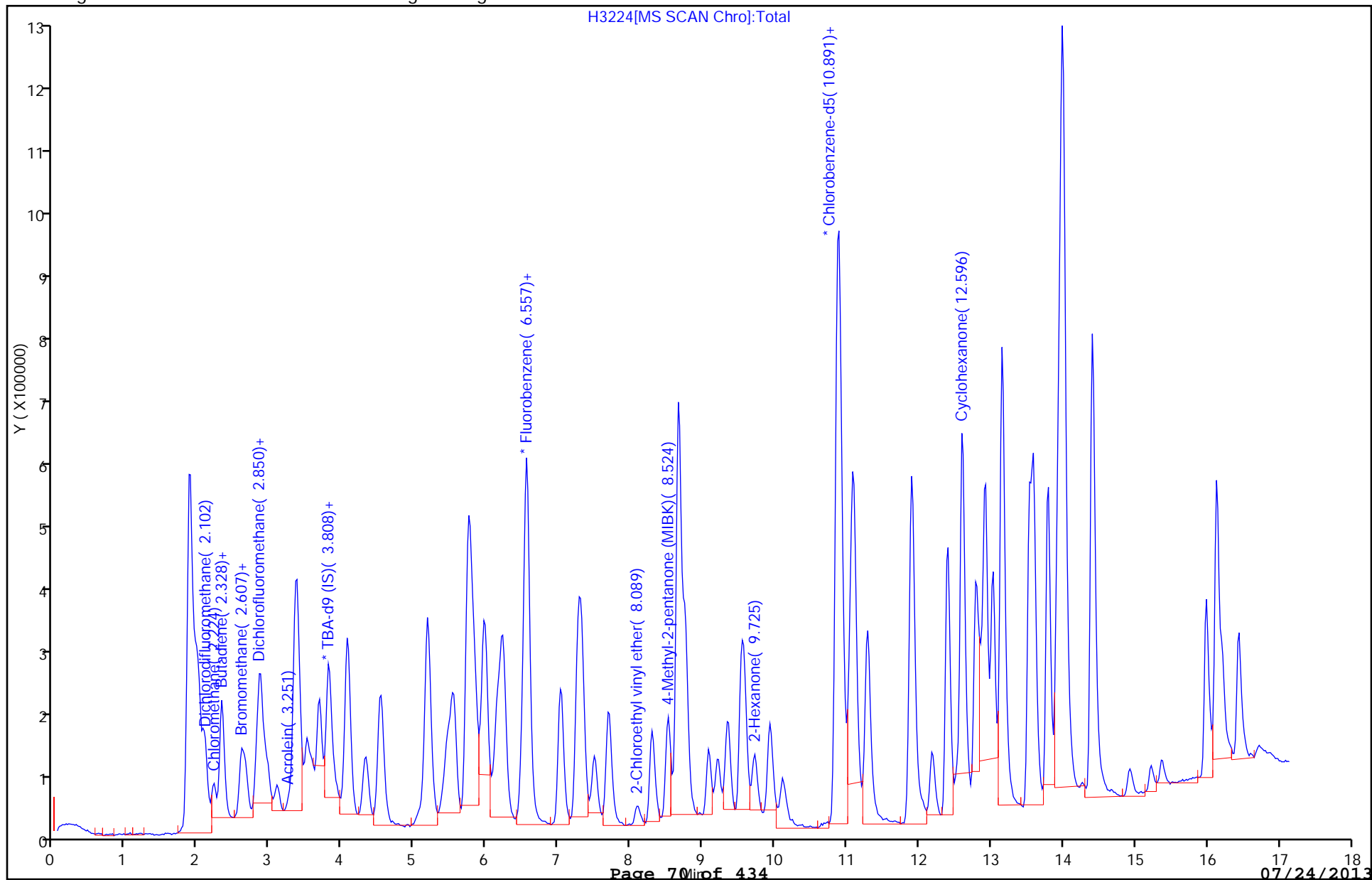
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3225.D  
 Lims ID: std10 Client ID:  
 Inject. Date: 03-Jul-2013 09:38:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 5  
 Sample ID: std10  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 5  
 Lims Batch ID: 181419 Lims Sample ID: 6  
 Sublist: chrom-AQ\_VMSH\_8260\*sub48  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:08 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 10:00:44

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.842	3.842	0.0	61	317089	250.0	
* 2 Fluorobenzene	96	6.557	6.557	0.0	97	1332040	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.873	10.873	0.0	84	353039	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.005	14.005	0.0	94	537587	12.5	
28 Dichlorodifluoromethane	85	2.102	2.102	0.0	91	624171	11.4	
30 Chloromethane	50	2.224	2.224	0.0	94	483213	10.2	
31 Butadiene	54	2.328	2.328	0.0	0	306807	10.6	
32 Vinyl chloride	62	2.345	2.345	0.0	95	418700	10.7	
35 Bromomethane	94	2.606	2.606	0.0	88	408385	10.4	
36 Chloroethane	64	2.659	2.659	0.0	93	279483	10.5	
37 Dichlorofluoromethane	67	2.850	2.850	0.0	97	982430	10.4	
38 Trichlorofluoromethane	101	2.885	2.885	0.0	85	871582	10.2	
44 Acrolein	56	3.250	3.250	0.0	83	126262	109.9	
47 Acetone	43	3.390	3.390	0.0	94	138496	41.0	
67 2-Butanone (MEK)	43	5.182	5.182	0.0	52	286254	45.7	
96 2-Chloroethyl vinyl ether	63	8.088	8.088	0.0	87	89206	9.74	
98 4-Methyl-2-pentanone (MIBK)	43	8.523	8.523	0.0	96	897758	43.7	
105 2-Hexanone	43	9.724	9.724	0.0	92	569140	46.2	
120 Cyclohexanone	55	12.544	12.544	0.0	86	227554	443.2	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3225.D

Injection Date: 03-Jul-2013 09:38:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 6

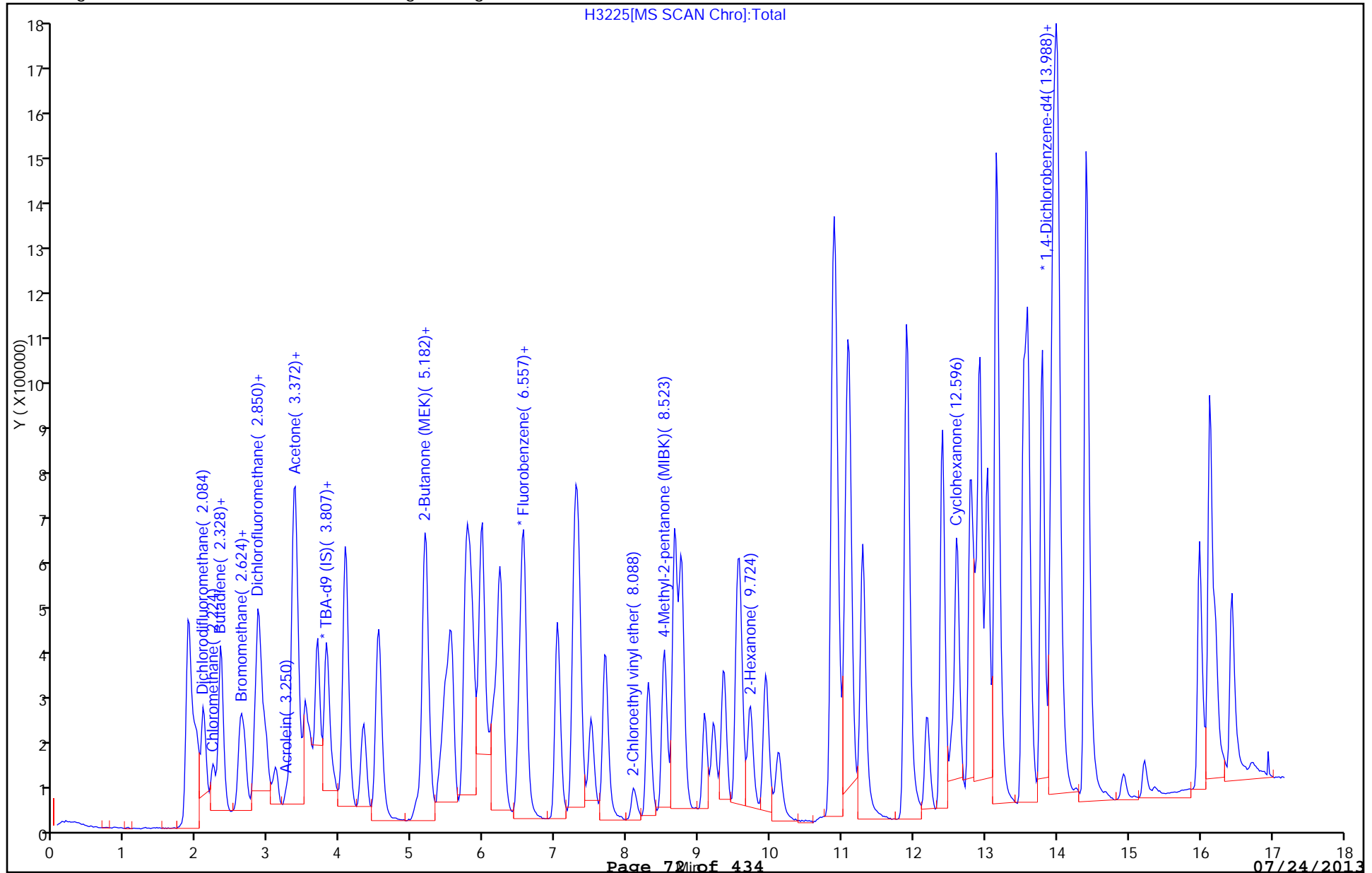
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3226.D  
 Lims ID: std30 Client ID:  
 Inject. Date: 03-Jul-2013 09:59:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 6  
 Sample ID: std30  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 6  
 Lims Batch ID: 181419 Lims Sample ID: 7  
 Sublist: chrom-AQ\_VMSH\_8260\*sub48  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:10 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 10:54:59

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.836	3.842	-0.006	59	305040	250.0	
* 2 Fluorobenzene	96	6.568	6.557	0.011	98	1338977	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.884	10.873	0.011	73	351903	12.5	
* 5 1,4-Dichlorobenzene-d4	152	13.999	14.005	-0.006	90	532476	12.5	
28 Dichlorodifluoromethane	85	2.095	2.102	-0.007	89	1807712	32.9	
30 Chloromethane	50	2.234	2.224	0.010	85	1446136	30.2	
31 Butadiene	54	2.321	2.328	-0.007	0	893551	30.7	
32 Vinyl chloride	62	2.356	2.345	0.011	82	1213595	30.7	
35 Bromomethane	94	2.600	2.606	-0.006	89	1207065	30.4	
36 Chloroethane	64	2.670	2.659	0.011	92	844210	31.6	
37 Dichlorofluoromethane	67	2.844	2.850	-0.006	81	2964691	31.1	
38 Trichlorofluoromethane	101	2.878	2.885	-0.007	96	2572018	29.8	
44 Acrolein	56	3.244	3.250	-0.006	81	392376	339.9	
47 Acetone	43	3.383	3.390	-0.007	93	396336	116.7	
67 2-Butanone (MEK)	43	5.193	5.182	0.011	57	818017	129.8	
96 2-Chloroethyl vinyl ether	63	8.099	8.088	0.011	92	287394	31.2	
98 4-Methyl-2-pentanone (MIBK)	43	8.517	8.523	-0.006	97	2640596	128.0	
105 2-Hexanone	43	9.718	9.724	-0.006	95	1767389	143.8	
120 Cyclohexanone	55	12.537	12.544	-0.007	87	656936	1283.5	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3226.D

Injection Date: 03-Jul-2013 09:59:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 7

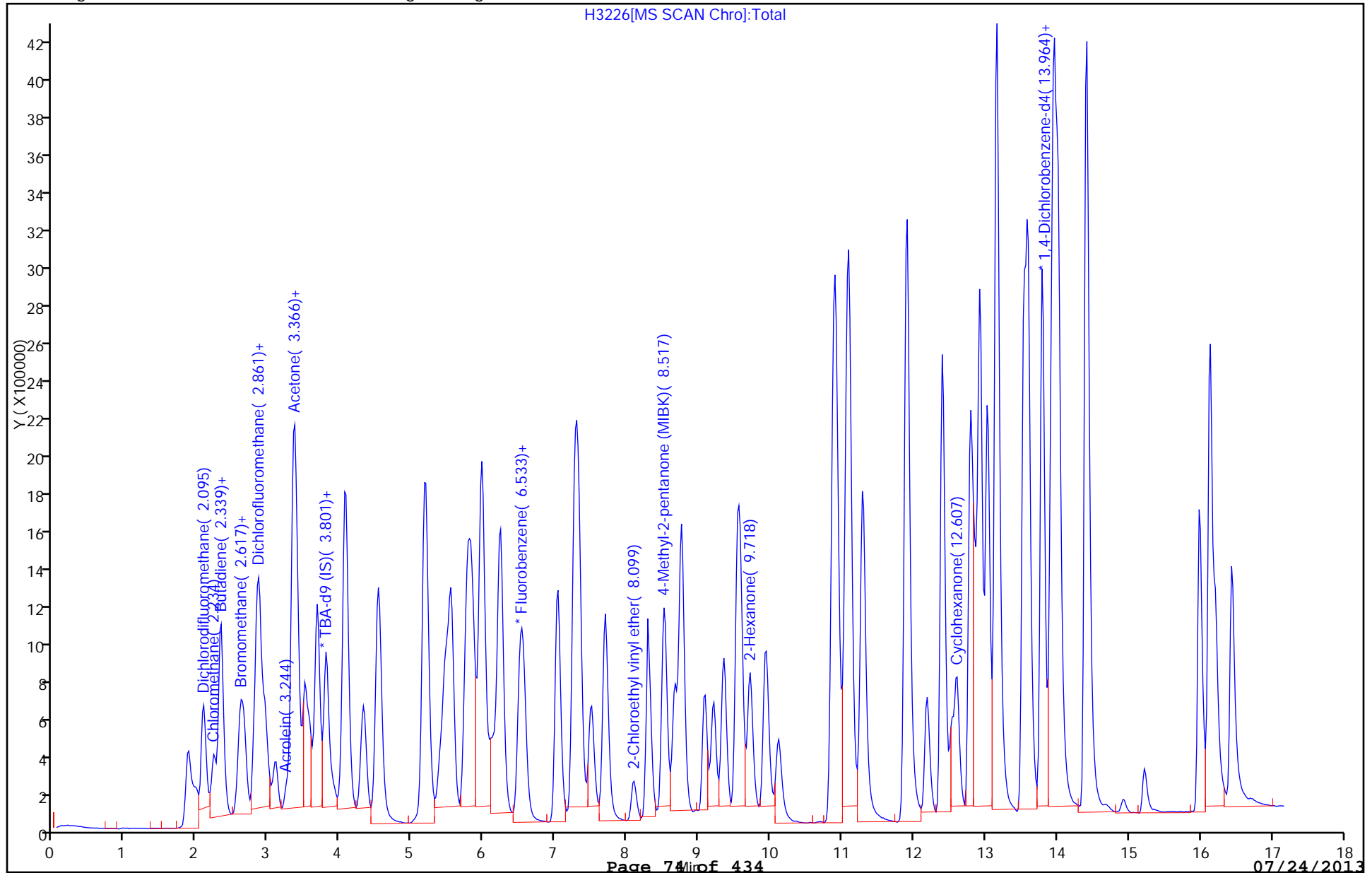
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1





TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3227.D  
 Lims ID: std60 Client ID:  
 Inject. Date: 03-Jul-2013 10:21:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 7  
 Sample ID: std60  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 7  
 Lims Batch ID: 181419 Lims Sample ID: 8  
 Sublist: chrom-AQ\_VMSH\_8260\*sub48  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:12 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 10:59:49

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.837	3.842	-0.005	38	279053	250.0	
* 2 Fluorobenzene	96	6.570	6.557	0.013	98	1297393	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.886	10.873	0.013	62	340862	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.001	14.005	-0.004	85	475591	12.5	
28 Dichlorodifluoromethane	85	2.097	2.102	-0.005	99	3389508	63.8	
30 Chloromethane	50	2.236	2.224	0.012	83	2689445	58.1	
31 Butadiene	54	2.323	2.328	-0.005	0	1708513	60.6	
32 Vinyl chloride	62	2.358	2.345	0.013	82	2293488	59.9	
35 Bromomethane	94	2.602	2.606	-0.004	90	2276318	59.2	
36 Chloroethane	64	2.654	2.659	-0.005	92	1584891	61.1	
37 Dichlorofluoromethane	67	2.845	2.850	-0.005	98	5768191	62.5	
38 Trichlorofluoromethane	101	2.863	2.885	-0.022	99	4984380	59.6	
44 Acrolein	56	3.246	3.250	-0.004	77	711948	636.5	
47 Acetone	43	3.385	3.390	-0.005	97	719196	218.6	
67 2-Butanone (MEK)	43	5.195	5.182	0.013	60	1504607	246.5	
96 2-Chloroethyl vinyl ether	63	8.101	8.088	0.013	91	547269	61.4	
98 4-Methyl-2-pentanone (MIBK)	43	8.519	8.523	-0.004	97	4667423	233.4	
105 2-Hexanone	43	9.720	9.724	-0.004	97	3121141	262.3	
120 Cyclohexanone	55	12.539	12.544	-0.005	88	1155175	2330.0	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3227.D

Injection Date: 03-Jul-2013 10:21:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 8

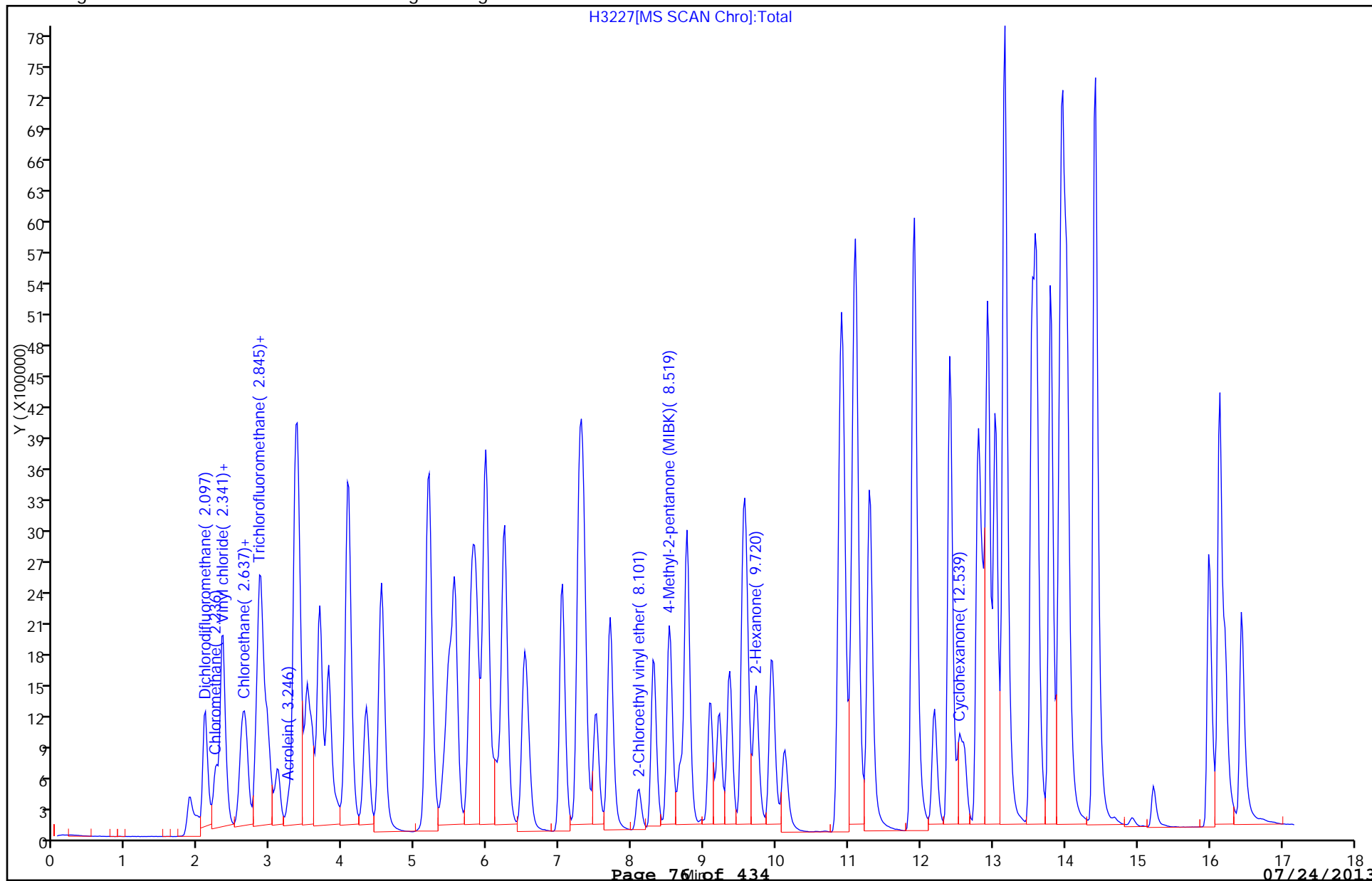
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-43753-1 Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 10:43 Calibration End Date: 07/03/2013 12:31 Calibration ID: 14677

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 280-181419/9	H3228.D
Level 2	STD02 280-181419/10	H3229.D
Level 3	STD05 280-181419/11	H3230.D
Level 4	ICIS 280-181419/12	H3231.D
Level 5	STD30 280-181419/13	H3232.D
Level 6	STD60 280-181419/14	H3233.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethanol	0.0017 0.0009	0.0017	0.0012	0.0011	0.0009	Lin2	0.0814	0.0009						0.9980			0.9900
2,2-Dichloro-1,1,1-trifluoroethane	1.0362 1.0807	1.1928	1.1621	1.1203	1.0708	Ave		1.1105			5.3		15.0				
Propene oxide	0.0281 0.0258	0.0283	0.0252	0.0262	0.0260	Ave		0.0266			4.9		15.0				
Acetonitrile	0.0089	0.0068	0.0090	0.0080	0.0081	Ave		0.0082			11.0		15.0				
Isopropyl alcohol	0.1612 0.1520	0.1632	0.1510	0.1488	0.1518	Ave		0.1547			3.9		15.0				
Isopropyl ether	0.3487 0.3145	0.3460	0.3111	0.3130	0.3094	Ave		0.3238			5.7		15.0				
2-Chloro-1,3-butadiene	0.6417 0.6015	0.6409	0.6143	0.5914	0.5879	Ave		0.6130			3.9		15.0				
Tert-butyl ethyl ether	1.2535 1.1345	1.2252	1.1224	1.1175	1.1245	Ave		1.1629			5.2		15.0				
Ethyl acetate	0.1323 0.1158	0.1238	0.1124	0.1182	0.1131	Ave		0.1193			6.4		15.0				
Propionitrile	0.0126 0.0121	0.0116	0.0112	0.0115	0.0119	Ave		0.0118			4.0		15.0				
Methacrylonitrile	0.0955 0.0836	0.0907	0.0797	0.0838	0.0826	Ave		0.0860			6.9		15.0				
Tert-amyl methyl ether	0.8762 0.8116	0.8774	0.7853	0.8000	0.8138	Ave		0.8274			4.8		15.0				
Methyl methacrylate	0.0684 0.0594	0.0690	0.0608	0.0607	0.0614	Ave		0.0633			6.7		15.0				
2-Nitropropane	0.0383 0.0342	0.0374	0.0350	0.0327	0.0338	Ave		0.0352			6.1		15.0				
cis-1,4-Dichloro-2-butene	0.1741 0.1578	0.1677	0.1551	0.1621	0.1613	Ave		0.1630			4.2		15.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-43753-1 Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 10:43 Calibration End Date: 07/03/2013 12:31 Calibration ID: 14677

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.6616	0.7335	0.6884	0.6724	0.6633	Ave		0.6838			4.3		15.0				
1,2-Dichloroethane-d4 (Surr)	0.2849	0.3102	0.2910	0.2950	0.2872	Ave		0.2937			3.4		15.0				
Toluene-d8 (Surr)	4.8582	5.2377	4.9615	4.7775	4.7576	Ave		4.9185			4.0		15.0				
4-Bromofluorobenzene (Surr)	1.6090	1.7572	1.6618	1.6215	1.6148	Ave		1.6529			3.7		15.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-43753-1 Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 10:43 Calibration End Date: 07/03/2013 12:31 Calibration ID: 14677

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD01 280-181419/9	H3228.D
Level 2	STD02 280-181419/10	H3229.D
Level 3	STD05 280-181419/11	H3230.D
Level 4	ICIS 280-181419/12	H3231.D
Level 5	STD30 280-181419/13	H3232.D
Level 6	STD60 280-181419/14	H3233.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Ethanol	FB	Lin2	297145	18083	33625	59722	159825	3000	100	250	500	1500
2,2-Dichloro-1,1,1-trifluoroethane	FB	Ave	106949 7393232	256590	634524	1244980	3652784	1.00 60.0	2.00	5.00	10.0	30.0
Propene oxide	FB	Ave	144930 8812968	304779	688233	1453843	4429559	50.0 3000	100	250	500	1500
Acetonitrile	FB	Ave	611831	14670	49329	88404	276609	600	20.0	50.0	100	300
Isopropyl alcohol	FB	Ave	166422 10400043	351046	824648	1653948	5179889	10.0 600	20.0	50.0	100	300
Isopropyl ether	FB	Ave	35990 2151343	74441	169878	347807	1055555	1.00 60.0	2.00	5.00	10.0	30.0
2-Chloro-1,3-butadiene	FB	Ave	66232 4115100	137867	335392	657285	2005563	1.00 60.0	2.00	5.00	10.0	30.0
Tert-butyl ethyl ether	FB	Ave	129382 7761229	263565	612822	1241885	3836080	1.00 60.0	2.00	5.00	10.0	30.0
Ethyl acetate	FB	Ave	27316 1583795	53284	122692	262791	771544	2.00 120	4.00	10.0	20.0	60.0
Propionitrile	FB	Ave	12970 826443	24990	61252	127713	404259	10.0 600	20.0	50.0	100	300
Methacrylonitrile	FB	Ave	98528 5720548	195165	435044	931840	2818024	10.0 600	20.0	50.0	100	300
Tert-amyl methyl ether	FB	Ave	90438 5552397	188741	428742	889115	2776005	1.00 60.0	2.00	5.00	10.0	30.0
Methyl methacrylate	FB	Ave	14112 812289	29672	66383	134983	418986	2.00 120	4.00	10.0	20.0	60.0
2-Nitropropane	FB	Ave	7896 467308	16086	38274	72726	230645	2.00 120	4.00	10.0	20.0	60.0
cis-1,4-Dichloro-2-butene	DCB	Ave	7529 442872	15092	35708	75195	223610	1.00 60.0	2.00	5.00	10.0	30.0
Dibromofluoromethane (Surr)	FB	Ave	4525844	157779	375838	747214	2262763	60.0	2.00	5.00	10.0	30.0

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-43753-1 Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 10:43 Calibration End Date: 07/03/2013 12:31 Calibration ID: 14677

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane-d4 (Surr)	FB	Ave	1949233	66739	158870	327810	979796	60.0	2.00	5.00	10.0	30.0
Toluene-d8 (Surr)	CBZ	Ave	9133671	316813	771050	1519948	4520573	60.0	2.00	5.00	10.0	30.0
4-Bromofluorobenzene (Surr)	DCB	Ave	4515947	158158	382599	751964	2238197	60.0	2.00	5.00	10.0	30.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3228.D  
 Lims ID: std01 Client ID:  
 Inject. Date: 03-Jul-2013 10:43:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 2  
 Sample ID: std01  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 8  
 Lims Batch ID: 181419 Lims Sample ID: 9  
 Sublist: chrom-AQ\_VMSH\_8260\*sub45  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:14 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 11:56:13

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.853	3.842	0.011	87	266120	250.0	
* 2 Fluorobenzene	96	6.568	6.557	0.011	98	1290181	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.884	10.873	0.011	86	365409	12.5	
* 5 1,4-Dichlorobenzene-d4	152	13.999	14.005	-0.006	96	540562	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.750	5.754	-0.004	53	90837	1.29	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.168	6.172	-0.004	96	40495	1.34	
\$ 10 Toluene-d8 (Surr)	98	8.674	8.678	-0.004	91	175939	1.22	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.607	12.611	-0.004	85	91089	1.27	
27 Chlorotrifluoroethene	116	2.061	2.048	0.014	67	16874	0.7723	
29 1,2-Dichloro-1,1,2,2-tetrafluoro	85	2.217	2.204	0.013	91	71187	0.9008	
33 2-Chloro-1,1,1-Trifluoroethane	118	2.391	2.378	0.013	95	54836	0.9067	
34 Ethylene oxide	43	2.565	2.552	0.013	99	115531	193.8	
39 Ethanol	45	3.087	3.057	0.030	16	8071	-3.58	
41 1,2-Dichloro-1,1,2-trifluoroetha	117	3.140	3.127	0.014	89	62936	0.9629	
42 1,1,1-Trifluoro-2,2-dichloroetha	83	3.192	3.179	0.013	76	106949	0.9331	
43 Propene oxide	58	3.192	3.196	-0.004	96	144930	52.8	
51 Acetonitrile	41		3.701					
49 Isopropyl alcohol	45	4.567	4.571	-0.004	91	166422	10.4	
62 Isopropyl ether	87	4.584	4.571	0.013	97	35990	1.08	
63 2-Chloro-1,3-butadiene	53	4.619	4.623	-0.004	84	66232	1.05	
64 Tert-butyl ethyl ether	59	4.984	4.989	-0.005	98	129382	1.08	
69 Ethyl acetate	43	5.228	5.232	-0.004	88	27316	2.22	
70 Propionitrile	54	5.298	5.285	0.014	62	12970	10.6	
72 Methacrylonitrile	41	5.454	5.459	-0.005	94	98528	11.1	
83 Tert-amyl methyl ether	73	6.359	6.364	-0.005	92	90438	1.06	
85 n-Butanol	56	7.003	6.973	0.030	42	10684	35.7	
87 Ethyl acrylate	55	7.177	7.164	0.013	90	28583	1.06	
91 Methyl methacrylate	100	7.473	7.477	-0.004	94	14112	2.16	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
95 2-Nitropropane	41	8.012	8.017	-0.005	86	7896	2.17	
107 Tetrahydrothiophene	60	9.927	9.914	0.013	48	10350	0.8437	
106 n-Butyl acetate	43	9.927	9.931	-0.004	90	50670	0.9824	
119 cis-1,4-Dichloro-2-butene	53	12.520	12.524	-0.004	68	7529	1.07	
135 1,2,3-Trimethylbenzene	105	14.086	14.091	-0.005	87	148573	1.12	
136 Benzyl chloride	126	14.191	14.178	0.013	97	10003	1.05	
140 1,3,5-Trichlorobenzene	180	15.409	15.413	-0.004	96	78731	1.10	



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3228.D

Injection Date: 03-Jul-2013 10:43:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 9

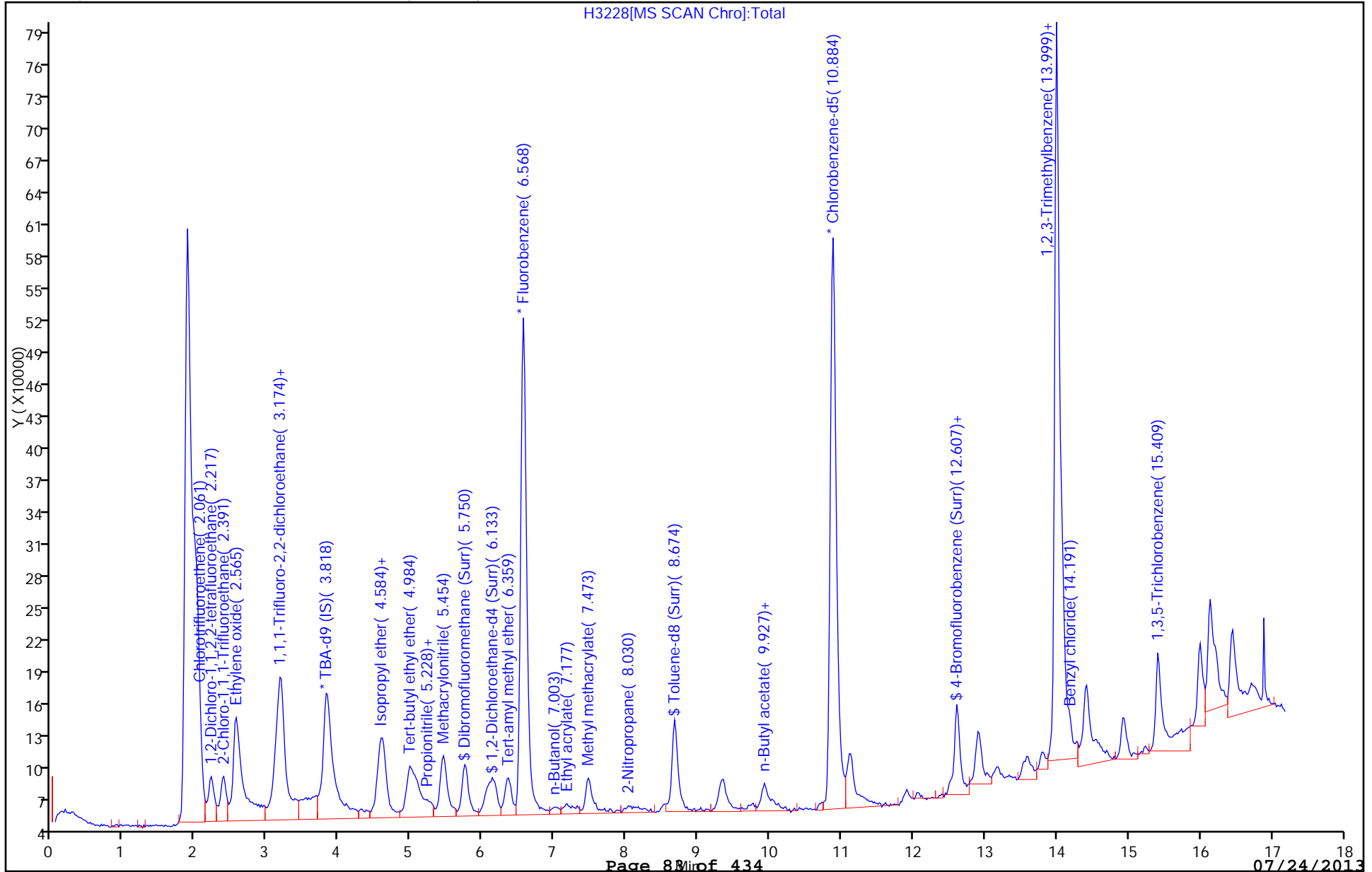
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3229.D  
 Lims ID: std02 Client ID:  
 Inject. Date: 03-Jul-2013 11:04:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 3  
 Sample ID: std02  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 9  
 Lims Batch ID: 181419 Lims Sample ID: 10  
 Sublist: chrom-AQ\_VMSH\_8260\*sub45  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:15 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 11:56:38

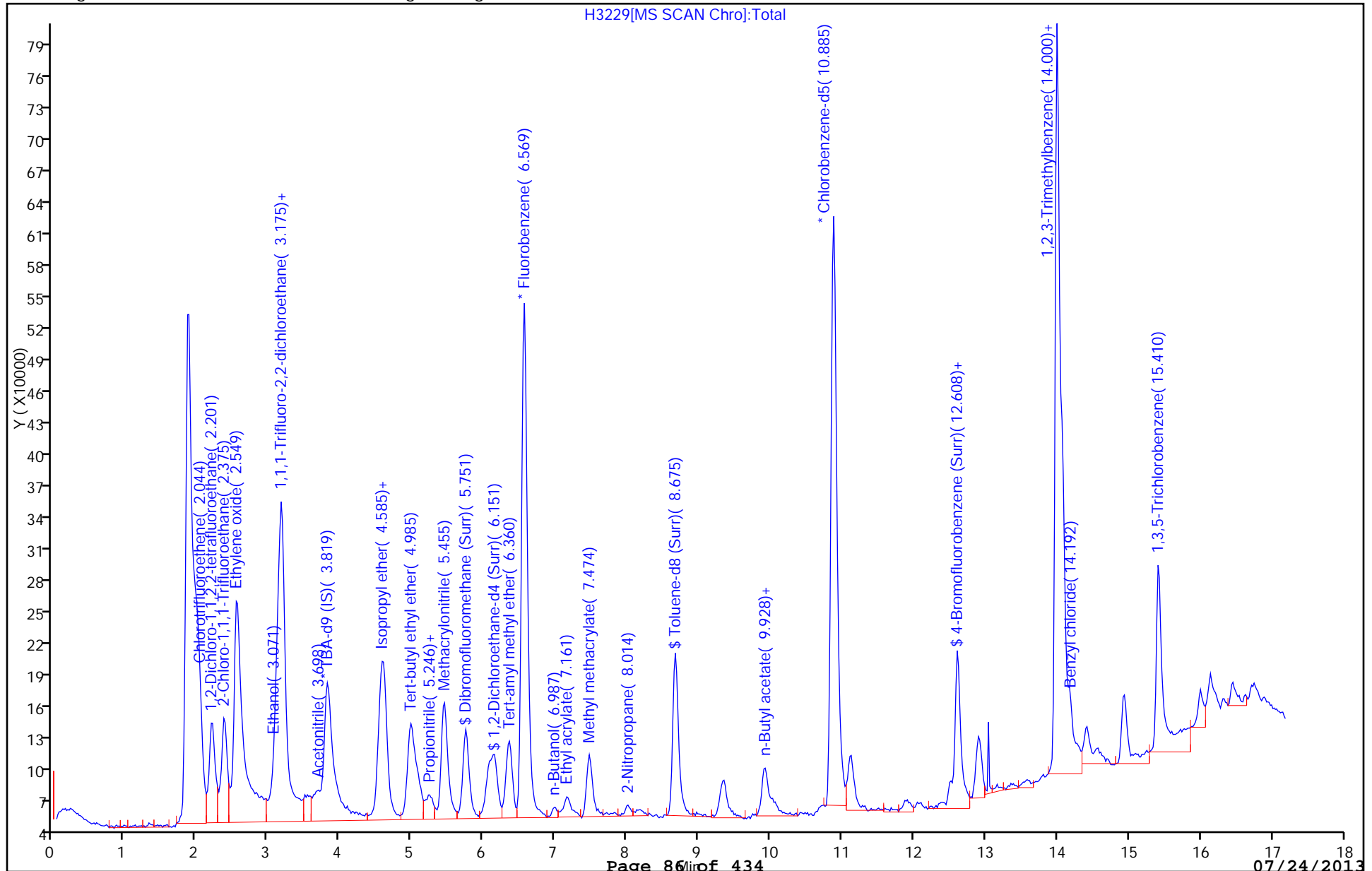
Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.854	3.842	0.012	92	293472	250.0	
* 2 Fluorobenzene	96	6.569	6.557	0.012	98	1344478	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.885	10.873	0.012	84	378046	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.000	14.005	-0.005	96	562540	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.751	5.754	-0.003	56	157779	2.15	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.151	6.172	-0.021	97	66739	2.11	
\$ 10 Toluene-d8 (Surr)	98	8.675	8.678	-0.003	92	316813	2.13	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.608	12.611	-0.003	85	158158	2.13	
27 Chlorotrifluoroethene	116	2.044	2.048	-0.003	81	43652	1.92	
29 1,2-Dichloro-1,1,2,2-tetrafluoro	85	2.201	2.204	-0.003	93	175114	2.13	
33 2-Chloro-1,1,1-Trifluoroethane	118	2.392	2.378	0.014	96	135081	2.14	
34 Ethylene oxide	43	2.566	2.552	0.014	99	268515	432.3	
39 Ethanol	45	3.071	3.057	0.014	5	18083	98.4	
41 1,2-Dichloro-1,1,2-trifluoroetha	117	3.141	3.127	0.015	85	146521	2.15	
42 1,1,1-Trifluoro-2,2-dichloroetha	83	3.175	3.179	-0.004	83	256590	2.15	
43 Propene oxide	58	3.193	3.196	-0.003	95	304779	106.6	
51 Acetonitrile	41	3.698	3.701	-0.003	59	14670	16.7	
49 Isopropyl alcohol	45	4.568	4.571	-0.003	92	351046	21.1	
62 Isopropyl ether	87	4.568	4.571	-0.003	98	74441	2.14	
63 2-Chloro-1,3-butadiene	53	4.620	4.623	-0.003	86	137867	2.09	
64 Tert-butyl ethyl ether	59	4.985	4.989	-0.004	99	263565	2.11	
69 Ethyl acetate	43	5.229	5.232	-0.003	90	53284	4.15	
70 Propionitrile	54	5.299	5.285	0.015	62	24990	19.7	
72 Methacrylonitrile	41	5.455	5.459	-0.004	94	195165	21.1	
83 Tert-amyl methyl ether	73	6.360	6.364	-0.004	95	188741	2.12	
85 n-Butanol	56	6.987	6.973	0.014	76	15896	51.0	
87 Ethyl acrylate	55	7.161	7.164	-0.003	99	59157	2.10	
91 Methyl methacrylate	100	7.474	7.477	-0.003	92	29672	4.36	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
95 2-Nitropropane	41	8.014	8.017	-0.003	88	16086	4.25	
107 Tetrahydrothiophene	60	9.910	9.914	-0.004	57	27208	2.14	
106 n-Butyl acetate	43	9.928	9.931	-0.003	96	83094	2.14	
119 cis-1,4-Dichloro-2-butene	53	12.521	12.524	-0.003	93	15092	2.06	
135 1,2,3-Trimethylbenzene	105	14.087	14.091	-0.004	95	291923	2.11	
136 Benzyl chloride	126	14.192	14.178	0.014	97	21645	2.18	
140 1,3,5-Trichlorobenzene	180	15.410	15.413	-0.003	96	157134	2.11	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3229.D  
 Injection Date: 03-Jul-2013 11:04:30 Limit Group: MSV - 8260B Water and Solid  
 Client ID: Instrument ID: VMS\_H  
 Lims Batch ID: 181419 Lims Sample ID: 10  
 Operator ID: meierg Purge Vol: 20.000 mL  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3230.D  
 Lims ID: std05 Client ID:  
 Inject. Date: 03-Jul-2013 11:26:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 4  
 Sample ID: std05  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 10  
 Lims Batch ID: 181419 Lims Sample ID: 11  
 Sublist: chrom-AQ\_VMSH\_8260\*sub45  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:17 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 12:14:22

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.842	3.842	0.0	88	277465	250.0	
* 2 Fluorobenzene	96	6.574	6.557	0.017	98	1364984	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.890	10.873	0.017	84	388515	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.005	14.005	0.0	95	575568	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.756	5.754	0.002	64	375838	5.03	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.156	6.172	-0.016	97	158870	4.95	
\$ 10 Toluene-d8 (Surr)	98	8.680	8.678	0.002	93	771050	5.04	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.613	12.611	0.002	86	382599	5.03	
27 Chlorotrifluoroethene	116	2.049	2.048	0.002	89	121426	5.25	
29 1,2-Dichloro-1,1,2,2-tetrafluoro	85	2.206	2.204	0.002	92	438508	5.24	
33 2-Chloro-1,1,1-Trifluoroethane	118	2.380	2.378	0.002	96	331777	5.19	
34 Ethylene oxide	43	2.554	2.552	0.002	99	606916	962.4	
39 Ethanol	45	3.076	3.057	0.019	49	33625	256.9	
41 1,2-Dichloro-1,1,2-trifluoroetha	117	3.128	3.127	0.002	90	361746	5.23	
42 1,1,1-Trifluoro-2,2-dichloroetha	83	3.180	3.179	0.001	84	634524	5.23	
43 Propene oxide	58	3.180	3.196	-0.016	96	688233	237.0	
51 Acetonitrile	41	3.703	3.701	0.002	80	49329	55.3	
49 Isopropyl alcohol	45	4.573	4.571	0.002	92	824648	48.8	
62 Isopropyl ether	87	4.573	4.571	0.002	98	169878	4.80	
63 2-Chloro-1,3-butadiene	53	4.625	4.623	0.002	91	335392	5.01	
64 Tert-butyl ethyl ether	59	4.990	4.989	0.001	97	612822	4.83	
69 Ethyl acetate	43	5.234	5.232	0.002	96	122692	9.42	
70 Propionitrile	54	5.286	5.285	0.002	66	61252	47.5	
72 Methacrylonitrile	41	5.443	5.459	-0.016	94	435044	46.3	
83 Tert-amyl methyl ether	73	6.365	6.364	0.001	96	428742	4.75	
85 n-Butanol	56	6.992	6.973	0.019	79	33470	105.7	
87 Ethyl acrylate	55	7.166	7.164	0.002	99	135527	4.74	
91 Methyl methacrylate	100	7.479	7.477	0.002	92	66383	9.61	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
95 2-Nitropropane	41	8.019	8.017	0.002	95	38274	9.95	
107 Tetrahydrothiophene	60	9.916	9.914	0.002	73	63650	4.88	
106 n-Butyl acetate	43	9.933	9.931	0.002	95	149765	4.50	
119 cis-1,4-Dichloro-2-butene	53	12.509	12.524	-0.015	91	35708	4.76	
135 1,2,3-Trimethylbenzene	105	14.075	14.091	-0.016	97	702051	4.95	
136 Benzyl chloride	126	14.179	14.178	0.001	98	49603	4.89	
140 1,3,5-Trichlorobenzene	180	15.415	15.413	0.002	97	385963	5.07	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3230.D

Injection Date: 03-Jul-2013 11:26:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 11

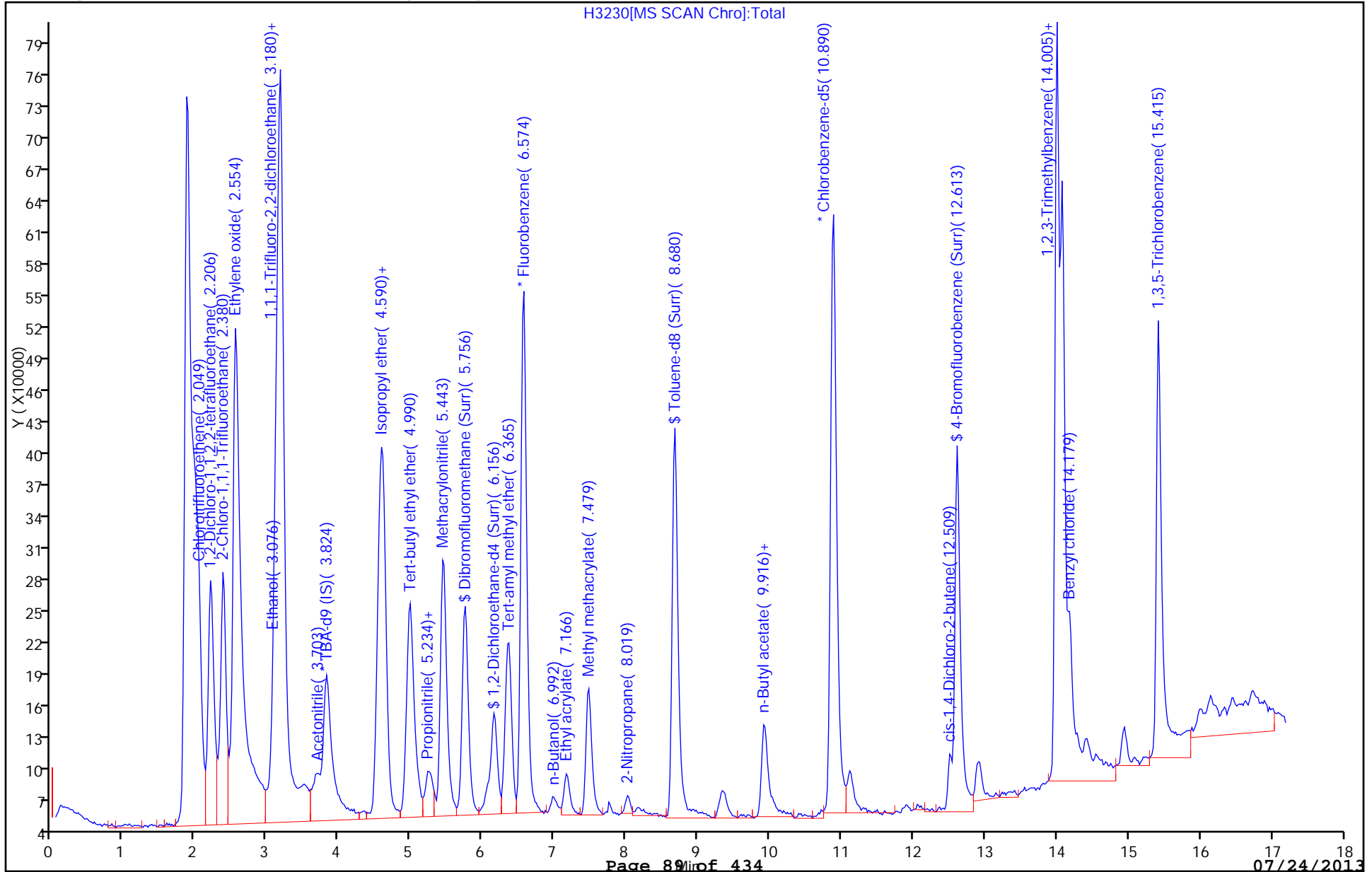
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3231.D  
 Lims ID: icis Client ID:  
 Inject. Date: 03-Jul-2013 11:47:30 Dil. Factor: 1.0000  
 Sample Type: ICIS Calib Level: 5  
 Sample ID: icis  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 11  
 Lims Batch ID: 181419 Lims Sample ID: 12  
 Sublist: chrom-AQ\_VMSH\_8260\*sub45  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:18 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 12:28:15

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.840	3.840	0.0	89	310506	250.0	
* 2 Fluorobenzene	96	6.572	6.572	0.0	98	1389174	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.888	10.888	0.0	84	397680	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.004	14.004	0.0	96	579674	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.754	5.754	0.0	57	747214	9.83	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.172	6.172	0.0	99	327810	10.0	
\$ 10 Toluene-d8 (Surr)	98	8.678	8.678	0.0	93	1519948	9.71	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.611	12.611	0.0	86	751964	9.81	
27 Chlorotrifluoroethene	116	2.048	2.048	0.0	95	243868	10.4	
29 1,2-Dichloro-1,1,2,2-tetrafluoro	85	2.204	2.204	0.0	94	869059	10.2	
33 2-Chloro-1,1,1-Trifluoroethane	118	2.378	2.378	0.0	96	655122	10.1	
34 Ethylene oxide	43	2.552	2.552	0.0	99	1267123	1974.4	
39 Ethanol	45	3.057	3.057	0.0	43	59722	517.0	
41 1,2-Dichloro-1,1,2-trifluoroetha	117	3.127	3.127	0.0	91	698825	9.93	
42 1,1,1-Trifluoro-2,2-dichloroetha	83	3.179	3.179	0.0	76	1244980	10.1	
43 Propene oxide	58	3.196	3.196	0.0	96	1453843	492.0	
51 Acetonitrile	41	3.701	3.701	0.0	82	88404	97.3	
49 Isopropyl alcohol	45	4.571	4.571	0.0	92	1653948	96.2	
62 Isopropyl ether	87	4.571	4.571	0.0	98	347807	9.67	
63 2-Chloro-1,3-butadiene	53	4.623	4.623	0.0	87	657285	9.65	
64 Tert-butyl ethyl ether	59	4.989	4.989	0.0	99	1241885	9.61	
69 Ethyl acetate	43	5.232	5.232	0.0	99	262791	19.8	
70 Propionitrile	54	5.285	5.285	0.0	74	127713	97.4	
72 Methacrylonitrile	41	5.459	5.459	0.0	95	931840	97.5	
83 Tert-amyl methyl ether	73	6.364	6.364	0.0	96	889115	9.67	
85 n-Butanol	56	6.973	6.973	0.0	86	81201	251.9	
87 Ethyl acrylate	55	7.164	7.164	0.0	100	291086	10.0	
91 Methyl methacrylate	100	7.477	7.477	0.0	95	134983	19.2	



Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
95 2-Nitropropane	41	8.017	8.017	0.0	97	72726	18.6	
107 Tetrahydrothiophene	60	9.914	9.914	0.0	67	132126	9.90	
106 n-Butyl acetate	43	9.931	9.931	0.0	95	308197	10.1	
119 cis-1,4-Dichloro-2-butene	53	12.524	12.524	0.0	92	75195	9.95	
135 1,2,3-Trimethylbenzene	105	14.091	14.091	0.0	98	1329771	9.32	
136 Benzyl chloride	126	14.178	14.178	0.0	99	103533	10.1	
140 1,3,5-Trichlorobenzene	180	15.413	15.413	0.0	96	717417	9.36	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3231.D

Injection Date: 03-Jul-2013 11:47:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 12

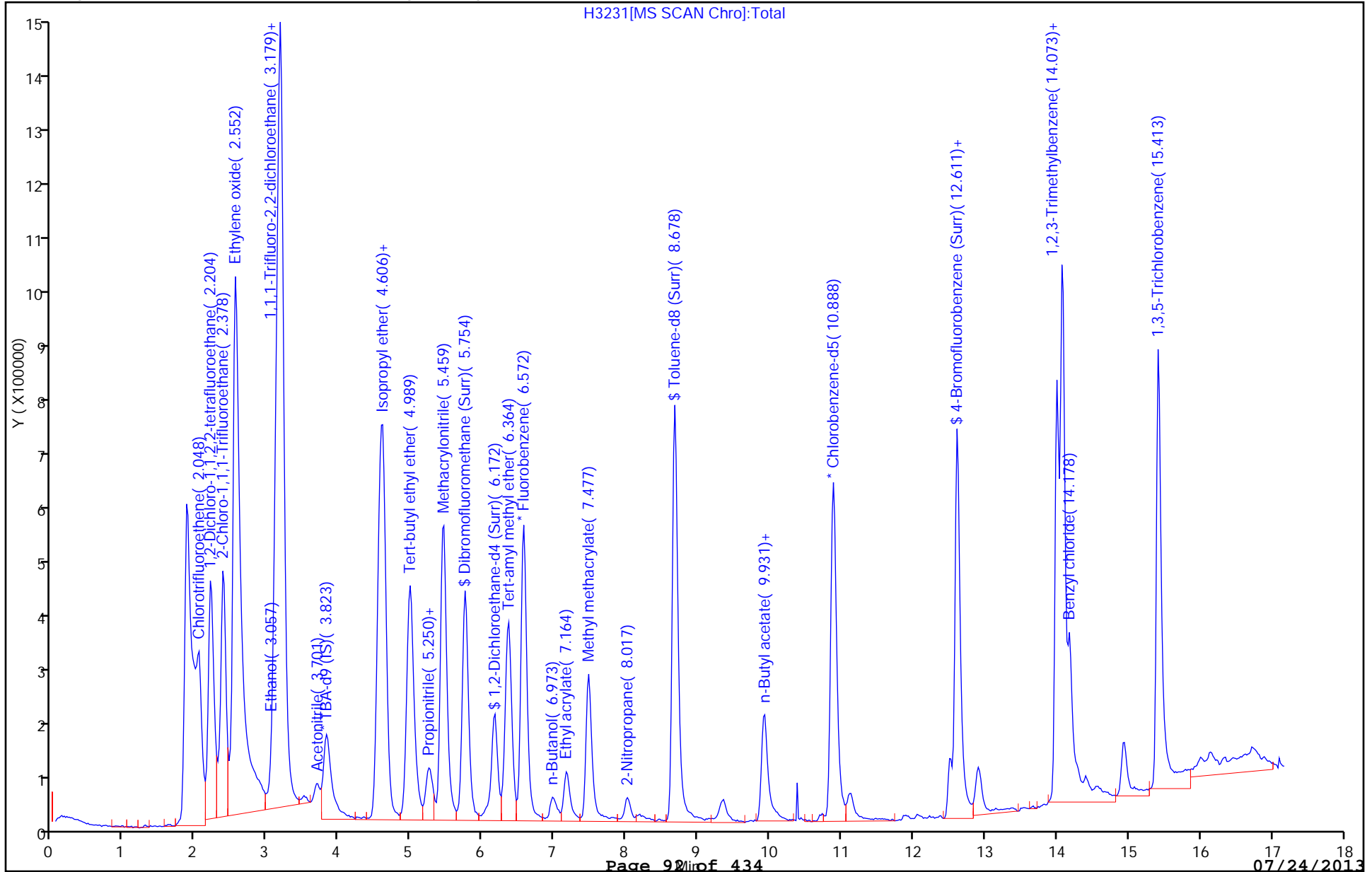
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3232.D  
 Lims ID: std30 Client ID:  
 Inject. Date: 03-Jul-2013 12:09:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 6  
 Sample ID: std30  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 12  
 Lims Batch ID: 181419 Lims Sample ID: 13  
 Sublist: chrom-AQ\_VMSH\_8260\*sub45  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:20 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 12:33:42

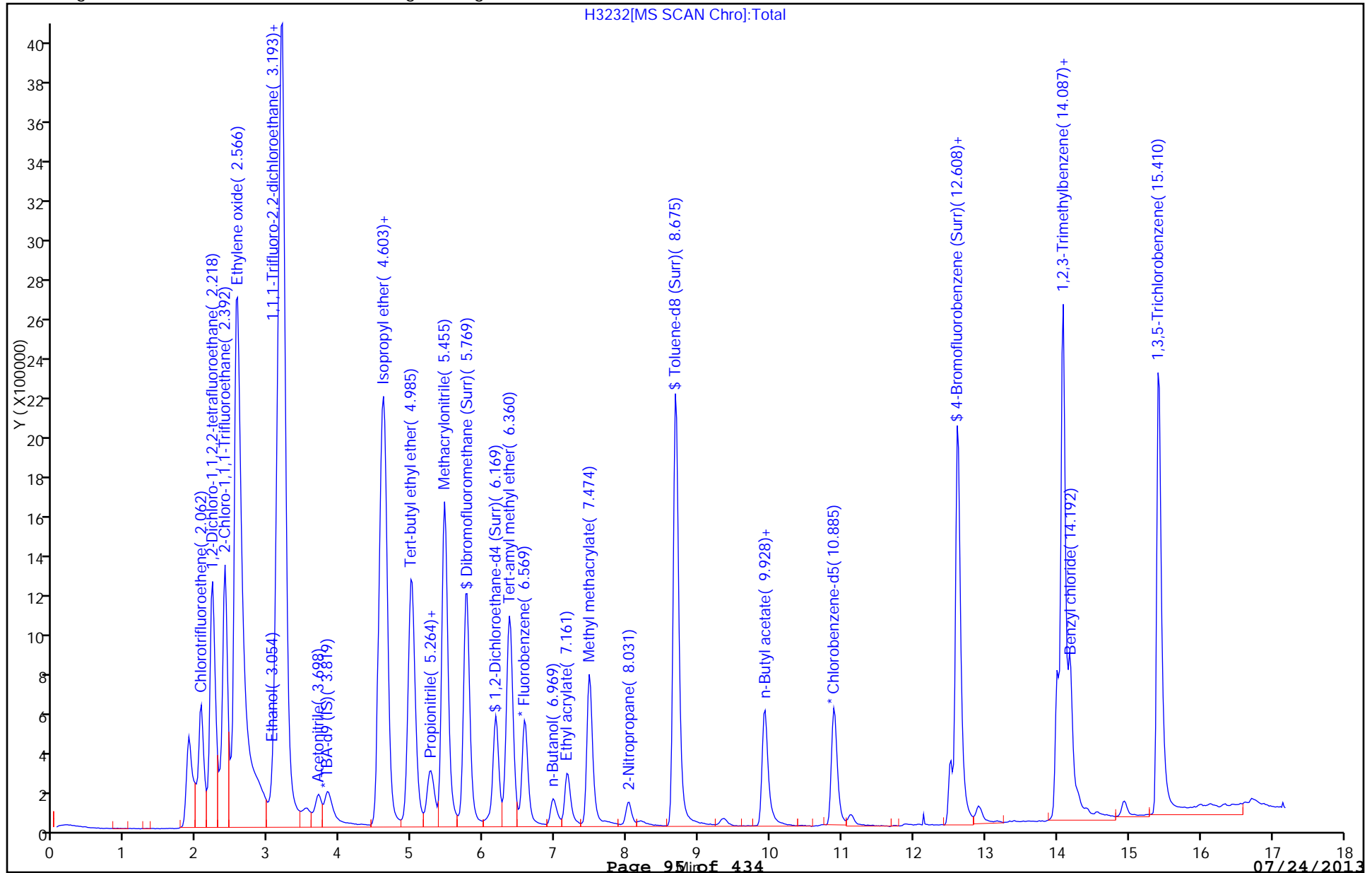
Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.854	3.840	0.014	91	299994	250.0	
* 2 Fluorobenzene	96	6.569	6.572	-0.003	98	1421368	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.885	10.888	-0.003	83	395908	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.000	14.004	-0.004	96	577526	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.751	5.754	-0.003	56	2262763	29.1	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.169	6.172	-0.003	97	979796	29.3	
\$ 10 Toluene-d8 (Surr)	98	8.675	8.678	-0.003	93	4520573	29.0	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.608	12.611	-0.003	85	2238197	29.3	
27 Chlorotrifluoroethene	116	2.062	2.048	0.015	87	771733	32.1	
29 1,2-Dichloro-1,1,2,2-tetrafluoro	85	2.218	2.204	0.014	97	2551277	29.3	
33 2-Chloro-1,1,1-Trifluoroethane	118	2.392	2.378	0.014	95	1953307	29.3	
34 Ethylene oxide	43	2.566	2.552	0.014	99	3988512	6074.0	
39 Ethanol	45	3.054	3.057	-0.003	77	159825	1501.2	
41 1,2-Dichloro-1,1,2-trifluoroetha	117	3.141	3.127	0.015	92	2060796	28.6	
42 1,1,1-Trifluoro-2,2-dichloroetha	83	3.193	3.179	0.014	82	3652784	28.9	
43 Propene oxide	58	3.193	3.196	-0.003	96	4429559	1465.1	
51 Acetonitrile	41	3.698	3.701	-0.003	79	276609	297.7	
49 Isopropyl alcohol	45	4.585	4.571	0.014	92	5179889	294.5	
62 Isopropyl ether	87	4.585	4.571	0.014	98	1055555	28.7	
63 2-Chloro-1,3-butadiene	53	4.637	4.623	0.014	88	2005563	28.8	
64 Tert-butyl ethyl ether	59	4.985	4.989	-0.004	99	3836080	29.0	
69 Ethyl acetate	43	5.246	5.232	0.014	98	771544	56.9	
70 Propionitrile	54	5.299	5.285	0.015	98	404259	301.2	
72 Methacrylonitrile	41	5.455	5.459	-0.004	95	2818024	288.2	
83 Tert-amyl methyl ether	73	6.360	6.364	-0.004	96	2776005	29.5	
85 n-Butanol	56	6.969	6.973	-0.004	88	258000	782.2	
87 Ethyl acrylate	55	7.161	7.164	-0.003	100	860270	28.9	
91 Methyl methacrylate	100	7.474	7.477	-0.003	92	418986	58.2	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
95 2-Nitropropane	41	8.014	8.017	-0.003	97	230645	57.6	
107 Tetrahydrothiophene	60	9.910	9.914	-0.004	67	417095	31.4	
106 n-Butyl acetate	43	9.928	9.931	-0.003	95	921038	32.2	
119 cis-1,4-Dichloro-2-butene	53	12.521	12.524	-0.003	93	223610	29.7	
135 1,2,3-Trimethylbenzene	105	14.087	14.091	-0.004	98	4066508	28.6	
136 Benzyl chloride	126	14.192	14.178	0.014	98	284236	27.9	
140 1,3,5-Trichlorobenzene	180	15.427	15.413	0.014	97	2128390	27.9	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3232.D  
 Injection Date: 03-Jul-2013 12:09:30 Limit Group: MSV - 8260B Water and Solid  
 Client ID: Instrument ID: VMS\_H  
 Lims Batch ID: 181419 Lims Sample ID: 13  
 Operator ID: meierg Purge Vol: 20.000 mL  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3233.D  
 Lims ID: std60 Client ID:  
 Inject. Date: 03-Jul-2013 12:31:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 7  
 Sample ID: std60  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 13  
 Lims Batch ID: 181419 Lims Sample ID: 14  
 Sublist: chrom-AQ\_VMSH\_8260\*sub45  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:23 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 12:53:43

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.854	3.840	0.014	95	302820	250.0	
* 2 Fluorobenzene	96	6.569	6.572	-0.003	97	1425222	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.885	10.888	-0.003	85	391681	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.000	14.004	-0.004	97	584742	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.751	5.754	-0.003	57	4525844	58.0	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.169	6.172	-0.003	97	1949233	58.2	
\$ 10 Toluene-d8 (Surr)	98	8.675	8.678	-0.003	84	9133671	59.3	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.608	12.611	-0.003	85	4515947	58.4	
27 Chlorotrifluoroethene	116	2.061	2.048	0.014	87	1612166	66.8	
29 1,2-Dichloro-1,1,2,2-tetrafluoro	85	2.218	2.204	0.014	93	5181260	59.3	
33 2-Chloro-1,1,1-Trifluoroethane	118	2.392	2.378	0.014	95	4013390	60.1	
34 Ethylene oxide	43	2.549	2.552	-0.003	99	7807471	11858	
39 Ethanol	45	3.071	3.057	0.014	91	297145	2862.2	
41 1,2-Dichloro-1,1,2-trifluoroetha	117	3.140	3.127	0.014	95	4193700	58.1	
42 1,1,1-Trifluoro-2,2-dichloroetha	83	3.193	3.179	0.014	82	7393232	58.4	
43 Propene oxide	58	3.193	3.196	-0.003	95	8812968	2907.1	
51 Acetonitrile	41	3.697	3.701	-0.004	75	611831	656.6	
49 Isopropyl alcohol	45	4.585	4.571	0.014	93	10400043	589.6	
62 Isopropyl ether	87	4.585	4.571	0.014	98	2151343	58.3	
63 2-Chloro-1,3-butadiene	53	4.620	4.623	-0.003	88	4115100	58.9	
64 Tert-butyl ethyl ether	59	4.985	4.989	-0.004	99	7761229	58.5	
69 Ethyl acetate	43	5.246	5.232	0.014	98	1583795	116.5	
70 Propionitrile	54	5.298	5.285	0.014	96	826443	614.1	
72 Methacrylonitrile	41	5.455	5.459	-0.004	94	5720548	583.5	
83 Tert-amyl methyl ether	73	6.360	6.364	-0.004	96	5552397	58.9	
85 n-Butanol	56	6.969	6.973	-0.004	88	538209	1627.4	
87 Ethyl acrylate	55	7.161	7.164	-0.003	100	1751989	58.7	
91 Methyl methacrylate	100	7.474	7.477	-0.003	93	812289	112.6	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
95 2-Nitropropane	41	8.013	8.017	-0.004	97	467308	116.3	
107 Tetrahydrothiophene	60	9.928	9.914	0.014	83	846139	64.4	
106 n-Butyl acetate	43	9.910	9.931	-0.021	95	1622002	58.1	M
119 cis-1,4-Dichloro-2-butene	53	12.521	12.524	-0.003	93	442872	58.1	
135 1,2,3-Trimethylbenzene	105	14.087	14.091	-0.004	98	8251178	57.3	
136 Benzyl chloride	126	14.191	14.178	0.013	98	580103	56.3	
140 1,3,5-Trichlorobenzene	180	15.427	15.413	0.014	97	4475382	57.9	

## QC Flag Legend

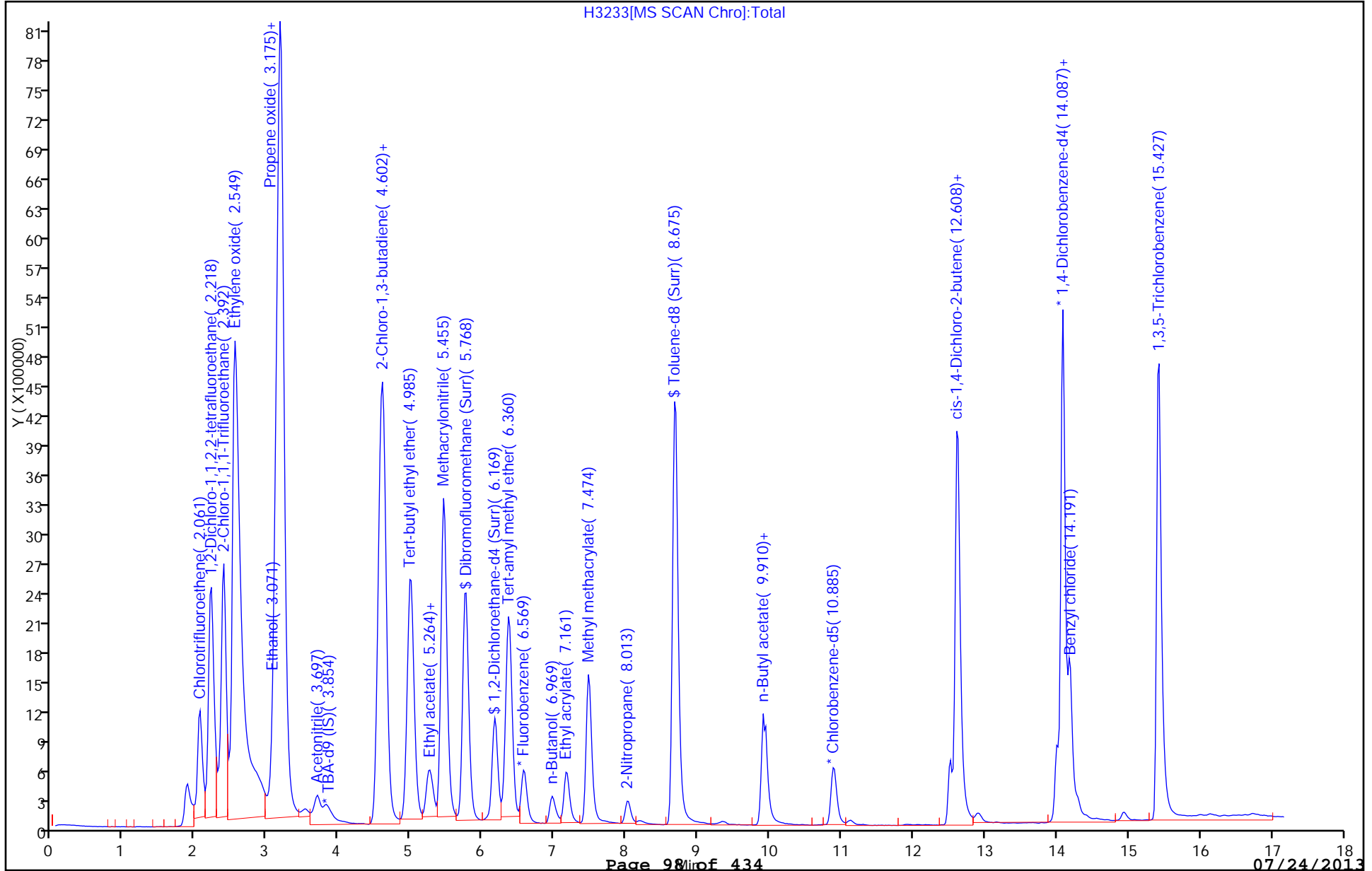
Review Flags

M - Manually Integrated

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3233.D  
Injection Date: 03-Jul-2013 12:31:30 Limit Group: MSV - 8260B Water and Solid  
Client ID: Instrument ID: VMS\_H  
Lims Batch ID: 181419 Lims Sample ID: 14  
Operator ID: meierg Purge Vol: 20.000 mL  
Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1





FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-43753-1 Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 15:16 Calibration End Date: 07/03/2013 17:27 Calibration ID: 14678

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD003 280-181419/18	H3239.D
Level 2	STD01 280-181419/19	H3240.D
Level 3	STD02 280-181419/20	H3241.D
Level 4	STD05 280-181419/21	H3242.D
Level 5	STD10 280-181419/22	H3243.D
Level 6	STD30 280-181419/23	H3244.D
Level 7	STD60 280-181419/24	H3245.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Ethyl ether	0.2685 0.2211	0.2259 0.2207	0.1998	0.2287	0.2176	Ave		0.2260			9.2		15.0				
1,1-Dichloroethene	0.4584 0.4304	0.4175 0.4353	0.3951	0.4319	0.4297	Ave		0.4283			4.5		30.0				
1,1,2-Trichloro-1,2,2-trifluoroethane	0.6224 0.5981	0.6127 0.6095	0.5413	0.5923	0.5992	Ave		0.5965			4.4		15.0				
Iodomethane	1.0407 1.0727	1.0261 1.0862	0.9373	1.0471	1.0509	Ave		1.0373			4.7		15.0				
Carbon disulfide	1.8892 1.5798	1.6335 1.5899	1.4365	1.5614	1.5555	Ave		1.6065			8.6		15.0				
Allyl chloride	0.8102 0.7442	0.8547 0.7557	0.7318	0.7679	0.7370	Ave		0.7716			5.8		15.0				
Methyl acetate	0.1769 0.1187	0.1214 0.1296	0.1086	0.1214	0.1226	Lin2	0.0829	0.1162						0.9910		0.9900	
Methylene Chloride	0.8697 0.3878	0.8697 0.3819	0.5670	0.4577	0.4079	Lin2	0.4892	0.3612						0.9950		0.9900	
2-Methyl-2-propanol	1.2982 1.2314	1.2889 1.2252	1.2040	1.0507	1.1803	Ave		1.2112			6.8		15.0				
Acrylonitrile	0.0290 0.0362	0.0322 0.0367	0.0306	0.0361	0.0344	Ave		0.0336			9.1		15.0				
Methyl tert-butyl ether	0.6551 0.7100	0.6733 0.7195	0.6110	0.7052	0.6912	Ave		0.6807			5.6		15.0				
trans-1,2-Dichloroethene	0.4136 0.4647	0.4450 0.4686	0.4052	0.4521	0.4578	Ave		0.4439			5.6		15.0				
Hexane	2.9031 2.9004	2.7172 3.0275	2.4407	2.8537	2.8221	Ave		2.8092			6.7		15.0				
1,1-Dichloroethane	0.8797 0.8569	0.8687 0.8722	0.7643	0.8462	0.8499	Ave		0.8483		0.1000	4.6		15.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H

GC Column: DB-624

ID: 0.53 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 15:16

Calibration End Date: 07/03/2013 17:27

Calibration ID: 14678

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Vinyl acetate	0.4870 0.5420	0.4898 0.5662	0.4606	0.5259	0.4863	Ave		0.5083			7.3		15.0				
cis-1,2-Dichloroethene	0.4522 0.4655	0.4462 0.4660	0.4101	0.4576	0.4593	Ave		0.4510			4.3		15.0				
2,2-Dichloropropane	0.9062 0.6520	0.7453 0.6394	0.6582	0.6790	0.6685	Ave		0.7069			13.0		15.0				
2-Butanol	1.2716 1.1680	1.0778 1.1782	0.9875	1.1407	1.1252	Ave		1.1356			7.8		15.0				
Chlorobromomethane	0.2332 0.2303	0.2336 0.2355	0.2117	0.2358	0.2288	Ave		0.2299			3.7		15.0				
Tetrahydrofuran	0.0342 0.0427	0.0508 0.0439	0.0445	0.0476	0.0452	Ave		0.0441			12.0		15.0				
Chloroform	0.8139 0.8197	0.8182 0.8236	0.7442	0.8149	0.8138	Ave		0.8069			3.5		30.0				
1,1,1-Trichloroethane	0.8291 0.7610	0.7670 0.7645	0.6945	0.7563	0.7598	Ave		0.7617			5.1		15.0				
Cyclohexane	0.8673 0.8320	0.8306 0.8423	0.7337	0.8135	0.8061	Ave		0.8179			5.1		15.0				
1,1-Dichloropropene	0.8371 0.6620	0.6857 0.6711	0.6339	0.6709	0.6370	Ave		0.6854			10.0		15.0				
Carbon tetrachloride	0.9006 0.7837	0.8198 0.7922	0.7235	0.7749	0.7836	Ave		0.7969			6.8		15.0				
Isobutyl alcohol		0.5662 0.4129	0.4225	0.4304	0.4244	Ave		0.4488			13.0		15.0				
Benzene	1.4522 1.3363	1.3412 1.3558	1.2184	1.3191	1.3288	Ave		1.3360			5.1		15.0				
1,2-Dichloroethane	0.3931 0.3537	0.3535 0.3559	0.3267	0.3639	0.3541	Ave		0.3573			5.5		15.0				
Trichloroethene	0.5477 0.5520	0.5378 0.5461	0.5044	0.5467	0.5643	Ave		0.5427			3.4		15.0				
2-Pentanone	0.2089 0.2044	0.1996 0.1785	0.1827	0.2078	0.2182	Ave		0.2000			7.2		15.0				
Methylcyclohexane	0.8587 0.7162	0.7194 0.7195	0.6569	0.7208	0.7218	Ave		0.7305			8.4		15.0				
1,2-Dichloropropane	0.5786 0.4859	0.5291 0.4860	0.4702	0.4979	0.4883	Ave		0.5051			7.3		30.0				
Dibromomethane	0.3511 0.2566	0.2791 0.2572	0.2500	0.2645	0.2598	Ave		0.2740			13.0		15.0				
1,4-Dioxane		0.0014 0.0015	0.0012	0.0016	0.0011	Ave		0.0014			14.0		15.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H

GC Column: DB-624

ID: 0.53 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 15:16

Calibration End Date: 07/03/2013 17:27

Calibration ID: 14678

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorobromomethane	0.7362 0.7365	0.7093 0.7350	0.6414	0.7215	0.7158	Ave		0.7137			4.7		15.0				
cis-1,3-Dichloropropene	2.3622 2.3997	2.3370 2.4260	2.2279	2.4209	2.3841	Ave		2.3654			2.9		15.0				
Toluene	1.5617 1.4987	1.4933 1.4579	1.3738	1.4655	1.4666	Ave		1.4739			3.8		30.0				
trans-1,3-Dichloropropene	0.4726 0.4428	0.4429 0.4326	0.3935	0.4536	0.4419	Ave		0.4400			5.5		15.0				
Ethyl methacrylate	0.4845 1.4172	1.0688 1.4423	1.4964	1.4941	1.4722	Lin2	-0.306	1.4944						0.9950		0.9900	
1,1,2-Trichloroethane	0.3414 0.2838	0.2681 0.2770	0.2506	0.2888	0.2802	Ave		0.2843			9.9		15.0				
Tetrachloroethene	1.8157 1.9376	1.9121 1.9535	1.7591	1.9252	1.9116	Ave		1.8878			3.8		15.0				
1,3-Dichloropropane	1.7144 1.7691	1.7313 1.7902	1.5732	1.8130	1.7500	Ave		1.7344			4.5		15.0				
Chlorodibromomethane	1.7618 2.0823	1.8768 2.0825	1.7882	2.0407	2.0457	Ave		1.9540			7.2		15.0				
Ethylene Dibromide	1.3984 1.4348	1.4527 1.4366	1.3125	1.4907	1.4123	Ave		1.4197			3.9		15.0				
1-Chlorohexane	2.8622 2.6531	2.7739 2.6834	2.4696	2.6849	2.6324	Ave		2.6799			4.6		15.0				
Chlorobenzene	4.3751 4.0756	4.1331 4.0792	3.7501	4.1585	4.0174	Ave		4.0842		0.3000	4.6		15.0				
1,1,1,2-Tetrachloroethane	1.9565 1.9384	1.9465 1.9689	1.7574	1.9045	1.9223	Ave		1.9135			3.8		15.0				
Ethylbenzene	2.1257 1.9873	2.0385 1.9556	1.8393	1.9962	1.9687	Ave		1.9873			4.4		30.0				
m-Xylene & p-Xylene	2.4700 2.7013	2.7746 2.7179	2.3629	2.7455	2.7043	Ave		2.6395			6.0		15.0				
o-Xylene	2.5516 2.3344	2.4251 2.3220	2.1158	2.3580	2.3507	Ave		2.3511			5.6		15.0				
Styrene	4.5188 3.9132	4.0998 3.8743	3.6735	3.9979	3.9292	Ave		4.0009			6.6		15.0				
Bromoform	1.0894 1.1378	1.1036 1.1264	1.0337	1.1876	1.1351	Ave		1.1162		0.1000	4.3		15.0				
Isopropylbenzene	5.1484 4.7775	4.8629 4.8047	2.5059	4.6648	4.6903	Lin1	-0.364	4.7627						0.9960		0.9900	
Bromobenzene	1.2610 1.1693	1.1363 1.1795	1.0547	1.1508	1.1440	Ave		1.1565			5.3		15.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H

GC Column: DB-624

ID: 0.53 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 15:16

Calibration End Date: 07/03/2013 17:27

Calibration ID: 14678

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
1,1,2,2-Tetrachloroethane	0.9668 0.9003	0.8739 0.8982	0.8175	0.8928	0.8630	Ave		0.8875			0.3000	5.1	15.0				
1,2,3-Trichloropropane	0.3971 0.2159	0.3054 0.2153	0.1932	0.2203	0.2126	Lin1	0.0518	0.2130						0.9990		0.9900	
trans-1,4-Dichloro-2-butene	0.1671 0.2021	0.1966 0.2032	0.1892	0.2022	0.2007	Ave		0.1945				6.7	15.0				
N-Propylbenzene	0.9843 1.1841	1.2688 1.1882	1.1320	1.1570	1.1824	Ave		1.1567				7.5	15.0				
2-Chlorotoluene	1.2400 0.9957	0.9741 0.9631	0.8911	0.9327	0.9591	Ave		0.9937				11.0	15.0				
1,3,5-Trimethylbenzene	4.0040 3.5513	3.5515 3.5861	3.2713	3.4810	3.5496	Ave		3.5707				6.1	15.0				
4-Chlorotoluene	1.3421 1.1417	1.1502 1.1724	1.0460	1.0884	1.1417	Ave		1.1546				8.1	15.0				
tert-Butylbenzene	4.4939 3.9641	4.0547 3.9524	3.7207	3.8991	3.9384	Ave		4.0033				6.0	15.0				
1,2,4-Trimethylbenzene	4.1988 3.3524	3.4362 3.3082	3.1249	3.3347	3.3799	Ave		3.4479				10.0	15.0				
sec-Butylbenzene	1.3727 0.9880	1.0728 0.9623	0.9578	0.9747	0.9940	Ave		1.0460				14.0	15.0				
1,3-Dichlorobenzene	2.2372 1.7479	1.7702 1.8335	1.6036	1.8646	1.8938	Ave		1.8501				11.0	15.0				
4-Isopropyltoluene	5.4856 4.5064	4.7198 4.4269	4.1257	4.4471	4.5193	Ave		4.6044				9.3	15.0				
1,4-Dichlorobenzene	3.3042 2.4597	2.6101 2.2893	2.3732	2.3006	2.3142	Ave		2.5216				14.0	15.0				
n-Butylbenzene	5.6578 3.9832	4.2633 3.9877	3.8059	3.9408	4.0181	Ave		4.2367				15.0	15.0				
1,2-Dichlorobenzene	2.0898 1.7043	1.7180 1.6567	1.6342	1.6798	1.7176	Ave		1.7429				9.0	15.0				
1,2-Dibromo-3-Chloropropane	0.1897 0.1615	0.1569	0.1671	0.1756	0.1679	Ave		0.1698				6.8	15.0				
1,2,4-Trichlorobenzene	1.2166	1.5518 1.1473	1.2504	1.2521	1.2861	Ave		1.2841				11.0	15.0				
Hexachlorobutadiene	2.6228 1.1293	1.4345 1.0617	1.2154	1.1731	1.2318	Lin2	0.4537	1.0738						0.9940		0.9900	
Naphthalene	1.3081	1.4703 1.2559	1.3054	1.3437	1.3499	Ave		1.3389				5.4	15.0				
1,2,3-Trichlorobenzene	1.1052 0.9633	0.9119	0.9915	0.9978	1.0280	Ave		0.9996				6.5	15.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-43753-1 Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 15:16 Calibration End Date: 07/03/2013 17:27 Calibration ID: 14678

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD003 280-181419/18	H3239.D
Level 2	STD01 280-181419/19	H3240.D
Level 3	STD02 280-181419/20	H3241.D
Level 4	STD05 280-181419/21	H3242.D
Level 5	STD10 280-181419/22	H3243.D
Level 6	STD30 280-181419/23	H3244.D
Level 7	STD60 280-181419/24	H3245.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Ethyl ether	FB	Ave	9097 766498	26392 1452420	47072	136987	258516	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloroethene	FB	Ave	15534 1492504	48779 2864809	93108	258727	510426	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	21088 2073883	71591 4011749	127545	354823	711752	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Iodomethane	FB	Ave	35262 3719719	119889 7148941	220854	627233	1248261	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Carbon disulfide	FB	Ave	64015 5477971	190866 10464487	338485	935281	1847630	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Allyl chloride	FB	Ave	27452 2580378	99863 4973934	172424	459965	875388	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Methyl acetate	FB	Lin2	29975 2058780	70926 4265399	127931	363731	728388	1.50 150	5.00 300	10.0	25.0	50.0
Methylene Chloride	FB	Lin2	101623 1344829	101623 2513592	133593	274149	484556	30.0	60.0	2.00	5.00	10.0
2-Methyl-2-propanol	TBA	Ave	4753 510689	17180 979268	32226	76642	163084	3.00 300	10.0 600	20.0	50.0	100
Acrylonitrile	FB	Ave	9810 1256164	37604 2418267	72082	215971	408501	3.00 300	10.0 600	20.0	50.0	100
Methyl tert-butyl ether	FB	Ave	22196 2461764	78675 4735789	143960	422394	821069	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	14016 1611244	51990 3084476	95488	270836	543802	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Hexane	CBZ	Ave	28700 2650865	86352 5127472	156295	453192	903281	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloroethane	FB	Ave	29807 2971257	101500 5741011	180084	506897	1009505	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl acetate	FB	Ave	33002 3758858	114462 7453886	217057	630060	1155243	0.600 60.0	2.00 120	4.00	10.0	20.0

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-43753-1 Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 15:16 Calibration End Date: 07/03/2013 17:27 Calibration ID: 14678

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
cis-1,2-Dichloroethene	FB	Ave	15323 1614063	52134 3066870	96634	274086	545556	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2,2-Dichloropropane	FB	Ave	30707 2260794	87086 4208608	155081	406737	793993	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Butanol	TBA	Ave	13967 1453172	43098 2825006	79294	249620	466401	9.00 900	30.0 1800	60.0	150	300
Chlorobromomethane	FB	Ave	7903 798564	27296 1550316	49878	141239	271816	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrahydrofuran	FB	Ave	2315 296034	11860 578342	20979	57074	107337	0.600 60.0	2.00 120	4.00	10.0	20.0
Chloroform	FB	Ave	27577 2842226	95600 5420733	175355	488111	966632	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	28093 2638901	89617 5032129	163648	453006	902444	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexane	FB	Ave	29388 2885037	97050 5544121	172887	487275	957511	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	28363 2295509	80124 4417341	149367	401889	756605	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Carbon tetrachloride	FB	Ave	30515 2717398	95787 5214378	170469	464166	930809	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Isobutyl alcohol	TBA	Ave	428101	18869 872271	28270	78482	146609	750 1500	25.0	50.0	125	250
Benzene	FB	Ave	49207 4633478	156712 8923508	287096	790162	1578380	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichloroethane	FB	Ave	13321 1226471	41310 2342589	76983	217950	420556	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Trichloroethene	FB	Ave	18557 1913944	62838 3594563	118852	327502	670289	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Pentanone	FB	Ave	28317 2834367	93306 4700101	172197	497817	1036756	1.20 120	4.00 240	8.00	20.0	40.0
Methylcyclohexane	FB	Ave	29095 2483319	84060 4735930	154787	431766	857417	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichloropropane	FB	Ave	19604 1684908	61826 3199125	110786	298236	580034	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Dibromomethane	FB	Ave	11896 889823	32609 1692769	58901	158467	308633	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dioxane	FB	Ave	100463	203473	5807	18892	26890	600	1200	40.0	100	200
Dichlorobromomethane	FB	Ave	24946 2553638	82879 4837401	151121	432168	850226	0.300 30.0	1.00 60.0	2.00	5.00	10.0
cis-1,3-Dichloropropene	CBZ	Ave	23352 2193214	74270 4108683	142665	384464	763101	0.300 30.0	1.00 60.0	2.00	5.00	10.0

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-43753-1 Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 15:16 Calibration End Date: 07/03/2013 17:27 Calibration ID: 14678

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Toluene	FB	Ave	52916 5196691	174478 9595450	323710	877871	1742047	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,3-Dichloropropene	FB	Ave	16012 1535294	51753 2847000	92720	271704	524933	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl methacrylate	CBZ	Lin2	4790 1295247	33967 2442757	95826	237284	471203	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,2-Trichloroethane	FB	Ave	11569 984036	31320 1823267	59044	172995	332780	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Tetrachloroethene	CBZ	Ave	17950 1770939	60766 3308566	112645	305737	611849	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,3-Dichloropropane	CBZ	Ave	16948 1616852	55021 3031893	100741	287920	560141	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chlorodibromomethane	CBZ	Ave	17417 1903115	59646 3527067	114507	324077	654759	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethylene Dibromide	CBZ	Ave	13824 1311338	46166 2433111	84045	236736	452044	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1-Chlorohexane	CBZ	Ave	28295 2424814	88155 4544692	158143	426384	842557	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Chlorobenzene	CBZ	Ave	43252 3724945	131351 6908728	240144	660410	1285875	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	19342 1771617	61859 3334640	112539	302448	615264	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Ethylbenzene	CBZ	Ave	21014 1816283	64785 3312000	117781	317013	630126	0.300 30.0	1.00 60.0	2.00	5.00	10.0
m-Xylene & p-Xylene	CBZ	Ave	24418 2468902	88178 4603187	151308	436013	865579	0.300 30.0	1.00 60.0	2.00	5.00	10.0
o-Xylene	CBZ	Ave	25225 2133571	77071 3932590	135484	374473	752395	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Styrene	CBZ	Ave	44672 3576493	130291 6561662	235235	634910	1257617	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromoform	CBZ	Ave	10770 1039891	35072 1907675	66195	188596	363327	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Isopropylbenzene	DCB	Lin1	71494 6583261	239571 12128681	246166	1184577	2316314	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Bromobenzene	DCB	Ave	17511 1611226	55980 2977409	103607	292241	564966	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,1,2,2-Tetrachloroethane	DCB	Ave	13426 1240588	43052 2267373	80310	226719	426220	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichloropropane	DCB	Lin1	5515 297510	15046 543475	18977	55954	104971	0.300 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCB	Ave	2321 278554	9686 513000	18587	51336	99140	0.300 30.0	1.00 60.0	2.00	5.00	10.0

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-43753-1 Analy Batch No.: 181419

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2013 15:16 Calibration End Date: 07/03/2013 17:27 Calibration ID: 14678

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
N-Propylbenzene	DCB	Ave	13669 1631711	62509 2999328	111204	293796	583920	0.300 30.0	1.00 60.0	2.00	5.00	10.0
2-Chlorotoluene	DCB	Ave	17220 1372009	47989 2431128	87533	236840	473638	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,3,5-Trimethylbenzene	DCB	Ave	55602 4893617	174964 9052543	321351	883961	1753007	0.300 30.0	1.00 60.0	2.00	5.00	10.0
4-Chlorotoluene	DCB	Ave	18638 1573265	56663 2959430	102754	276383	563842	0.300 30.0	1.00 60.0	2.00	5.00	10.0
tert-Butylbenzene	DCB	Ave	62405 5462439	199758 9977094	365503	990137	1945019	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trimethylbenzene	DCB	Ave	58308 4619435	169284 8351044	306973	846802	1669202	0.300 30.0	1.00 60.0	2.00	5.00	10.0
sec-Butylbenzene	DCB	Ave	19062 1361486	52852 2429087	94091	247507	490905	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,3-Dichlorobenzene	DCB	Ave	31067 2408574	87209 4628367	157530	473486	935268	0.300 30.0	1.00 60.0	2.00	5.00	10.0
4-Isopropyltoluene	DCB	Ave	76177 6209638	232520 11174880	405288	1129272	2231866	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dichlorobenzene	DCB	Ave	45884 3389416	128588 5778988	233126	584196	1142876	0.300 30.0	1.00 60.0	2.00	5.00	10.0
n-Butylbenzene	DCB	Ave	78568 5488752	210035 10066230	373873	1000713	1984339	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichlorobenzene	DCB	Ave	29021 2348509	84639 4182183	160536	426565	848265	0.300 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCB	Ave		9346 396163	16415	44589	82913	30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trichlorobenzene	DCB	Ave	76449 1676480	2896260	122836	317965	635125	30.0	1.00 60.0	2.00	5.00	10.0
Hexachlorobutadiene	DCB	Lin2	36422 1556150	70672 2680203	119397	297891	608338	0.300 30.0	1.00 60.0	2.00	5.00	10.0
Naphthalene	DCB	Ave	72434 1802450	3170393	128236	341225	666655	30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichlorobenzene	DCB	Ave		54448 1327413	97402	253379	507695	30.0	1.00 60.0	2.00	5.00	10.0

Curve Type Legend:

Ave = Average ISTD  
Lin1 = Linear 1/conc ISTD  
Lin2 = Linear 1/conc^2 ISTD



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3239.D  
 Lims ID: std003 Client ID:  
 Inject. Date: 03-Jul-2013 15:16:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 1  
 Sample ID: main 10 chk  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 19  
 Lims Batch ID: 181419 Lims Sample ID: 18  
 Sublist: chrom-AQ\_VMSH\_8260\*sub39  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:26 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 18:36:11

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.842	3.840	0.002	91	305098	250.0	
* 2 Fluorobenzene	96	6.575	6.572	0.003	98	1411838	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.908	10.888	0.020	86	411911	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.023	14.004	0.019	98	578612	12.5	
40 Ethyl ether	59	3.111	3.123	-0.012	72	9097	0.3563	
45 1,1-Dichloroethene	96	3.355	3.367	-0.012	95	15534	0.3211	
46 1,1,2-Trichloro-1,2,2-trifluoro	151	3.390	3.402	-0.012	90	21088	0.3130	
48 Iodomethane	142	3.512	3.541	-0.029	97	35262	0.3010	
50 Carbon disulfide	76	3.599	3.611	-0.012	98	64015	0.3528	
52 3-Chloro-1-propene	41	3.686	3.698	-0.012	52	27452	0.3150	
53 Methyl acetate	43	3.686	3.715	-0.029	64	29975	1.57	
54 Methylene Chloride	84		3.819					
55 2-Methyl-2-propanol	59	3.947	3.941	0.006	8	4753	3.22	
57 Acrylonitrile	53	4.086	4.080	0.006	51	9810	2.59	
58 trans-1,2-Dichloroethene	96	4.086	4.098	-0.012	95	14016	0.2796	
56 Methyl tert-butyl ether	73	4.086	4.098	-0.012	71	22196	0.2887	
59 Hexane	57	4.330	4.359	-0.029	88	28700	0.3100	
60 1,1-Dichloroethane	63	4.539	4.550	-0.011	66	29807	0.3111	
61 Vinyl acetate	43	4.556	4.568	-0.012	95	33002	0.5749	
66 2,2-Dichloropropane	77	5.200	5.212	-0.012	66	30707	0.3846	
65 cis-1,2-Dichloroethene	96	5.200	5.212	-0.012	70	15323	0.3008	
71 sec-Butyl Alcohol	45	5.443	5.438	0.005	66	13967	10.1	
73 Chlorobromomethane	128	5.478	5.490	-0.012	91	7903	0.3044	
74 Tetrahydrofuran	42	5.548	5.542	0.006	13	2315	0.4645	
75 Chloroform	83	5.565	5.577	-0.012	75	27577	0.3026	
76 1,1,1-Trichloroethane	97	5.809	5.803	0.006	85	28093	0.3265	
77 Cyclohexane	56	5.861	5.873	-0.012	75	29388	0.3181	
78 1,1-Dichloropropene	75	5.983	5.995	-0.012	71	28363	0.3664	

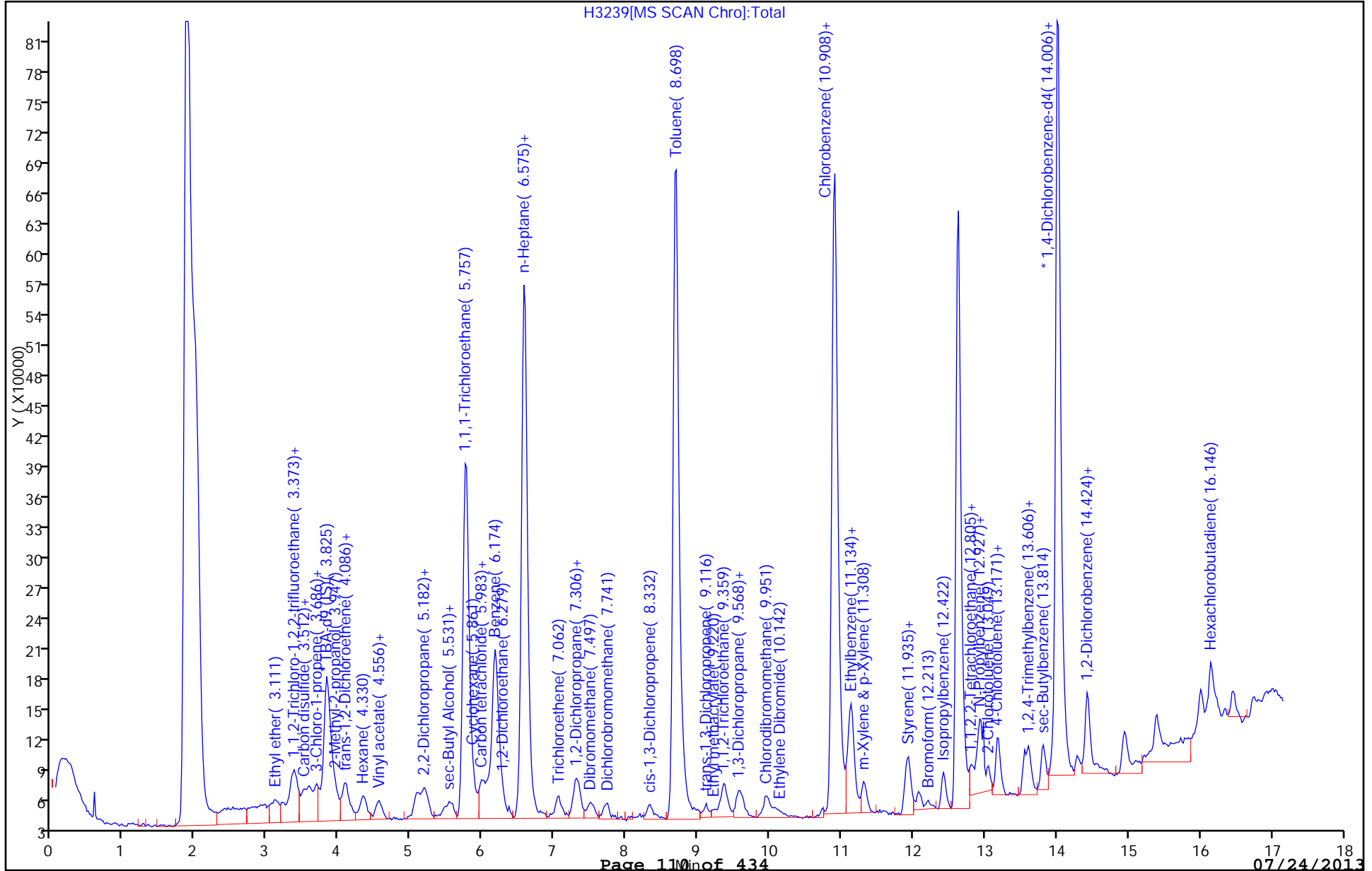
Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
79 Carbon tetrachloride	117	6.000	6.012	-0.012	72	30515	0.3390	
80 Isobutyl alcohol	41		6.134					
81 Benzene	78	6.244	6.256	-0.012	84	49207	0.3261	
82 1,2-Dichloroethane	62	6.279	6.273	0.006	21	13321	0.3301	
84 n-Heptane	43	6.522	6.534	-0.012	89	36310	0.3312	
86 Trichloroethene	95	7.045	7.056	-0.011	85	18557	0.3027	
88 2-Pentanone	43	7.288	7.300	-0.012	82	28317	1.25	
89 Methylcyclohexane	55	7.288	7.300	-0.012	87	29095	0.3526	
90 1,2-Dichloropropane	63	7.358	7.352	0.006	79	19604	0.3436	
92 Dibromomethane	93	7.532	7.526	0.006	83	11896	0.3843	
93 1,4-Dioxane	88		7.561					
94 Dichlorobromomethane	83	7.706	7.718	-0.012	85	24946	0.3095	
97 cis-1,3-Dichloropropene	75	8.332	8.327	0.005	78	23352	0.2996	
99 Toluene	91	8.785	8.779	0.006	84	52916	0.3179	
100 trans-1,3-Dichloropropene	75	9.116	9.110	0.006	76	16012	0.3222	
101 Ethyl methacrylate	69	9.220	9.232	-0.012	61	4790	0.3019	
102 1,1,2-Trichloroethane	97	9.377	9.371	0.006	49	11569	0.3603	
103 Tetrachloroethene	164	9.568	9.580	-0.012	94	17950	0.2885	
104 1,3-Dichloropropane	76	9.620	9.615	0.005	77	16948	0.2965	
108 Chlorodibromomethane	129	9.968	9.963	0.005	60	17417	0.2705	
109 Ethylene Dibromide	107	10.142	10.154	-0.012	61	13824	0.2955	
110 1-Chlorohexane	91	10.908	10.920	-0.012	35	28295	0.3204	
111 Chlorobenzene	112	10.943	10.955	-0.012	85	43252	0.3214	
112 1,1,1,2-Tetrachloroethane	131	11.082	11.094	-0.012	46	19342	0.3067	
113 Ethylbenzene	106	11.117	11.129	-0.012	83	21014	0.3209	
114 m-Xylene & p-Xylene	106	11.308	11.320	-0.012	0	24418	0.2807	
115 o-Xylene	106	11.917	11.912	0.005	87	25225	0.3256	
116 Styrene	104	11.952	11.947	0.005	92	44672	0.3388	
117 Bromoform	173	12.213	12.208	0.005	76	10770	0.2928	
118 Isopropylbenzene	105	12.422	12.417	0.005	86	71494	0.4006	
122 Bromobenzene	156	12.805	12.817	-0.012	61	17511	0.3271	
121 1,1,2,2-Tetrachloroethane	83	12.822	12.834	-0.012	1	13426	0.3268	
123 1,2,3-Trichloropropane	110	12.892	12.869	0.023	20	5515	0.3160	
124 trans-1,4-Dichloro-2-butene	53	12.927	12.904	0.023	1	2321	0.2578	
125 N-Propylbenzene	120	12.944	12.956	-0.012	83	13669	0.2553	
126 2-Chlorotoluene	126	13.049	13.061	-0.012	91	17220	0.3744	
127 1,3,5-Trimethylbenzene	105	13.171	13.165	0.006	90	55602	0.3364	
128 4-Chlorotoluene	126	13.188	13.182	0.006	97	18638	0.3487	
129 tert-Butylbenzene	119	13.553	13.565	-0.012	88	62405	0.3368	
130 1,2,4-Trimethylbenzene	105	13.623	13.617	0.006	90	58308	0.3653	
131 sec-Butylbenzene	134	13.814	13.809	0.005	82	19062	0.3937	
132 1,3-Dichlorobenzene	146	13.936	13.948	-0.012	2	31067	0.3628	
133 4-Isopropyltoluene	119	13.971	13.983	-0.012	87	76177	0.3574	
134 1,4-Dichlorobenzene	146	14.041	14.035	0.006	73	45884	0.3931	
137 n-Butylbenzene	91	14.424	14.418	0.006	96	78568	0.4006	
138 1,2-Dichlorobenzene	146	14.441	14.453	-0.012	77	29021	0.3597	
139 1,2-Dibromo-3-Chloropropane	157		15.236					
141 1,2,4-Trichlorobenzene	180		16.002					
142 Hexachlorobutadiene	225	16.146	16.158	-0.012	84	36422	0.3102	
143 Naphthalene	128		16.228					
144 1,2,3-Trichlorobenzene	180		16.454					
S 145 Trihalomethanes, Total	1				0		1.18	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
S 146 Xylenes, Total (URS)	1				0		0.6063	
S 147 Total BTEX	1				0		1.57	
S 148 1,3-Dichloropropene, Total	1				0		0.6218	
S 149 1,2-Dichloroethene, Total	1				0		0.5804	
S 150 Xylenes, Total	106				0		0.6063	
S 151 1,2-Dichloroethene, Total (URS)	96				0		0.5804	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3239.D  
Injection Date: 03-Jul-2013 15:16:30 Limit Group: MSV - 8260B Water and Solid  
Client ID: Instrument ID: VMS\_H  
Lims Batch ID: 181419 Lims Sample ID: 18  
Operator ID: meierg Purge Vol: 20.000 mL  
Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3240.D  
 Lims ID: std01 Client ID:  
 Inject. Date: 03-Jul-2013 15:38:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 2  
 Sample ID: std01  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 20  
 Lims Batch ID: 181419 Lims Sample ID: 19  
 Sublist: chrom-AQ\_VMSH\_8260\*sub39  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:27 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 18:37:07

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.859	3.840	0.019	97	333228	250.0	
* 2 Fluorobenzene	96	6.592	6.572	0.020	98	1460547	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.908	10.888	0.020	87	397251	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.023	14.004	0.019	97	615816	12.5	
40 Ethyl ether	59	3.111	3.123	-0.012	87	26392	1.00	
45 1,1-Dichloroethene	96	3.372	3.367	0.005	95	48779	0.9746	
46 1,1,2-Trichloro-1,2,2-trifluoroethane	151	3.390	3.402	-0.012	93	71591	1.03	
48 Iodomethane	142	3.529	3.541	-0.012	99	119889	0.9892	
50 Carbon disulfide	76	3.598	3.611	-0.013	100	190866	1.02	
52 3-Chloro-1-propene	41	3.703	3.698	0.005	77	99863	1.11	
53 Methyl acetate	43	3.703	3.715	-0.012	65	70926	4.51	
54 Methylene Chloride	84	3.825	3.819	0.006	93	101623	1.05	
55 2-Methyl-2-propanol	59	3.946	3.941	0.005	38	17180	10.6	
57 Acrylonitrile	53	4.086	4.080	0.006	59	37604	9.58	
58 trans-1,2-Dichloroethene	96	4.103	4.098	0.005	94	51990	1.00	
56 Methyl tert-butyl ether	73	4.086	4.098	-0.012	79	78675	0.9891	
59 Hexane	57	4.347	4.359	-0.012	91	86352	0.9672	
60 1,1-Dichloroethane	63	4.538	4.550	-0.012	93	101500	1.02	
61 Vinyl acetate	43	4.573	4.568	0.005	95	114462	1.93	
66 2,2-Dichloropropane	77	5.199	5.212	-0.013	72	87086	1.05	
65 cis-1,2-Dichloroethene	96	5.199	5.212	-0.013	81	52134	0.9894	
71 sec-Butyl Alcohol	45	5.443	5.438	0.005	72	43098	28.5	
73 Chlorobromomethane	128	5.495	5.490	0.005	90	27296	1.02	
74 Tetrahydrofuran	42	5.548	5.542	0.006	34	11860	2.30	
75 Chloroform	83	5.565	5.577	-0.012	85	95600	1.01	
76 1,1,1-Trichloroethane	97	5.809	5.803	0.006	91	89617	1.01	
77 Cyclohexane	56	5.878	5.873	0.005	89	97050	1.02	
78 1,1-Dichloropropene	75	5.983	5.995	-0.012	80	80124	1.00	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
79 Carbon tetrachloride	117	6.017	6.012	0.005	80	95787	1.03	
80 Isobutyl alcohol	41	6.122	6.134	-0.012	33	18869	31.5	
81 Benzene	78	6.244	6.256	-0.012	93	156712	1.00	
82 1,2-Dichloroethane	62	6.278	6.273	0.005	92	41310	0.9896	
84 n-Heptane	43	6.540	6.534	0.006	94	114479	1.01	
86 Trichloroethene	95	7.062	7.056	0.006	95	62838	0.99	
88 2-Pentanone	43	7.305	7.300	0.005	83	93306	3.99	
89 Methylcyclohexane	55	7.305	7.300	0.005	89	84060	0.9849	
90 1,2-Dichloropropane	63	7.357	7.352	0.005	92	61826	1.05	
92 Dibromomethane	93	7.514	7.526	-0.012	87	32609	1.02	
93 1,4-Dioxane	88		7.561					19
94 Dichlorobromomethane	83	7.723	7.718	0.005	93	82879	0.99	
97 cis-1,3-Dichloropropene	75	8.332	8.327	0.005	86	74270	0.9880	
99 Toluene	91	8.785	8.779	0.006	97	174478	1.01	
100 trans-1,3-Dichloropropene	75	9.115	9.110	0.005	87	51753	1.01	
101 Ethyl methacrylate	69	9.237	9.232	0.005	75	33967	0.9199	
102 1,1,2-Trichloroethane	97	9.376	9.371	0.005	84	31320	0.9430	
103 Tetrachloroethene	164	9.568	9.580	-0.012	90	60766	1.01	
104 1,3-Dichloropropane	76	9.620	9.615	0.005	87	55021	1.00	
108 Chlorodibromomethane	129	9.968	9.963	0.005	82	59646	0.9605	
109 Ethylene Dibromide	107	10.142	10.154	-0.012	85	46166	1.02	
110 1-Chlorohexane	91	10.908	10.920	-0.012	83	88155	1.04	
111 Chlorobenzene	112	10.960	10.955	0.005	91	131351	1.01	
112 1,1,1,2-Tetrachloroethane	131	11.099	11.094	0.005	76	61859	1.02	
113 Ethylbenzene	106	11.134	11.129	0.005	99	64785	1.03	
114 m-Xylene & p-Xylene	106	11.325	11.320	0.005	0	88178	1.05	
115 o-Xylene	106	11.917	11.912	0.005	95	77071	1.03	
116 Styrene	104	11.952	11.947	0.005	92	130291	1.02	
117 Bromoform	173	12.213	12.208	0.005	90	35072	0.9887	
118 Isopropylbenzene	105	12.422	12.417	0.005	95	239571	1.10	
122 Bromobenzene	156	12.822	12.817	0.005	80	55980	0.9825	
121 1,1,2,2-Tetrachloroethane	83	12.822	12.834	-0.012	67	43052	0.9846	
123 1,2,3-Trichloropropane	110	12.874	12.869	0.005	74	15046	1.19	
124 trans-1,4-Dichloro-2-butene	53	12.909	12.904	0.005	35	9686	1.01	
125 N-Propylbenzene	120	12.944	12.956	-0.012	96	62509	1.10	
126 2-Chlorotoluene	126	13.048	13.061	-0.013	92	47989	0.9803	
127 1,3,5-Trimethylbenzene	105	13.170	13.165	0.005	94	174964	0.99	
128 4-Chlorotoluene	126	13.188	13.182	0.006	98	56663	1.00	
129 tert-Butylbenzene	119	13.553	13.565	-0.012	93	199758	1.01	
130 1,2,4-Trimethylbenzene	105	13.623	13.617	0.006	95	169284	1.00	
131 sec-Butylbenzene	134	13.814	13.809	0.005	86	52852	1.03	
132 1,3-Dichlorobenzene	146	13.936	13.948	-0.012	85	87209	0.9568	
133 4-Isopropyltoluene	119	13.988	13.983	0.005	92	232520	1.03	
134 1,4-Dichlorobenzene	146	14.040	14.035	0.005	84	128588	1.04	
137 n-Butylbenzene	91	14.423	14.418	0.005	95	210035	1.01	
138 1,2-Dichlorobenzene	146	14.441	14.453	-0.012	95	84639	0.9857	
139 1,2-Dibromo-3-Chloropropane	157	15.241	15.236	0.005	68	9346	1.12	
141 1,2,4-Trichlorobenzene	180	16.007	16.002	0.005	92	76449	1.21	
142 Hexachlorobutadiene	225	16.146	16.158	-0.012	94	70672	0.9133	
143 Naphthalene	128	16.233	16.228	0.005	90	72434	1.10	
144 1,2,3-Trichlorobenzene	180	16.459	16.454	0.005	90	54448	1.11	
S 145 Trihalomethanes, Total	1				0		3.96	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
S 146 Xylenes, Total (URS)	1				0		2.08	
S 147 Total BTEX	1				0		5.13	
S 148 1,3-Dichloropropene, Total	1				0		1.99	
S 149 1,2-Dichloroethene, Total	1				0		1.99	
S 150 Xylenes, Total	106				0		2.08	
S 151 1,2-Dichloroethene, Total (URS)	96				0		1.99	

## QC Flag Legend

## Processing Flags

1 - Missing Peaks

9 - Failed A Reference Spectral Test

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3240.D

Injection Date: 03-Jul-2013 15:38:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 19

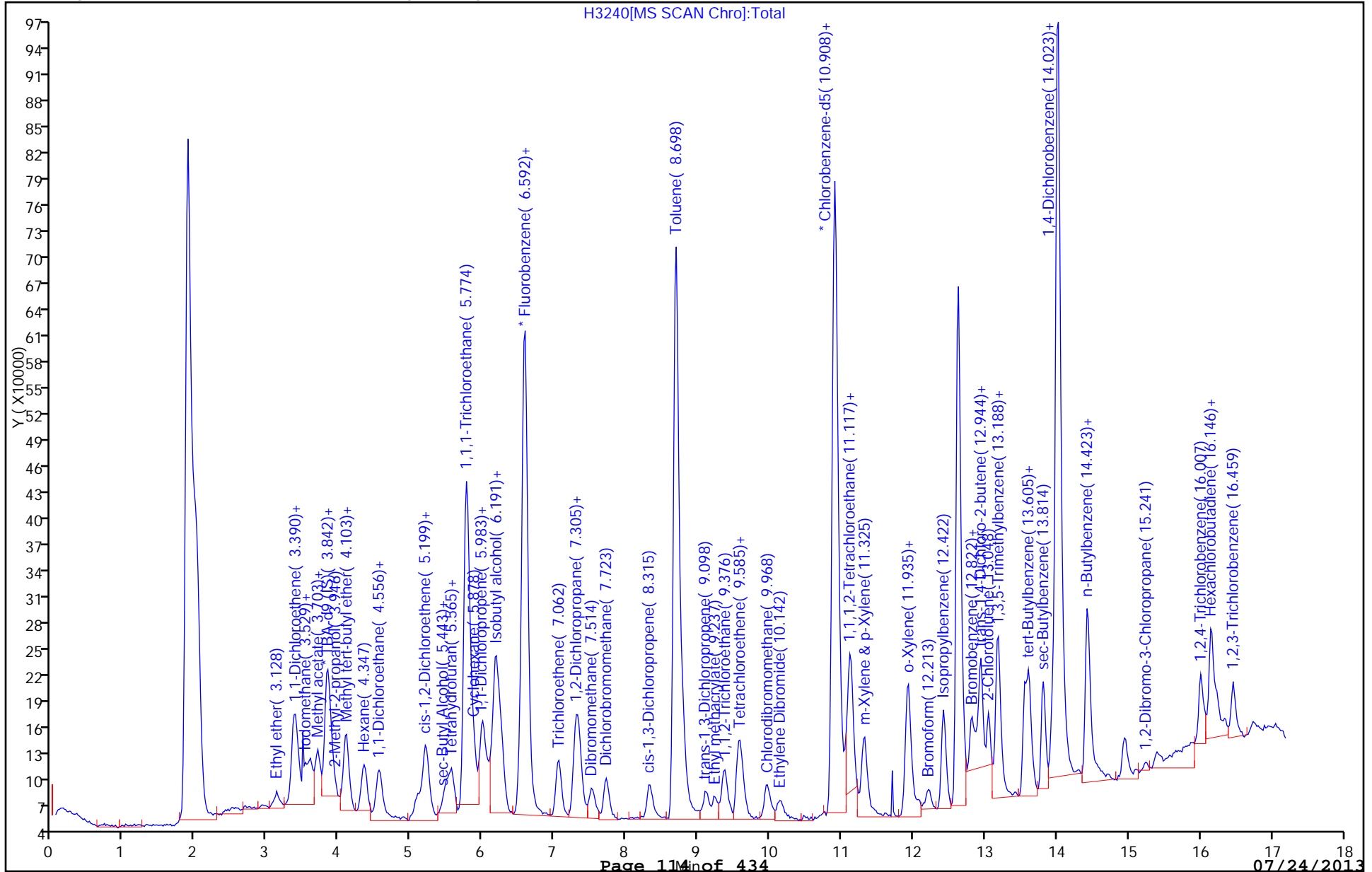
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1





TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3241.D  
 Lims ID: std02 Client ID:  
 Inject. Date: 03-Jul-2013 16:00:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 3  
 Sample ID: std02  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 21  
 Lims Batch ID: 181419 Lims Sample ID: 20  
 Sublist: chrom-AQ\_VMSH\_8260\*sub39  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:28 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 18:37:36

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.859	3.840	0.019	96	334582	250.0	
* 2 Fluorobenzene	96	6.591	6.572	0.019	98	1472681	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.907	10.888	0.019	87	400224	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.022	14.004	0.018	97	613965	12.5	
40 Ethyl ether	59	3.111	3.123	-0.012	92	47072	1.77	
45 1,1-Dichloroethene	96	3.354	3.367	-0.013	97	93108	1.85	
46 1,1,2-Trichloro-1,2,2-trifluoroethane	151	3.389	3.402	-0.013	94	127545	1.81	
48 Iodomethane	142	3.528	3.541	-0.013	99	220854	1.81	
50 Carbon disulfide	76	3.598	3.611	-0.013	100	338485	1.79	
52 3-Chloro-1-propene	41	3.702	3.698	0.004	84	172424	1.90	
53 Methyl acetate	43	3.702	3.715	-0.013	93	127931	8.63	
54 Methylene Chloride	84	3.824	3.819	0.005	90	133593	1.79	
55 2-Methyl-2-propanol	59	3.928	3.941	-0.013	88	32226	19.9	
57 Acrylonitrile	53	4.085	4.080	0.005	99	72082	18.2	
58 trans-1,2-Dichloroethene	96	4.103	4.098	0.004	96	95488	1.83	
56 Methyl tert-butyl ether	73	4.085	4.098	-0.013	90	143960	1.79	
59 Hexane	57	4.346	4.359	-0.013	92	156295	1.74	
60 1,1-Dichloroethane	63	4.538	4.550	-0.012	85	180084	1.80	
61 Vinyl acetate	43	4.572	4.568	0.004	97	217057	3.62	
66 2,2-Dichloropropane	77	5.216	5.212	0.004	80	155081	1.86	
65 cis-1,2-Dichloroethene	96	5.199	5.212	-0.013	71	96634	1.82	
71 sec-Butyl Alcohol	45	5.425	5.438	-0.013	92	79294	52.2	
73 Chlorobromomethane	128	5.495	5.490	0.005	78	49878	1.84	
74 Tetrahydrofuran	42	5.547	5.542	0.005	38	20979	4.04	
75 Chloroform	83	5.564	5.577	-0.013	80	175355	1.84	
76 1,1,1-Trichloroethane	97	5.808	5.803	0.005	96	163648	1.82	
77 Cyclohexane	56	5.878	5.873	0.005	90	172887	1.79	
78 1,1-Dichloropropene	75	5.999	5.995	0.004	85	149367	1.85	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
79 Carbon tetrachloride	117	5.999	6.012	-0.013	76	170469	1.82	
80 Isobutyl alcohol	41	6.139	6.134	0.005	17	28270	47.1	
81 Benzene	78	6.243	6.256	-0.013	94	287096	1.82	
82 1,2-Dichloroethane	62	6.278	6.273	0.005	88	76983	1.83	
84 n-Heptane	43	6.539	6.534	0.005	94	204630	1.79	
86 Trichloroethene	95	7.061	7.056	0.005	93	118852	1.86	
88 2-Pentanone	43	7.305	7.300	0.005	86	172197	7.31	
89 Methylcyclohexane	55	7.305	7.300	0.005	91	154787	1.80	
90 1,2-Dichloropropane	63	7.357	7.352	0.005	96	110786	1.86	
92 Dibromomethane	93	7.531	7.526	0.005	89	58901	1.82	
93 1,4-Dioxane	88	7.566	7.561	0.005	12	5807	35.5	
94 Dichlorobromomethane	83	7.722	7.718	0.004	92	151121	1.80	
97 cis-1,3-Dichloropropene	75	8.331	8.327	0.004	83	142665	1.88	
99 Toluene	91	8.784	8.779	0.005	98	323710	1.86	
100 trans-1,3-Dichloropropene	75	9.115	9.110	0.005	95	92720	1.79	
101 Ethyl methacrylate	69	9.236	9.232	0.004	82	95826	2.21	
102 1,1,2-Trichloroethane	97	9.376	9.371	0.005	92	59044	1.76	
103 Tetrachloroethene	164	9.567	9.580	-0.013	98	112645	1.86	
104 1,3-Dichloropropane	76	9.619	9.615	0.004	91	100741	1.81	
108 Chlorodibromomethane	129	9.967	9.963	0.004	86	114507	1.83	
109 Ethylene Dibromide	107	10.141	10.154	-0.013	95	84045	1.85	
110 1-Chlorohexane	91	10.907	10.920	-0.013	81	158143	1.84	
111 Chlorobenzene	112	10.959	10.955	0.004	91	240144	1.84	
112 1,1,1,2-Tetrachloroethane	131	11.099	11.094	0.005	78	112539	1.84	
113 Ethylbenzene	106	11.133	11.129	0.004	99	117781	1.85	
114 m-Xylene & p-Xylene	106	11.325	11.320	0.005	0	151308	1.79	
115 o-Xylene	106	11.917	11.912	0.005	95	135484	1.80	
116 Styrene	104	11.934	11.947	-0.013	92	235235	1.84	
117 Bromoform	173	12.212	12.208	0.004	96	66195	1.85	
118 Isopropylbenzene	105	12.421	12.417	0.004	96	246166	1.13	
122 Bromobenzene	156	12.822	12.817	0.005	83	103607	1.82	
121 1,1,2,2-Tetrachloroethane	83	12.822	12.834	-0.012	65	80310	1.84	
123 1,2,3-Trichloropropane	110	12.874	12.869	0.005	55	18977	1.57	
124 trans-1,4-Dichloro-2-butene	53	12.909	12.904	0.005	39	18587	1.95	
125 N-Propylbenzene	120	12.943	12.956	-0.013	94	111204	1.96	
126 2-Chlorotoluene	126	13.048	13.061	-0.013	94	87533	1.79	
127 1,3,5-Trimethylbenzene	105	13.170	13.165	0.005	94	321351	1.83	
128 4-Chlorotoluene	126	13.187	13.182	0.005	98	102754	1.81	
129 tert-Butylbenzene	119	13.552	13.565	-0.013	93	365503	1.86	
130 1,2,4-Trimethylbenzene	105	13.622	13.617	0.005	94	306973	1.81	
131 sec-Butylbenzene	134	13.813	13.809	0.004	89	94091	1.83	
132 1,3-Dichlorobenzene	146	13.935	13.948	-0.013	92	157530	1.73	
133 4-Isopropyltoluene	119	13.988	13.983	0.005	90	405288	1.79	
134 1,4-Dichlorobenzene	146	14.040	14.035	0.005	85	233126	1.88	
137 n-Butylbenzene	91	14.423	14.418	0.005	95	373873	1.80	
138 1,2-Dichlorobenzene	146	14.440	14.453	-0.013	94	160536	1.88	
139 1,2-Dibromo-3-Chloropropane	157	15.241	15.236	0.005	71	16415	1.97	
141 1,2,4-Trichlorobenzene	180	16.006	16.002	0.004	93	122836	1.95	
142 Hexachlorobutadiene	225	16.163	16.158	0.005	90	119397	1.84	
143 Naphthalene	128	16.233	16.228	0.005	92	128236	1.95	
144 1,2,3-Trichlorobenzene	180	16.459	16.454	0.005	93	97402	1.98	
S 145 Trihalomethanes, Total	1				0		7.32	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
S 146 Xylenes, Total (URS)	1				0		3.59	
S 147 Total BTEX	1				0		9.13	
S 148 1,3-Dichloropropene, Total	1				0		3.67	
S 149 1,2-Dichloroethene, Total	1				0		3.64	
S 150 Xylenes, Total	106				0		3.59	
S 151 1,2-Dichloroethene, Total (URS)	96				0		3.64	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3241.D

Injection Date: 03-Jul-2013 16:00:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 20

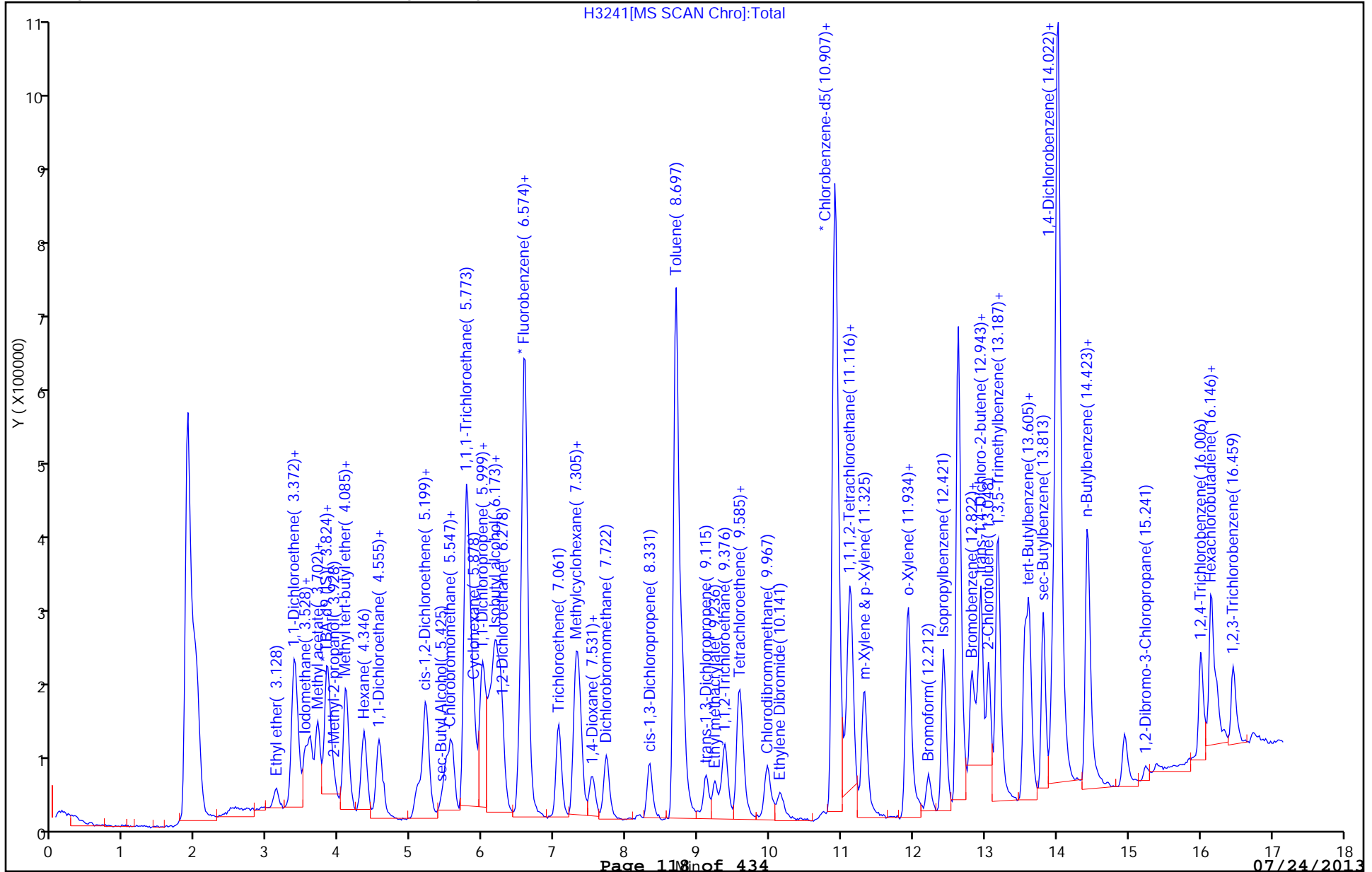
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3242.D  
 Lims ID: std05 Client ID:  
 Inject. Date: 03-Jul-2013 16:22:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 4  
 Sample ID: std05  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 22  
 Lims Batch ID: 181419 Lims Sample ID: 21  
 Sublist: chrom-AQ\_VMSH\_8260\*sub39  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:28 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 18:38:00

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.855	3.840	0.015	85	364717	250.0	
* 2 Fluorobenzene	96	6.587	6.572	0.015	97	1497526	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.903	10.888	0.015	86	397025	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.018	14.004	0.014	97	634843	12.5	
40 Ethyl ether	59	3.124	3.123	0.001	94	136987	5.06	
45 1,1-Dichloroethene	96	3.367	3.367	0.0	97	258727	5.04	
46 1,1,2-Trichloro-1,2,2-trifluoroethane	151	3.402	3.402	0.0	88	354823	4.97	
48 Iodomethane	142	3.541	3.541	0.0	97	627233	5.05	
50 Carbon disulfide	76	3.611	3.611	0.0	99	935281	4.86	
52 3-Chloro-1-propene	41	3.698	3.698	0.0	89	459965	4.98	
53 Methyl acetate	43	3.715	3.715	0.0	71	363731	25.4	
54 Methylene Chloride	84	3.820	3.819	0.001	93	274149	4.98	
55 2-Methyl-2-propanol	59	3.942	3.941	0.001	77	76642	43.4	
57 Acrylonitrile	53	4.081	4.080	0.001	97	215971	53.7	
58 trans-1,2-Dichloroethene	96	4.098	4.098	0.0	94	270836	5.09	
56 Methyl tert-butyl ether	73	4.098	4.098	0.0	87	422394	5.18	
59 Hexane	57	4.342	4.359	-0.017	95	453192	5.08	
60 1,1-Dichloroethane	63	4.551	4.550	0.001	85	506897	4.99	
61 Vinyl acetate	43	4.568	4.568	0.0	97	630060	10.3	
66 2,2-Dichloropropane	77	5.212	5.212	0.0	84	406737	4.80	
65 cis-1,2-Dichloroethene	96	5.212	5.212	0.0	85	274086	5.07	
71 sec-Butyl Alcohol	45	5.438	5.438	0.0	92	249620	150.7	
73 Chlorobromomethane	128	5.490	5.490	0.0	94	141239	5.13	
74 Tetrahydrofuran	42	5.560	5.542	0.018	86	57074	10.8	
75 Chloroform	83	5.577	5.577	0.0	82	488111	5.05	
76 1,1,1-Trichloroethane	97	5.804	5.803	0.001	92	453006	4.96	
77 Cyclohexane	56	5.873	5.873	0.0	92	487275	4.97	
78 1,1-Dichloropropene	75	5.995	5.995	0.0	90	401889	4.89	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
79 Carbon tetrachloride	117	6.013	6.012	0.001	79	464166	4.86	
80 Isobutyl alcohol	41	6.134	6.134	0.0	89	78482	119.9	
81 Benzene	78	6.256	6.256	0.0	97	790162	4.94	
82 1,2-Dichloroethane	62	6.274	6.273	0.001	78	217950	5.09	
84 n-Heptane	43	6.535	6.534	0.001	96	583779	5.02	
86 Trichloroethene	95	7.057	7.056	0.001	94	327502	5.04	
88 2-Pentanone	43	7.300	7.300	0.0	86	497817	20.8	
89 Methylcyclohexane	55	7.300	7.300	0.0	88	431766	4.93	
90 1,2-Dichloropropane	63	7.353	7.352	0.001	97	298236	4.93	
92 Dibromomethane	93	7.527	7.526	0.001	90	158467	4.83	
93 1,4-Dioxane	88	7.561	7.561	0.0	5	18892	113.7	
94 Dichlorobromomethane	83	7.718	7.718	0.0	98	432168	5.05	
97 cis-1,3-Dichloropropene	75	8.327	8.327	0.0	88	384464	5.12	
99 Toluene	91	8.780	8.779	0.001	91	877871	4.97	
100 trans-1,3-Dichloropropene	75	9.110	9.110	0.0	93	271704	5.15	
101 Ethyl methacrylate	69	9.232	9.232	0.0	88	237284	5.20	
102 1,1,2-Trichloroethane	97	9.371	9.371	0.0	91	172995	5.08	
103 Tetrachloroethene	164	9.563	9.580	-0.017	98	305737	5.10	
104 1,3-Dichloropropane	76	9.615	9.615	0.0	90	287920	5.23	
108 Chlorodibromomethane	129	9.963	9.963	0.0	90	324077	5.22	
109 Ethylene Dibromide	107	10.155	10.154	0.001	96	236736	5.25	
110 1-Chlorohexane	91	10.920	10.920	0.0	94	426384	5.01	
111 Chlorobenzene	112	10.955	10.955	0.0	92	660410	5.09	
112 1,1,1,2-Tetrachloroethane	131	11.094	11.094	0.0	92	302448	4.98	
113 Ethylbenzene	106	11.129	11.129	0.0	99	317013	5.02	
114 m-Xylene & p-Xylene	106	11.321	11.320	0.001	0	436013	5.20	
115 o-Xylene	106	11.912	11.912	0.0	95	374473	5.01	
116 Styrene	104	11.947	11.947	0.0	93	634910	5.00	
117 Bromoform	173	12.208	12.208	0.0	94	188596	5.32	
118 Isopropylbenzene	105	12.417	12.417	0.0	95	1184577	4.97	
122 Bromobenzene	156	12.817	12.817	0.0	92	292241	4.98	
121 1,1,2,2-Tetrachloroethane	83	12.835	12.834	0.001	87	226719	5.03	
123 1,2,3-Trichloropropane	110	12.869	12.869	0.0	74	55954	4.93	
124 trans-1,4-Dichloro-2-butene	53	12.904	12.904	0.0	45	51336	5.20	
125 N-Propylbenzene	120	12.956	12.956	0.0	95	293796	5.00	
126 2-Chlorotoluene	126	13.061	13.061	0.0	95	236840	4.69	
127 1,3,5-Trimethylbenzene	105	13.165	13.165	0.0	93	883961	4.87	
128 4-Chlorotoluene	126	13.183	13.182	0.001	98	276383	4.71	
129 tert-Butylbenzene	119	13.566	13.565	0.001	93	990137	4.87	
130 1,2,4-Trimethylbenzene	105	13.618	13.617	0.001	95	846802	4.84	
131 sec-Butylbenzene	134	13.809	13.809	0.0	91	247507	4.66	
132 1,3-Dichlorobenzene	146	13.948	13.948	0.0	87	473486	5.04	
133 4-Isopropyltoluene	119	13.983	13.983	0.0	91	1129272	4.83	
134 1,4-Dichlorobenzene	146	14.035	14.035	0.0	88	584196	4.56	
137 n-Butylbenzene	91	14.418	14.418	0.0	95	1000713	4.65	
138 1,2-Dichlorobenzene	146	14.453	14.453	0.0	94	426565	4.82	
139 1,2-Dibromo-3-Chloropropane	157	15.236	15.236	0.0	82	44589	5.17	
141 1,2,4-Trichlorobenzene	180	16.002	16.002	0.0	95	317965	4.88	
142 Hexachlorobutadiene	225	16.159	16.158	0.001	92	297891	5.04	
143 Naphthalene	128	16.228	16.228	0.0	97	341225	5.02	
144 1,2,3-Trichlorobenzene	180	16.455	16.454	0.0	95	253379	4.99	
S 145 Trihalomethanes, Total	1				0		20.6	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
S 146 Xylenes, Total (URS)	1				0		10.2	
S 147 Total BTEX	1				0		25.1	
S 148 1,3-Dichloropropene, Total	1				0		10.3	
S 149 1,2-Dichloroethene, Total	1				0		10.2	
S 150 Xylenes, Total	106				0		10.2	
S 151 1,2-Dichloroethene, Total (URS)	96				0		10.2	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3242.D

Injection Date: 03-Jul-2013 16:22:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 21

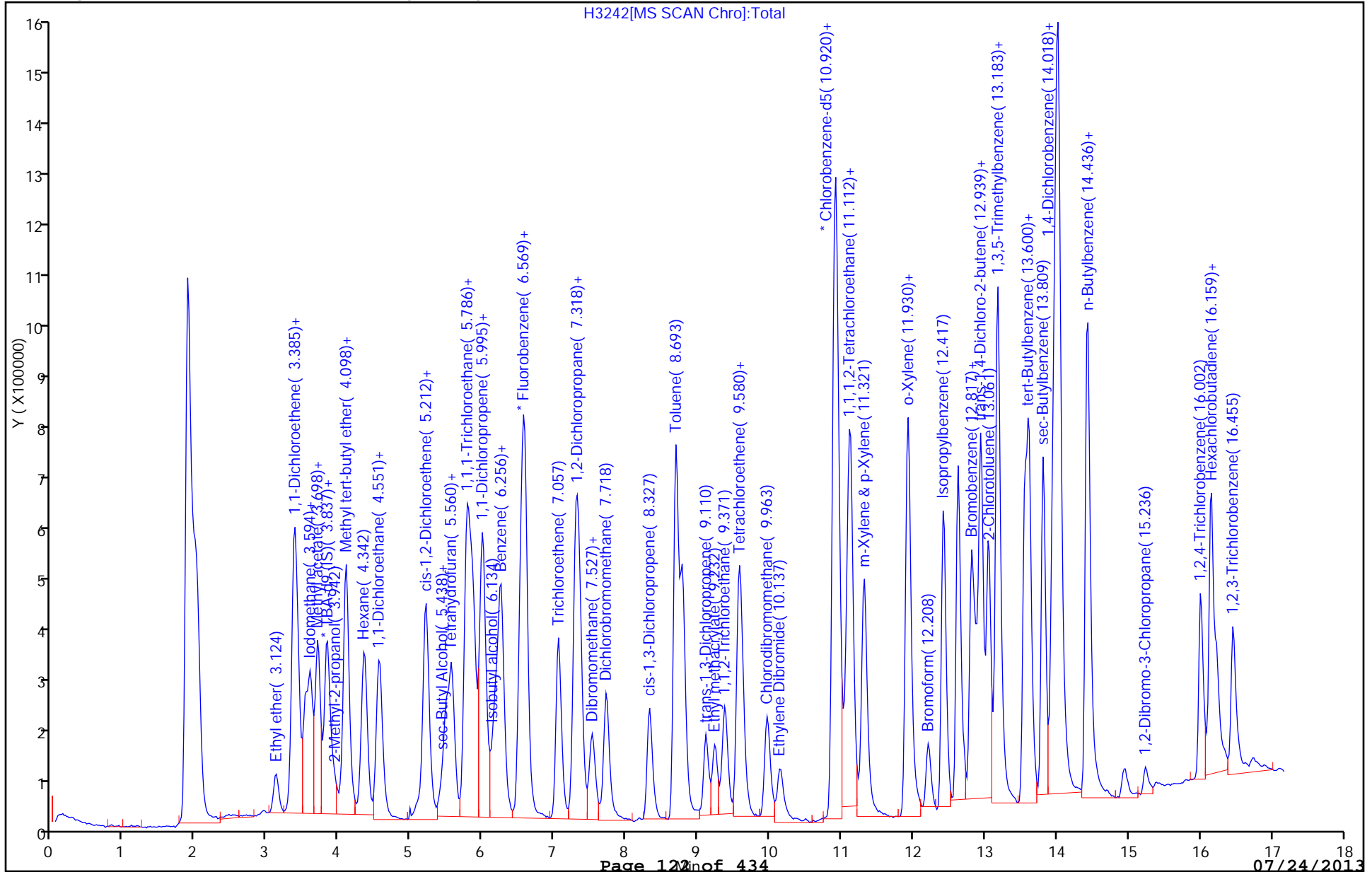
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1





TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3243.D  
 Lims ID: std10 Client ID:  
 Inject. Date: 03-Jul-2013 16:44:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 5  
 Sample ID: std10  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 23  
 Lims Batch ID: 181419 Lims Sample ID: 22  
 Sublist: chrom-AQ\_VMSH\_8260\*sub39  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:29 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 18:39:15

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.854	3.854	0.0	87	345424	250.0	
* 2 Fluorobenzene	96	6.587	6.587	0.0	98	1484763	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.903	10.903	0.0	87	400091	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.018	14.018	0.0	93	617320	12.5	
40 Ethyl ether	59	3.123	3.123	0.0	93	258516	9.63	
45 1,1-Dichloroethene	96	3.367	3.367	0.0	89	510426	10.0	
46 1,1,2-Trichloro-1,2,2-trifluoroethane	151	3.402	3.402	0.0	96	711752	10.0	
48 Iodomethane	142	3.541	3.541	0.0	99	1248261	10.1	
50 Carbon disulfide	76	3.611	3.611	0.0	99	1847630	9.68	
52 3-Chloro-1-propene	41	3.698	3.698	0.0	94	875388	9.55	
53 Methyl acetate	43	3.715	3.715	0.0	87	728388	52.1	
54 Methylene Chloride	84	3.819	3.819	0.0	91	484556	9.94	
55 2-Methyl-2-propanol	59	3.941	3.941	0.0	77	163084	97.4	
57 Acrylonitrile	53	4.080	4.080	0.0	100	408501	102.4	
58 trans-1,2-Dichloroethene	96	4.098	4.098	0.0	97	543802	10.3	
56 Methyl tert-butyl ether	73	4.098	4.098	0.0	86	821069	10.2	
59 Hexane	57	4.359	4.359	0.0	95	903281	10.0	
60 1,1-Dichloroethane	63	4.550	4.550	0.0	96	1009505	10.0	
61 Vinyl acetate	43	4.568	4.568	0.0	97	1155243	19.1	
66 2,2-Dichloropropane	77	5.212	5.212	0.0	83	793993	9.46	
65 cis-1,2-Dichloroethene	96	5.212	5.212	0.0	86	545556	10.2	
71 sec-Butyl Alcohol	45	5.438	5.438	0.0	79	466401	297.3	
73 Chlorobromomethane	128	5.490	5.490	0.0	94	271816	9.96	
74 Tetrahydrofuran	42	5.542	5.542	0.0	86	107337	20.5	
75 Chloroform	83	5.577	5.577	0.0	82	966632	10.1	
76 1,1,1-Trichloroethane	97	5.803	5.803	0.0	94	902444	9.97	
77 Cyclohexane	56	5.873	5.873	0.0	91	957511	9.86	
78 1,1-Dichloropropene	75	5.995	5.995	0.0	89	756605	9.29	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
79 Carbon tetrachloride	117	6.012	6.012	0.0	92	930809	9.83	
80 Isobutyl alcohol	41	6.134	6.134	0.0	75	146609	236.4	
81 Benzene	78	6.256	6.256	0.0	97	1578380	9.95	
82 1,2-Dichloroethane	62	6.273	6.273	0.0	88	420556	9.91	
84 n-Heptane	43	6.534	6.534	0.0	95	1145432	9.93	
86 Trichloroethene	95	7.056	7.056	0.0	97	670289	10.4	
88 2-Pentanone	43	7.300	7.300	0.0	86	1036756	43.6	
89 Methylcyclohexane	55	7.300	7.300	0.0	88	857417	9.88	
90 1,2-Dichloropropane	63	7.352	7.352	0.0	97	580034	9.67	
92 Dibromomethane	93	7.526	7.526	0.0	88	308633	9.48	
93 1,4-Dioxane	88	7.561	7.561	0.0	1	26890	163.2	
94 Dichlorobromomethane	83	7.718	7.718	0.0	93	850226	10.0	
97 cis-1,3-Dichloropropene	75	8.327	8.327	0.0	88	763101	10.1	
99 Toluene	91	8.779	8.779	0.0	91	1742047	9.95	
100 trans-1,3-Dichloropropene	75	9.110	9.110	0.0	95	524933	10.0	
101 Ethyl methacrylate	69	9.232	9.232	0.0	90	471203	10.1	
102 1,1,2-Trichloroethane	97	9.371	9.371	0.0	91	332780	9.86	
103 Tetrachloroethene	164	9.580	9.580	0.0	97	611849	10.1	
104 1,3-Dichloropropane	76	9.615	9.615	0.0	91	560141	10.1	
108 Chlorodibromomethane	129	9.963	9.963	0.0	88	654759	10.5	
109 Ethylene Dibromide	107	10.154	10.154	0.0	98	452044	9.95	
110 1-Chlorohexane	91	10.920	10.920	0.0	91	842557	9.82	
111 Chlorobenzene	112	10.955	10.955	0.0	91	1285875	9.84	
112 1,1,1,2-Tetrachloroethane	131	11.094	11.094	0.0	84	615264	10.0	
113 Ethylbenzene	106	11.129	11.129	0.0	99	630126	9.91	
114 m-Xylene & p-Xylene	106	11.320	11.320	0.0	0	865579	10.2	
115 o-Xylene	106	11.912	11.912	0.0	91	752395	10.0	
116 Styrene	104	11.947	11.947	0.0	94	1257617	9.82	
117 Bromoform	173	12.208	12.208	0.0	95	363327	10.2	
118 Isopropylbenzene	105	12.417	12.417	0.0	96	2316314	9.92	
122 Bromobenzene	156	12.817	12.817	0.0	84	564966	9.89	
121 1,1,2,2-Tetrachloroethane	83	12.834	12.834	0.0	87	426220	9.72	
123 1,2,3-Trichloropropane	110	12.869	12.869	0.0	74	104971	9.73	
124 trans-1,4-Dichloro-2-butene	53	12.904	12.904	0.0	58	99140	10.3	
125 N-Propylbenzene	120	12.956	12.956	0.0	93	583920	10.2	
126 2-Chlorotoluene	126	13.061	13.061	0.0	95	473638	9.65	
127 1,3,5-Trimethylbenzene	105	13.165	13.165	0.0	91	1753007	9.94	
128 4-Chlorotoluene	126	13.182	13.182	0.0	98	563842	9.89	
129 tert-Butylbenzene	119	13.565	13.565	0.0	89	1945019	9.84	
130 1,2,4-Trimethylbenzene	105	13.617	13.617	0.0	94	1669202	9.80	
131 sec-Butylbenzene	134	13.809	13.809	0.0	91	490905	9.50	
132 1,3-Dichlorobenzene	146	13.948	13.948	0.0	89	935268	10.2	
133 4-Isopropyltoluene	119	13.983	13.983	0.0	92	2231866	9.82	
134 1,4-Dichlorobenzene	146	14.035	14.035	0.0	86	1142876	9.18	
137 n-Butylbenzene	91	14.418	14.418	0.0	95	1984339	9.48	
138 1,2-Dichlorobenzene	146	14.453	14.453	0.0	95	848265	9.85	
139 1,2-Dibromo-3-Chloropropane	157	15.236	15.236	0.0	83	82913	9.89	
141 1,2,4-Trichlorobenzene	180	16.002	16.002	0.0	94	635125	10.0	
142 Hexachlorobutadiene	225	16.158	16.158	0.0	96	608338	11.0	
143 Naphthalene	128	16.228	16.228	0.0	97	666655	10.1	
144 1,2,3-Trichlorobenzene	180	16.454	16.454	0.0	94	507695	10.3	
S 145 Trihalomethanes, Total	1				0		40.8	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
S 146 Xylenes, Total (URS)	1				0		20.2	
S 147 Total BTEX	1				0		50.0	
S 148 1,3-Dichloropropene, Total	1				0		20.1	
S 149 1,2-Dichloroethene, Total	1				0		20.5	
S 150 Xylenes, Total	106				0		20.2	
S 151 1,2-Dichloroethene, Total (URS)	96				0		20.5	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3243.D

Injection Date: 03-Jul-2013 16:44:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 22

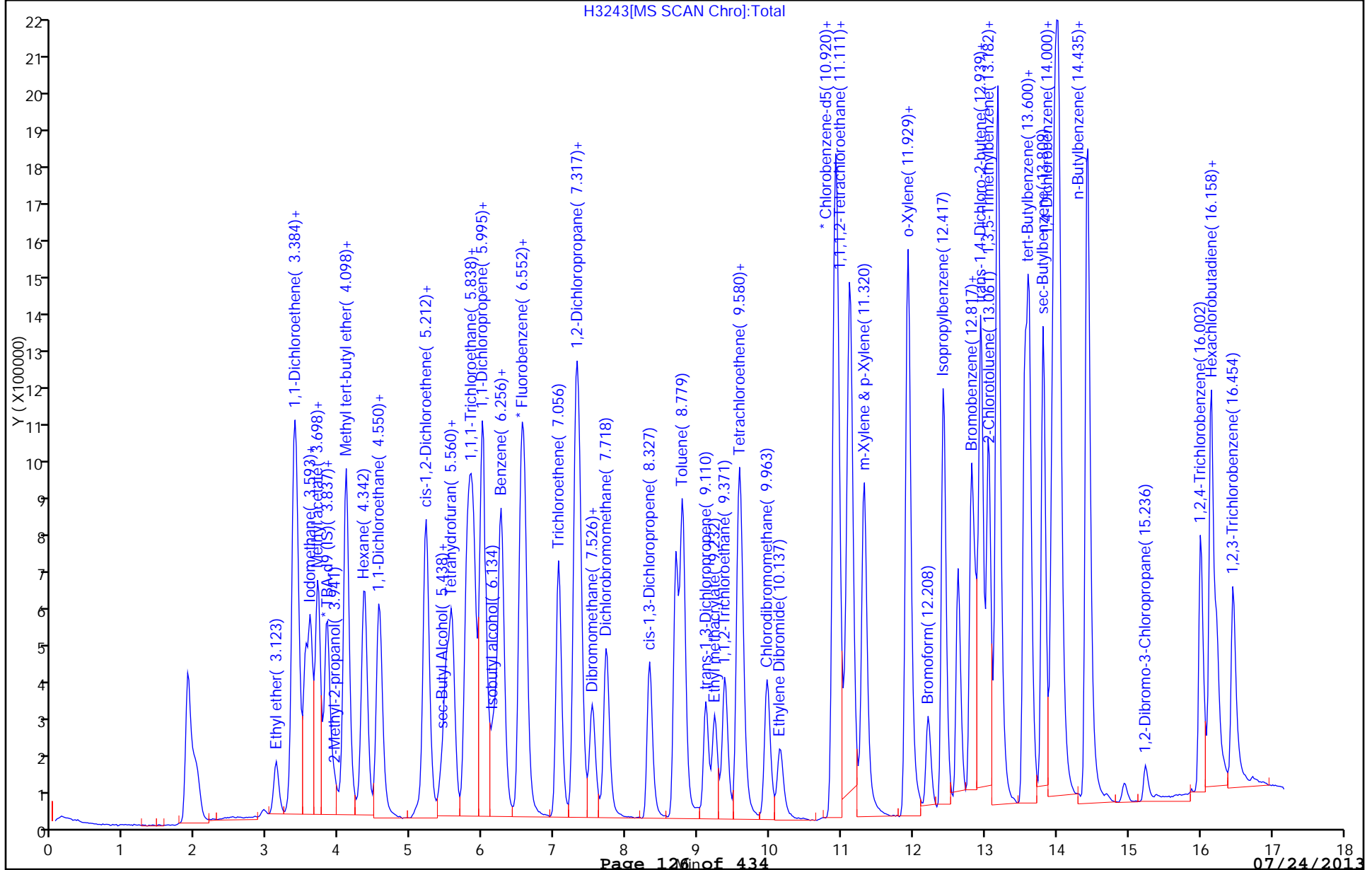
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3244.D  
 Lims ID: std30 Client ID:  
 Inject. Date: 03-Jul-2013 17:05:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 6  
 Sample ID: std30  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 24  
 Lims Batch ID: 181419 Lims Sample ID: 23  
 Sublist: chrom-AQ\_VMSH\_8260\*sub39  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:30 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 18:39:38

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.842	3.854	-0.012	27	345606	250.0	
* 2 Fluorobenzene	96	6.592	6.587	0.005	98	1444780	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.908	10.903	0.005	73	380819	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.023	14.018	0.005	89	574153	12.5	
40 Ethyl ether	59	3.111	3.123	-0.012	93	766498	29.3	
45 1,1-Dichloroethene	96	3.372	3.367	0.005	97	1492504	30.1	
46 1,1,2-Trichloro-1,2,2-trifluoroethane	151	3.390	3.402	-0.012	91	2073883	30.1	
48 Iodomethane	142	3.529	3.541	-0.012	97	3719719	31.0	
50 Carbon disulfide	76	3.598	3.611	-0.013	99	5477971	29.5	
52 3-Chloro-1-propene	41	3.703	3.698	0.005	86	2580378	28.9	
53 Methyl acetate	43	3.703	3.715	-0.012	98	2058780	152.6	
54 Methylene Chloride	84	3.825	3.819	0.006	89	1344829	30.9	
55 2-Methyl-2-propanol	59	3.929	3.941	-0.012	90	510689	305.0	
57 Acrylonitrile	53	4.068	4.080	-0.012	99	1256164	323.5	
58 trans-1,2-Dichloroethene	96	4.103	4.098	0.005	94	1611244	31.4	
56 Methyl tert-butyl ether	73	4.086	4.098	-0.012	90	2461764	31.3	
59 Hexane	57	4.347	4.359	-0.012	95	2650865	31.0	
60 1,1-Dichloroethane	63	4.538	4.550	-0.012	96	2971257	30.3	
61 Vinyl acetate	43	4.573	4.568	0.005	97	3758858	64.0	
66 2,2-Dichloropropane	77	5.217	5.212	0.005	90	2260794	27.7	
65 cis-1,2-Dichloroethene	96	5.199	5.212	-0.013	86	1614063	31.0	
71 sec-Butyl Alcohol	45	5.426	5.438	-0.012	76	1453172	925.7	
73 Chlorobromomethane	128	5.495	5.490	0.005	90	798564	30.1	
74 Tetrahydrofuran	42	5.548	5.542	0.006	89	296034	58.0	
75 Chloroform	83	5.565	5.577	-0.012	96	2842226	30.5	
76 1,1,1-Trichloroethane	97	5.809	5.803	0.006	96	2638901	30.0	
77 Cyclohexane	56	5.878	5.873	0.005	93	2885037	30.5	
78 1,1-Dichloropropene	75	6.000	5.995	0.005	92	2295509	29.0	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
79 Carbon tetrachloride	117	6.017	6.012	0.005	89	2717398	29.5	
80 Isobutyl alcohol	41	6.139	6.134	0.005	91	428101	690.0	
81 Benzene	78	6.244	6.256	-0.012	98	4633478	30.0	
82 1,2-Dichloroethane	62	6.278	6.273	0.005	89	1226471	29.7	
84 n-Heptane	43	6.540	6.534	0.006	95	3352132	29.9	
86 Trichloroethene	95	7.062	7.056	0.006	94	1913944	30.5	
88 2-Pentanone	43	7.288	7.300	-0.012	86	2834367	122.6	
89 Methylcyclohexane	55	7.305	7.300	0.005	86	2483319	29.4	
90 1,2-Dichloropropane	63	7.357	7.352	0.005	97	1684908	28.9	
92 Dibromomethane	93	7.531	7.526	0.005	91	889823	28.1	
93 1,4-Dioxane	88	7.549	7.561	-0.012	92	100463	626.6	
94 Dichlorobromomethane	83	7.723	7.718	0.005	99	2553638	31.0	
97 cis-1,3-Dichloropropene	75	8.332	8.327	0.005	89	2193214	30.4	
99 Toluene	91	8.785	8.779	0.006	93	5196691	30.5	
100 trans-1,3-Dichloropropene	75	9.115	9.110	0.005	92	1535294	30.2	
101 Ethyl methacrylate	69	9.237	9.232	0.005	89	1295247	28.7	
102 1,1,2-Trichloroethane	97	9.376	9.371	0.005	91	984036	30.0	
103 Tetrachloroethene	164	9.568	9.580	-0.012	98	1770939	30.8	
104 1,3-Dichloropropane	76	9.620	9.615	0.005	91	1616852	30.6	
108 Chlorodibromomethane	129	9.968	9.963	0.005	86	1903115	32.0	
109 Ethylene Dibromide	107	10.142	10.154	-0.012	99	1311338	30.3	
110 1-Chlorohexane	91	10.908	10.920	-0.012	96	2424814	29.7	
111 Chlorobenzene	112	10.960	10.955	0.005	93	3724945	29.9	
112 1,1,1,2-Tetrachloroethane	131	11.099	11.094	0.005	93	1771617	30.4	
113 Ethylbenzene	106	11.134	11.129	0.005	99	1816283	30.0	
114 m-Xylene & p-Xylene	106	11.325	11.320	0.005	0	2468902	30.7	
115 o-Xylene	106	11.917	11.912	0.005	95	2133571	29.8	
116 Styrene	104	11.934	11.947	-0.013	93	3576493	29.3	
117 Bromoform	173	12.213	12.208	0.005	94	1039891	30.6	
118 Isopropylbenzene	105	12.422	12.417	0.005	95	6583261	30.2	
122 Bromobenzene	156	12.822	12.817	0.005	94	1611226	30.3	
121 1,1,2,2-Tetrachloroethane	83	12.822	12.834	-0.012	88	1240588	30.4	
123 1,2,3-Trichloropropane	110	12.874	12.869	0.005	58	297510	30.2	
124 trans-1,4-Dichloro-2-butene	53	12.909	12.904	0.005	45	278554	31.2	
125 N-Propylbenzene	120	12.944	12.956	-0.012	93	1631711	30.7	
126 2-Chlorotoluene	126	13.048	13.061	-0.013	96	1372009	30.1	
127 1,3,5-Trimethylbenzene	105	13.170	13.165	0.005	92	4893617	29.8	
128 4-Chlorotoluene	126	13.188	13.182	0.006	98	1573265	29.7	
129 tert-Butylbenzene	119	13.553	13.565	-0.012	90	5462439	29.7	
130 1,2,4-Trimethylbenzene	105	13.623	13.617	0.006	96	4619435	29.2	
131 sec-Butylbenzene	134	13.814	13.809	0.005	90	1361486	28.3	
132 1,3-Dichlorobenzene	146	13.936	13.948	-0.012	97	2408574	28.3	
133 4-Isopropyltoluene	119	13.988	13.983	0.005	95	6209638	29.4	
134 1,4-Dichlorobenzene	146	14.040	14.035	0.005	95	3389416	29.3	
137 n-Butylbenzene	91	14.423	14.418	0.005	94	5488752	28.2	
138 1,2-Dichlorobenzene	146	14.441	14.453	-0.012	95	2348509	29.3	
139 1,2-Dibromo-3-Chloropropane	157	15.241	15.236	0.005	86	222521	28.5	
141 1,2,4-Trichlorobenzene	180	16.007	16.002	0.005	94	1676480	28.4	
142 Hexachlorobutadiene	225	16.163	16.158	0.005	95	1556150	31.1	
143 Naphthalene	128	16.233	16.228	0.005	94	1802450	29.3	
144 1,2,3-Trichlorobenzene	180	16.459	16.454	0.005	94	1327413	28.9	
S 145 Trihalomethanes, Total	1				0		124.0	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
S 146 Xylenes, Total (URS)	1				0		60.5	
S 147 Total BTEX	1				0		151.0	
S 148 1,3-Dichloropropene, Total	1				0		60.6	
S 149 1,2-Dichloroethene, Total	1				0		62.4	
S 150 Xylenes, Total	106				0		60.5	
S 151 1,2-Dichloroethene, Total (URS)	96				0		62.4	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3244.D

Injection Date: 03-Jul-2013 17:05:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 23

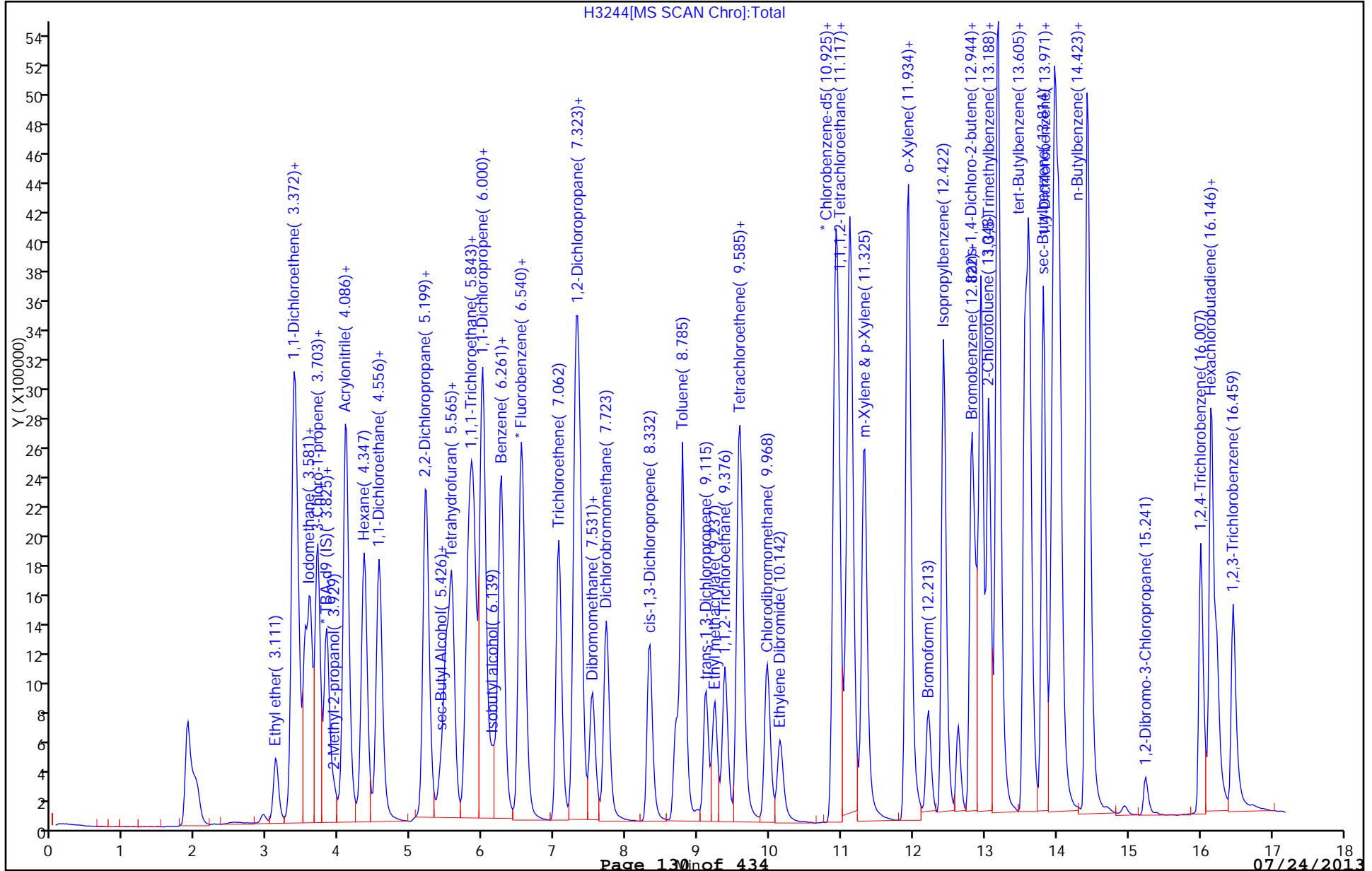
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1





TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Lims ID: std60 Client ID:  
 Inject. Date: 03-Jul-2013 17:27:30 Dil. Factor: 1.0000  
 Sample Type: IC Calib Level: 7  
 Sample ID: std60  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 25  
 Lims Batch ID: 181419 Lims Sample ID: 24  
 Sublist: chrom-AQ\_VMSH\_8260\*sub39  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:31 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 18:40:21

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.854	3.854	0.0	46	333032	250.0	
* 2 Fluorobenzene	96	6.587	6.587	0.0	97	1371228	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.903	10.903	0.0	62	352840	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.018	14.018	0.0	84	525904	12.5	
40 Ethyl ether	59	3.123	3.123	0.0	94	1452420	58.6	
45 1,1-Dichloroethene	96	3.367	3.367	0.0	97	2864809	61.0	
46 1,1,2-Trichloro-1,2,2-trifluoroethane	151	3.402	3.402	0.0	97	4011749	61.3	
48 Iodomethane	142	3.524	3.541	-0.017	97	7148941	62.8	
50 Carbon disulfide	76	3.593	3.611	-0.018	99	10464487	59.4	
52 3-Chloro-1-propene	41	3.698	3.698	0.0	85	4973934	58.8	
53 Methyl acetate	43	3.698	3.715	-0.017	98	4265399	333.9	
54 Methylene Chloride	84	3.820	3.819	0.001	90	2513592	62.1	
55 2-Methyl-2-propanol	59	3.924	3.941	-0.017	98	979268	606.9	
57 Acrylonitrile	53	4.081	4.080	0.001	99	2418267	656.3	
58 trans-1,2-Dichloroethene	96	4.098	4.098	0.0	95	3084476	63.3	
56 Methyl tert-butyl ether	73	4.098	4.098	0.0	88	4735789	63.4	
59 Hexane	57	4.342	4.359	-0.017	95	5127472	64.7	
60 1,1-Dichloroethane	63	4.550	4.550	0.0	96	5741011	61.7	
61 Vinyl acetate	43	4.568	4.568	0.0	97	7453886	133.7	
66 2,2-Dichloropropane	77	5.212	5.212	0.0	84	4208608	54.3	
65 cis-1,2-Dichloroethene	96	5.212	5.212	0.0	85	3066870	62.0	
71 sec-Butyl Alcohol	45	5.421	5.438	-0.017	76	2825006	1867.5	
73 Chlorobromomethane	128	5.490	5.490	0.0	95	1550316	61.5	
74 Tetrahydrofuran	42	5.560	5.542	0.018	90	578342	119.5	
75 Chloroform	83	5.577	5.577	0.0	96	5420733	61.2	
76 1,1,1-Trichloroethane	97	5.804	5.803	0.001	94	5032129	60.2	
77 Cyclohexane	56	5.873	5.873	0.0	93	5544121	61.8	
78 1,1-Dichloropropene	75	5.995	5.995	0.0	92	4417341	58.8	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
79 Carbon tetrachloride	117	6.012	6.012	0.0	86	5214378	59.6	
80 Isobutyl alcohol	41	6.134	6.134	0.0	73	872271	1458.9	
81 Benzene	78	6.256	6.256	0.0	98	8923508	60.9	
82 1,2-Dichloroethane	62	6.273	6.273	0.0	94	2342589	59.8	
84 n-Heptane	43	6.534	6.534	0.0	95	6380101	59.9	
86 Trichloroethene	95	7.057	7.056	0.001	97	3594563	60.4	
88 2-Pentanone	43	7.300	7.300	0.0	96	4700101	214.2	
89 Methylcyclohexane	55	7.300	7.300	0.0	89	4735930	59.1	
90 1,2-Dichloropropane	63	7.370	7.352	0.018	97	3199125	57.7	
92 Dibromomethane	93	7.526	7.526	0.0	91	1692769	56.3	
93 1,4-Dioxane	88	7.561	7.561	0.0	51	203473	1337.2	
94 Dichlorobromomethane	83	7.718	7.718	0.0	99	4837401	61.8	
97 cis-1,3-Dichloropropene	75	8.327	8.327	0.0	91	4108683	61.5	
99 Toluene	91	8.797	8.779	0.018	93	9595450	59.3	
100 trans-1,3-Dichloropropene	75	9.110	9.110	0.0	95	2847000	59.0	
101 Ethyl methacrylate	69	9.232	9.232	0.0	88	2442757	58.1	
102 1,1,2-Trichloroethane	97	9.389	9.371	0.018	91	1823267	58.5	
103 Tetrachloroethene	164	9.580	9.580	0.0	97	3308566	62.1	
104 1,3-Dichloropropane	76	9.615	9.615	0.0	92	3031893	61.9	
108 Chlorodibromomethane	129	9.963	9.963	0.0	90	3527067	63.9	
109 Ethylene Dibromide	107	10.154	10.154	0.0	98	2433111	60.7	
110 1-Chlorohexane	91	10.920	10.920	0.0	97	4544692	60.1	
111 Chlorobenzene	112	10.955	10.955	0.0	91	6908728	59.9	
112 1,1,1,2-Tetrachloroethane	131	11.094	11.094	0.0	95	3334640	61.7	
113 Ethylbenzene	106	11.129	11.129	0.0	99	3312000	59.0	
114 m-Xylene & p-Xylene	106	11.320	11.320	0.0	0	4603187	61.8	
115 o-Xylene	106	11.929	11.912	0.017	95	3932590	59.3	
116 Styrene	104	11.947	11.947	0.0	93	6561662	58.1	
117 Bromoform	173	12.208	12.208	0.0	94	1907675	60.5	
118 Isopropylbenzene	105	12.434	12.417	0.017	95	12128681	60.6	
122 Bromobenzene	156	12.817	12.817	0.0	94	2977409	61.2	
121 1,1,2,2-Tetrachloroethane	83	12.834	12.834	0.0	88	2267373	60.7	
123 1,2,3-Trichloropropane	110	12.887	12.869	0.018	64	543475	60.4	
124 trans-1,4-Dichloro-2-butene	53	12.904	12.904	0.0	50	513000	62.7	
125 N-Propylbenzene	120	12.956	12.956	0.0	97	2999328	61.6	
126 2-Chlorotoluene	126	13.061	13.061	0.0	95	2431128	58.2	
127 1,3,5-Trimethylbenzene	105	13.182	13.165	0.017	93	9052543	60.3	
128 4-Chlorotoluene	126	13.200	13.182	0.018	98	2959430	60.9	
129 tert-Butylbenzene	119	13.565	13.565	0.0	91	9977094	59.2	
130 1,2,4-Trimethylbenzene	105	13.618	13.617	0.001	96	8351044	57.6	
131 sec-Butylbenzene	134	13.826	13.809	0.017	81	2429087	55.2	
132 1,3-Dichlorobenzene	146	13.948	13.948	0.0	84	4628367	59.5	
133 4-Isopropyltoluene	119	13.983	13.983	0.0	94	11174880	57.7	
134 1,4-Dichlorobenzene	146	14.053	14.035	0.018	92	5778988	54.5	
137 n-Butylbenzene	91	14.418	14.418	0.0	95	10066230	56.5	
138 1,2-Dichlorobenzene	146	14.453	14.453	0.0	96	4182183	57.0	
139 1,2-Dibromo-3-Chloropropane	157	15.236	15.236	0.0	86	396163	55.5	
141 1,2,4-Trichlorobenzene	180	16.019	16.002	0.017	94	2896260	53.6	
142 Hexachlorobutadiene	225	16.158	16.158	0.0	96	2680203	58.9	
143 Naphthalene	128	16.245	16.228	0.017	94	3170393	56.3	
144 1,2,3-Trichlorobenzene	180	16.472	16.454	0.018	94	2301914	54.7	
S 145 Trihalomethanes, Total	1				0		247.5	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
S 146 Xylenes, Total (URS)	1				0		121.0	
S 147 Total BTEX	1				0		300.3	
S 148 1,3-Dichloropropene, Total	1				0		120.5	
S 149 1,2-Dichloroethene, Total	1				0		125.3	
S 150 Xylenes, Total	106				0		121.0	
S 151 1,2-Dichloroethene, Total (URS)	96				0		125.3	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D

Injection Date: 03-Jul-2013 17:27:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 24

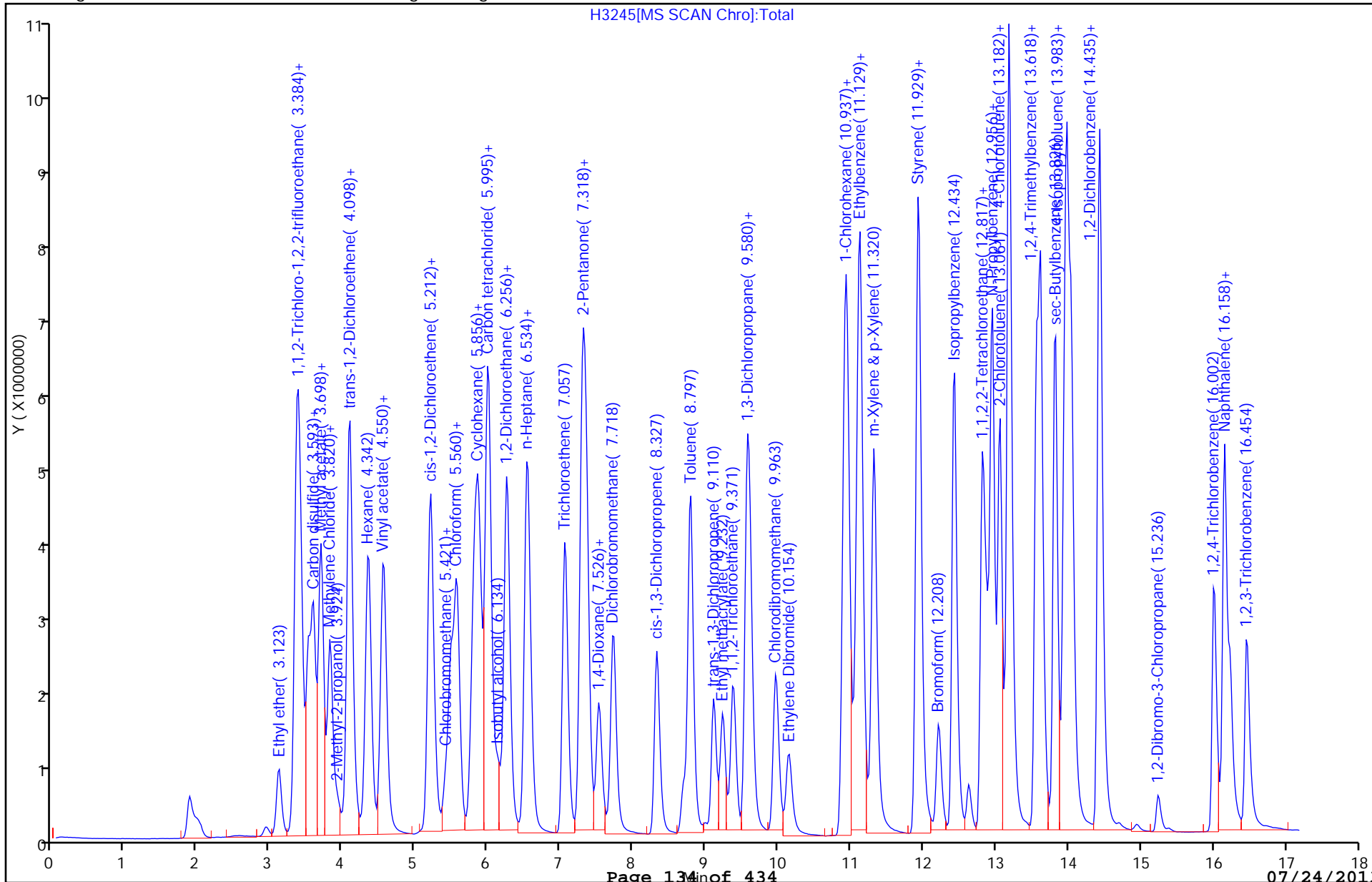
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 280-181419/16 Calibration Date: 07/03/2013 13:27  
 Instrument ID: VMS\_H Calib Start Date: 07/03/2013 10:43  
 GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 07/03/2013 12:31  
 Lab File ID: H3235.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.0010		459	500	-8.1	50.0
Acetonitrile	Ave	0.0082	0.0109		134	100	33.6	55.0
Isopropyl alcohol	Ave	0.1547	0.1670		108	100	8.0	50.0
Isopropyl ether	Ave	0.3238	0.3479		10.7	10.0	7.4	35.0
2-Chloro-1,3-butadiene	Ave	0.6130	0.6493		10.6	10.0	5.9	35.0
Tert-butyl ethyl ether	Ave	1.163	1.250		10.7	10.0	7.5	35.0
Ethyl acetate	Ave	0.1193	0.1941		32.6	20.0	62.8*	55.0
Propionitrile	Ave	0.0118	0.0133		112	100	12.3	35.0
Methacrylonitrile	Ave	0.0860	0.0942		110	100	9.5	50.0
Tert-amyl methyl ether	Ave	0.8274	0.9037		10.9	10.0	9.2	35.0
Methyl methacrylate	Ave	0.0633	0.0719		22.7	20.0	13.7	35.0
2-Nitropropane	Ave	0.0352	0.0351		19.9	20.0	-0.3	55.0
cis-1,4-Dichloro-2-butene	Ave	0.1630	0.1879		11.5	10.0	15.3	55.0
Dibromofluoromethane (Surr)	Ave	0.6838	0.6504		8.56	9.00	-4.9	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2937	0.2857		8.76	9.00	-2.7	35.0
Toluene-d8 (Surr)	Ave	4.918	4.738		8.67	9.00	-3.7	35.0
4-Bromofluorobenzene (Surr)	Ave	1.653	1.591		8.66	9.00	-3.8	35.0

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3235.D  
 Lims ID: icv Client ID:  
 Inject. Date: 03-Jul-2013 13:27:30 Dil. Factor: 1.0000  
 Sample Type: ICV  
 Sample ID: icv  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 15  
 Lims Batch ID: 181419 Lims Sample ID: 16  
 Sublist:  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:23 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

Date: 03-Jul-2013 13:52:54

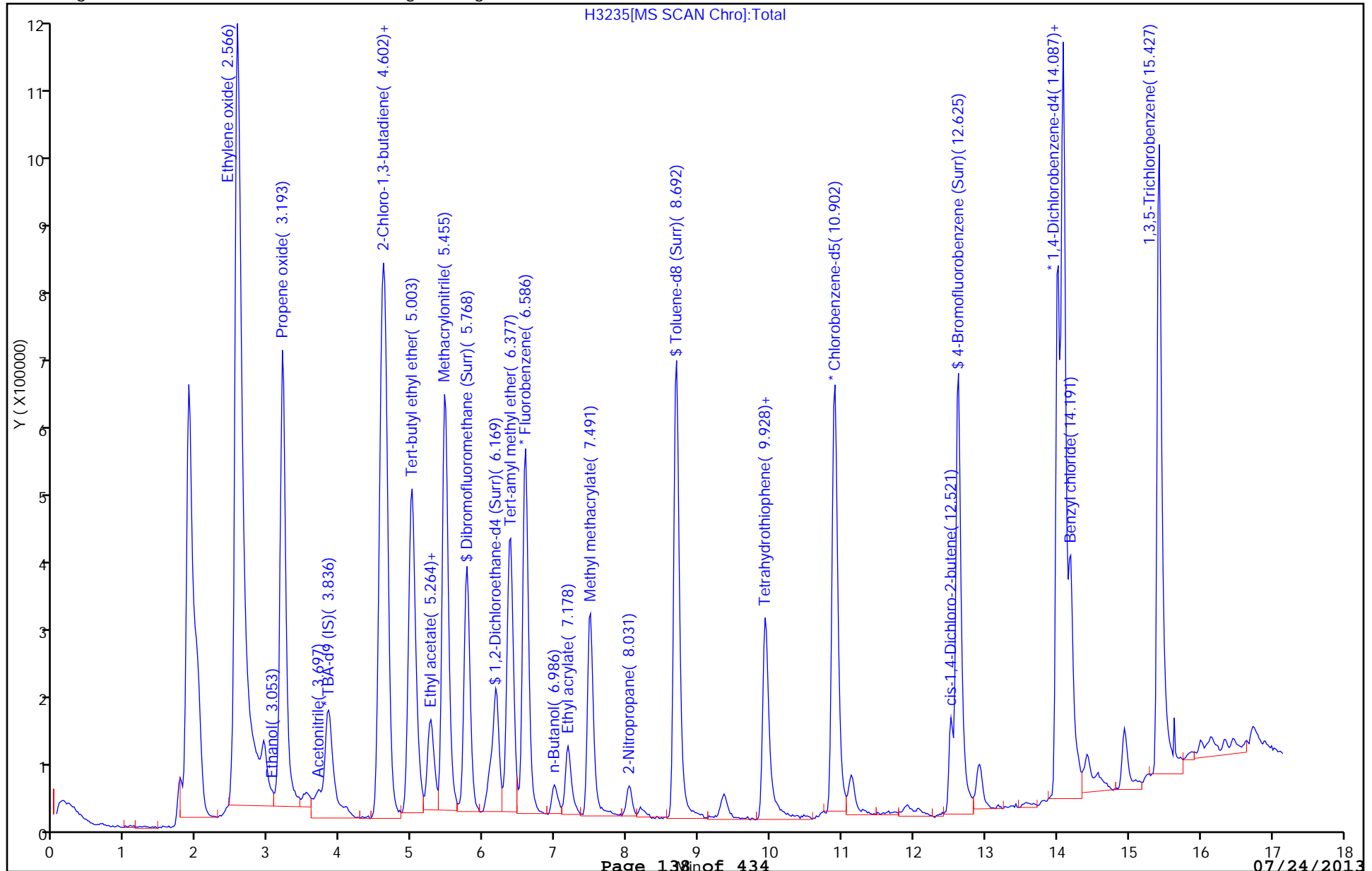
Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.854	3.840	0.014	91	347690	250.0	
* 2 Fluorobenzene	96	6.586	6.572	0.014	98	1432051	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.902	10.888	0.014	86	406336	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.017	14.004	0.013	95	611514	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.768	5.754	0.014	56	670585	8.56	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.186	6.172	0.014	97	294615	8.76	
\$ 10 Toluene-d8 (Surr)	98	8.692	8.678	0.014	93	1386111	8.67	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.625	12.611	0.014	87	700390	8.66	
34 Ethylene oxide	43	2.566	2.552	0.014	99	1556177	2352.2	
39 Ethanol	45	3.053	3.057	-0.004	48	55748	459.4	
43 Propene oxide	58	3.193	3.196	-0.003	96	1667685	547.5	
51 Acetonitrile	41	3.697	3.701	-0.004	100	125093	133.6	
49 Isopropyl alcohol	45	4.585	4.571	0.014	92	1913259	108.0	
62 Isopropyl ether	87	4.585	4.571	0.014	98	398553	10.7	
63 2-Chloro-1,3-butadiene	53	4.637	4.623	0.014	87	743842	10.6	
64 Tert-butyl ethyl ether	59	5.003	4.989	0.013	99	1431958	10.7	
69 Ethyl acetate	43	5.246	5.232	0.014	99	444813	32.6	
70 Propionitrile	54	5.298	5.285	0.014	97	151891	112.3	
72 Methacrylonitrile	41	5.455	5.459	-0.004	95	1079028	109.5	
83 Tert-amyl methyl ether	73	6.377	6.364	0.013	96	1035300	10.9	
85 n-Butanol	56	6.986	6.973	0.013	88	92276	277.7	
87 Ethyl acrylate	55	7.178	7.164	0.014	99	343892	11.5	
91 Methyl methacrylate	100	7.491	7.477	0.014	95	164771	22.7	
95 2-Nitropropane	41	8.031	8.017	0.014	96	80443	19.9	
107 Tetrahydrothiophene	60	9.928	9.914	0.014	63	156473	11.5	
106 n-Butyl acetate	43	9.928	9.931	-0.003	95	527543	17.5	
119 cis-1,4-Dichloro-2-butene	53	12.521	12.524	-0.003	92	91921	11.5	
135 1,2,3-Trimethylbenzene	105	14.087	14.091	-0.004	94	1531581	10.2	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
136 Benzyl chloride	126	14.191	14.178	0.013	98	123876	11.5	
140 1,3,5-Trichlorobenzene	180	15.427	15.413	0.014	97	843167	10.4	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3235.D  
 Injection Date: 03-Jul-2013 13:27:30 Limit Group: MSV - 8260B Water and Solid  
 Client ID: Instrument ID: VMS\_H  
 Lims Batch ID: 181419 Lims Sample ID: 16  
 Operator ID: meierg Purge Vol: 20.000 mL  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1





FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 280-181419/15 Calibration Date: 07/03/2013 13:49  
 Instrument ID: VMS\_H Calib Start Date: 07/03/2013 08:12  
 GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 07/03/2013 10:21  
 Lab File ID: H3236.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.5123	0.5660		11.0	10.0	10.5	20.0
Chloromethane	Ave	0.4463	0.4321	0.1000	9.68	10.0	-3.2	20.0
Vinyl chloride	Ave	0.3689	0.3829		10.4	10.0	3.8	20.0
Bromomethane	Ave	0.3702	0.3586		9.69	10.0	-3.1	20.0
Chloroethane	Ave	0.2497	0.2482		9.94	10.0	-0.6	20.0
Dichlorofluoromethane	Ave	0.8889	0.9022		10.1	10.0	1.5	50.0
Trichlorofluoromethane	Ave	0.8052	0.8106		10.1	10.0	0.7	20.0
Acrolein	Ave	0.0108	0.0118		109	100	9.3	55.0
Acetone	Ave	0.0317	0.0308		38.9	40.0	-2.8	20.0
2-Butanone (MEK)	Ave	0.0588	0.0632		43.0	40.0	7.4	20.0
2-Chloroethyl vinyl ether	Ave	0.0859	0.0996		11.6	10.0	16.0	55.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1926	0.1921		39.9	40.0	-0.3	20.0
2-Hexanone	Ave	0.4364	0.4881		44.7	40.0	11.8	20.0
Cyclohexanone	Ave	0.0182	0.0182		401	400	0.3	55.0

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3236.D  
 Lims ID: icv Client ID:  
 Inject. Date: 03-Jul-2013 13:49:30 Dil. Factor: 1.0000  
 Sample Type: ICV  
 Sample ID: icv  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 16  
 Lims Batch ID: 181419 Lims Sample ID: 15  
 Sublist:  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:00:23 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: meierg

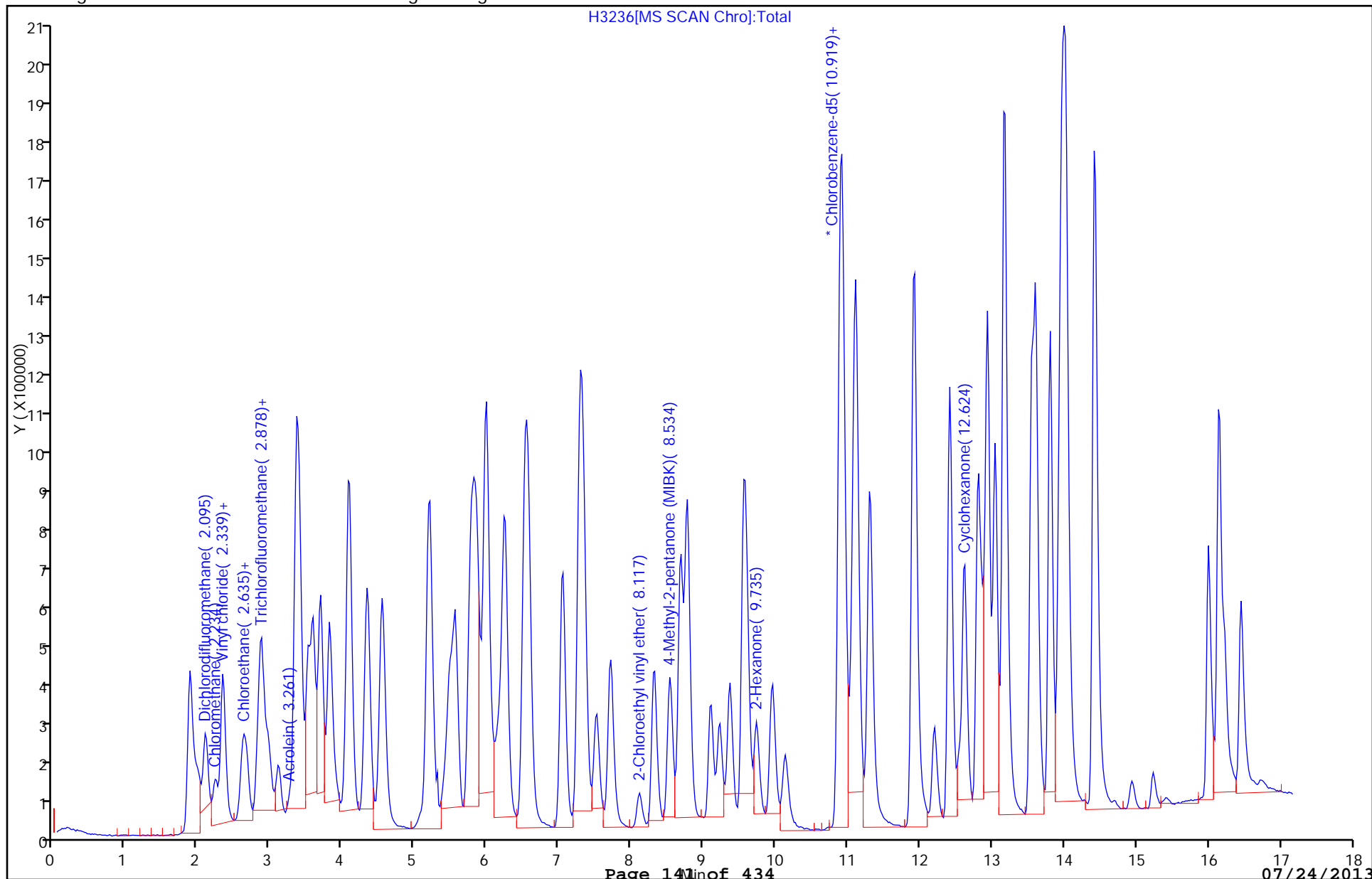
Date: 03-Jul-2013 14:29:35

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.853	3.840	0.013	59	325221	250.0	
* 2 Fluorobenzene	96	6.585	6.572	0.013	98	1444952	12.5	
* 3 1,4-Dioxane-d8	96	7.334	7.335	-0.001	72	2065	250.0	
* 4 Chlorobenzene-d5	119	10.901	10.888	0.013	85	390328	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.016	14.004	0.012	95	588077	12.5	
28 Dichlorodifluoromethane	85	2.113	2.102	0.011	88	654289	11.0	
30 Chloromethane	50	2.234	2.224	0.010	88	499529	9.68	
31 Butadiene	54	2.339	2.328	0.011	0	318405	10.1	
32 Vinyl chloride	62	2.356	2.345	0.011	97	442584	10.4	
35 Bromomethane	94	2.617	2.606	0.011	89	414550	9.69	
36 Chloroethane	64	2.670	2.659	0.011	95	286862	9.94	
37 Dichlorofluoromethane	67	2.861	2.850	0.011	97	1042933	10.1	
38 Trichlorofluoromethane	101	2.878	2.885	-0.007	96	937044	10.1	
44 Acrolein	56	3.261	3.250	0.011	90	136168	109.3	
47 Acetone	43	3.400	3.390	0.010	35	142536	38.9	
67 2-Butanone (MEK)	43	5.210	5.182	0.028	41	292202	43.0	
96 2-Chloroethyl vinyl ether	63	8.117	8.088	0.029	91	115169	11.6	
98 4-Methyl-2-pentanone (MIBK)	43	8.534	8.523	0.011	96	888214	39.9	
105 2-Hexanone	43	9.735	9.724	0.011	97	609684	44.7	
120 Cyclohexanone	55	12.555	12.544	0.011	87	227859	401.4	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3236.D  
Injection Date: 03-Jul-2013 13:49:30 Limit Group: MSV - 8260B Water and Solid  
Client ID: Instrument ID: VMS\_H  
Lims Batch ID: 181419 Lims Sample ID: 15  
Operator ID: meierg Purge Vol: 20.000 mL  
Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 280-181419/25 Calibration Date: 07/03/2013 18:11  
 Instrument ID: VMS\_H Calib Start Date: 07/03/2013 15:16  
 GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 07/03/2013 17:27  
 Lab File ID: H3247.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2260	0.2129		9.42	10.0	-5.8	35.0
1,1-Dichloroethene	Ave	0.4283	0.4038		9.43	10.0	-5.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5965	0.5530		9.27	10.0	-7.3	35.0
Iodomethane	Ave	1.037	1.052		10.1	10.0	1.4	35.0
Carbon disulfide	Ave	1.607	1.486		9.25	10.0	-7.5	20.0
Allyl chloride	Ave	0.7716	0.6832		8.85	10.0	-11.5	35.0
Methyl acetate	Lin2		0.1124		47.6	50.0	-4.7	55.0
Methylene Chloride	Lin2		0.3939		9.55	10.0	-4.5	20.0
2-Methyl-2-propanol	Ave	1.211	1.162		95.9	100	-4.1	50.0
Acrylonitrile	Ave	0.0336	0.0332		98.8	100	-1.2	55.0
Methyl tert-butyl ether	Ave	0.6807	0.6684		9.82	10.0	-1.8	20.0
trans-1,2-Dichloroethene	Ave	0.4439	0.4464		10.1	10.0	0.6	20.0
Hexane	Ave	2.809	2.721		9.69	10.0	-3.1	20.0
1,1-Dichloroethane	Ave	0.8483	0.8343	0.1000	9.83	10.0	-1.7	20.0
Vinyl acetate	Ave	0.5083	0.4889		19.2	20.0	-3.8	55.0
cis-1,2-Dichloroethene	Ave	0.4510	0.4467		9.90	10.0	-1.0	20.0
2,2-Dichloropropane	Ave	0.7069	0.5881		8.32	10.0	-16.8	20.0
2-Butanol	Ave	1.136	1.108		293	300	-2.4	50.0
Chlorobromomethane	Ave	0.2299	0.2230		9.70	10.0	-3.0	20.0
Tetrahydrofuran	Ave	0.0441	0.0447		20.3	20.0	1.4	55.0
Chloroform	Ave	0.8069	0.7904		9.80	10.0	-2.0	20.0
1,1,1-Trichloroethane	Ave	0.7617	0.7224		9.48	10.0	-5.2	20.0
Cyclohexane	Ave	0.8179	0.7571		9.26	10.0	-7.4	35.0
1,1-Dichloropropene	Ave	0.6854	0.6749		9.85	10.0	-1.5	20.0
Carbon tetrachloride	Ave	0.7969	0.7561		9.49	10.0	-5.1	20.0
Isobutyl alcohol	Ave	0.4488	0.4116		229	250	-8.3	50.0
Benzene	Ave	1.336	1.285		9.62	10.0	-3.8	20.0
1,2-Dichloroethane	Ave	0.3573	0.3363		9.41	10.0	-5.9	20.0
Trichloroethene	Ave	0.5427	0.5436		10.0	10.0	0.2	20.0
2-Pentanone	Ave	0.2000	0.1815		36.3	40.0	-9.2	55.0
Methylcyclohexane	Ave	0.7305	0.6751		9.24	10.0	-7.6	35.0
1,2-Dichloropropane	Ave	0.5051	0.4695		9.30	10.0	-7.0	20.0
Dibromomethane	Ave	0.2740	0.2504		9.14	10.0	-8.6	20.0
1,4-Dioxane	Ave	0.0014	0.0014		206	200	3.1	55.0
Dichlorobromomethane	Ave	0.7137	0.7009		9.82	10.0	-1.8	20.0
cis-1,3-Dichloropropene	Ave	2.365	2.352		9.94	10.0	-0.6	20.0
Toluene	Ave	1.474	1.432		9.71	10.0	-2.9	20.0
trans-1,3-Dichloropropene	Ave	0.4400	0.4623		10.5	10.0	5.1	20.0
Ethyl methacrylate	Lin2		1.326		9.08	10.0	-9.2	35.0
1,1,2-Trichloroethane	Ave	0.2843	0.2746		9.66	10.0	-3.4	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 280-181419/25 Calibration Date: 07/03/2013 18:11  
 Instrument ID: VMS\_H Calib Start Date: 07/03/2013 15:16  
 GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 07/03/2013 17:27  
 Lab File ID: H3247.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrachloroethene	Ave	1.888	1.857		9.84	10.0	-1.6	20.0
1,3-Dichloropropane	Ave	1.734	1.683		9.71	10.0	-2.9	20.0
Chlorodibromomethane	Ave	1.954	1.990		10.2	10.0	1.9	20.0
Ethylene Dibromide	Ave	1.420	1.388		9.78	10.0	-2.2	20.0
1-Chlorohexane	Ave	2.680	2.532		9.45	10.0	-5.5	35.0
Chlorobenzene	Ave	4.084	3.910	0.3000	9.57	10.0	-4.3	20.0
1,1,1,2-Tetrachloroethane	Ave	1.913	1.869		9.77	10.0	-2.3	20.0
Ethylbenzene	Ave	1.987	1.884		9.48	10.0	-5.2	20.0
m-Xylene & p-Xylene	Ave	2.640	2.604		9.87	10.0	-1.3	20.0
o-Xylene	Ave	2.351	2.298		9.77	10.0	-2.3	20.0
Styrene	Ave	4.001	3.763		9.41	10.0	-5.9	20.0
Bromoform	Ave	1.116	1.115	0.1000	9.99	10.0	-0.0	20.0
Isopropylbenzene	Lin1		4.439		9.40	10.0	-6.0	20.0
Bromobenzene	Ave	1.157	1.106		9.56	10.0	-4.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8875	0.8225	0.3000	9.27	10.0	-7.3	20.0
1,2,3-Trichloropropane	Lin1		0.2155		9.87	10.0	-1.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1945	0.1888		9.71	10.0	-2.9	55.0
N-Propylbenzene	Ave	1.157	1.099		9.50	10.0	-5.0	20.0
2-Chlorotoluene	Ave	0.9937	0.9167		9.23	10.0	-7.7	20.0
1,3,5-Trimethylbenzene	Ave	3.571	3.342		9.36	10.0	-6.4	20.0
4-Chlorotoluene	Ave	1.155	1.081		9.36	10.0	-6.4	20.0
tert-Butylbenzene	Ave	4.003	3.720		9.29	10.0	-7.1	20.0
1,2,4-Trimethylbenzene	Ave	3.448	3.168		9.19	10.0	-8.1	20.0
sec-Butylbenzene	Ave	1.046	0.9396		8.98	10.0	-10.2	20.0
1,3-Dichlorobenzene	Ave	1.850	1.645		8.89	10.0	-11.1	20.0
4-Isopropyltoluene	Ave	4.604	4.426		9.61	10.0	-3.9	20.0
1,4-Dichlorobenzene	Ave	2.522	2.394		9.49	10.0	-5.1	20.0
n-Butylbenzene	Ave	4.237	3.797		8.96	10.0	-10.4	20.0
1,2-Dichlorobenzene	Ave	1.743	1.635		9.38	10.0	-6.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1698	0.1638		9.65	10.0	-3.5	20.0
1,2,4-Trichlorobenzene	Ave	1.284	1.209		9.41	10.0	-5.9	20.0
Hexachlorobutadiene	Lin2		1.128		10.1	10.0	0.9	20.0
Naphthalene	Ave	1.339	1.285		9.60	10.0	-4.0	20.0
1,2,3-Trichlorobenzene	Ave	1.000	0.9706		9.71	10.0	-2.9	20.0

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3247.D  
 Lims ID: icv Client ID:  
 Inject. Date: 03-Jul-2013 18:11:30 Dil. Factor: 1.0000  
 Sample Type: ICV  
 Sample ID: icv  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 27  
 Lims Batch ID: 181419 Lims Sample ID: 25  
 Sublist:  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 19:05:53 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 19:05:53

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.859	3.854	0.005	58	313445	250.0	
* 2 Fluorobenzene	96	6.592	6.587	0.005	98	1370587	12.5	
* 3 1,4-Dioxane-d8	96		7.335					
* 4 Chlorobenzene-d5	119	10.908	10.903	0.005	87	366271	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.023	14.018	0.005	96	576454	12.5	
40 Ethyl ether	59	3.111	3.123	-0.012	94	233400	9.42	
45 1,1-Dichloroethene	96	3.372	3.367	0.005	96	442717	9.43	
46 1,1,2-Trichloro-1,2,2-trifluoro	151	3.407	3.402	0.005	93	606304	9.27	
48 Iodomethane	142	3.529	3.541	-0.012	99	1153197	10.1	
50 Carbon disulfide	76	3.598	3.611	-0.013	99	1628978	9.25	
52 3-Chloro-1-propene	41	3.703	3.698	0.005	90	749152	8.85	
53 Methyl acetate	43	3.703	3.715	-0.012	86	615961	47.6	
54 Methylene Chloride	84	3.825	3.819	0.006	93	431877	9.55	
55 2-Methyl-2-propanol	59	3.946	3.941	0.005	86	145632	95.9	
57 Acrylonitrile	53	4.086	4.080	0.006	99	363964	98.8	
58 trans-1,2-Dichloroethene	96	4.103	4.098	0.005	98	489430	10.1	
56 Methyl tert-butyl ether	73	4.103	4.098	0.005	93	732868	9.82	
59 Hexane	57	4.347	4.359	-0.012	95	797323	9.69	
60 1,1-Dichloroethane	63	4.556	4.550	0.006	96	914727	9.83	
61 Vinyl acetate	43	4.573	4.568	0.005	97	1072051	19.2	
66 2,2-Dichloropropane	77	5.217	5.212	0.005	85	644829	8.32	
65 cis-1,2-Dichloroethene	96	5.200	5.212	-0.012	85	489778	9.90	
71 sec-Butyl Alcohol	45	5.426	5.438	-0.012	93	416867	292.8	
73 Chlorobromomethane	128	5.495	5.490	0.005	91	244530	9.70	
74 Tetrahydrofuran	42	5.548	5.542	0.006	86	98098	20.3	
75 Chloroform	83	5.582	5.577	0.005	95	866648	9.80	
76 1,1,1-Trichloroethane	97	5.809	5.803	0.006	92	792101	9.48	
77 Cyclohexane	56	5.878	5.873	0.005	90	830122	9.26	
78 1,1-Dichloropropene	75	6.000	5.995	0.005	92	739960	9.85	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
79 Carbon tetrachloride	117	6.017	6.012	0.005	78	828994	9.49	
80 Isobutyl alcohol	41	6.139	6.134	0.005	61	129022	229.3	
81 Benzene	78	6.261	6.256	0.005	98	1408654	9.62	
82 1,2-Dichloroethane	62	6.279	6.273	0.006	81	368738	9.41	
84 n-Heptane	43	6.540	6.534	0.006	95	1003100	9.42	
86 Trichloroethene	95	7.062	7.056	0.006	96	596066	10.0	
88 2-Pentanone	43	7.305	7.300	0.005	86	796182	36.3	
89 Methylcyclohexane	55	7.305	7.300	0.005	88	740268	9.24	
90 1,2-Dichloropropane	63	7.358	7.352	0.006	95	514838	9.30	
92 Dibromomethane	93	7.532	7.526	0.006	87	274592	9.14	
93 1,4-Dioxane	88	7.549	7.561	-0.012	10	31361	206.2	
94 Dichlorobromomethane	83	7.723	7.718	0.005	99	768469	9.82	
97 cis-1,3-Dichloropropene	75	8.332	8.327	0.005	87	689280	9.94	
99 Toluene	91	8.802	8.779	0.023	92	1570026	9.71	
100 trans-1,3-Dichloropropene	75	9.115	9.110	0.005	94	506848	10.5	
101 Ethyl methacrylate	69	9.237	9.232	0.005	87	388624	9.08	
102 1,1,2-Trichloroethane	97	9.376	9.371	0.005	85	301077	9.66	
103 Tetrachloroethene	164	9.585	9.580	0.005	98	544089	9.84	
104 1,3-Dichloropropane	76	9.620	9.615	0.005	90	493266	9.71	
108 Chlorodibromomethane	129	9.968	9.963	0.005	86	583201	10.2	
109 Ethylene Dibromide	107	10.159	10.154	0.005	96	406660	9.78	
110 1-Chlorohexane	91	10.925	10.920	0.005	89	741871	9.45	
111 Chlorobenzene	112	10.960	10.955	0.005	91	1145642	9.57	
112 1,1,1,2-Tetrachloroethane	131	11.099	11.094	0.005	87	547535	9.77	
113 Ethylbenzene	106	11.134	11.129	0.005	99	552032	9.48	
114 m-Xylene & p-Xylene	106	11.325	11.320	0.005	0	763133	9.87	
115 o-Xylene	106	11.917	11.912	0.005	91	673378	9.77	
116 Styrene	104	11.952	11.947	0.005	94	1102726	9.41	
117 Bromoform	173	12.213	12.208	0.005	94	326832	10.0	
118 Isopropylbenzene	105	12.422	12.417	0.005	96	2047306	9.40	
122 Bromobenzene	156	12.822	12.817	0.005	95	510070	9.56	
121 1,1,2,2-Tetrachloroethane	83	12.840	12.834	0.006	87	379319	9.27	
123 1,2,3-Trichloropropane	110	12.874	12.869	0.005	56	99356	9.87	
124 trans-1,4-Dichloro-2-butene	53	12.909	12.904	0.005	54	87086	9.71	
125 N-Propylbenzene	120	12.944	12.956	-0.012	93	506775	9.50	
126 2-Chlorotoluene	126	13.048	13.061	-0.013	93	422765	9.23	
127 1,3,5-Trimethylbenzene	105	13.170	13.165	0.005	91	1541020	9.36	
128 4-Chlorotoluene	126	13.188	13.182	0.006	98	498524	9.36	
129 tert-Butylbenzene	119	13.570	13.565	0.005	90	1715698	9.29	
130 1,2,4-Trimethylbenzene	105	13.623	13.617	0.006	96	1460794	9.19	
131 sec-Butylbenzene	134	13.814	13.809	0.005	90	433325	8.98	
132 1,3-Dichlorobenzene	146	13.953	13.948	0.005	78	758727	8.89	
133 4-Isopropyltoluene	119	13.971	13.983	-0.012	92	2041182	9.61	
134 1,4-Dichlorobenzene	146	14.040	14.035	0.005	82	1104137	9.49	
137 n-Butylbenzene	91	14.423	14.418	0.005	95	1751261	8.96	
138 1,2-Dichlorobenzene	146	14.441	14.453	-0.012	94	754152	9.38	
139 1,2-Dibromo-3-Chloropropane	157	15.241	15.236	0.005	85	75522	9.65	
141 1,2,4-Trichlorobenzene	180	16.007	16.002	0.005	95	557431	9.41	
142 Hexachlorobutadiene	225	16.164	16.158	0.006	94	520405	10.1	
143 Naphthalene	128	16.233	16.228	0.005	96	592780	9.60	
144 1,2,3-Trichlorobenzene	180	16.459	16.454	0.005	95	447620	9.71	
S 145 Trihalomethanes, Total	1				0		39.8	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
S 146 Xylenes, Total (URS)	1				0		19.6	
S 148 1,3-Dichloropropene, Total	1				0		20.5	
S 149 1,2-Dichloroethene, Total	1				0		20.0	
S 150 Xylenes, Total	106				0		19.6	
S 151 1,2-Dichloroethene, Total (URS)	96				0		20.0	



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3247.D

Injection Date: 03-Jul-2013 18:11:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181419

Lims Sample ID: 25

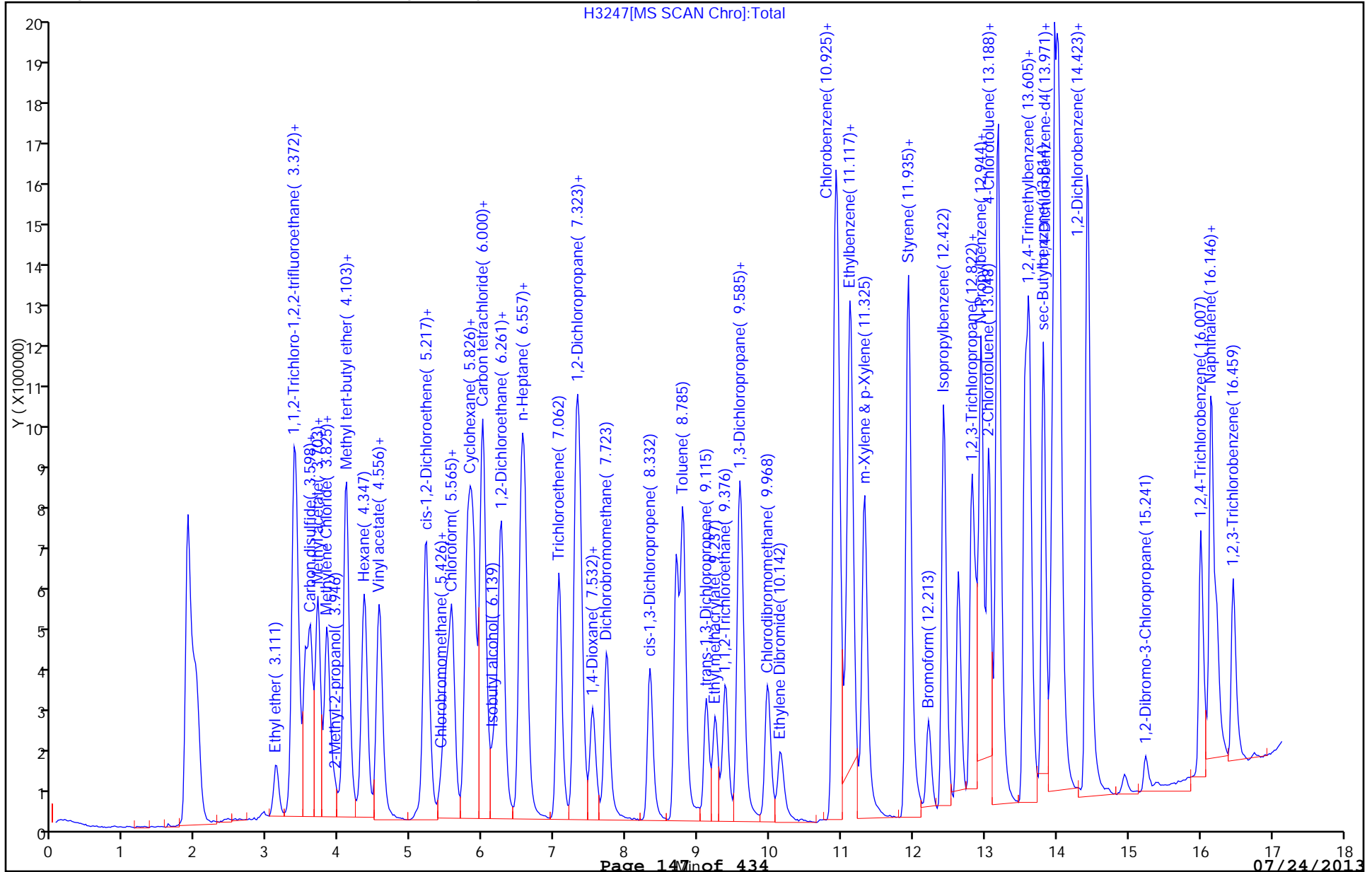
Operator ID: meierg

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 280-181535/2 Calibration Date: 07/03/2013 19:38  
 Instrument ID: VMS\_H Calib Start Date: 07/03/2013 08:12  
 GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 07/03/2013 10:21  
 Lab File ID: H3249.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.5123	0.5858		11.4	10.0	14.4	20.0
Chloromethane	Ave	0.4463	0.4622	0.1000	10.4	10.0	3.6	20.0
Vinyl chloride	Ave	0.3689	0.3981		10.8	10.0	7.9	20.0
Bromomethane	Ave	0.3702	0.3731		10.1	10.0	0.8	20.0
Chloroethane	Ave	0.2497	0.2640		10.6	10.0	5.7	20.0
Dichlorofluoromethane	Ave	0.8889	0.9594		10.8	10.0	7.9	50.0
Trichlorofluoromethane	Ave	0.8052	0.8542		10.6	10.0	6.1	20.0
Acrolein	Ave	0.0108	0.0137		127	100	27.3	50.0
Acetone	Ave	0.0317	0.0384		48.5	40.0	21.2*	20.0
2-Butanone (MEK)	Ave	0.0588	0.0731		49.7	40.0	24.2*	20.0
2-Chloroethyl vinyl ether	Ave	0.0859	0.0999		11.6	10.0	16.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1926	0.2296		47.7	40.0	19.2	20.0
2-Hexanone	Ave	0.4364	0.5437		49.8	40.0	24.6*	20.0
Cyclohexanone	Ave	0.0182	0.0229		504	400	26.1	50.0

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3249.D  
 Lims ID: ccv Client ID:  
 Inject. Date: 03-Jul-2013 19:38:30 Dil. Factor: 1.0000  
 Sample Type: CCV  
 Sample ID: ccv  
 Misc. Info.:  
 Operator: tinkhams Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 1  
 Lims Batch ID: 181535 Lims Sample ID: 2  
 Sublist: chrom-AQ\_VMSH\_8260\*sub32  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 23:56:07 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 20:10:07

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.841	3.841	0.0	94	407326	250.0	
* 2 Fluorobenzene	96	6.591	6.591	0.0	97	1361152	12.5	
* 3 1,4-Dioxane-d8	96		7.473					
* 4 Chlorobenzene-d5	119	10.907	10.907	0.0	85	378549	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.022	14.022	0.0	96	580901	12.5	
28 Dichlorodifluoromethane	85	2.101	2.101	0.0	89	637898	11.4	
30 Chloromethane	50	2.240	2.240	0.0	91	503292	10.4	
31 Butadiene	54	2.327	2.327	0.0	0	313924	10.6	
32 Vinyl chloride	62	2.362	2.362	0.0	97	433444	10.8	
35 Bromomethane	94	2.623	2.623	0.0	87	406270	10.1	
36 Chloroethane	64	2.675	2.675	0.0	94	287469	10.6	
37 Dichlorofluoromethane	67	2.867	2.867	0.0	95	1044657	10.8	
38 Trichlorofluoromethane	101	2.884	2.884	0.0	94	930132	10.6	
40 Ethyl ether	59	3.110	3.110	0.0	94	252872	10.3	
44 Acrolein	56	3.267	3.267	0.0	84	149431	127.3	
45 1,1-Dichloroethene	96	3.354	3.354	0.0	96	476790	10.2	
46 1,1,2-Trichloro-1,2,2-trifluoroethane	151	3.389	3.389	0.0	96	669449	10.3	
47 Acetone	43	3.406	3.406	0.0	95	167406	48.5	
48 Iodomethane	142	3.528	3.528	0.0	99	1161161	10.3	
50 Carbon disulfide	76	3.597	3.597	0.0	99	1749663	10.0	
52 3-Chloro-1-propene	41	3.702	3.702	0.0	83	820294	9.76	
53 Methyl acetate	43	3.702	3.702	0.0	87	685519	53.5	
54 Methylene Chloride	84	3.824	3.824	0.0	93	471542	10.6	
55 2-Methyl-2-propanol	59	3.928	3.928	0.0	66	195095	98.9	
57 Acrylonitrile	53	4.085	4.085	0.0	99	417558	114.2	
56 Methyl tert-butyl ether	73	4.085	4.085	0.0	86	803711	10.8	
58 trans-1,2-Dichloroethene	96	4.102	4.102	0.0	95	506186	10.5	
59 Hexane	57	4.346	4.346	0.0	94	852193	10.0	
60 1,1-Dichloroethane	63	4.537	4.537	0.0	96	931006	10.1	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
61 Vinyl acetate	43	4.572	4.572	0.0	97	1228730	22.2	
65 cis-1,2-Dichloroethene	96	5.199	5.199	0.0	84	510248	10.4	
66 2,2-Dichloropropane	77	5.216	5.216	0.0	80	786730	10.2	
67 2-Butanone (MEK)	43	5.216	5.216	0.0	52	318280	49.7	
71 sec-Butyl Alcohol	45	5.425	5.425	0.0	92	522290	282.3	
73 Chlorobromomethane	128	5.494	5.494	0.0	92	260176	10.4	
74 Tetrahydrofuran	42	5.547	5.547	0.0	89	108708	22.6	
75 Chloroform	83	5.564	5.564	0.0	82	896255	10.2	
76 1,1,1-Trichloroethane	97	5.808	5.808	0.0	95	856830	10.3	
77 Cyclohexane	56	5.877	5.877	0.0	90	918959	10.3	
78 1,1-Dichloropropene	75	5.982	5.982	0.0	93	747794	10.0	
79 Carbon tetrachloride	117	6.016	6.016	0.0	89	882643	10.2	
80 Isobutyl alcohol	41	6.138	6.138	0.0	70	153696	210.2	
81 Benzene	78	6.243	6.243	0.0	97	1453003	9.99	
82 1,2-Dichloroethane	62	6.278	6.278	0.0	91	402909	10.4	
84 n-Heptane	43	6.539	6.539	0.0	95	1088503	10.3	
86 Trichloroethene	95	7.061	7.061	0.0	94	608025	10.3	
88 2-Pentanone	43	7.287	7.287	0.0	87	1032162	47.4	
89 Methylcyclohexane	55	7.304	7.304	0.0	85	819688	10.3	
90 1,2-Dichloropropane	63	7.357	7.357	0.0	96	538319	9.79	
92 Dibromomethane	93	7.531	7.531	0.0	89	298283	10.0	
93 1,4-Dioxane	88	7.565	7.565	0.0	21	38461	254.6	
94 Dichlorobromomethane	83	7.722	7.722	0.0	94	824436	10.6	
96 2-Chloroethyl vinyl ether	63	8.122	8.122	0.0	88	108773	11.6	
97 cis-1,3-Dichloropropene	75	8.331	8.331	0.0	85	721004	10.1	
98 4-Methyl-2-pentanone (MIBK)	43	8.540	8.540	0.0	97	1000028	47.7	
99 Toluene	91	8.784	8.784	0.0	90	1613589	10.1	
100 trans-1,3-Dichloropropene	75	9.114	9.114	0.0	95	516313	10.8	
101 Ethyl methacrylate	69	9.236	9.236	0.0	89	427535	9.65	
102 1,1,2-Trichloroethane	97	9.375	9.375	0.0	85	323219	10.4	
103 Tetrachloroethene	164	9.567	9.567	0.0	98	579651	10.1	
104 1,3-Dichloropropane	76	9.619	9.619	0.0	88	537893	10.2	
105 2-Hexanone	43	9.741	9.741	0.0	97	658549	49.8	
108 Chlorodibromomethane	129	9.967	9.967	0.0	86	617411	10.4	
109 Ethylene Dibromide	107	10.141	10.141	0.0	98	445933	10.4	
110 1-Chlorohexane	91	10.907	10.907	0.0	95	809502	9.97	
111 Chlorobenzene	112	10.959	10.959	0.0	92	1223488	9.89	
112 1,1,1,2-Tetrachloroethane	131	11.098	11.098	0.0	92	573497	9.90	
113 Ethylbenzene	106	11.133	11.133	0.0	99	593237	9.86	
114 m-Xylene & p-Xylene	106	11.324	11.324	0.0	0	804776	10.1	
115 o-Xylene	106	11.916	11.916	0.0	90	688655	9.67	
116 Styrene	104	11.951	11.951	0.0	94	1128776	9.32	
117 Bromoform	173	12.212	12.212	0.0	95	356445	10.5	
118 Isopropylbenzene	105	12.421	12.421	0.0	95	2188225	9.96	
120 Cyclohexanone	55	12.560	12.560	0.0	88	277625	504.2	
122 Bromobenzene	156	12.821	12.821	0.0	94	538631	10.0	
121 1,1,2,2-Tetrachloroethane	83	12.839	12.839	0.0	80	435096	10.5	
123 1,2,3-Trichloropropane	110	12.873	12.873	0.0	68	111996	11.1	
124 trans-1,4-Dichloro-2-butene	53	12.908	12.908	0.0	59	102399	11.3	
125 N-Propylbenzene	120	12.943	12.943	0.0	94	547623	10.2	
126 2-Chlorotoluene	126	13.047	13.047	0.0	92	452133	9.79	
127 1,3,5-Trimethylbenzene	105	13.169	13.169	0.0	93	1654414	9.97	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
128 4-Chlorotoluene	126	13.187	13.187	0.0	98	530516	9.89	
129 tert-Butylbenzene	119	13.569	13.569	0.0	93	1835205	9.86	
130 1,2,4-Trimethylbenzene	105	13.622	13.622	0.0	96	1582010	9.87	
131 sec-Butylbenzene	134	13.813	13.813	0.0	90	465012	9.57	
132 1,3-Dichlorobenzene	146	13.952	13.952	0.0	88	796988	9.27	
133 4-Isopropyltoluene	119	13.987	13.987	0.0	92	2119373	9.90	
134 1,4-Dichlorobenzene	146	14.039	14.039	0.0	81	1170439	9.99	
137 n-Butylbenzene	91	14.422	14.422	0.0	95	1875204	9.52	
138 1,2-Dichlorobenzene	146	14.440	14.440	0.0	94	789152	9.74	
139 1,2-Dibromo-3-Chloropropane	157	15.240	15.240	0.0	83	84895	10.8	
141 1,2,4-Trichlorobenzene	180	16.006	16.006	0.0	94	640690	10.7	
142 Hexachlorobutadiene	225	16.163	16.163	0.0	91	587779	11.4	
143 Naphthalene	128	16.232	16.232	0.0	97	735606	11.8	
144 1,2,3-Trichlorobenzene	180	16.458	16.458	0.0	95	519719	11.2	
S 148 1,3-Dichloropropene, Total	1				0		20.8	
S 149 1,2-Dichloroethene, Total	1				0		20.9	
S 150 Xylenes, Total	106				0		19.7	
S 145 Trihalomethanes, Total	1				0		41.8	
S 146 Xylenes, Total (URS)	1				0		19.7	
S 147 Total BTEX	1				0		49.6	
S 151 1,2-Dichloroethene, Total (URS)	96				0		20.9	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3249.D

Injection Date: 03-Jul-2013 19:38:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181535

Lims Sample ID: 2

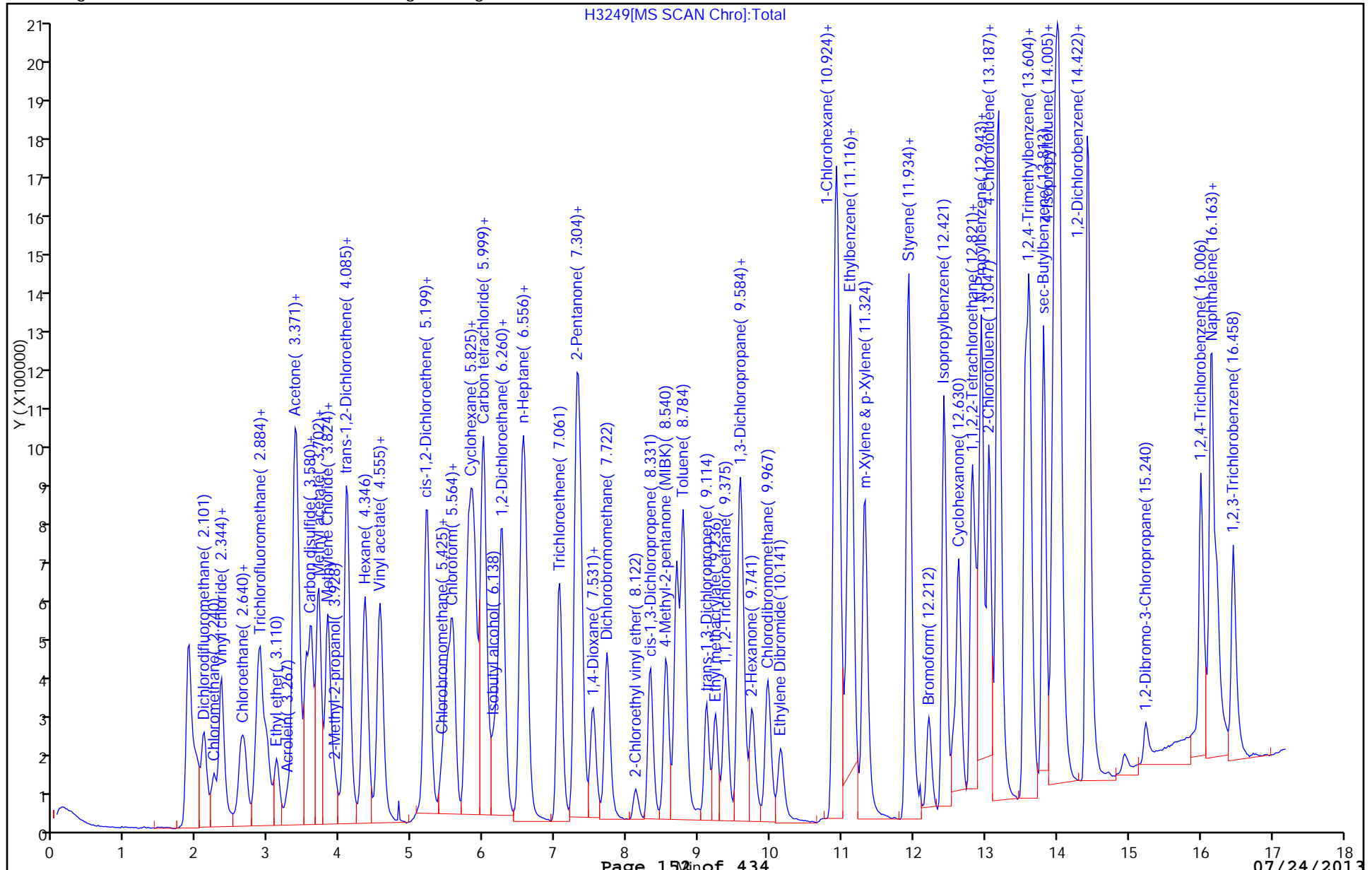
Operator ID: tinkhams

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 280-181535/2 Calibration Date: 07/03/2013 19:38  
 Instrument ID: VMS\_H Calib Start Date: 07/03/2013 15:16  
 GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 07/03/2013 17:27  
 Lab File ID: H3249.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2260	0.2322		10.3	10.0	2.7	35.0
1,1-Dichloroethene	Ave	0.4283	0.4379		10.2	10.0	2.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5965	0.6148		10.3	10.0	3.1	50.0
Iodomethane	Ave	1.037	1.066		10.3	10.0	2.8	35.0
Carbon disulfide	Ave	1.607	1.607		10.0	10.0	0.0	20.0
Allyl chloride	Ave	0.7716	0.7533		9.76	10.0	-2.4	35.0
Methyl acetate	Lin2		0.1259		53.5	50.0	6.9	50.0
Methylene Chloride	Lin2		0.4330		10.6	10.0	6.4	20.0
2-Methyl-2-propanol	Ave	1.211	1.197		98.9	100	-1.1	50.0
Acrylonitrile	Ave	0.0336	0.0384		114	100	14.2	50.0
Methyl tert-butyl ether	Ave	0.6807	0.7381		10.8	10.0	8.4	20.0
trans-1,2-Dichloroethene	Ave	0.4439	0.4649		10.5	10.0	4.7	20.0
Hexane	Ave	2.809	2.814		10.0	10.0	0.2	20.0
1,1-Dichloroethane	Ave	0.8483	0.8550	0.1000	10.1	10.0	0.8	20.0
Vinyl acetate	Ave	0.5083	0.5642		22.2	20.0	11.0	50.0
cis-1,2-Dichloroethene	Ave	0.4510	0.4686		10.4	10.0	3.9	20.0
2,2-Dichloropropane	Ave	0.7069	0.7225		10.2	10.0	2.2	20.0
2-Butanol	Ave	1.136	1.069		282	300	-5.9	50.0
Chlorobromomethane	Ave	0.2299	0.2389		10.4	10.0	3.9	20.0
Tetrahydrofuran	Ave	0.0441	0.0499		22.6	20.0	13.1	50.0
Chloroform	Ave	0.8069	0.8231		10.2	10.0	2.0	20.0
1,1,1-Trichloroethane	Ave	0.7617	0.7869		10.3	10.0	3.3	20.0
Cyclohexane	Ave	0.8179	0.8439		10.3	10.0	3.2	35.0
1,1-Dichloropropene	Ave	0.6854	0.6867		10.0	10.0	0.2	20.0
Carbon tetrachloride	Ave	0.7969	0.8106		10.2	10.0	1.7	20.0
Isobutyl alcohol	Ave	0.4488	0.3773		210	250	-15.9	50.0
Benzene	Ave	1.336	1.334		9.99	10.0	-0.1	20.0
1,2-Dichloroethane	Ave	0.3573	0.3700		10.4	10.0	3.6	20.0
Trichloroethene	Ave	0.5427	0.5584		10.3	10.0	2.9	20.0
2-Pentanone	Ave	0.2000	0.2370		47.4	40.0	18.5	50.0
Methylcyclohexane	Ave	0.7305	0.7528		10.3	10.0	3.0	35.0
1,2-Dichloropropane	Ave	0.5051	0.4944		9.79	10.0	-2.1	20.0
Dibromomethane	Ave	0.2740	0.2739		10.0	10.0	-0.0	20.0
1,4-Dioxane	Ave	0.0014	0.0018		255	200	27.3	50.0
Dichlorobromomethane	Ave	0.7137	0.7571		10.6	10.0	6.1	20.0
cis-1,3-Dichloropropene	Ave	2.365	2.381		10.1	10.0	0.7	20.0
Toluene	Ave	1.474	1.482		10.1	10.0	0.5	20.0
trans-1,3-Dichloropropene	Ave	0.4400	0.4742		10.8	10.0	7.8	20.0
Ethyl methacrylate	Lin2		1.412		9.65	10.0	-3.5	35.0
1,1,2-Trichloroethane	Ave	0.2843	0.2968		10.4	10.0	4.4	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 280-181535/2 Calibration Date: 07/03/2013 19:38  
 Instrument ID: VMS\_H Calib Start Date: 07/03/2013 15:16  
 GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 07/03/2013 17:27  
 Lab File ID: H3249.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrachloroethene	Ave	1.888	1.914		10.1	10.0	1.4	20.0
1,3-Dichloropropane	Ave	1.734	1.776		10.2	10.0	2.4	20.0
Chlorodibromomethane	Ave	1.954	2.039		10.4	10.0	4.3	20.0
Ethylene Dibromide	Ave	1.420	1.473		10.4	10.0	3.7	20.0
1-Chlorohexane	Ave	2.680	2.673		9.97	10.0	-0.3	35.0
Chlorobenzene	Ave	4.084	4.040	0.3000	9.89	10.0	-1.1	20.0
1,1,1,2-Tetrachloroethane	Ave	1.913	1.894		9.90	10.0	-1.0	20.0
Ethylbenzene	Ave	1.987	1.959		9.86	10.0	-1.4	20.0
m-Xylene & p-Xylene	Ave	2.640	2.657		10.1	10.0	0.7	20.0
o-Xylene	Ave	2.351	2.274		9.67	10.0	-3.3	20.0
Styrene	Ave	4.001	3.727		9.32	10.0	-6.8	20.0
Bromoform	Ave	1.116	1.177	0.1000	10.5	10.0	5.4	20.0
Isopropylbenzene	Lin1		4.709		9.96	10.0	-0.4	20.0
Bromobenzene	Ave	1.157	1.159		10.0	10.0	0.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8875	0.9363	0.3000	10.5	10.0	5.5	20.0
1,2,3-Trichloropropane	Lin1		0.2410		11.1	10.0	10.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1945	0.2204		11.3	10.0	13.3	50.0
N-Propylbenzene	Ave	1.157	1.178		10.2	10.0	1.9	20.0
2-Chlorotoluene	Ave	0.9937	0.9729		9.79	10.0	-2.1	20.0
1,3,5-Trimethylbenzene	Ave	3.571	3.560		9.97	10.0	-0.3	20.0
4-Chlorotoluene	Ave	1.155	1.142		9.89	10.0	-1.1	20.0
tert-Butylbenzene	Ave	4.003	3.949		9.86	10.0	-1.4	20.0
1,2,4-Trimethylbenzene	Ave	3.448	3.404		9.87	10.0	-1.3	20.0
sec-Butylbenzene	Ave	1.046	1.001		9.57	10.0	-4.3	20.0
1,3-Dichlorobenzene	Ave	1.850	1.715		9.27	10.0	-7.3	20.0
4-Isopropyltoluene	Ave	4.604	4.561		9.90	10.0	-1.0	20.0
1,4-Dichlorobenzene	Ave	2.522	2.519		9.99	10.0	-0.1	20.0
n-Butylbenzene	Ave	4.237	4.035		9.52	10.0	-4.8	20.0
1,2-Dichlorobenzene	Ave	1.743	1.698		9.74	10.0	-2.6	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1698	0.1827		10.8	10.0	7.6	20.0
1,2,4-Trichlorobenzene	Ave	1.284	1.379		10.7	10.0	7.4	20.0
Hexachlorobutadiene	Lin2		1.265		11.4	10.0	13.6	20.0
Naphthalene	Ave	1.339	1.583		11.8	10.0	18.2	20.0
1,2,3-Trichlorobenzene	Ave	1.000	1.118		11.2	10.0	11.9	20.0



TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3249.D  
 Lims ID: ccv Client ID:  
 Inject. Date: 03-Jul-2013 19:38:30 Dil. Factor: 1.0000  
 Sample Type: CCV  
 Sample ID: ccv  
 Misc. Info.:  
 Operator: tinkhams Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 1  
 Lims Batch ID: 181535 Lims Sample ID: 2  
 Sublist: chrom-AQ\_VMSH\_8260\*sub32  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 23:56:07 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 20:10:07

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.841	3.841	0.0	94	407326	250.0	
* 2 Fluorobenzene	96	6.591	6.591	0.0	97	1361152	12.5	
* 3 1,4-Dioxane-d8	96		7.473					
* 4 Chlorobenzene-d5	119	10.907	10.907	0.0	85	378549	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.022	14.022	0.0	96	580901	12.5	
28 Dichlorodifluoromethane	85	2.101	2.101	0.0	89	637898	11.4	
30 Chloromethane	50	2.240	2.240	0.0	91	503292	10.4	
31 Butadiene	54	2.327	2.327	0.0	0	313924	10.6	
32 Vinyl chloride	62	2.362	2.362	0.0	97	433444	10.8	
35 Bromomethane	94	2.623	2.623	0.0	87	406270	10.1	
36 Chloroethane	64	2.675	2.675	0.0	94	287469	10.6	
37 Dichlorofluoromethane	67	2.867	2.867	0.0	95	1044657	10.8	
38 Trichlorofluoromethane	101	2.884	2.884	0.0	94	930132	10.6	
40 Ethyl ether	59	3.110	3.110	0.0	94	252872	10.3	
44 Acrolein	56	3.267	3.267	0.0	84	149431	127.3	
45 1,1-Dichloroethene	96	3.354	3.354	0.0	96	476790	10.2	
46 1,1,2-Trichloro-1,2,2-trifluoroethane	151	3.389	3.389	0.0	96	669449	10.3	
47 Acetone	43	3.406	3.406	0.0	95	167406	48.5	
48 Iodomethane	142	3.528	3.528	0.0	99	1161161	10.3	
50 Carbon disulfide	76	3.597	3.597	0.0	99	1749663	10.0	
52 3-Chloro-1-propene	41	3.702	3.702	0.0	83	820294	9.76	
53 Methyl acetate	43	3.702	3.702	0.0	87	685519	53.5	
54 Methylene Chloride	84	3.824	3.824	0.0	93	471542	10.6	
55 2-Methyl-2-propanol	59	3.928	3.928	0.0	66	195095	98.9	
57 Acrylonitrile	53	4.085	4.085	0.0	99	417558	114.2	
56 Methyl tert-butyl ether	73	4.085	4.085	0.0	86	803711	10.8	
58 trans-1,2-Dichloroethene	96	4.102	4.102	0.0	95	506186	10.5	
59 Hexane	57	4.346	4.346	0.0	94	852193	10.0	
60 1,1-Dichloroethane	63	4.537	4.537	0.0	96	931006	10.1	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
61 Vinyl acetate	43	4.572	4.572	0.0	97	1228730	22.2	
65 cis-1,2-Dichloroethene	96	5.199	5.199	0.0	84	510248	10.4	
66 2,2-Dichloropropane	77	5.216	5.216	0.0	80	786730	10.2	
67 2-Butanone (MEK)	43	5.216	5.216	0.0	52	318280	49.7	
71 sec-Butyl Alcohol	45	5.425	5.425	0.0	92	522290	282.3	
73 Chlorobromomethane	128	5.494	5.494	0.0	92	260176	10.4	
74 Tetrahydrofuran	42	5.547	5.547	0.0	89	108708	22.6	
75 Chloroform	83	5.564	5.564	0.0	82	896255	10.2	
76 1,1,1-Trichloroethane	97	5.808	5.808	0.0	95	856830	10.3	
77 Cyclohexane	56	5.877	5.877	0.0	90	918959	10.3	
78 1,1-Dichloropropene	75	5.982	5.982	0.0	93	747794	10.0	
79 Carbon tetrachloride	117	6.016	6.016	0.0	89	882643	10.2	
80 Isobutyl alcohol	41	6.138	6.138	0.0	70	153696	210.2	
81 Benzene	78	6.243	6.243	0.0	97	1453003	9.99	
82 1,2-Dichloroethane	62	6.278	6.278	0.0	91	402909	10.4	
84 n-Heptane	43	6.539	6.539	0.0	95	1088503	10.3	
86 Trichloroethene	95	7.061	7.061	0.0	94	608025	10.3	
88 2-Pentanone	43	7.287	7.287	0.0	87	1032162	47.4	
89 Methylcyclohexane	55	7.304	7.304	0.0	85	819688	10.3	
90 1,2-Dichloropropane	63	7.357	7.357	0.0	96	538319	9.79	
92 Dibromomethane	93	7.531	7.531	0.0	89	298283	10.0	
93 1,4-Dioxane	88	7.565	7.565	0.0	21	38461	254.6	
94 Dichlorobromomethane	83	7.722	7.722	0.0	94	824436	10.6	
96 2-Chloroethyl vinyl ether	63	8.122	8.122	0.0	88	108773	11.6	
97 cis-1,3-Dichloropropene	75	8.331	8.331	0.0	85	721004	10.1	
98 4-Methyl-2-pentanone (MIBK)	43	8.540	8.540	0.0	97	1000028	47.7	
99 Toluene	91	8.784	8.784	0.0	90	1613589	10.1	
100 trans-1,3-Dichloropropene	75	9.114	9.114	0.0	95	516313	10.8	
101 Ethyl methacrylate	69	9.236	9.236	0.0	89	427535	9.65	
102 1,1,2-Trichloroethane	97	9.375	9.375	0.0	85	323219	10.4	
103 Tetrachloroethene	164	9.567	9.567	0.0	98	579651	10.1	
104 1,3-Dichloropropane	76	9.619	9.619	0.0	88	537893	10.2	
105 2-Hexanone	43	9.741	9.741	0.0	97	658549	49.8	
108 Chlorodibromomethane	129	9.967	9.967	0.0	86	617411	10.4	
109 Ethylene Dibromide	107	10.141	10.141	0.0	98	445933	10.4	
110 1-Chlorohexane	91	10.907	10.907	0.0	95	809502	9.97	
111 Chlorobenzene	112	10.959	10.959	0.0	92	1223488	9.89	
112 1,1,1,2-Tetrachloroethane	131	11.098	11.098	0.0	92	573497	9.90	
113 Ethylbenzene	106	11.133	11.133	0.0	99	593237	9.86	
114 m-Xylene & p-Xylene	106	11.324	11.324	0.0	0	804776	10.1	
115 o-Xylene	106	11.916	11.916	0.0	90	688655	9.67	
116 Styrene	104	11.951	11.951	0.0	94	1128776	9.32	
117 Bromoform	173	12.212	12.212	0.0	95	356445	10.5	
118 Isopropylbenzene	105	12.421	12.421	0.0	95	2188225	9.96	
120 Cyclohexanone	55	12.560	12.560	0.0	88	277625	504.2	
122 Bromobenzene	156	12.821	12.821	0.0	94	538631	10.0	
121 1,1,2,2-Tetrachloroethane	83	12.839	12.839	0.0	80	435096	10.5	
123 1,2,3-Trichloropropane	110	12.873	12.873	0.0	68	111996	11.1	
124 trans-1,4-Dichloro-2-butene	53	12.908	12.908	0.0	59	102399	11.3	
125 N-Propylbenzene	120	12.943	12.943	0.0	94	547623	10.2	
126 2-Chlorotoluene	126	13.047	13.047	0.0	92	452133	9.79	
127 1,3,5-Trimethylbenzene	105	13.169	13.169	0.0	93	1654414	9.97	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
128 4-Chlorotoluene	126	13.187	13.187	0.0	98	530516	9.89	
129 tert-Butylbenzene	119	13.569	13.569	0.0	93	1835205	9.86	
130 1,2,4-Trimethylbenzene	105	13.622	13.622	0.0	96	1582010	9.87	
131 sec-Butylbenzene	134	13.813	13.813	0.0	90	465012	9.57	
132 1,3-Dichlorobenzene	146	13.952	13.952	0.0	88	796988	9.27	
133 4-Isopropyltoluene	119	13.987	13.987	0.0	92	2119373	9.90	
134 1,4-Dichlorobenzene	146	14.039	14.039	0.0	81	1170439	9.99	
137 n-Butylbenzene	91	14.422	14.422	0.0	95	1875204	9.52	
138 1,2-Dichlorobenzene	146	14.440	14.440	0.0	94	789152	9.74	
139 1,2-Dibromo-3-Chloropropane	157	15.240	15.240	0.0	83	84895	10.8	
141 1,2,4-Trichlorobenzene	180	16.006	16.006	0.0	94	640690	10.7	
142 Hexachlorobutadiene	225	16.163	16.163	0.0	91	587779	11.4	
143 Naphthalene	128	16.232	16.232	0.0	97	735606	11.8	
144 1,2,3-Trichlorobenzene	180	16.458	16.458	0.0	95	519719	11.2	
S 148 1,3-Dichloropropene, Total	1				0		20.8	
S 149 1,2-Dichloroethene, Total	1				0		20.9	
S 150 Xylenes, Total	106				0		19.7	
S 145 Trihalomethanes, Total	1				0		41.8	
S 146 Xylenes, Total (URS)	1				0		19.7	
S 147 Total BTEX	1				0		49.6	
S 151 1,2-Dichloroethene, Total (URS)	96				0		20.9	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3249.D

Injection Date: 03-Jul-2013 19:38:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181535

Lims Sample ID: 2

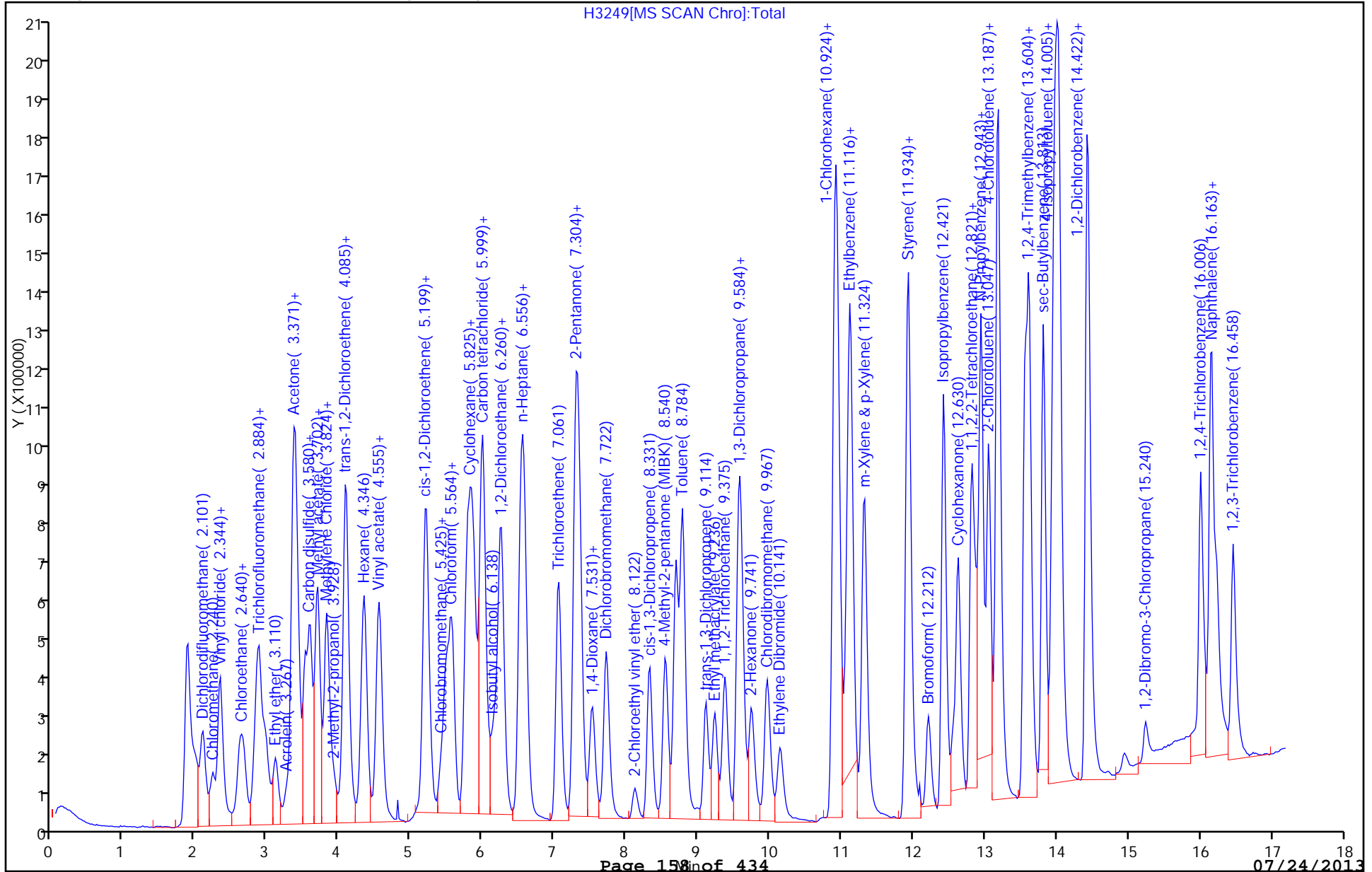
Operator ID: tinkhams

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 280-181535/3 Calibration Date: 07/03/2013 20:00  
 Instrument ID: VMS\_H Calib Start Date: 07/03/2013 10:43  
 GC Column: DB-624 (75.53) ID: 0.53 (mm) Calib End Date: 07/03/2013 12:31  
 Lab File ID: H3250.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.0008		348	500	-30.5	50.0
Acetonitrile	Ave	0.0082	0.0097		119	100	18.8	50.0
Isopropyl alcohol	Ave	0.1547	0.1513		97.8	100	-2.2	50.0
Isopropyl ether	Ave	0.3238	0.3102		9.58	10.0	-4.2	35.0
2-Chloro-1,3-butadiene	Ave	0.6130	0.5858		9.56	10.0	-4.4	35.0
Tert-butyl ethyl ether	Ave	1.163	1.159		9.96	10.0	-0.4	35.0
Ethyl acetate	Ave	0.1193	0.1202		20.2	20.0	0.8	50.0
Propionitrile	Ave	0.0118	0.0122		103	100	3.4	50.0
Methacrylonitrile	Ave	0.0860	0.0874		102	100	1.6	50.0
Tert-amyl methyl ether	Ave	0.8274	0.8496		10.3	10.0	2.7	35.0
Methyl methacrylate	Ave	0.0633	0.0636		20.1	20.0	0.4	35.0
2-Nitropropane	Ave	0.0352	0.0347		19.7	20.0	-1.6	50.0
cis-1,4-Dichloro-2-butene	Ave	0.1630	0.1626		9.97	10.0	-0.3	50.0
Dibromofluoromethane (Surr)	Ave	0.6838	0.7238		9.53	9.00	5.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2937	0.3144		9.64	9.00	7.1	20.0
Toluene-d8 (Surr)	Ave	4.918	4.930		9.02	9.00	0.2	20.0
4-Bromofluorobenzene (Surr)	Ave	1.653	1.700		9.26	9.00	2.9	20.0

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3250.D  
 Lims ID: ccv Client ID:  
 Inject. Date: 03-Jul-2013 20:00:30 Dil. Factor: 1.0000  
 Sample Type: CCV  
 Sample ID: ccv  
 Misc. Info.:  
 Operator: tinkhams Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 2  
 Lims Batch ID: 181535 Lims Sample ID: 3  
 Sublist: chrom-AQ\_VMSH\_8260\*sub34  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 23:56:09 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 20:23:43

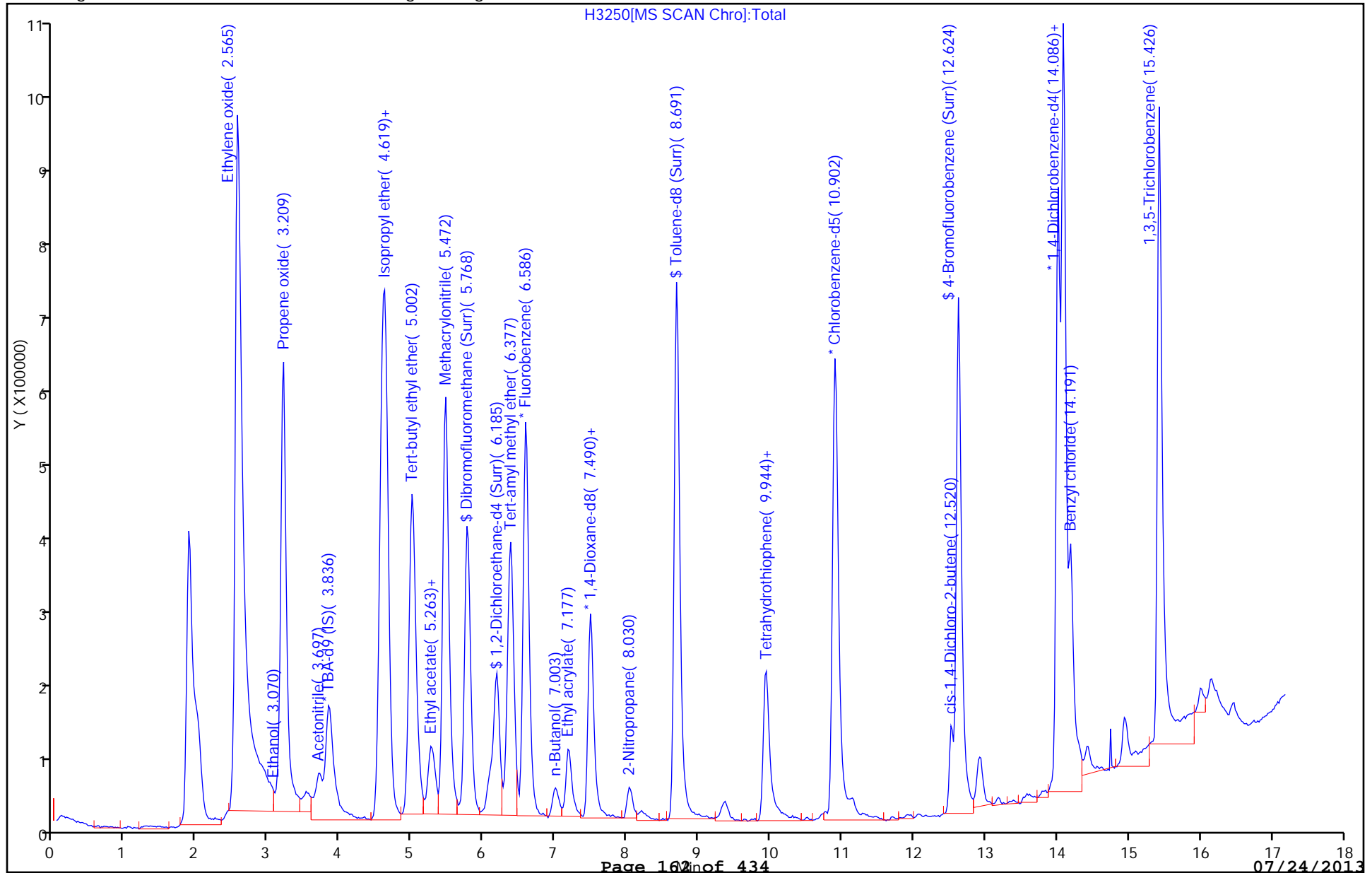
Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.853	3.853	0.0	89	356378	250.0	
* 2 Fluorobenzene	96	6.586	6.586	0.0	97	1417753	12.5	
* 3 1,4-Dioxane-d8	96	7.473	7.473	0.0	93	19792	250.0	
* 4 Chlorobenzene-d5	119	10.902	10.902	0.0	85	416292	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.017	14.017	0.0	96	628294	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.768	5.768	0.0	65	738840	9.53	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.185	6.185	0.0	98	320940	9.64	
\$ 10 Toluene-d8 (Surr)	98	8.691	8.691	0.0	93	1477707	9.02	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.624	12.624	0.0	86	769204	9.26	
34 Ethylene oxide	43	2.565	2.565	0.0	99	1398330	2134.9	
39 Ethanol	45	3.070	3.070	0.0	50	43998	347.5	
43 Propene oxide	58	3.209	3.209	0.0	96	1545667	512.6	
51 Acetonitrile	41	3.697	3.697	0.0	82	110154	118.8	
62 Isopropyl ether	87	4.584	4.584	0.0	98	351851	9.58	
49 Isopropyl alcohol	45	4.584	4.584	0.0	92	1716330	97.8	
63 2-Chloro-1,3-butadiene	53	4.636	4.636	0.0	86	664463	9.56	
64 Tert-butyl ethyl ether	59	5.002	5.002	0.0	99	1314152	9.96	
69 Ethyl acetate	43	5.263	5.263	0.0	98	272764	20.2	
70 Propionitrile	54	5.315	5.315	0.0	89	138443	103.4	
72 Methacrylonitrile	41	5.472	5.472	0.0	95	990814	101.6	
83 Tert-amyl methyl ether	73	6.377	6.377	0.0	96	963571	10.3	
85 n-Butanol	56	7.003	7.003	0.0	88	86061	261.6	
87 Ethyl acrylate	55	7.177	7.177	0.0	99	312928	10.5	
91 Methyl methacrylate	100	7.490	7.490	0.0	94	144147	20.1	
95 2-Nitropropane	41	8.030	8.030	0.0	98	78668	19.7	
107 Tetrahydrothiophene	60	9.944	9.944	0.0	89	140262	10.0	
106 n-Butyl acetate	43	9.944	9.944	0.0	95	334259	10.5	
119 cis-1,4-Dichloro-2-butene	53	12.520	12.520	0.0	92	81717	9.97	
135 1,2,3-Trimethylbenzene	105	14.086	14.086	0.0	98	1405399	9.08	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
136 Benzyl chloride	126	14.191	14.191	0.0	99	110081	9.94	
140 1,3,5-Trichlorobenzene	180	15.426	15.426	0.0	97	777637	9.36	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3250.D  
 Injection Date: 03-Jul-2013 20:00:30 Limit Group: MSV - 8260B Water and Solid  
 Client ID: Instrument ID: VMS\_H  
 Lims Batch ID: 181535 Lims Sample ID: 3  
 Operator ID: tinkhams Purge Vol: 20.000 mL  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1





TestAmerica Denver  
Target Compound Quantitation Report

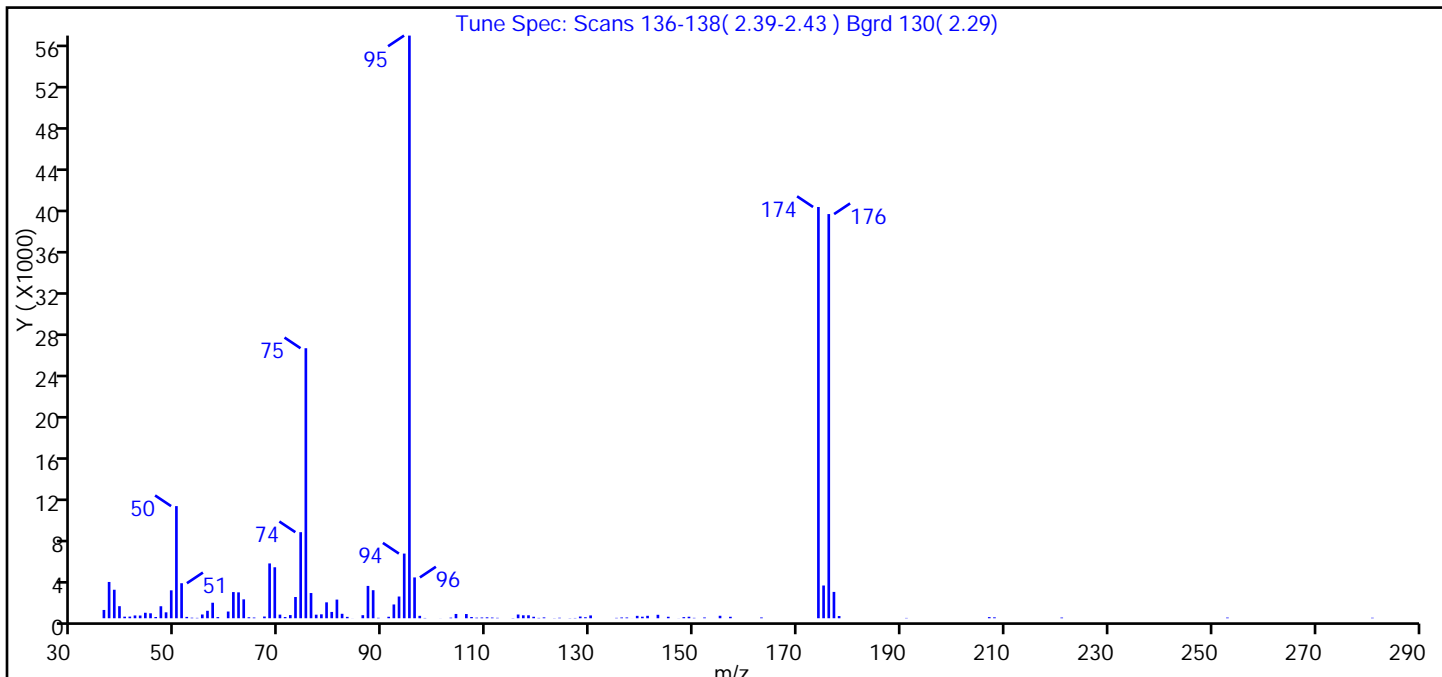
Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3220.D  
 Lims ID: bfb Client ID:  
 Inject. Date: 03-Jul-2013 08:04:30 Dil. Factor: 1.0000  
 Sample Type: BFB  
 Sample ID: bfb  
 Misc. Info.:  
 Operator: meierg Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 100  
 Lims Batch ID: 181419 Lims Sample ID: 1  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 18:59:58 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
\$ 7 BFB	95	2.409	2.409	0.0	85	281271	0	

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3220.D  
 Injection Date: 03-Jul-2013 08:04:30 Limit Group: MSV - 8260B Water and Solid  
 Client ID: Instrument ID: VMS\_H  
 Lims Batch ID: 181419 Lims Sample ID: 1  
 Operator ID: meierg Purge Vol: 20.000 mL  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Tune Method: BFB Method 8260

\$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.25
75	30.00 - 60.00% of mass 95	46.34
96	5.00 - 9.00% of mass 95	7.01
173	Less than 2.00% of mass 174	0.00 ( 0.00)
174	Greater than 50.00% of mass 95	70.58
175	5.00 - 9.00% of mass 174	5.62 ( 7.96)
176	95.00 - 101.00% of mass 174	69.37 ( 98.28)
177	5.00 - 9.00% of mass 176	4.52 ( 6.52)

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3220.D\AQ\_VMSH\_8260.rsl\spectra.d  
Injection Date: 03-Jul-2013 08:04:30  
Spectrum: Tune Spec: Scans 136-138( 2.39-2.43 ) Bgrd 130( 2.29)  
Base Peak: 95.00  
Minimum % Base Peak: 0  
Number of Points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	806	65.00	70	96.00	3964	136.00	76
37.00	3524	67.00	167	97.00	236	137.00	76
38.00	2768	68.00	5323	98.00	29	138.00	3
39.00	1173	69.00	4950	101.00	7	139.00	234
40.00	154	70.00	353	103.00	58	140.00	150
41.00	161	71.00	117	104.00	417	141.00	238
42.00	273	72.00	308	106.00	410	143.00	337
43.00	265	73.00	2063	107.00	120	145.00	144
44.00	534	74.00	8357	108.00	57	147.00	8
45.00	482	75.00	26216	109.00	75	148.00	109
46.00	121	76.00	2449	110.00	90	149.00	147
47.00	1166	77.00	347	111.00	69	150.00	40
48.00	576	78.00	382	112.00	42	152.00	76
49.00	2711	79.00	1546	115.00	21	155.00	241
50.00	10888	80.00	613	116.00	363	157.00	143
51.00	3401	81.00	1812	117.00	288	163.00	77
52.00	132	82.00	434	118.00	288	174.00	39928
53.00	54	83.00	135	119.00	144	175.00	3180
54.00	38	84.00	6	120.00	35	176.00	39240
55.00	365	86.00	299	121.00	83	177.00	2558
56.00	725	87.00	3140	123.00	16	178.00	215
57.00	1507	88.00	2724	124.00	49	191.00	32
58.00	114	89.00	42	126.00	18	207.00	110
60.00	653	91.00	144	127.00	28	208.00	88
61.00	2542	92.00	1339	128.00	167	221.00	68
62.00	2515	93.00	2110	129.00	100	253.00	66
63.00	1836	94.00	6279	130.00	275	281.00	49
64.00	97	95.00	56568	135.00	39		

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3248.D  
 Lims ID: bfb Client ID:  
 Inject. Date: 03-Jul-2013 19:12:30 Dil. Factor: 1.0000  
 Sample Type: BFB  
 Sample ID: bfb  
 Misc. Info.:  
 Operator: tinkhams Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 100  
 Lims Batch ID: 181535 Lims Sample ID: 1  
 Detector: MS SCAN

Method: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 23:56:06 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams Date: 03-Jul-2013 19:17:50

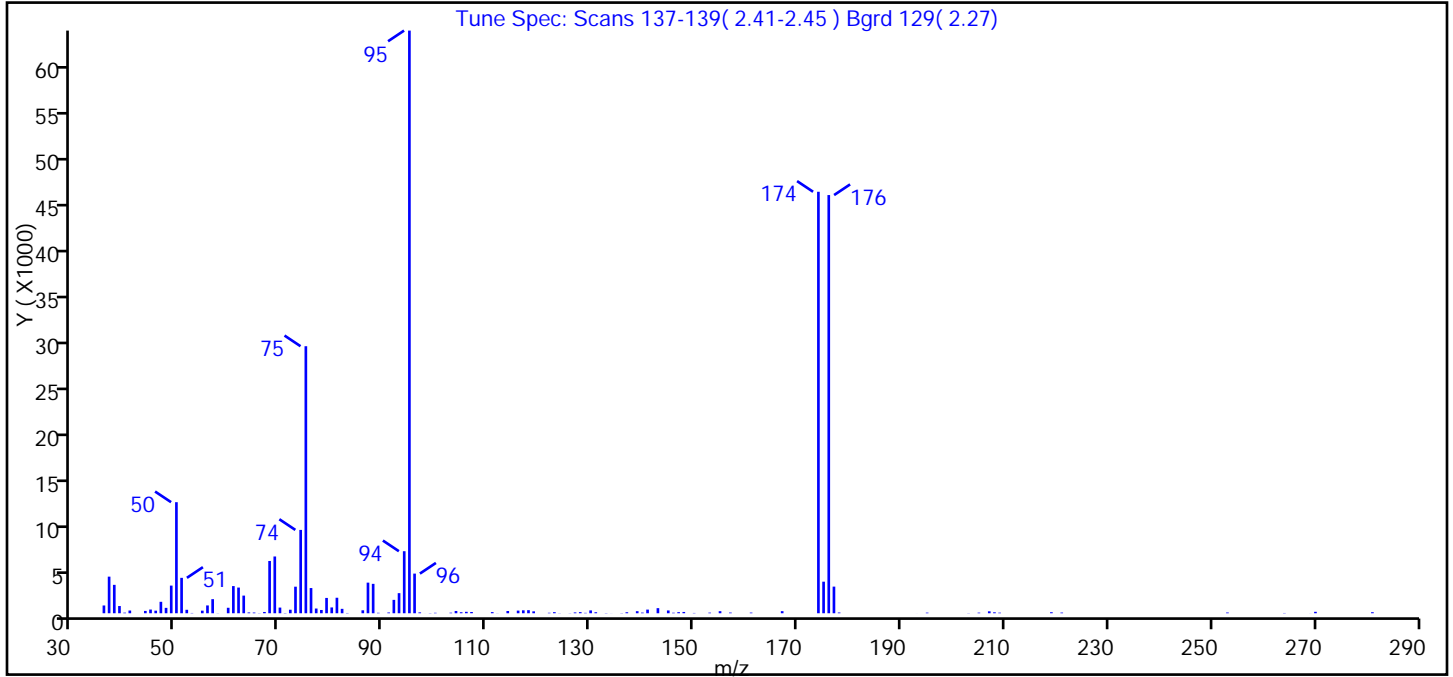
Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
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\$ 7 BFB	95	2.429	2.429	0.0	86	310698	0	
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TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3248.D  
 Injection Date: 03-Jul-2013 19:12:30 Limit Group: MSV - 8260B Water and Solid  
 Client ID: Instrument ID: VMS\_H  
 Lims Batch ID: 181535 Lims Sample ID: 1  
 Operator ID: tinkhams Purge Vol: 20.000 mL  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Tune Method: BFB Method 8260

\$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.06
75	30.00 - 60.00% of mass 95	45.83
96	5.00 - 9.00% of mass 95	6.81
173	Less than 2.00% of mass 174	0.00 ( 0.00)
174	Greater than 50.00% of mass 95	72.34
175	5.00 - 9.00% of mass 174	5.42 ( 7.49)
176	95.00 - 101.00% of mass 174	71.77 ( 99.22)
177	5.00 - 9.00% of mass 176	4.57 ( 6.37)

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3248.D\AQ\_VMSH\_8260.rsl\spectra.d  
Injection Date: 03-Jul-2013 19:12:30  
Spectrum: Tune Spec: Scans 137-139( 2.41-2.45 ) Bgrd 129( 2.27)  
Base Peak: 95.00  
Minimum % Base Peak: 0  
Number of Points: 116

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	851	69.00	6208	103.00	62	145.00	306
37.00	4003	70.00	621	104.00	248	146.00	58
38.00	3106	71.00	28	105.00	113	147.00	121
39.00	791	72.00	386	106.00	158	148.00	142
40.00	66	73.00	2905	107.00	137	150.00	34
41.00	298	74.00	9114	111.00	125	153.00	69
44.00	256	75.00	29200	112.00	9	155.00	227
45.00	405	76.00	2756	114.00	246	157.00	76
46.00	282	77.00	517	116.00	290	161.00	73
47.00	1252	78.00	359	117.00	322	167.00	228
48.00	590	79.00	1676	118.00	337	174.00	46088
49.00	3024	80.00	636	119.00	209	175.00	3453
50.00	12145	81.00	1696	122.00	53	176.00	45728
51.00	3873	82.00	483	123.00	120	177.00	2913
52.00	379	83.00	30	124.00	16	178.00	82
53.00	32	86.00	324	126.00	15	193.00	3
55.00	284	87.00	3348	127.00	91	195.00	69
56.00	855	88.00	3216	128.00	125	203.00	17
57.00	1542	89.00	50	129.00	45	205.00	69
58.00	13	91.00	85	130.00	312	207.00	212
60.00	600	92.00	1464	131.00	112	208.00	105
61.00	2971	93.00	2198	133.00	23	209.00	65
62.00	2809	94.00	6784	134.00	6	219.00	112
63.00	1930	95.00	63712	136.00	21	221.00	75
64.00	89	96.00	4336	137.00	110	253.00	82
65.00	79	97.00	95	139.00	227	264.00	31
66.00	19	98.00	3	140.00	73	269.00	6
67.00	140	99.00	21	141.00	400	270.00	159
68.00	5716	100.00	51	143.00	558	281.00	114

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 280-181535/27  
 Matrix: Water Lab File ID: H3252.D  
 Analysis Method: 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 20 (mL) Date Analyzed: 07/03/2013 20:43  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 (75.53) ID: 0.53 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 181535 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-66-3	Chloroform	0.20	U	1.0	0.20	0.16
156-59-2	cis-1,2-Dichloroethene	0.20	U	1.0	0.20	0.15
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	1.0	0.20	0.15
79-01-6	Trichloroethene	0.20	U	1.0	0.20	0.16
75-01-4	Vinyl chloride	0.40	U	1.5	0.40	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
1868-53-7	Dibromofluoromethane (Surr)	107		85-115
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		70-120
460-00-4	4-Bromofluorobenzene (Surr)	104		75-120
2037-26-5	Toluene-d8 (Surr)	102		85-120

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3252.D  
 Lims ID: mb Client ID:  
 Inject. Date: 03-Jul-2013 20:43:30 Dil. Factor: 1.0000  
 Sample Type: MB  
 Sample ID: mb  
 Misc. Info.:  
 Operator: tinkhams Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 4  
 Lims Batch ID: 181535 Lims Sample ID: 27  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 23:56:09 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 22:09:26

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.860	3.853	0.007	95	373441	250.0	
* 2 Fluorobenzene	96	6.575	6.586	-0.011	98	1434185	12.5	
* 3 1,4-Dioxane-d8	96	7.498	7.473	0.025	1	19569	250.0	
* 4 Chlorobenzene-d5	119	10.909	10.902	0.007	86	417396	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.024	14.017	0.007	97	625626	12.5	
\$ 6 a,a,a-Trifluorotoluene	1		0.000					
\$ 7 BFB	95	2.520	2.429	0.091	0	584	0	
\$ 8 Dibromofluoromethane (Surr)	111	5.757	5.768	-0.011	75	755303	9.63	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.175	6.185	-0.010	99	321461	9.54	
\$ 10 Toluene-d8 (Surr)	98	8.698	8.691	0.007	93	1512581	9.21	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.631	12.624	0.007	87	775246	9.37	
18 2,2-Dimethylpentane	1		0.000					
12 3-Ethylpentane	1		0.000					
21 2,4-Dimethylpentane	1		0.000					
24 3-Methylhexane	1		0.000					
19 2,3-Dimethylpentane	1		0.000					
23 2-Methylhexane	1		0.000					
17 2,2,3-Trimethylbutane	1		0.000					
13 n-Nonyl Aldehyde	1		0.000					
22 Pentachloroethane	167		0.000					
15 Dimethyl disulfide	1		0.000					
16 3,3-Dimethylpentane	1		0.000					
14 2-Butoxyethanol TIC	1		0.000					
20 2-Methylnaphthalene	142		0.000					
25 Dichloroacetonitrile TIC	74		1.000					
26 2,3-dichloro-1-propene TIC	75		1.000					
27 Chlorotrifluoroethene	116		2.048					
28 Dichlorodifluoromethane	85		2.101					
29 1,2-Dichloro-1,1,2,2-tetrafluoro	85		2.204					
30 Chloromethane	50		2.240					



Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
31 Butadiene	54		2.327					
32 Vinyl chloride	62		2.362					
33 2-Chloro-1,1,1-Trifluoroethane	118		2.378					
34 Ethylene oxide	43		2.565					
35 Bromomethane	94		2.623					
36 Chloroethane	64		2.675					
37 Dichlorofluoromethane	67		2.867					
38 Trichlorofluoromethane	101		2.884					
39 Ethanol	45		3.070					
40 Ethyl ether	59		3.110					
41 1,2-Dichloro-1,1,2-trifluoroetha	117		3.127					
42 1,1,1-Trifluoro-2,2-dichloroetha	83		3.179					
43 Propene oxide	58		3.209					
44 Acrolein	56		3.267					
45 1,1-Dichloroethene	96		3.354					
46 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.389					
47 Acetone	43	3.408	3.406	0.002	95	12951	3.56	
48 Iodomethane	142		3.528					
50 Carbon disulfide	76		3.597					
51 Acetonitrile	41		3.697					
52 3-Chloro-1-propene	41		3.702					
53 Methyl acetate	43		3.702					
54 Methylene Chloride	84	3.825	3.824	0.001	93	66493	0.2500	
55 2-Methyl-2-propanol	59		3.928					
57 Acrylonitrile	53		4.085					
56 Methyl tert-butyl ether	73		4.085					
58 trans-1,2-Dichloroethene	96		4.102					
59 Hexane	57		4.346					
60 1,1-Dichloroethane	63		4.537					
61 Vinyl acetate	43		4.572					
62 Isopropyl ether	87		4.584					
49 Isopropyl alcohol	45		4.584					
63 2-Chloro-1,3-butadiene	53		4.636					
64 Tert-butyl ethyl ether	59		5.002					19
65 cis-1,2-Dichloroethene	96		5.199					19
66 2,2-Dichloropropane	77		5.216					
67 2-Butanone (MEK)	43		5.216					19
69 Ethyl acetate	43		5.263					
70 Propionitrile	54		5.315					
68 Propene oxide TIC	58		5.334					
71 sec-Butyl Alcohol	45		5.425					
72 Methacrylonitrile	41		5.472					
73 Chlorobromomethane	128		5.494					
74 Tetrahydrofuran	42		5.547					
75 Chloroform	83		5.564					
76 1,1,1-Trichloroethane	97		5.808					
77 Cyclohexane	56		5.877					
78 1,1-Dichloropropene	75		5.982					
79 Carbon tetrachloride	117		6.016					19
80 Isobutyl alcohol	41		6.138					
81 Benzene	78		6.243					
82 1,2-Dichloroethane	62		6.278					

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
83 Tert-amyl methyl ether	73		6.377					
84 n-Heptane	43		6.539					
85 n-Butanol	56		7.003					
86 Trichloroethene	95		7.061					
87 Ethyl acrylate	55		7.177					
88 2-Pentanone	43		7.287					19
89 Methylcyclohexane	55		7.304					
90 1,2-Dichloropropane	63		7.357					
91 Methyl methacrylate	100		7.490					
92 Dibromomethane	93		7.531					
93 1,4-Dioxane	88		7.565					
94 Dichlorobromomethane	83		7.722					
95 2-Nitropropane	41		8.030					
96 2-Chloroethyl vinyl ether	63		8.122					
97 cis-1,3-Dichloropropene	75		8.331					
98 4-Methyl-2-pentanone (MIBK)	43		8.540					19
99 Toluene	91		8.784					
100 trans-1,3-Dichloropropene	75		9.114					
101 Ethyl methacrylate	69		9.236					19
102 1,1,2-Trichloroethane	97		9.375					19
103 Tetrachloroethene	164		9.567					
104 1,3-Dichloropropane	76		9.619					
105 2-Hexanone	43		9.741					
107 Tetrahydrothiophene	60		9.944					
106 n-Butyl acetate	43		9.944					29
108 Chlorodibromomethane	129		9.967					
109 Ethylene Dibromide	107		10.141					
110 1-Chlorohexane	91		10.907					
111 Chlorobenzene	112		10.959					
112 1,1,1,2-Tetrachloroethane	131		11.098					19
113 Ethylbenzene	106		11.133					
114 m-Xylene & p-Xylene	106		11.324					
115 o-Xylene	106		11.916					
116 Styrene	104		11.951					
117 Bromoform	173		12.212					
118 Isopropylbenzene	105		12.421					
119 cis-1,4-Dichloro-2-butene	53		12.520					
120 Cyclohexanone	55		12.560					
122 Bromobenzene	156		12.821					
121 1,1,2,2-Tetrachloroethane	83		12.839					
123 1,2,3-Trichloropropane	110		12.873					
124 trans-1,4-Dichloro-2-butene	53		12.908					
125 N-Propylbenzene	120		12.943					149
126 2-Chlorotoluene	126		13.047					
127 1,3,5-Trimethylbenzene	105		13.169					
128 4-Chlorotoluene	126		13.187					
129 tert-Butylbenzene	119		13.569					
130 1,2,4-Trimethylbenzene	105		13.622					
131 sec-Butylbenzene	134		13.813					
132 1,3-Dichlorobenzene	146		13.952					
133 4-Isopropyltoluene	119		13.987					
134 1,4-Dichlorobenzene	146		14.039					

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
135 1,2,3-Trimethylbenzene	105		14.086					
136 Benzyl chloride	126		14.191					
137 n-Butylbenzene	91		14.422					
138 1,2-Dichlorobenzene	146		14.440					
139 1,2-Dibromo-3-Chloropropane	157		15.240					
140 1,3,5-Trichlorobenzene	180		15.426					
141 1,2,4-Trichlorobenzene	180	16.008	16.006	0.002	76	23189	0.3608	
142 Hexachlorobutadiene	225		16.163					
143 Naphthalene	128	16.234	16.232	0.002	76	31480	0.4698	
144 1,2,3-Trichlorobenzene	180	16.460	16.458	0.002	78	17020	0.3402	
S 148 1,3-Dichloropropene, Total	1				0		0	7
S 149 1,2-Dichloroethene, Total	1				0		0	7
S 150 Xylenes, Total	106				0		0	7
S 145 Trihalomethanes, Total	1				0		0	7
S 146 Xylenes, Total (URS)	1				0		0	7
S 147 Total BTEX	1		0.000					7
S 151 1,2-Dichloroethene, Total (URS)	96				0		0	7

## QC Flag Legend

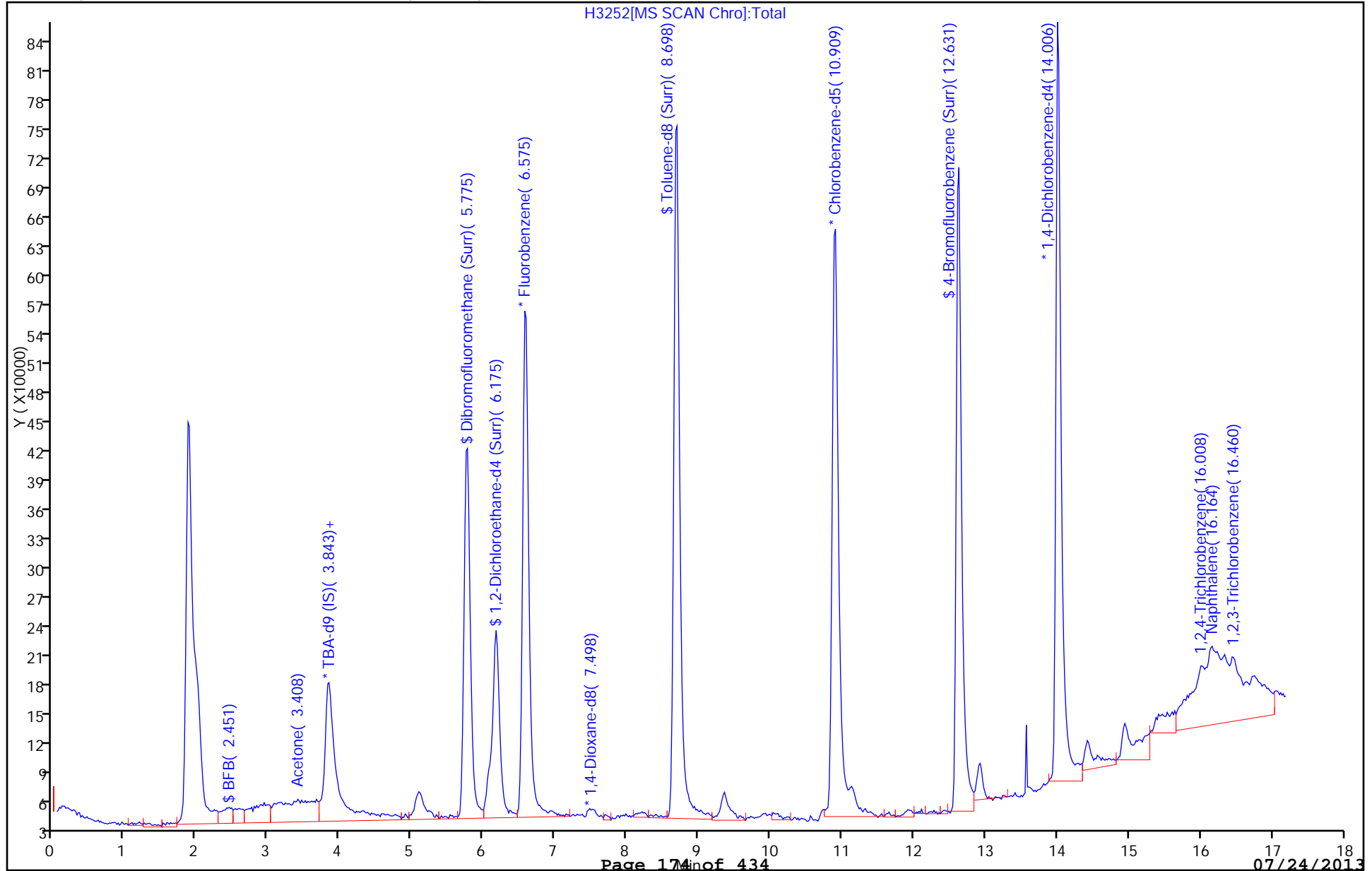
## Processing Flags

- 1 - Missing Peaks
- 2 - Failed Coelution Test
- 4 - Failed Signal Ratio Test
- 7 - Failed Limit of Detection
- 9 - Failed A Reference Spectral Test

TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3252.D  
Injection Date: 03-Jul-2013 20:43:30 Limit Group: MSV - 8260B Water and Solid  
Client ID: Instrument ID: VMS\_H  
Lims Batch ID: 181535 Lims Sample ID: 27  
Operator ID: tinkhams Purge Vol: 20.000 mL  
Column Type: DB-624 (75.53) Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 280-181535/26  
 Matrix: Water Lab File ID: H3251.D  
 Analysis Method: 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 20 (mL) Date Analyzed: 07/03/2013 20:22  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 (75.53) ID: 0.53 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 181535 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-66-3	Chloroform	4.89		1.0	0.20	0.16
156-59-2	cis-1,2-Dichloroethene	4.90		1.0	0.20	0.15
127-18-4	Tetrachloroethene	4.89		1.0	0.40	0.20
156-60-5	trans-1,2-Dichloroethene	5.12		1.0	0.20	0.15
79-01-6	Trichloroethene	4.93		1.0	0.20	0.16
75-01-4	Vinyl chloride	4.78		1.5	0.40	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
1868-53-7	Dibromofluoromethane (Surr)	94		85-115
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-120
460-00-4	4-Bromofluorobenzene (Surr)	92		75-120
2037-26-5	Toluene-d8 (Surr)	99		85-120

TestAmerica Denver  
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3251.D  
 Lims ID: lcs Client ID:  
 Inject. Date: 03-Jul-2013 20:22:30 Dil. Factor: 1.0000  
 Sample Type: LCS  
 Sample ID: lcs  
 Misc. Info.:  
 Operator: tinkhams Instrument ID: VMS\_H  
 Purge Vol: 20.000 mL ALS Bottle#: 3  
 Lims Batch ID: 181535 Lims Sample ID: 26  
 Detector: MS SCAN  
 Method: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\AQ\_VMSH\_8260.m  
 Last Update: 03-Jul-2013 23:56:09 Calib Date: 03-Jul-2013 17:27:30  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Denchrom\ChromData\VMS\_H\20130703-13204.b\H3245.D  
 Limit Group: MSV - 8260B Water and Solid  
 Integrator: RTE ID Type: Deconvolution ID  
 Column Type: DB-624 (75.53) Column Dia: 0.53 mm  
 Process Host: DENPC293

First Level Reviewer: tinkhams

Date: 03-Jul-2013 20:44:51

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.841	3.853	-0.012	74	370892	250.0	
* 2 Fluorobenzene	96	6.590	6.586	0.004	97	1423471	12.5	
* 3 1,4-Dioxane-d8	96		7.473					19
* 4 Chlorobenzene-d5	119	10.906	10.902	0.004	85	388318	12.5	
* 5 1,4-Dichlorobenzene-d4	152	14.022	14.017	0.005	97	608370	12.5	
\$ 8 Dibromofluoromethane (Surr)	111	5.772	5.768	0.004	60	660838	8.49	
\$ 9 1,2-Dichloroethane-d4 (Surr)	65	6.173	6.185	-0.012	94	298379	8.92	
\$ 10 Toluene-d8 (Surr)	98	8.696	8.691	0.005	91	1359129	8.90	
\$ 11 4-Bromofluorobenzene (Surr)	95	12.629	12.624	0.005	85	667171	8.29	
28 Dichlorodifluoromethane	85	2.100	2.101	-0.001	87	297761	5.10	
30 Chloromethane	50	2.222	2.240	-0.018	98	232498	4.57	
31 Butadiene	54	2.327	2.327	0.0	0	138406	4.48	
32 Vinyl chloride	62	2.344	2.362	-0.018	95	200752	4.78	
35 Bromomethane	94	2.605	2.623	-0.018	90	200170	4.75	
36 Chloroethane	64	2.675	2.675	0.0	98	138143	4.86	
37 Dichlorofluoromethane	67	2.849	2.867	-0.017	81	520406	5.14	
38 Trichlorofluoromethane	101	2.883	2.884	-0.001	88	443117	4.83	
40 Ethyl ether	59	3.110	3.110	0.0	93	125751	4.89	
44 Acrolein	56	3.266	3.267	-0.001	94	70432	57.4	
45 1,1-Dichloroethene	96	3.353	3.354	-0.001	97	234413	4.81	
46 1,1,2-Trichloro-1,2,2-trifluoroethane	151	3.388	3.389	-0.001	96	320111	4.71	
47 Acetone	43	3.406	3.406	0.0	88	81340	22.5	
48 Iodomethane	142	3.527	3.528	-0.001	97	596548	5.05	
50 Carbon disulfide	76	3.597	3.597	0.0	99	853167	4.66	
52 3-Chloro-1-propene	41	3.684	3.702	-0.018	75	403835	4.60	
53 Methyl acetate	43	3.701	3.702	-0.001	76	337319	24.8	
54 Methylene Chloride	84	3.823	3.824	-0.001	92	268534	5.17	
55 2-Methyl-2-propanol	59	3.928	3.928	0.0	77	77672	43.2	
57 Acrylonitrile	53	4.067	4.085	-0.018	63	206026	53.9	
56 Methyl tert-butyl ether	73	4.084	4.085	-0.001	79	388220	5.01	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
58 trans-1,2-Dichloroethene	96	4.084	4.102	-0.018	95	258942	5.12	
59 Hexane	57	4.345	4.346	-0.001	94	428357	4.91	
60 1,1-Dichloroethane	63	4.537	4.537	0.0	96	483625	5.01	
61 Vinyl acetate	43	4.554	4.572	-0.018	97	611035	10.6	
65 cis-1,2-Dichloroethene	96	5.198	5.199	-0.001	86	251892	4.90	
66 2,2-Dichloropropane	77	5.198	5.216	-0.018	70	383546	4.76	
67 2-Butanone (MEK)	43	5.198	5.216	-0.018	52	144633	21.6	
71 sec-Butyl Alcohol	45	5.424	5.425	-0.001	75	227237	134.9	
73 Chlorobromomethane	128	5.494	5.494	0.0	79	127302	4.86	
74 Tetrahydrofuran	42	5.546	5.547	-0.001	40	53036	10.6	
75 Chloroform	83	5.564	5.564	0.0	89	449303	4.89	
76 1,1,1-Trichloroethane	97	5.807	5.808	-0.001	97	419880	4.84	
77 Cyclohexane	56	5.859	5.877	-0.018	93	454697	4.88	
78 1,1-Dichloropropene	75	5.981	5.982	-0.001	92	395545	5.07	
79 Carbon tetrachloride	117	5.999	6.016	-0.017	79	434444	4.79	
80 Isobutyl alcohol	41	6.138	6.138	0.0	84	71510	107.4	
81 Benzene	78	6.242	6.243	-0.001	97	719654	4.73	
82 1,2-Dichloroethane	62	6.277	6.278	-0.001	73	201403	4.95	
84 n-Heptane	43	6.521	6.539	-0.018	96	537193	4.86	
86 Trichloroethene	95	7.043	7.061	-0.018	94	304906	4.93	
88 2-Pentanone	43	7.286	7.287	-0.001	78	377138	16.6	
89 Methylcyclohexane	55	7.304	7.304	0.0	89	397489	4.78	
90 1,2-Dichloropropane	63	7.356	7.357	-0.001	94	278813	4.85	
92 Dibromomethane	93	7.530	7.531	-0.001	89	146487	4.69	
93 1,4-Dioxane	88	7.548	7.565	-0.017	9	15473	98.0	
94 Dichlorobromomethane	83	7.722	7.722	0.0	98	386054	4.75	
96 2-Chloroethyl vinyl ether	63	8.122	8.122	0.0	87	55455	5.67	
97 cis-1,3-Dichloropropene	75	8.331	8.331	0.0	83	370950	5.05	
98 4-Methyl-2-pentanone (MIBK)	43	8.539	8.540	-0.001	96	488721	22.3	
99 Toluene	91	8.783	8.784	-0.001	89	814438	4.85	
100 trans-1,3-Dichloropropene	75	9.114	9.114	0.0	90	272688	5.44	
101 Ethyl methacrylate	69	9.236	9.236	0.0	85	233776	5.24	
102 1,1,2-Trichloroethane	97	9.375	9.375	0.0	92	159435	4.93	
103 Tetrachloroethene	164	9.566	9.567	-0.001	98	286684	4.89	
104 1,3-Dichloropropane	76	9.618	9.619	-0.001	92	260095	4.83	
105 2-Hexanone	43	9.740	9.741	-0.001	96	311763	23.0	
108 Chlorodibromomethane	129	9.967	9.967	0.0	89	309131	5.09	
109 Ethylene Dibromide	107	10.141	10.141	0.0	97	212772	4.82	
110 1-Chlorohexane	91	10.906	10.907	-0.001	91	396194	4.76	
111 Chlorobenzene	112	10.941	10.959	-0.018	91	608132	4.79	
112 1,1,1,2-Tetrachloroethane	131	11.098	11.098	0.0	86	285682	4.81	
113 Ethylbenzene	106	11.133	11.133	0.0	99	286311	4.64	
114 m-Xylene & p-Xylene	106	11.307	11.324	-0.017	0	408039	4.98	
115 o-Xylene	106	11.916	11.916	0.0	95	351578	4.81	
116 Styrene	104	11.933	11.951	-0.018	93	580982	4.67	
117 Bromoform	173	12.212	12.212	0.0	95	170884	4.93	
118 Isopropylbenzene	105	12.420	12.421	-0.001	95	1091156	4.78	
120 Cyclohexanone	55	12.560	12.560	0.0	89	130705	231.4	
122 Bromobenzene	156	12.821	12.821	0.0	92	266701	4.74	
121 1,1,2,2-Tetrachloroethane	83	12.821	12.839	-0.018	87	210037	4.86	
123 1,2,3-Trichloropropane	110	12.873	12.873	0.0	73	56111	5.17	
124 trans-1,4-Dichloro-2-butene	53	12.908	12.908	0.0	40	47952	5.07	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
125 N-Propylbenzene	120	12.943	12.943	-0.001	97	268182	4.76	
126 2-Chlorotoluene	126	13.047	13.047	0.0	94	226097	4.68	
127 1,3,5-Trimethylbenzene	105	13.169	13.169	0.0	93	821250	4.73	
128 4-Chlorotoluene	126	13.186	13.187	-0.001	98	265627	4.73	
129 tert-Butylbenzene	119	13.552	13.569	-0.017	93	904831	4.64	
130 1,2,4-Trimethylbenzene	105	13.621	13.622	-0.001	96	770180	4.59	
131 sec-Butylbenzene	134	13.813	13.813	0.0	90	232130	4.56	
132 1,3-Dichlorobenzene	146	13.934	13.952	-0.018	97	403906	4.49	
133 4-Isopropyltoluene	119	13.969	13.987	-0.018	92	1048929	4.68	
134 1,4-Dichlorobenzene	146	14.039	14.039	0.0	85	579007	4.72	
137 n-Butylbenzene	91	14.422	14.422	0.0	95	933139	4.53	
138 1,2-Dichlorobenzene	146	14.439	14.440	-0.001	93	394355	4.65	
139 1,2-Dibromo-3-Chloropropane	157	15.240	15.240	0.0	81	41967	5.08	
141 1,2,4-Trichlorobenzene	180	16.005	16.006	-0.001	94	325841	5.21	
142 Hexachlorobutadiene	225	16.162	16.163	-0.001	91	292956	5.18	
143 Naphthalene	128	16.232	16.232	0.0	96	340361	5.22	
144 1,2,3-Trichlorobenzene	180	16.458	16.458	0.0	94	254729	5.24	
S 148 1,3-Dichloropropene, Total	1				0		10.5	
S 149 1,2-Dichloroethene, Total	1				0		10.0	
S 150 Xylenes, Total	106				0		9.79	
S 145 Trihalomethanes, Total	1				0		19.7	
S 146 Xylenes, Total (URS)	1				0		9.79	
S 151 1,2-Dichloroethene, Total (URS)	96				0		10.0	

## QC Flag Legend

## Processing Flags

1 - Missing Peaks

9 - Failed A Reference Spectral Test



TestAmerica Denver

Data File: \\Denchrom\ChromData\VMS\_H\20130703-13231.b\H3251.D

Injection Date: 03-Jul-2013 20:22:30

Limit Group: MSV - 8260B Water and Solid

Client ID:

Instrument ID: VMS\_H

Lims Batch ID: 181535

Lims Sample ID: 26

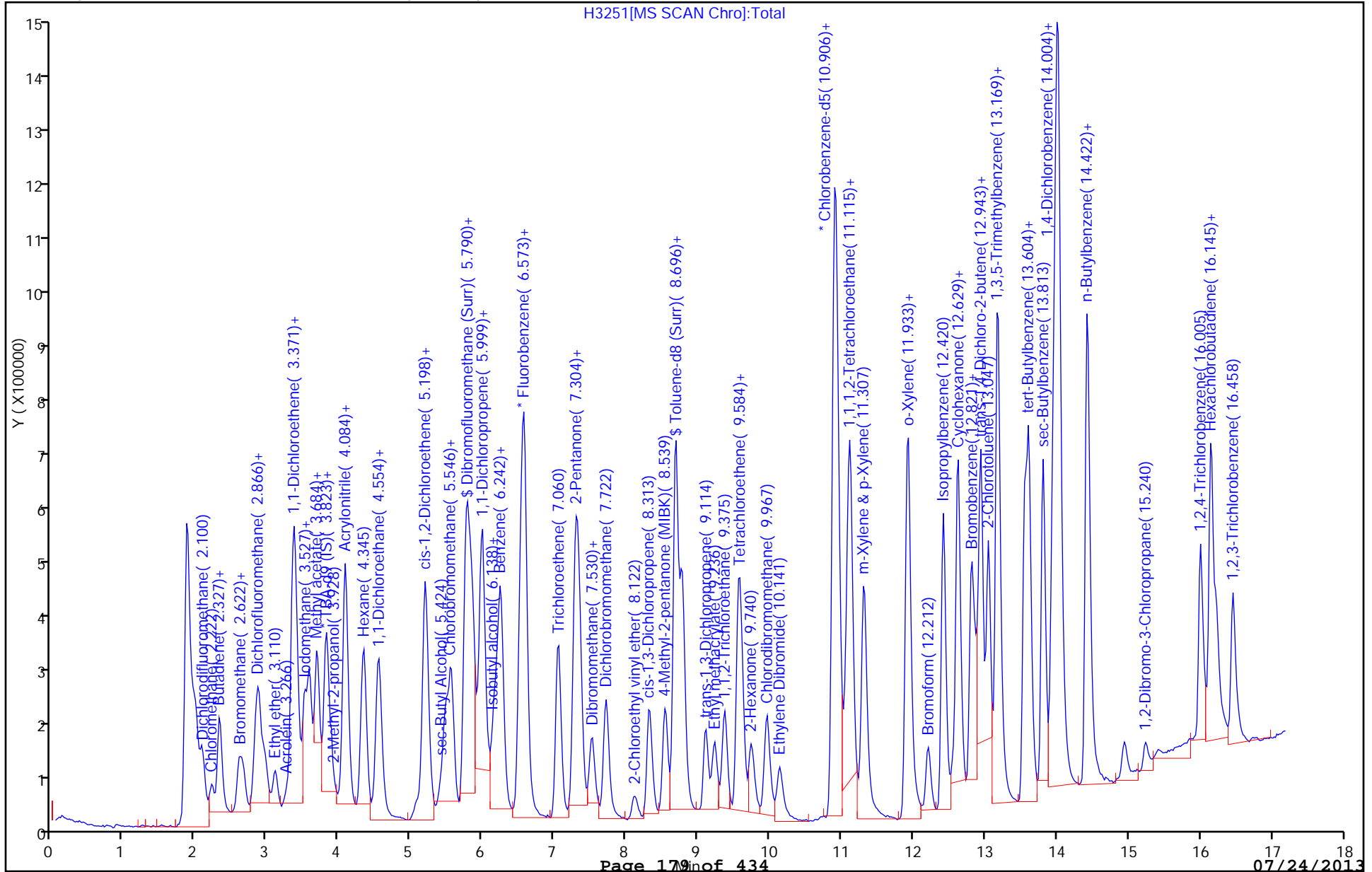
Operator ID: tinkhams

Purge Vol: 20.000 mL

Column Type: DB-624 (75.53)

Column Dia: 0.53 mm

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H Start Date: 07/03/2013 08:04

Analysis Batch Number: 181419 End Date: 07/03/2013 18:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-181419/1		07/03/2013 08:04	1	H3220.D	DB-624 (75.53) 0.53 (mm)
STD003 280-181419/2 IC		07/03/2013 08:12	1	H3221.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 08:12	1		DB-624 (75.53) 0.53 (mm)
STD01 280-181419/3 IC		07/03/2013 08:33	1	H3222.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 08:33	1		DB-624 (75.53) 0.53 (mm)
STD02 280-181419/4 IC		07/03/2013 08:55	1	H3223.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 08:55	1		DB-624 (75.53) 0.53 (mm)
STD05 280-181419/5 IC		07/03/2013 09:16	1	H3224.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 09:16	1		DB-624 (75.53) 0.53 (mm)
STD10 280-181419/6 IC		07/03/2013 09:38	1	H3225.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 09:38	1		DB-624 (75.53) 0.53 (mm)
STD30 280-181419/7 IC		07/03/2013 09:59	1	H3226.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 09:59	1		DB-624 (75.53) 0.53 (mm)
STD60 280-181419/8 IC		07/03/2013 10:21	1	H3227.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 10:21	1		DB-624 (75.53) 0.53 (mm)
STD01 280-181419/9 IC		07/03/2013 10:43	1	H3228.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 10:43	1		DB-624 (75.53) 0.53 (mm)
STD02 280-181419/10 IC		07/03/2013 11:04	1	H3229.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 11:04	1		DB-624 (75.53) 0.53 (mm)
STD05 280-181419/11 IC		07/03/2013 11:26	1	H3230.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 11:26	1		DB-624 (75.53) 0.53 (mm)
ICIS 280-181419/12		07/03/2013 11:47	1	H3231.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 11:47	1		DB-624 (75.53) 0.53 (mm)
STD30 280-181419/13 IC		07/03/2013 12:09	1	H3232.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 12:09	1		DB-624 (75.53) 0.53 (mm)
STD60 280-181419/14 IC		07/03/2013 12:31	1	H3233.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 12:31	1		DB-624 (75.53) 0.53 (mm)
ICV 280-181419/16		07/03/2013 13:27	1	H3235.D	DB-624 (75.53) 0.53 (mm)
ICV 280-181419/15		07/03/2013 13:49	1	H3236.D	DB-624 (75.53) 0.53 (mm)
ICV 280-181419/17		07/03/2013 14:11	1	H3237.D	DB-624 (75.53) 0.53 (mm)
STD003 280-181419/18 IC		07/03/2013 15:16	1	H3239.D	DB-624 (75.53) 0.53 (mm)
STD01 280-181419/19 IC		07/03/2013 15:38	1	H3240.D	DB-624 (75.53) 0.53 (mm)
STD02 280-181419/20 IC		07/03/2013 16:00	1	H3241.D	DB-624 (75.53) 0.53 (mm)
STD05 280-181419/21 IC		07/03/2013 16:22	1	H3242.D	DB-624 (75.53) 0.53 (mm)
STD10 280-181419/22 IC		07/03/2013 16:44	1	H3243.D	DB-624 (75.53) 0.53 (mm)
STD30 280-181419/23 IC		07/03/2013 17:05	1	H3244.D	DB-624 (75.53) 0.53 (mm)
STD60 280-181419/24 IC		07/03/2013 17:27	1	H3245.D	DB-624 (75.53) 0.53 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H Start Date: 07/03/2013 08:04

Analysis Batch Number: 181419 End Date: 07/03/2013 18:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ICV 280-181419/25		07/03/2013 18:11	1	H3247.D	DB-624 (75.53) 0.53 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Instrument ID: VMS\_H Start Date: 07/03/2013 19:12

Analysis Batch Number: 181535 End Date: 07/04/2013 10:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-181535/1		07/03/2013 19:12	1	H3248.D	DB-624 (75.53) 0.53 (mm)
CCV 280-181535/2		07/03/2013 19:38	1	H3249.D	DB-624 (75.53) 0.53 (mm)
CCV 280-181535/3		07/03/2013 20:00	1	H3250.D	DB-624 (75.53) 0.53 (mm)
LCS 280-181535/26		07/03/2013 20:22	1	H3251.D	DB-624 (75.53) 0.53 (mm)
MB 280-181535/27		07/03/2013 20:43	1	H3252.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 21:05	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 21:27	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 21:49	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 22:10	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 22:32	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 22:54	10		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 23:16	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 23:37	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/03/2013 23:59	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 00:21	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 00:42	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 01:04	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 01:26	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 01:47	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 02:09	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 02:30	1		DB-624 (75.53) 0.53 (mm)
280-43753-1	B035M0409LA	07/04/2013 02:52	1	H3269.D	DB-624 (75.53) 0.53 (mm)
280-43753-2	062513LE	07/04/2013 03:14	1	H3270.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 03:35	1		DB-624 (75.53) 0.53 (mm)
280-43753-3	062513LF	07/04/2013 03:57	1	H3272.D	DB-624 (75.53) 0.53 (mm)
280-43753-4	062513LR	07/04/2013 04:19	1	H3273.D	DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 04:40	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 05:02	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 05:24	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 05:45	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 06:28	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 06:50	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 07:11	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 07:33	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 07:54	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 08:16	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 08:38	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 09:00	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 09:21	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 09:43	1		DB-624 (75.53) 0.53 (mm)
ZZZZZ		07/04/2013 10:05	1		DB-624 (75.53) 0.53 (mm)



GC/MS VOA Continuing Calibration Review Checklist

Instrument ID and Date: H 07/03/13pm Work List 13231

Check Method Used: Analysis  624  8260B  Other VOA \_\_\_\_\_

VOA Preparation  5mL  20mL  5035 Low  5035 High  5030 Low  5030 High

Continuing Calibration	Review Items	Level 1		Level 2	Comments
		Yes	No		
1. BFB meets criteria?		<input checked="" type="checkbox"/>		X	
2. ICAL date and instrument ID verified?		<input checked="" type="checkbox"/>		X	
3. Do SPC RRFs and CCC %Ds meet method criteria?		<input checked="" type="checkbox"/>		X	
4. Does %D meet criteria for non-CCC compounds?		<input checked="" type="checkbox"/>		X	
5. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3- /1,4- /1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5- /1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane & MIBK 2- /4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropane		<input checked="" type="checkbox"/>		X	
6. Label number of standard used recorded?		<input checked="" type="checkbox"/>		X	
7. Manual integrations documented and checked?		<input checked="" type="checkbox"/>		X	
8. Do the Internal Standards meet criteria for %D against ICAL?		<input checked="" type="checkbox"/>		X	
9. Does this CCV pass Q4 criteria?		<input checked="" type="checkbox"/>		X	see below

1st Level Reviewer:  Date: 07/03/13 Acetone  
 2nd Level Reviewer:  Date: 7-5-13 2-hexanone  
 2-Butanone

TestAmerica Denver

Instrument: 44

DV-MS-0010 (8260B) (624) (Circle)

Purge Volume: (20mL) (5mL/5g) (Circle)

Tune Time: 181535

Lims Batch: 19:12-10:05

Sequence Name: C:\HPCHEM\1\SEQUENCE\070313pm.S  
 Comment: tinkhams  
 Operator: tinkhams  
 Data Path: C:\HPCHEM\1\DATA\070313pm.B\  
 Pre-Seq Cmd:  
 Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch  
 (X) Full Method (X) Inject Anyway  
 ( ) Reprocessing Only ( ) Don't Inject

Line Type	Vial	DataFile	Method	Sample Name
1	Sample	100 H3248	BFB	bfb
2	Sample	1 H3249	8260	ccv
3	Sample	2 H3250	8260	ccv
4	Sample	3 H3251	8260	lcs
5	Sample	4 H3252	8260	mb
6	Sample	5 H3253	8260	280-43624-f-7 pH<2
7	Sample	6 H3254	8260	280-43661-c-1 pH<2
8	Sample	7 H3255	8260	280-43661-a-2 pH<2
9	Sample	8 H3256	8260	280-43662-b-1 pH<2
10	Sample	9 H3257	8260	280-43662-b-2 pH<2
11	Sample	10 H3258	8260	280-43662-c-3 pH<2
12	Sample	11 H3259	8260	280-43662-b-2 pH<2
13	Sample	12 H3260	8260	280-43841-d-1 pH<2
14	Sample	13 H3261	8260	280-43841-e-3 pH<2
15	Sample	14 H3262	8260	280-43841-d-2 pH<2
16	Sample	15 H3263	8260	280-43841-n-4 pH<2
17	Sample	16 H3264	8260	280-43841-m-4 MS pH<2
18	Sample	17 H3265	8260	280-43841-m-4 MSD pH<2
19	Sample	18 H3266	8260	280-43841-d-5 pH<2
20	Sample	19 H3267	8260	280-43841-c-6 pH<2
21	Sample	20 H3268	8260	280-43841-b-7 pH<2
22	Sample	21 H3269	8260	280-43753-d-1 pH<2
23	Sample	22 H3270	8260	280-43753-e-2 pH<2
24	Sample	23 H3271	8260	280-43753-e-2 pH<2
25	Sample	24 H3272	8260	280-43753-b-3 pH<2
26	Sample	25 H3273	8260	280-43753-b-4 pH<2
27	Sample	26 H3274	8260	280-43814-a-2 pH<2
28	Sample	27 H3275	8260	280-43814-a-2 pH<2
29	Sample	28 H3276	8260	280-43814-c-3 pH<2
30	Sample	29 H3277	8260	280-43814-c-3 pH<2
31	Sample	30 H3278	8260	BLANK
32	Sample	31 H3279	8260	LCS
33	Sample	32 H3280	8260	MB
34	Sample	33 H3281	8260	280-43763-b-12 pH<2
35	Sample	34 H3282	8260	280-43763-c-13 pH<2
36	Sample	35 H3283	8260	280-43898-g-1 pH<2
37	Sample	36 H3284	8260	280-44005-b-1 pH<2
38	Sample	37 H3285	8260	280-44005-h-2 pH<2
39	Sample	38 H3286	8260	280-44005-g-2 MS pH<2
40	Sample	39 H3287	8260	280-44005-g-2 MSD pH<2
41	Sample	40 H3288	8260	280-75423-1-1 pH<2
42	Sample	41 H3289	8260	600-75423-b-2 pH<2

81/03/13

01/05/13



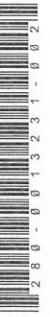



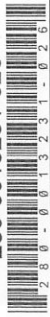

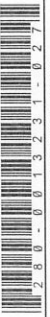















01/05/13

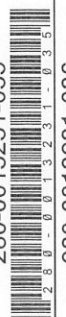
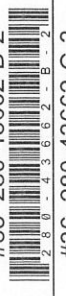

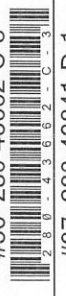



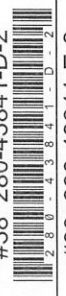





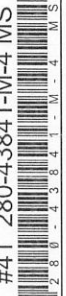








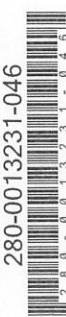













\*Run rejected because of poor purge or QC issue. Do not report.

TestAmerica Laboratories  
Worklist Report

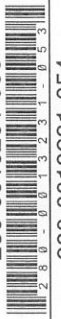






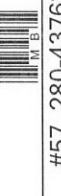



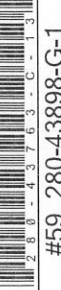





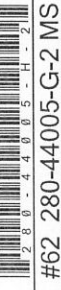










Worklist Name: 070313pm  
 Instrument Name: VMS\_H  
 Purge Volume: 20.00  
 Analysis Type: VOA  
 Batch Directory: \\Denchrom\ChromData\VMS\_HI\20130703-13231.b  
 Upload Directory: \\Cortalsapp06\280-DN-RawData\Organics\MS\VMS\_H  
 Run Reagent: MV-ARCH SS A\_00004 Amount Added: 0.720000, Units: uL  
 Run Reagent: MV-567649\_00001 Amount Added: 1.000000, Units: uL

Worklist Number: 13231  
 Chrom Method: AQ\_VMSH\_8260  
 Units: mL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013231-001 	# 1 bfb 	MV-BFB_00010	BFB		voaWater	1.000000	uL	1.000000
280-0013231-002 	# 2 ccv 	MV-567649_00001 MV-Gas/Ket A_00008 MV-2 Cleve_00015 MV-Main A_00003	CCV		voaWater	20.00	mL	1.000000
280-0013231-003 	# 3 ccv 	MV-Supp A_00004	CCV		voaWater	20.00	mL	1.000000
280-0013231-026 	#26 lcs 	MV-Main B_00001 MV-Gas/Ket B_00003 MV-SS 2-Cleve_00008	LCS		voaWater	20.00	mL	1.000000
280-0013231-027 	#27 mb 		MB		voaWater	20.00	mL	1.000000
280-0013231-028 	#28 280-32357-A-1 		Client		voaWater	20.00	mL	1.000000
280-0013231-029 	#29 280-32357-A-2 		Client		voaWater	20.00	mL	1.000000
280-0013231-030 	#30 280-43624-F-7 		Client		voaWater	20.00	mL	1.000000
280-0013231-031 	#31 280-43661-C-1 		Client		voaWater	20.00	mL	1.000000
280-0013231-032 	#32 280-43661-A-2 		Client		voaWater	20.00	mL	1.000000
280-0013231-033 	#33 280-43662-B-1 		Client		voaWater	20.00	mL	1.000000
280-0013231-034 	#34 280-43662-B-2 		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013231-035 	#35 280-43662-B-2 		Client		voaWater	2.000000	mL	1.000000
280-0013231-036 	#36 280-43662-C-3 		Client		voaWater	20.00	mL	1.000000
280-0013231-037 	#37 280-43841-D-1 		Client		voaWater	20.00	mL	1.000000
280-0013231-038 	#38 280-43841-D-2 		Client		voaWater	20.00	mL	1.000000
280-0013231-039 	#39 280-43841-E-3 		Client		voaWater	20.00	mL	1.000000
280-0013231-040 	#40 280-43841-N-4 		Client		voaWater	20.00	mL	1.000000
280-0013231-041 	#41 280-43841-M-4 MS 	MV-Main B_00001 MV-Gas/Ket B_00003 MV-SS 2-Cleve_00008	MS		voaWater	20.00	mL	1.000000
280-0013231-042 	#42 280-43841-M-4 MSD 	MV-Main B_00001 MV-Gas/Ket B_00003 MV-SS 2-Cleve_00008	MSD		voaWater	20.00	mL	1.000000
280-0013231-043 	#43 280-43841-D-5 		Client		voaWater	20.00	mL	1.000000
280-0013231-044 	#44 280-43841-C-6 		Client		voaWater	20.00	mL	1.000000
280-0013231-045 	#45 280-43841-B-7 		Client		voaWater	20.00	mL	1.000000
280-0013231-046 	#46 280-43753-D-1 		Client		voaWater	20.00	mL	1.000000
280-0013231-047 	#47 280-43753-E-2 		Client		voaWater	20.00	mL	1.000000
280-0013231-048 	#48 280-43753-E-2 		Client		voaWater	10.00	mL	1.000000
280-0013231-049 	#49 280-43753-B-3 		Client		voaWater	20.00	mL	1.000000
280-0013231-050 	#50 280-43753-B-4 		Client		voaWater	20.00	mL	1.000000
280-0013231-051 	#51 280-43814-A-2 		Client		voaWater	20.00	mL	1.000000
280-0013231-052 	#52 280-43814-A-2 		Client		voaWater	10.00	mL	1.000000



Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013231-053 	#53 280-43814-C-3 		Client		voaWater	20.00	mL	1.000000
280-0013231-054 	#54 280-43814-B-4 		Client		voaWater	20.00	mL	1.000000
280-0013231-055 	#55 LCS 	MV-SS 2-Cleve_00008 MV-Main B_00001 MV-Gas/Ket B_00003	LCS		voaWater	20.00	mL	1.000000
280-0013231-056 	#56 MB 		MB		voaWater	20.00	mL	1.000000
280-0013231-057 	#57 280-43763-B-12 		Client		voaWater	20.00	mL	1.000000
280-0013231-058 	#58 280-43763-C-13 		Client		voaWater	20.00	mL	1.000000
280-0013231-059 	#59 280-43898-G-1 		Client		voaWater	20.00	mL	1.000000
280-0013231-060 	#60 280-44005-B-1 		Client		voaWater	20.00	mL	1.000000
280-0013231-061 	#61 280-44005-H-2 		Client		voaWater	20.00	mL	1.000000
280-0013231-062 	#62 280-44005-G-2 MS 	MV-Main B_00001 MV-Gas/Ket B_00003 MV-SS 2-Cleve_00008	MS		voaWater	20.00	mL	1.000000
280-0013231-063 	#63 280-44005-G-2 MSD 	MV-Main B_00001 MV-Gas/Ket B_00003 MV-SS 2-Cleve_00008	MSD		voaWater	20.00	mL	1.000000
280-0013231-064 	#64 600-75423-I-1 		Client		voaWater	20.00	mL	1.000000
280-0013231-065 	#65 600-75423-B-2 		Client		voaWater	20.00	mL	1.000000
280-0013231-066 	#66 Samp 66 		Client		voaWater	20.00	mL	1.000000

Gas/Ketone/2-cleue

Instrument ID and Date: H 07/03/13 I CAL Batch/ICV lines 181419 (ICV) 15  
 Calibration Event 14676 Work List 13204 2<sup>nd</sup> Day Batch/ICV lines \_\_\_\_\_

Check Method Used: Analysis  624  8260B  Other VOA \_\_\_\_\_

VOA Preparation  5mL  20mL  5035 Low  5035 High  5030 Low  5030 High

Review Items	Level 1		Level 2	Comments
	Yes	No		
<b>Initial Calibration</b>				
1. BFB meets criteria?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
2. ICAL date and instrument ID verified?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Does the Form VI match the data in the Chrom source method?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
4. Sufficient number of calibration points used?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
5. Reasons for removal of points documented?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
6. %RSD or correlation coefficient within method limits?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Some points < RL removed
7. Response factors meet criteria?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
8. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3-/1,4-/1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5-/1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane & MIBK 2-/4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropene	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
9. Data checked for detector saturation?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
10. Label number of standards used recorded?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
11. Manual integrations documented and checked?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
12. 2 <sup>nd</sup> source ICV recovery 80-120% (±20% drift) for DoD projects, 65-135% (±35%, or ±55% of expected for poor performers) for non-DoD? Exceptions noted in comment section.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

1st Level Reviewer: [Signature] Date: 07/03/13

2nd Level Reviewer: [Signature] Date: 7/5/13

Sequence Name: C:\HPCHEM\1\SEQUENCE\070313I.S

Comment:

Operator: meierg

Data Path: C:\HPCHEM\1\DATA\070313.B\

Pre-Seq Cmd:

Post-Seq Cmd:

Method Sections To Run      On A Barcode Mismatch  
 Full Method             Inject Anyway  
 Reprocessing Only     Don't Inject

TestAmerica Denver

Instrument: H

DV-MS-0010 (8260B/624) (Circle)

Purge Volume: (20mL/5mL/5g) (Circle)

Tune Time: 08:04-18:11

Lims Batch: 181419

81 / 03 / 13  
07 / 03 / 13

Line Type	Vial	DataFile	Method	Sample Name
1 Sample	100	H3220	BFB	bfb
2 Sample	1	H3221	8260	std003
3 Sample	2	H3222	8260	std01
4 Sample	3	H3223	8260	std02
5 Sample	4	H3224	8260	std05
6 Sample	5	H3225	8260	std10
7 Sample	6	H3226	8260	std30
8 Sample	7	H3227	8260	std60
9 Sample	8	H3228	8260	std01
10 Sample	9	H3229	8260	std02
11 Sample	10	H3230	8260	std05
12 Sample	11	H3231	8260	icis
13 Sample	12	H3232	8260	std30
14 Sample	13	H3233	8260	std60
15 Sample	14	H3234	8260	icv
16 Sample	15	H3235	8260	icv
17 Sample	16	H3236	8260	icv
18 Sample	17	H3237	8260	icv
19 Sample	18	H3238	8260	main 10 chk
20 Sample	19	H3239	8260	std003
21 Sample	20	H3240	8260	std01
22 Sample	21	H3241	8260	std02
23 Sample	22	H3242	8260	std05
24 Sample	23	H3243	8260	std10
25 Sample	24	H3244	8260	std30
26 Sample	25	H3245	8260	std60
27 Sample	26	H3246	8260	blk
28 Sample	27	H3247	8260	icv



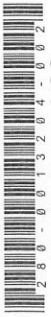
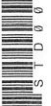





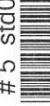

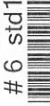

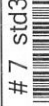



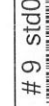
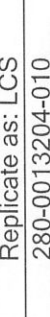
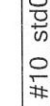
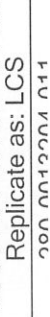
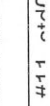
\*Run rejected because of poor purge or QC issue. Do not report.


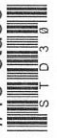

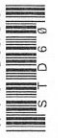
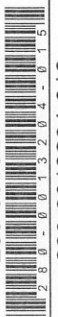





















TestAmerica Laboratories  
Worklist Report

Worklist Name: 070313i  
Instrument Name: VMS\_H  
Purge Volume: 20.00  
Analysis Type: VOA  
Batch Directory: \\Denchrom\ChromData\VMS\_HI\20130703-13204.b  
Upload Directory: \\Cortalsapp06\280-DN-RawData\Organics\MS\VMS\_H  
Run Reagent: MV-ARCH SS A\_00004

Worklist Number: 13204  
Chrom Method: AQ\_VMSH\_8260  
Units: mL

Amount Added: 0.720000, Units: uL

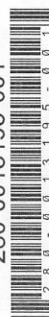

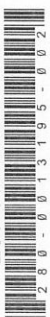

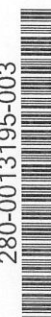















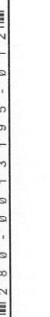
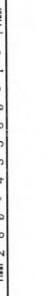
Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013204-001 	# 1 bfb 	MV-BFB_00010	BFB		voaWater	1.000000	uL	1.000000
280-0013204-002 	# 2 std003 	MV-567649_00001 MV-Gas/Ket A_00008 MV-2 Cleve_00015	IC	1	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-003 	# 3 std01 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	2	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-004 	# 4 std02 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	3	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-005 	# 5 std05 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	4	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-006 	# 6 std10 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	5	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-007 	# 7 std30 	MV-Gas/Ket A_00008 MV-2 Cleve_00015 MV-567649_00001	IC	6	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-008 	# 8 std60 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	7	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-009 	# 9 std01 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	2	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-010 	#10 std02 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	3	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-011 	#11 std05 	MV-567649_00001	IC	4	voaWater	20.00	mL	1.000000



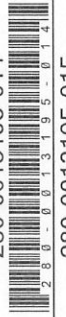

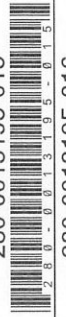






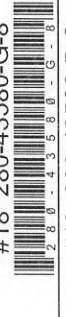
























Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013204-013  Replicate as: LCS	#13 std30 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	6	voaWater	20.00	mL	1.000000
280-0013204-014  Replicate as: LCS	#14 std60 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	7	voaWater	20.00	mL	1.000000
280-0013204-015 	#15 icv 	MV-567649_00001 MV-SS 2-Cleve_00008 MV-Gas/Ket B_00003	ICV		voaWater	20.00	mL	1.000000
280-0013204-016 	#16 icv 	MV-567649_00001 MV-Supp B_00001 MV-ARCH SS A_00005	ICV		voaWater	20.00	mL	1.000000
280-0013204-017 	#17 icv 	Freon_B_00001 MV-567649_00001	ICV		voaWater	20.00	mL	1.000000
280-0013204-018 	#18 std003 	MV-Main A_00003 MV-567649_00001	IC	1	voaWater	20.00	mL	1.000000
280-0013204-019 	#19 std01 	MV-567649_00001 MV-Main A_00003	IC	2	voaWater	20.00	mL	1.000000
280-0013204-020 	#20 std02 	MV-567649_00001 MV-Main A_00003	IC	3	voaWater	20.00	mL	1.000000
280-0013204-021 	#21 std05 	MV-567649_00001 MV-Main A_00003	IC	4	voaWater	20.00	mL	1.000000
280-0013204-022 	#22 std10 	MV-567649_00001 MV-Main A_00003	IC	5	voaWater	20.00	mL	1.000000
280-0013204-023 	#23 std30 	MV-567649_00001 MV-Main A_00003	IC	6	voaWater	20.00	mL	1.000000
280-0013204-024 	#24 std60 	MV-567649_00001 MV-Main A_00003	IC	7	voaWater	20.00	mL	1.000000
280-0013204-025 	#25 icv 	MV-567649_00001 MV-Main B_00001	ICV		voaWater	20.00	mL	1.000000


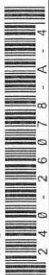


TestAmerica Laboratories  
Worklist Report

Worklist Name: 070213P  
 Instrument Name: VMS\_G  
 Purge Volume: 20.00  
 Analysis Type: VOA  
 Batch Directory: \\Denchrom\ChromData\VMS\_G\20130702-13195.b  
 Upload Directory: \\Cortalsapp06\280-DN-RawData\Organics\MS\VMS\_G  
 Run Reagent: MV-ARCH SS A\_00004 Amount Added: 0.850000, Units: uL  
 Run Reagent: MV-Archon IS\_00543 Amount Added: 1.000000, Units: uL

Worklist Number: 13195  
 Chrom Method: AQ\_VMSG\_8260  
 Units: mL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013195-001 	# 1 BFB 	MV-BFB_00010	BFB		voaWater	1.000000	uL	1.000000
280-0013195-002 	# 2 CCV 	MV-Main A_00003 MV-2 Cleve_00014 MV-Archon IS_00543 MV-Gas/Ket A_00008	CCV		voaWater	20.00	mL	1.000000
280-0013195-003 	# 3 CCV 	MV-Supp A_00004	CCV		voaWater	20.00	mL	1.000000
280-0013195-004 	# 4 CCV 	MV-Archon IS_00543 MV-Gas/Ket A_00008	CCV		voaWater	20.00	mL	1.000000
280-0013195-005 	# 5 CCV 	MV-Archon IS_00543 MV-Gas/Ket A_00008	CCV		voaWater	20.00	mL	1.000000
280-0013195-006 	# 6 LCS 	MV-Main B_00001 MV-SS 2-Cleve_00008 MV-Gas/Ket B_00003	LCS		voaWater	20.00	mL	1.000000
280-0013195-007 	# 7 MB 		MB		voaWater	20.00	mL	1.000000
280-0013195-008 	# 8 280-32357-A-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-009 	# 9 280-32357-A-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-010 	#10 280-43624-E-4 		Client		voaWater	5.000000	mL	1.000000
280-0013195-011 	#11 280-43580-I-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-012 	#12 280-43580-I-1 		Client		voaWater	1.000000	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013195-013 	#13 280-43580-I-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-014 	#14 280-43580-I-3 		Client		voaWater	20.00	mL	1.000000
280-0013195-015 	#15 280-43580-H-4 		Client		voaWater	20.00	mL	1.000000
280-0013195-016 	#16 280-43580-H-5 		Client		voaWater	20.00	mL	1.000000
280-0013195-017 	#17 280-43580-H-6 		Client		voaWater	20.00	mL	1.000000
280-0013195-018 	#18 280-43580-G-8 		Client		voaWater	20.00	mL	1.000000
280-0013195-019 	#19 280-43580-B-9 		Client		voaWater	20.00	mL	1.000000
280-0013195-020 	#20 280-43580-A-10 		Client		voaWater	20.00	mL	1.000000
280-0013195-021 	#21 280-43639-D-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-022 	#22 280-43639-D-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-023 	#23 280-43639-C-8 		Client		voaWater	20.00	mL	1.000000
280-0013195-024 	#24 280-43818-H-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-025 	#25 280-43818-H-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-026 	#26 280-43818-A-3 		Client		voaWater	20.00	mL	1.000000
280-0013195-027 	#27 240-26078-B-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-028 	#28 240-26078-A-2 		Client		voaWater	2.000000	mL	1.000000
280-0013195-029 	#29 240-26078-A-2 		Client		voaWater	0.200000	mL	1.000000
280-0013195-030 	#30 240-26078-A-3 		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013195-031 	#31 240-26078-A-4 		Client		voaWater	20.00	mL	1.000000
280-0013195-032 	#32 240-26078-A-4 		Client		voaWater	2.000000	mL	1.000000



Main

Instrument ID and Date: H 07/03/13 ICAL Batch/ICV lines 181419 (ICV) 25  
 Calibration Event 14678 Work List 13204 2<sup>nd</sup> Day Batch/ICV lines

Check Method Used: Analysis  624  8260B  Other VOA

VOA Preparation  5mL  20mL  5035 Low  5035 High  5030 Low  5030 High

Review Items	Level 1		Level 2	Comments
	Yes	No		
<b>Initial Calibration</b>				
1. BFB meets criteria?	/		/	
2. ICAL date and instrument ID verified?	/		/	
3. Does the Form VI match the data in the Chrom source method?	/		/	
4. Sufficient number of calibration points used?	/		/	
5. Reasons for removal of points documented?	/		/	
6. %RSD or correlation coefficient within method limits?	/		/	Some points < RL removed
7. Response factors meet criteria?	/		/	
8. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3-/1,4-/1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5-/1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane & MIBK 2-/4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropene	/		/	
9. Data checked for detector saturation?	/		/	
10. Label number of standards used recorded?	/		/	
11. Manual integrations documented and checked?	/		/	
12. 2 <sup>nd</sup> source ICV recovery 80-120% (±20% drift) for DoD projects, 65-135% (±35%, or ±55% of expected for poor performers) for non-DoD? Exceptions noted in comment section.	/		/	

1st Level Reviewer: SR Date: 07/03/13  
 2nd Level Reviewer: Am Date: 7/5/13

Sequence Name: C:\HPCHEM\1\SEQUENCE\070313I.S  
 Comment:  
 Operator: meierg  
 Data Path: C:\HPCHEM\1\DATA\070313.B\  
 Pre-Seq Cmd:  
 Post-Seq Cmd:

TestAmerica Denver  
 Instrument: H  
 DV-MS-0010 (8260B) (624) (Circle)  
 Purge Volume: (20mL) (5mL) (5g) (Circle)  
 Tune Time: 08:04-18:11  
 Lims Batch: 181419

Method Sections To Run On A Barcode Mismatch  
 Full Method  Inject Anyway  
 Reprocessing Only  Don't Inject




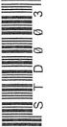




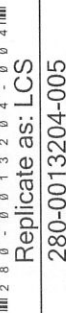
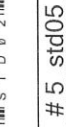










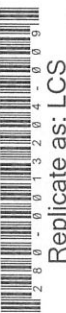

07/03/13


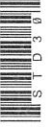










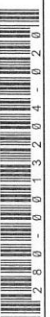
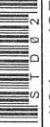




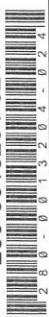
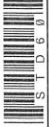






Line Type	Vial	DataFile	Method	Sample Name
1 Sample	100	H3220	BFB	bfb
2 Sample	1	H3221	8260	std003
3 Sample	2	H3222	8260	std01
4 Sample	3	H3223	8260	std02
5 Sample	4	H3224	8260	std05
6 Sample	5	H3225	8260	std10
7 Sample	6	H3226	8260	std30
8 Sample	7	H3227	8260	std60
9 Sample	8	H3228	8260	std01
10 Sample	9	H3229	8260	std02
11 Sample	10	H3230	8260	std05
12 Sample	11	H3231	8260	icis
13 Sample	12	H3232	8260	std30
14 Sample	13	H3233	8260	std60
15 Sample	14	H3234	8260	icv
16 Sample	15	H3235	8260	icv
17 Sample	16	H3236	8260	icv
18 Sample	17	H3237	8260	icv
19 Sample	18	H3238	8260	main 10 chk
20 Sample	19	H3239	8260	std003
21 Sample	20	H3240	8260	std01
22 Sample	21	H3241	8260	std02
23 Sample	22	H3242	8260	std05
24 Sample	23	H3243	8260	std10
25 Sample	24	H3244	8260	std30
26 Sample	25	H3245	8260	std60
27 Sample	26	H3246	8260	blk
28 Sample	27	H3247	8260	icv

TestAmerica Laboratories  
Worklist Report

Worklist Name: 070313i  
Instrument Name: VMS\_H  
Purge Volume: 20.00  
Analysis Type: VOA  
Batch Directory: \\Denchrom\ChromData\VMS\_HI20130703-13204.b  
Upload Directory: \\Cortalsapp06\280-DN-RawData\Organics\MS\VMS\_H  
Run Reagent: MV-ARCH SS A\_00004

Worklist Number: 13204  
Chrom Method: AQ\_VMSH\_8260  
Units: mL  
Amount Added: 0.720000, Units: uL

























Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013204-001 	# 1 bfb 	MV-BFB_00010	BFB		voaWater	1.000000	uL	1.000000
280-0013204-002 	# 2 std003 	MV-567649_00001 MV-Gas/Ket A_00008 MV-2 Cleve_00015	IC	1	voaWater	20.00	mL	1.000000
280-0013204-003 	# 3 std01 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	2	voaWater	20.00	mL	1.000000
280-0013204-004 	# 4 std02 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	3	voaWater	20.00	mL	1.000000
280-0013204-005 	# 5 std05 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	4	voaWater	20.00	mL	1.000000
280-0013204-006 	# 6 std10 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	5	voaWater	20.00	mL	1.000000
280-0013204-007 	# 7 std30 	MV-Gas/Ket A_00008 MV-2 Cleve_00015 MV-567649_00001	IC	6	voaWater	20.00	mL	1.000000
280-0013204-008 	# 8 std60 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	7	voaWater	20.00	mL	1.000000
280-0013204-009 	# 9 std01 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	2	voaWater	20.00	mL	1.000000
280-0013204-010 	#10 std02 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	3	voaWater	20.00	mL	1.000000
280-0013204-011 	#11 std05 	MV-567649_00001	IC	4	voaWater	20.00	mL	1.000000



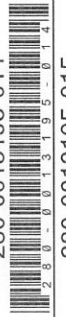

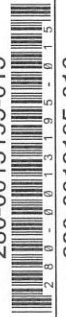

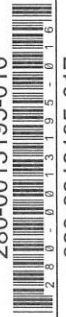





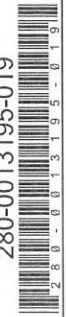

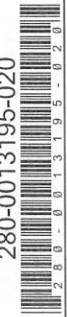





















Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013204-013  Replicate as: LCS	#13 std30 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	6	voaWater	20.00	mL	1.000000
280-0013204-014  Replicate as: LCS	#14 std60 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	7	voaWater	20.00	mL	1.000000
280-0013204-015 	#15 icv 	MV-567649_00001 MV-SS 2-Cleve_00008 MV-Gas/Ket B_00003	ICV		voaWater	20.00	mL	1.000000
280-0013204-016 	#16 icv 	MV-567649_00001 MV-Supp B_00001 MV-ARCH SS A_00005	ICV		voaWater	20.00	mL	1.000000
280-0013204-017 	#17 icv 	Freon_B_00001 MV-567649_00001	ICV		voaWater	20.00	mL	1.000000
280-0013204-018 	#18 std003 	MV-Main A_00003 MV-567649_00001	IC	1	voaWater	20.00	mL	1.000000
280-0013204-019 	#19 std01 	MV-567649_00001 MV-Main A_00003	IC	2	voaWater	20.00	mL	1.000000
280-0013204-020 	#20 std02 	MV-567649_00001 MV-Main A_00003	IC	3	voaWater	20.00	mL	1.000000
280-0013204-021 	#21 std05 	MV-567649_00001 MV-Main A_00003	IC	4	voaWater	20.00	mL	1.000000
280-0013204-022 	#22 std10 	MV-567649_00001 MV-Main A_00003	IC	5	voaWater	20.00	mL	1.000000
280-0013204-023 	#23 std30 	MV-567649_00001 MV-Main A_00003	IC	6	voaWater	20.00	mL	1.000000
280-0013204-024 	#24 std60 	MV-567649_00001 MV-Main A_00003	IC	7	voaWater	20.00	mL	1.000000
280-0013204-025 	#25 icv 	MV-567649_00001 MV-Main B_00001	ICV		voaWater	20.00	mL	1.000000

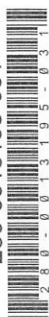
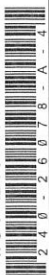
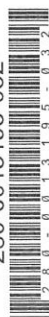

TestAmerica Laboratories  
Worklist Report

Worklist Name: 070213P  
 Instrument Name: VMS\_G  
 Purge Volume: 20.00  
 Analysis Type: VOA  
 Batch Directory: \\Denchrom\ChromData\VMS\_G\20130702-13195.b  
 Upload Directory: \\Cortalsapp06\280-DN-RawData\Organics\VMS\_G  
 Run Reagent: MV-ARCH SS A\_00004 Amount Added: 0.850000, Units: uL  
 Run Reagent: MV-Archon IS\_00543 Amount Added: 1.000000, Units: uL

Worklist Number: 13195  
 Chrom Method: AQ\_VMSG\_8260  
 Units: mL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013195-001 	# 1 BFB 	MV-BFB_00010	BFB		voaWater	1.000000	uL	1.000000
280-0013195-002 	# 2 CCV 	MV-Main A_00003 MV-2 Cleve_00014 MV-Archon IS_00543 MV-Gas/Ket A_00008	CCV		voaWater	20.00	mL	1.000000
280-0013195-003 	# 3 CCV 	MV-Supp A_00004	CCV		voaWater	20.00	mL	1.000000
280-0013195-004 	# 4 CCV 	MV-Archon IS_00543 MV-Gas/Ket A_00008	CCV		voaWater	20.00	mL	1.000000
280-0013195-005 	# 5 CCV 	MV-Archon IS_00543 MV-Gas/Ket A_00008	CCV		voaWater	20.00	mL	1.000000
280-0013195-006 	# 6 LCS 	MV-Main B_00001 MV-SS 2-Cleve_00008 MV-Gas/Ket B_00003	LCS		voaWater	20.00	mL	1.000000
280-0013195-007 	# 7 MB 		MB		voaWater	20.00	mL	1.000000
280-0013195-008 	# 8 280-32357-A-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-009 	# 9 280-32357-A-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-010 	#10 280-43624-E-4 		Client		voaWater	5.000000	mL	1.000000
280-0013195-011 	#11 280-43580-I-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-012 	#12 280-43580-I-1 		Client		voaWater	1.000000	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013195-013 	#13 280-43580-I-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-014 	#14 280-43580-I-3 		Client		voaWater	20.00	mL	1.000000
280-0013195-015 	#15 280-43580-H-4 		Client		voaWater	20.00	mL	1.000000
280-0013195-016 	#16 280-43580-H-5 		Client		voaWater	20.00	mL	1.000000
280-0013195-017 	#17 280-43580-H-6 		Client		voaWater	20.00	mL	1.000000
280-0013195-018 	#18 280-43580-G-8 		Client		voaWater	20.00	mL	1.000000
280-0013195-019 	#19 280-43580-B-9 		Client		voaWater	20.00	mL	1.000000
280-0013195-020 	#20 280-43580-A-10 		Client		voaWater	20.00	mL	1.000000
280-0013195-021 	#21 280-43639-D-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-022 	#22 280-43639-D-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-023 	#23 280-43639-C-8 		Client		voaWater	20.00	mL	1.000000
280-0013195-024 	#24 280-43818-H-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-025 	#25 280-43818-H-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-026 	#26 280-43818-A-3 		Client		voaWater	20.00	mL	1.000000
280-0013195-027 	#27 240-26078-B-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-028 	#28 240-26078-A-2 		Client		voaWater	2.000000	mL	1.000000
280-0013195-029 	#29 240-26078-A-2 		Client		voaWater	0.200000	mL	1.000000
280-0013195-030 	#30 240-26078-A-3 		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013195-031 	#31 240-26078-A-4 		Client		voaWater	20.00	mL	1.000000
280-0013195-032 	#32 240-26078-A-4 		Client		voaWater	2.000000	mL	1.000000

Supp / Freon

Instrument ID and Date: H 07/03/13I ICAL Batch/ICV lines 181419 (ICIS) 12 / (ICV) 16,17  
 Calibration Event 14677 Work List 13204 2<sup>nd</sup> Day Batch/ICV lines \_\_\_\_\_

Check Method Used: Analysis  624  8260B  Other VOA \_\_\_\_\_

VOA Preparation  5mL  20mL  5035 Low  5035 High  5030 Low  5030 High

Review Items	Level 1		Level 2	Comments
	Yes	No		
<b>Initial Calibration</b>				
1. BFB meets criteria?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
2. ICAL date and instrument ID verified?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Does the Form VI match the data in the Chrom source method?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
4. Sufficient number of calibration points used?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
5. Reasons for removal of points documented?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Some points < RL removed
6. %RSD or correlation coefficient within method limits?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
7. Response factors meet criteria?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
8. Isomeric pairs checked for correct peak assignment? Vinyl acetate/Isopropyl ether 1,3- /1,4- /1,2-Dichlorobenzene Ethylbenzene/Xylenes 1,3,5- /1,2,4-Trimethylbenzene / isopropylbenzene 2-Nitropropane between Bromodichloromethane & MIBK 2- /4-Chlorotoluene / n-propylbenzene MIBK/2-Hexanone Methyl/Ethyl Methacrylate 1,1-Dichloroethene /cis-1,2 & trans-1,2-Dichloroethene 1,1-Dichloropropene / cis / tran -1,3-Dichloropropene /1,2,3-Trichloropropene	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
9. Data checked for detector saturation?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
10. Label number of standards used recorded?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
11. Manual integrations documented and checked?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
12. 2 <sup>nd</sup> source ICV recovery 80-120% ( $\pm 20\%$ drift) for DoD projects, 65-135% ( $\pm 35\%$ , or $\pm 55\%$ of expected for poor performers) for non-DoD? Exceptions noted in comment section.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

1st Level Reviewer: [Signature] Date: 07/03/13

2nd Level Reviewer: [Signature] Date: 7/5/13

ICV not good for  
 - ethyl acetate  
 - n-Butyl acetate



TestAmerica Denver

Instrument: H

DV-MS-0010 (8260B624) (Circle)

Purge Volume: (20mL/5mL/5g) (Circle)

Tune Time: 08:04-18:11

Lims Batch: 181419

Sequence Name: C:\HPCHEM\1\SEQUENCE\070313I.S

Comment:

Operator: meierg

Data Path: C:\HPCHEM\1\DATA\070313.B\

Pre-Seq Cmd:

Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch  
 Full Method  Inject Anyway  
 Reprocessing Only  Don't Inject

07 / 03 / 13





















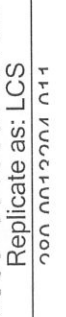
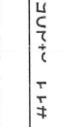
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2 Sample	1	H3221	8260	std003
3 Sample	2	H3222	8260	std01
4 Sample	3	H3223	8260	std02
5 Sample	4	H3224	8260	std05
6 Sample	5	H3225	8260	std10
7 Sample	6	H3226	8260	std30
8 Sample	7	H3227	8260	std60
9 Sample	8	H3228	8260	std01
10 Sample	9	H3229	8260	std02
11 Sample	10	H3230	8260	std05
12 Sample	11	H3231	8260	icis
13 Sample	12	H3232	8260	std30
14 Sample	13	H3233	8260	std60
15 Sample	14	H3234	8260	icv
16 Sample	15	H3235	8260	icv
17 Sample	16	H3236	8260	icv
18 Sample	17	H3237	8260	icv
19 Sample	18	H3238	8260	main 10 chk
20 Sample	19	H3239	8260	std003
21 Sample	20	H3240	8260	std01
22 Sample	21	H3241	8260	std02
23 Sample	22	H3242	8260	std05
24 Sample	23	H3243	8260	std10
25 Sample	24	H3244	8260	std30
26 Sample	25	H3245	8260	std60
27 Sample	26	H3246	8260	blk
28 Sample	27	H3247	8260	icv




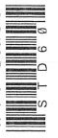
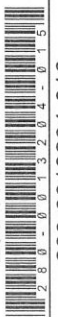
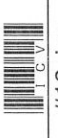




















\*Run rejected because of poor purge or QC issue. Do not report.

TestAmerica Laboratories  
Worklist Report

Worklist Name: 070313i  
 Instrument Name: VMS\_H  
 Purge Volume: 20.00  
 Analysis Type: VOA  
 Batch Directory: \\Denchrom\ChromData\VMS\_H\20130703-13204.b  
 Upload Directory: \\Cortalsapp06\280-DN-RawData\Organics\MS\VMS\_H  
 Run Reagent: MV-ARCH SS A\_00004 Amount Added: 0.720000, Units: uL

Worklist Number: 13204  
 Chrom Method: AQ\_VMSH\_8260  
 Units: mL

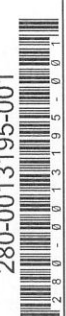
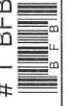


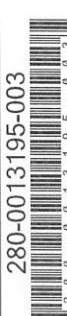



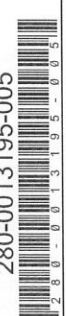



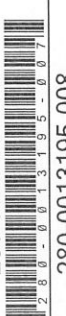

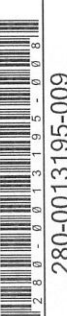









Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013204-001 	# 1 bfb 	MV-BFB_00010	BFB		voaWater	1.000000	uL	1.000000
280-0013204-002 	# 2 std003 	MV-567649_00001 MV-Gas/Ket A_00008 MV-2 Cleve_00015	IC	1	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-003 	# 3 std01 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	2	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-004 	# 4 std02 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	3	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-005 	# 5 std05 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	4	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-006 	# 6 std10 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	5	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-007 	# 7 std30 	MV-Gas/Ket A_00008 MV-2 Cleve_00015 MV-567649_00001	IC	6	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-008 	# 8 std60 	MV-2 Cleve_00015 MV-Gas/Ket A_00008 MV-567649_00001	IC	7	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-009 	# 9 std01 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	2	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-010 	# 10 std02 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	3	voaWater	20.00	mL	1.000000
Replicate as: LCS								
280-0013204-011 	# 11 std05 	MV-567649_00001	IC	4	voaWater	20.00	mL	1.000000

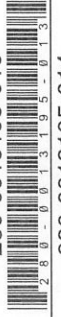

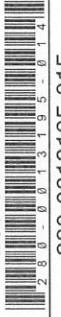

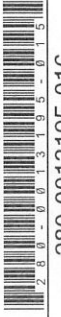
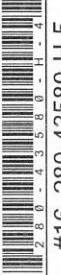

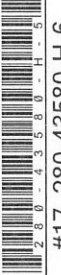

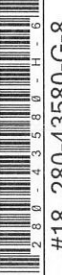







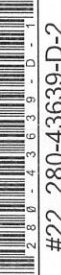


















Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013204-013  Replicate as: LCS	#13 std30 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	6	voaWater	20.00	mL	1.000000
280-0013204-014  Replicate as: LCS	#14 std60 	MV-567649_00001 MV-Supp A_00004 MV-ARCH SS A_00005 Freon_A_00001	IC	7	voaWater	20.00	mL	1.000000
280-0013204-015 	#15 icv 	MV-567649_00001 MV-SS 2-Cleve_00008 MV-Gas/Ket B_00003	ICV		voaWater	20.00	mL	1.000000
280-0013204-016 	#16 icv 	MV-567649_00001 MV-Supp B_00001 MV-ARCH SS A_00005	ICV		voaWater	20.00	mL	1.000000
280-0013204-017 	#17 icv 	Freon_B_00001 MV-567649_00001	ICV		voaWater	20.00	mL	1.000000
280-0013204-018 	#18 std003 	MV-Main A_00003 MV-567649_00001	IC	1	voaWater	20.00	mL	1.000000
280-0013204-019 	#19 std01 	MV-567649_00001 MV-Main A_00003	IC	2	voaWater	20.00	mL	1.000000
280-0013204-020 	#20 std02 	MV-567649_00001 MV-Main A_00003	IC	3	voaWater	20.00	mL	1.000000
280-0013204-021 	#21 std05 	MV-567649_00001 MV-Main A_00003	IC	4	voaWater	20.00	mL	1.000000
280-0013204-022 	#22 std10 	MV-567649_00001 MV-Main A_00003	IC	5	voaWater	20.00	mL	1.000000
280-0013204-023 	#23 std30 	MV-567649_00001 MV-Main A_00003	IC	6	voaWater	20.00	mL	1.000000
280-0013204-024 	#24 std60 	MV-567649_00001 MV-Main A_00003	IC	7	voaWater	20.00	mL	1.000000
280-0013204-025 	#25 icv 	MV-567649_00001 MV-Main B_00001	ICV		voaWater	20.00	mL	1.000000

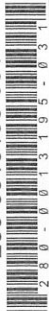

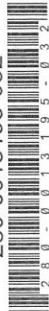
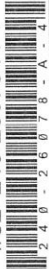
TestAmerica Laboratories  
Worklist Report

Worklist Name: 070213P  
 Instrument Name: VMS\_G  
 Purge Volume: 20.00  
 Analysis Type: VOA  
 Batch Directory: \\Denchrom\ChromData\VMS\_G\20130702-13195.b  
 Upload Directory: \\Cortalsapp06\280-DN-RawData\Organics\MS\VMS\_G  
 Run Reagent: MV-ARCH SS A\_00004 Amount Added: 0.850000, Units: uL  
 Run Reagent: MV-Archon IS\_00543 Amount Added: 1.000000, Units: uL

Worklist Number: 13195  
 Chrom Method: AQ\_VMSG\_8260  
 Units: mL

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013195-001 	# 1 BFB 	MV-BFB_00010	BFB		voaWater	1.000000	uL	1.000000
280-0013195-002 	# 2 CCV 	MV-Main A_00003 MV-2 Cleve_00014 MV-Archon IS_00543 MV-Gas/Ket A_00008	CCV		voaWater	20.00	mL	1.000000
280-0013195-003 	# 3 CCV 	MV-Supp A_00004	CCV		voaWater	20.00	mL	1.000000
280-0013195-004 	# 4 CCV 	MV-Archon IS_00543 MV-Gas/Ket A_00008	CCV		voaWater	20.00	mL	1.000000
280-0013195-005 	# 5 CCV 	MV-Archon IS_00543 MV-Gas/Ket A_00008	CCV		voaWater	20.00	mL	1.000000
280-0013195-006 	# 6 LCS 	MV-Main B_00001 MV-SS 2-Cleve_00008 MV-Gas/Ket B_00003	LCS		voaWater	20.00	mL	1.000000
280-0013195-007 	# 7 MB 		MB		voaWater	20.00	mL	1.000000
280-0013195-008 	# 8 280-32357-A-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-009 	# 9 280-32357-A-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-010 	#10 280-43624-E-4 		Client		voaWater	5.000000	mL	1.000000
280-0013195-011 	#11 280-43580-I-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-012 	#12 280-43580-I-1 		Client		voaWater	1.000000	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013195-013 	#13 280-43580-I-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-014 	#14 280-43580-I-3 		Client		voaWater	20.00	mL	1.000000
280-0013195-015 	#15 280-43580-H-4 		Client		voaWater	20.00	mL	1.000000
280-0013195-016 	#16 280-43580-H-5 		Client		voaWater	20.00	mL	1.000000
280-0013195-017 	#17 280-43580-H-6 		Client		voaWater	20.00	mL	1.000000
280-0013195-018 	#18 280-43580-G-8 		Client		voaWater	20.00	mL	1.000000
280-0013195-019 	#19 280-43580-B-9 		Client		voaWater	20.00	mL	1.000000
280-0013195-020 	#20 280-43580-A-10 		Client		voaWater	20.00	mL	1.000000
280-0013195-021 	#21 280-43639-D-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-022 	#22 280-43639-D-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-023 	#23 280-43639-C-8 		Client		voaWater	20.00	mL	1.000000
280-0013195-024 	#24 280-43818-H-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-025 	#25 280-43818-H-2 		Client		voaWater	20.00	mL	1.000000
280-0013195-026 	#26 280-43818-A-3 		Client		voaWater	20.00	mL	1.000000
280-0013195-027 	#27 240-26078-B-1 		Client		voaWater	20.00	mL	1.000000
280-0013195-028 	#28 240-26078-A-2 		Client		voaWater	2.000000	mL	1.000000
280-0013195-029 	#29 240-26078-A-2 		Client		voaWater	0.200000	mL	1.000000
280-0013195-030 	#30 240-26078-A-3 		Client		voaWater	20.00	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
280-0013195-031 	#31 240-26078-A-4 		Client		vowater	20.00	mL	1.000000
280-0013195-032 	#32 240-26078-A-4 		Client		vowater	2.000000	mL	1.000000

# GENERAL CHEMISTRY

COVER PAGE  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-43753-1

SDG No.: \_\_\_\_\_

Project: Griffiss AFB B 35 LTM

Client Sample ID  
B035M0409LA  
062513LE

Lab Sample ID  
280-43753-1  
280-43753-2

Comments:

\_\_\_\_\_



1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: B035M0409LA

Lab Sample ID: 280-43753-1

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

SDG ID.: \_\_\_\_\_

Matrix: Water

Date Sampled: 06/25/2013 16:00

Reporting Basis: WET

Date Received: 06/26/2013 09:15

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate as N	0.10	0.50	0.10	0.042	mg/L	U		1	9056A
Chloride	230	30	5.0	2.5	mg/L			10	9056A
Sulfate	2.9	5.0	0.50	0.23	mg/L	J		1	9056A
Total Organic Carbon - Quad	2.3	1.0	0.40	0.16	mg/L			1	9060A
Alkalinity	240	5.0	2.0	1.1	mg/L			1	SM 2320B

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: 062513LE

Lab Sample ID: 280-43753-2

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

SDG ID.:

Matrix: Water

Date Sampled: 06/25/2013 16:15

Reporting Basis: WET

Date Received: 06/26/2013 09:15

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate as N	0.10	0.50	0.10	0.042	mg/L	U		1	9056A
Chloride	0.33	3.0	0.50	0.25	mg/L	J		1	9056A
Sulfate	0.37	5.0	0.50	0.23	mg/L	J		1	9056A
Total Organic Carbon - Quad	0.41	1.0	0.40	0.16	mg/L	J		1	9060A
Alkalinity	2.0	5.0	2.0	1.1	mg/L	U		1	SM 2320B

2-IN  
 CALIBRATION QUALITY CONTROL  
 GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Analyst: EMK Batch Start Date: 06/26/2013  
 Reporting Units: mg/L Analytical Batch No.: 180677

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	10:29	Chloride	20.1	20.0	101	90-110		IC ICV
			Sulfate	19.6	20.0	98	90-110		IC ICV weekly_00210
2	ICB	10:45	Chloride	0.333				J	
			Sulfate	0.50				U	
17	CCV	14:42	Chloride	25.3	25.0	101	90-110		IC daily cal_01137
			Sulfate	24.8	25.0	99	90-110		IC daily cal_01137
18	CCB	14:58	Chloride	0.50				U	
			Sulfate	0.50				U	
29	CCV	17:53	Chloride	25.0	25.0	100	90-110		IC daily cal_01137
			Sulfate	25.0	25.0	100	90-110		IC daily cal_01137
30	CCB	18:09	Chloride	0.50				U	
			Sulfate	0.50				U	
41	CCV	21:03	Chloride	26.0	25.0	104	90-110		IC daily cal_01137
			Sulfate	26.0	25.0	104	90-110		IC daily cal_01137
42	CCB	21:19	Chloride	0.333				J	
			Sulfate	0.50				U	

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

2-IN  
 CALIBRATION QUALITY CONTROL  
 GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Analyst: EMK Batch Start Date: 06/26/2013  
 Reporting Units: mg/L Analytical Batch No.: 180678

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	10:29	Nitrate as N	3.93	4.00	98	90-110		IC ICV weekly 00211
2	ICB	10:45	Nitrate as N	0.10				U	
17	CCV	14:42	Nitrate as N	5.01	5.00	100	90-110		IC daily cal_01137
18	CCB	14:58	Nitrate as N	0.10				U	

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

2-IN  
 CALIBRATION QUALITY CONTROL  
 GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
 SDG No.: \_\_\_\_\_  
 Analyst: DFB Batch Start Date: 07/18/2013  
 Reporting Units: mg/L Analytical Batch No.: 183453

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	17:58	Total Organic Carbon - Quad	20.1	20.0	101	90-110		TOC ICV Std_00016
2	ICB	18:12	Total Organic Carbon - Quad	0.25				U	
16	CCV	21:40	Total Organic Carbon - Quad	25.8	25.0	103	90-110		TOC LCS Std_00018
17	CCB	21:55	Total Organic Carbon - Quad	0.163				J	

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

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1  
SDG No.: \_\_\_\_\_  
Analyst: MPS Batch Start Date: 06/27/2013  
Reporting Units: mg/L Analytical Batch No.: 180826

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	CCV	15:32	Alkalinity	202	200	101	90-110		Alk daily lcs 00338
18	CCB	15:36	Alkalinity	1.97				J	

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

3-IN  
METHOD BLANK  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver

Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 180677 Date: 06/26/2013 11:48							
9056A	MB 280-180677/6	Chloride	0.334	J	mg/L	3.0	1
9056A	MB 280-180677/6	Sulfate	0.50	U	mg/L	5.0	1
Batch ID: 180678 Date: 06/26/2013 11:48							
9056A	MB 280-180678/6	Nitrate as N	0.10	U	mg/L	0.50	1
Batch ID: 183453 Date: 07/18/2013 18:57							
9060A	MB 280-183453/5	Total Organic Carbon - Quad	0.40	U	mg/L	1.0	1
Batch ID: 180826 Date: 06/27/2013 14:41							
SM 2320B	MB 280-180826/6	Alkalinity	1.24	J	mg/L	5.0	1

6-IN  
 DUPLICATE  
 GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 180826 Date: 06/27/2013 14:50								
SM 2320B	B035M0409LA	280-43753-1	Alkalinity	240	mg/L			
SM 2320B	B035M0409LA	280-43753-1 DU	Alkalinity	244	mg/L	0.3	10	

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



7A-IN  
LAB CONTROL SAMPLE  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 180677 Date: 06/26/2013 11:16			LCS Source: IC daily cal_01137								
9056A	LCS 280-180677/4	Chloride	25.9		mg/L	25.0	104	89-110	0	10	
9056A	LCS 280-180677/4	Sulfate	25.9		mg/L	25.0	104	86-110	2	10	
Batch ID: 180678 Date: 06/26/2013 11:16			LCS Source: IC daily cal_01137								
9056A	LCS 280-180678/4	Nitrate as N	5.11		mg/L	5.00	102	87-110	0	10	
Batch ID: 183453 Date: 07/18/2013 18:27			LCS Source: TOC LCS Std_00018								
9060A	LCS 280-183453/3	Total Organic Carbon - Quad	25.5		mg/L	25.0	102	86-114	0	12	
Batch ID: 180826 Date: 06/27/2013 14:32			LCS Source: Alk daily lcs_00338								
SM 2320B	LCS 280-180826/4	Alkalinity	191		mg/L	200	95	90-110	10	10	

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

7A-IN  
LAB CONTROL SAMPLE DUPLICATE  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 180677		Date: 06/26/2013 11:32		LCSD Source: IC daily cal_01137							
9056A	LCSD 280-180677/5	Chloride	25.9		mg/L	25.0	104	89-110	0	10	
9056A	LCSD 280-180677/5	Sulfate	25.5		mg/L	25.0	102	86-110	2	10	
Batch ID: 180678		Date: 06/26/2013 11:32		LCSD Source: IC daily cal_01137							
9056A	LCSD 280-180678/5	Nitrate as N	5.11		mg/L	5.00	102	87-110	0	10	
Batch ID: 183453		Date: 07/18/2013 18:42		LCSD Source: TOC LCS Std_00018							
9060A	LCSD 280-183453/4	Total Organic Carbon - Quad	25.5		mg/L	25.0	102	86-114	0	12	
Batch ID: 180826		Date: 06/27/2013 14:37		LCSD Source: Alk daily lcs_00338							
SM 2320B	LCSD 280-180826/5	Alkalinity	211		mg/L	200	106	90-110	10	10	

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

7A-IN  
 METHOD REPORTING LIMIT CHECK  
 GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 180677 Date: 06/26/2013 11:00			LCS Source: IC CAL INT1_00217								
9056A	MRL 280-180677/3	Chloride	1.13	J	mg/L	1.00	113	50-150			
9056A	MRL 280-180677/3	Sulfate	1.15	J	mg/L	1.00	115	50-150			
Batch ID: 180678 Date: 06/26/2013 11:00			LCS Source: IC CAL INT1_00217								
9056A	MRL 280-180678/3	Nitrate as N	0.239	J	mg/L	0.200	120	50-150			

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

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-43753-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: WC\_IC10  
Method: 9056A DL Date: 11/30/2009 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Chloride		3	0.254
Nitrate as N		0.5	0.042
Sulfate		5	0.232

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-43753-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: WC\_IC10  
Method: 9056A XMDL Date: 11/01/2009 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Chloride		3	0.254
Sulfate		5	0.232

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-43753-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: WC\_IC10  
Method: 9056A XMDL Date: 03/28/2011 13:33

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate as N		0.5	0.0425

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-43753-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: WC\_SHI3  
Method: 9060A DL Date: 11/30/2009 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Total Organic Carbon - Quad		1	0.155

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-43753-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: WC\_SHI3  
Method: 9060A XMDL Date: 03/28/2011 11:39

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Organic Carbon - Quad		1	0.155



9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-43753-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: WC-AT3  
Method: SM 2320B DL Date: 03/28/2011 12:06

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Alkalinity		5	1.07

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-43753-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: WC-AT3  
Method: SM 2320B XMDL Date: 03/28/2011 12:06

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Alkalinity		5	1.07

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IC10 Method: 9056A

Start Date: 06/26/2013 10:29 End Date: 06/26/2013 23:10

Lab Sample ID	D / F	Type	Time	Analytes															
				CL	SO														
ICV 280-180677/1	1		10:29	X	X														
ICB 280-180677/2	1		10:45	X	X														
MRL 280-180677/3	1	T	11:00	X	X														
LCS 280-180677/4	1	T	11:16	X	X														
LCSD 280-180677/5	1	T	11:32	X	X														
MB 280-180677/6	1	T	11:48	X	X														
ZZZZZZ			12:04																
ZZZZZZ			12:20																
ZZZZZZ			12:35																
ZZZZZZ			12:51																
ZZZZZZ			13:07																
ZZZZZZ			13:23																
ZZZZZZ			13:39																
ZZZZZZ			13:55																
280-43753-1	1	T	14:11		X														
280-43753-2	1	T	14:27	X	X														
CCV 280-180677/17	1		14:42	X	X														
CCB 280-180677/18	1		14:58	X	X														
ZZZZZZ			15:14																
ZZZZZZ			15:30																
ZZZZZZ			15:46																
ZZZZZZ			16:02																
ZZZZZZ			16:18																
ZZZZZZ			16:34																
ZZZZZZ			16:50																
ZZZZZZ			17:06																
ZZZZZZ			17:21																
ZZZZZZ			17:37																
CCV 280-180677/29	1		17:53	X	X														
CCB 280-180677/30	1		18:09	X	X														
ZZZZZZ			18:25																
ZZZZZZ			18:41																
ZZZZZZ			18:57																
ZZZZZZ			19:12																
ZZZZZZ			19:28																
ZZZZZZ			19:44																
ZZZZZZ			20:00																
280-43753-1	10	T	20:16	X															
ZZZZZZ			20:32																
ZZZZZZ			20:48																
CCV 280-180677/41	1		21:03	X	X														
CCB 280-180677/42	1		21:19	X	X														

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IC10 Method: 9056A

Start Date: 06/26/2013 10:29 End Date: 06/26/2013 23:10

Lab Sample ID	D / F	T y p e	Time	Analytes															
				C L -	S O 4														
zzzzzz			21:35																
zzzzzz			21:51																
zzzzzz			22:06																
zzzzzz			22:22																
zzzzzz			22:38																
CCV 280-180677/48			22:54																
CCB 280-180677/49			23:10																

Prep Types

T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IC10 Method: 9056A

Start Date: 06/26/2013 10:29 End Date: 06/26/2013 23:10

Lab Sample ID	D / F	T y p e	Time	Analytes															
				N O 3															
ICV 280-180678/1	1		10:29	X															
ICB 280-180678/2	1		10:45	X															
MRL 280-180678/3	1	T	11:00	X															
LCS 280-180678/4	1	T	11:16	X															
LCSD 280-180678/5	1	T	11:32	X															
MB 280-180678/6	1	T	11:48	X															
ZZZZZZ			12:04																
ZZZZZZ			12:20																
ZZZZZZ			12:35																
ZZZZZZ			12:51																
ZZZZZZ			13:07																
ZZZZZZ			13:23																
ZZZZZZ			13:39																
ZZZZZZ			13:55																
280-43753-1	1	T	14:11	X															
280-43753-2	1	T	14:27	X															
CCV 280-180678/17	1		14:42	X															
CCB 280-180678/18	1		14:58	X															
ZZZZZZ			15:14																
ZZZZZZ			15:30																
ZZZZZZ			15:46																
ZZZZZZ			16:02																
ZZZZZZ			16:18																
ZZZZZZ			16:34																
ZZZZZZ			16:50																
ZZZZZZ			17:06																
ZZZZZZ			17:21																
ZZZZZZ			17:37																
CCV 280-180678/29			17:53																
CCB 280-180678/30			18:09																
ZZZZZZ			18:25																
ZZZZZZ			18:41																
ZZZZZZ			18:57																
ZZZZZZ			19:12																
ZZZZZZ			19:28																
ZZZZZZ			19:44																
ZZZZZZ			20:00																
ZZZZZZ			20:16																
ZZZZZZ			20:32																
ZZZZZZ			20:48																
CCV 280-180678/41			21:03																
CCB 280-180678/42			21:19																

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IC10 Method: 9056A

Start Date: 06/26/2013 10:29 End Date: 06/26/2013 23:10

Lab Sample ID	D / F	T y p e	Time	Analytes															
				N O 3															
zzzzzz			21:35																
zzzzzz			21:51																
zzzzzz			22:06																
zzzzzz			22:22																
zzzzzz			22:38																
CCV 280-180678/48			22:54																
CCB 280-180678/49			23:10																

Prep Types

T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_SHI3 Method: 9060A

Start Date: 07/18/2013 17:58 End Date: 07/19/2013 12:50

Lab Sample ID	D / F	T y p e	Time	Analytes															
				T	O	C	Q												
ICV 280-183453/1	1		17:58	X															
ICB 280-183453/2	1		18:12	X															
LCS 280-183453/3	1	T	18:27	X															
LCSD 280-183453/4	1	T	18:42	X															
MB 280-183453/5	1	T	18:57	X															
ZZZZZZ			19:11																
ZZZZZZ			19:26																
ZZZZZZ			19:41																
ZZZZZZ			19:55																
ZZZZZZ			20:10																
280-43753-1	1	T	20:27	X															
280-43753-2	1	T	20:41	X															
ZZZZZZ			20:56																
ZZZZZZ			21:11																
ZZZZZZ			21:25																
CCV 280-183453/16	1		21:40	X															
CCB 280-183453/17	1		21:55	X															
ZZZZZZ			22:10																
ZZZZZZ			22:24																
ZZZZZZ			22:39																
ZZZZZZ			22:54																
ZZZZZZ			23:08																
ZZZZZZ			23:25																
ZZZZZZ			23:40																
ZZZZZZ			10:08																
ZZZZZZ			10:23																
ZZZZZZ			10:38																
CCV 280-183453/28			10:52																
CCB 280-183453/29			11:07																
ZZZZZZ			11:22																
ZZZZZZ			11:36																
ZZZZZZ			11:51																
ZZZZZZ			12:06																
ZZZZZZ			12:20																
CCV 280-183453/35			12:35																
CCB 280-183453/36			12:50																

Prep Types  
T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Instrument ID: WC-AT3 Method: SM 2320B

Start Date: 06/27/2013 14:18 End Date: 06/27/2013 15:36

Lab Sample ID	D / F	T y p e	Time	Analytes																
				A	l	k														
RINSE 280-180826/1			14:18																	
ZZZZZZ			14:23																	
ZZZZZZ			14:28																	
LCS 280-180826/4	1	T	14:32	X																
LCSD 280-180826/5	1	T	14:37	X																
MB 280-180826/6	1	T	14:41	X																
280-43753-1	1	T	14:45	X																
280-43753-1 DU	1	T	14:50	X																
280-43753-2	1	T	14:53	X																
ZZZZZZ			14:58																	
ZZZZZZ			15:03																	
ZZZZZZ			15:07																	
ZZZZZZ			15:12																	
ZZZZZZ			15:18																	
ZZZZZZ			15:23																	
ZZZZZZ			15:27																	
CCV 280-180826/17	1		15:32	X																
CCB 280-180826/18	1		15:36	X																

Prep Types  
T = Total/NA



**Wet Chemistry Data Review Checklist  
For Tests with Calibration Curves**

Test Name/ Method #: IC

SOP # WC # 0020

Instrument: IC10 Analyst: E. KUDIA

Analysis Date: 06-26-13

Lot / Sample Numbers	Matrix	Prep Batch	Batch	Method	Special Inst
<u>280-43746, 43748</u>	<u>AQ</u>		<u>180678</u>		
<u>43753, 43752</u>	<u>↓</u>		<u>180677</u>		
<u>43751, 43754</u>	<u>↓</u>				

A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Minimum of five standards in ICAL or as specified in method?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
2. Correlation coefficient $\geq 0.995$ ?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3. Second-source ICV analyzed, and recovery within acceptance limits?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
4. ICB analyzed immediately after the ICV & results < the RL	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
5. CCV analyzed after every ten samples & recovery within acceptance limits?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
6. CCB analyzed after every CCV & results < RL?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
7. Absolute value of the intercept is $< \pm \frac{1}{2}$ the RL?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
B. Sample Results				
1. All samples greater than highest calibration standard diluted and reanalyzed?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
2. Do associated RLs/MDLs reflect dilutions or limited sample volume?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3. All reported results bracketed by in control CCV results?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
4. Sample analyses done within holding time?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
5. Initial pH check documented for all samples? (If Applicable)			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Preparation benchsheet completed and included in package?			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. Client requirements reviewed and met?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
8. Were data manually transcribed from instrument printouts into TALS verified 100% including significant figures and correct units? (If Applicable)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
9. Do the prep and analysis dates in TALS reflect the actual dates?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
11. Raw data copies prepared, scanned, and uploaded?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
12. Manual integrations done properly and initialed and dated?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
13. STD/True Value information is updated and included?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
C. Preparation/Matrix QC				
1. Method blank < RL or all reported samples > 10x blank have NCM?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
2. Method blank < 1/2 RL or NCM provided?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3. LCS/LCSD run for batch and within QC limits?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
4. MS/MSD run at required frequency and within limits or NCM written?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
5. DUP run at required frequency and RPD within acceptance limits or NCM written?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>

Analyst: E. Kudia

Date: 06-27-13

2nd Level Reviewer: [Signature]

Date: 7/9/13

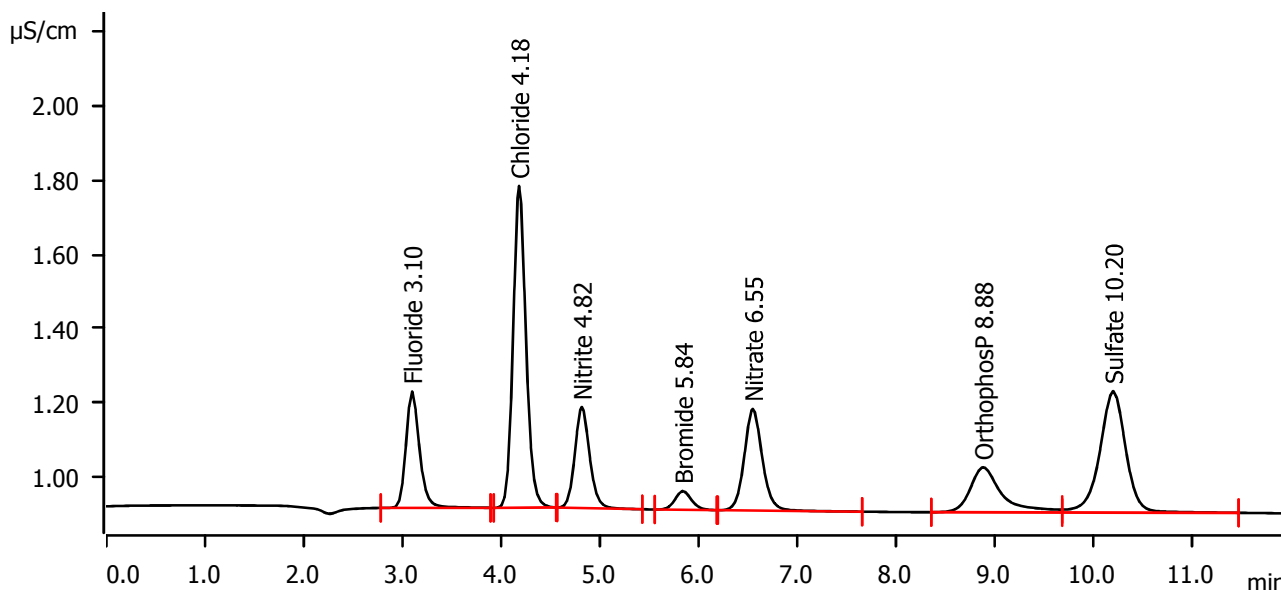
**Sample data**

Ident . . . . . STD1  
 Sample type . . . . . Standard 1  
 Determination start . . . . . 2013-06-06 10:49:36 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

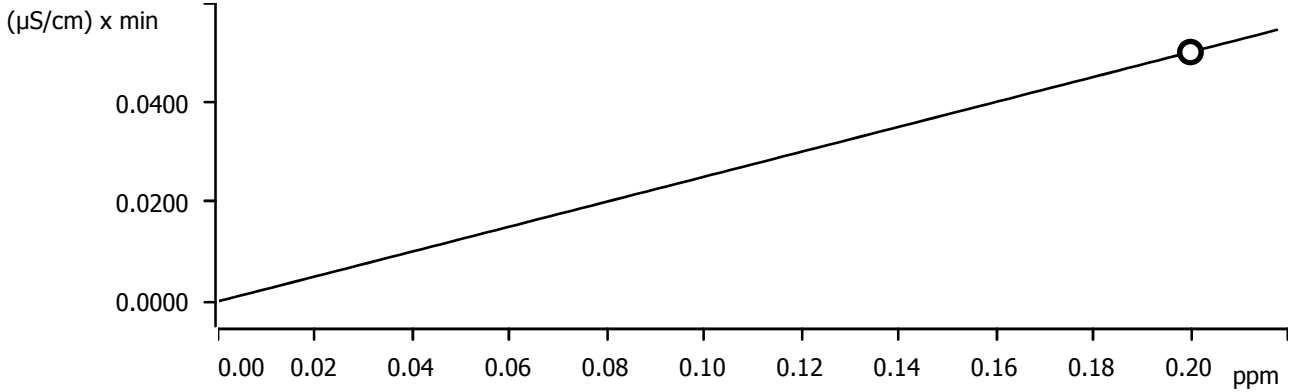
Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.51 MPa  
 Temperature . . . . . 30.0 °C

**Anions**



Peak number	Retention time min	Area ( $\mu\text{S/cm}$ ) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.098	0.0502	0.313	0.200	Fluoride
2	4.182	0.1302	0.866	1.000	Chloride
3	4.817	0.0472	0.272	0.200	Nitrite
4	5.840	0.0098	0.050	0.200	Bromide
5	6.548	0.0580	0.273	0.200	Nitrate
6	8.882	0.0451	0.121	0.200	OrthophosP
7	10.197	0.1001	0.327	1.000	Sulfate

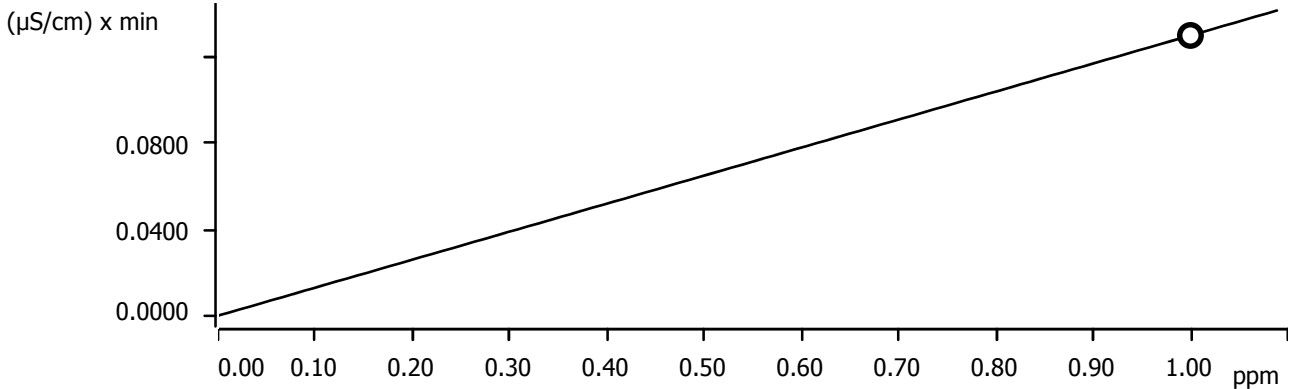
**Fluoride (Anions)**



Function: . . . . .  $A = 0.0501979 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used

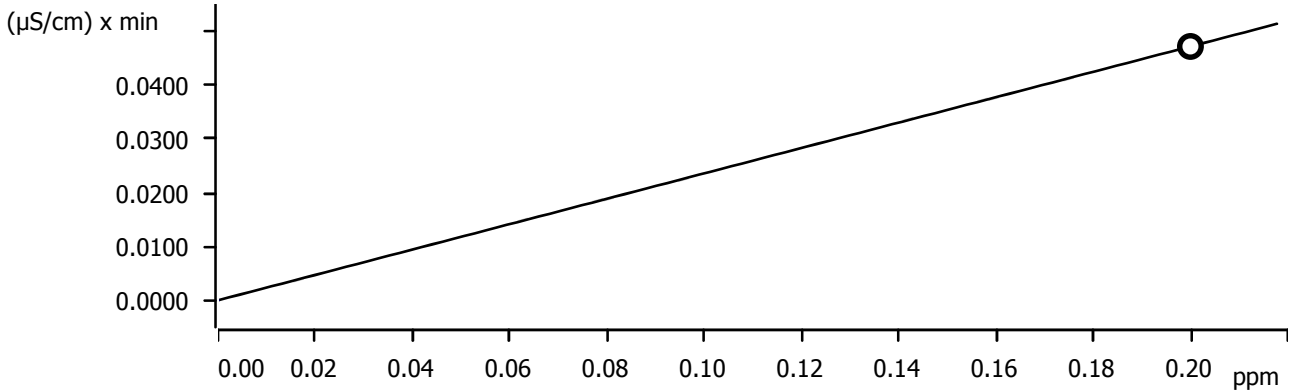
**Chloride (Anions)**



Function: . . . . .  $A = 0.0260411 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used

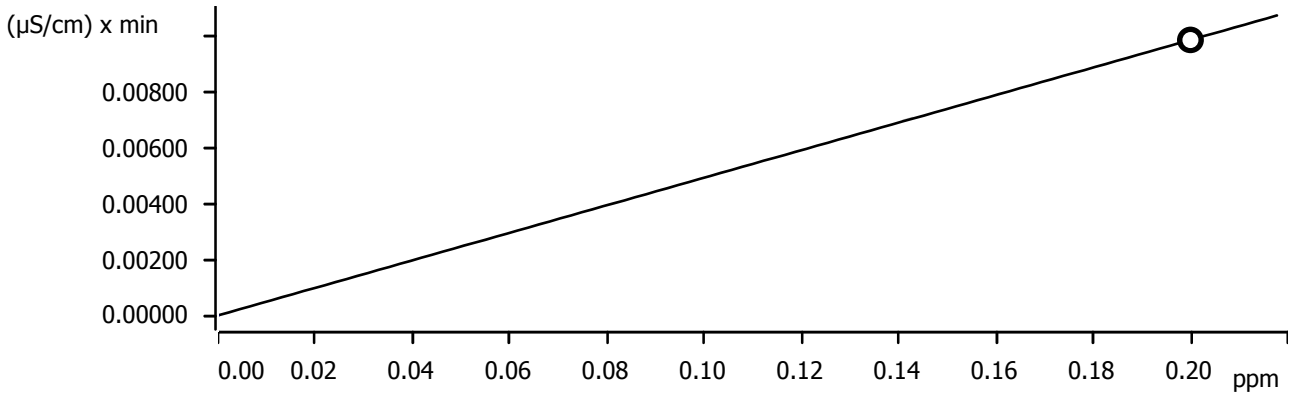
**Nitrite (Anions)**



Function: . . . . .  $A = 0.0471838 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used

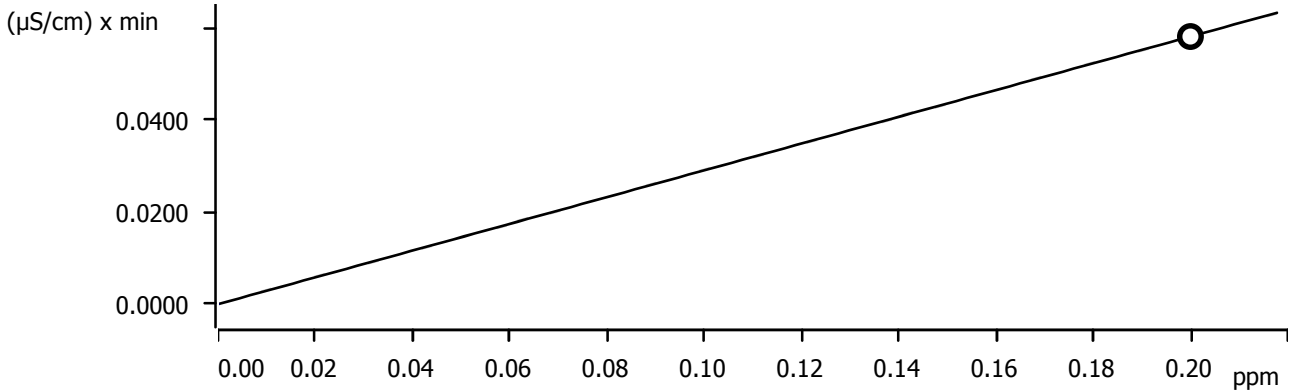
**Bromide (Anions)**



Function: . . . . .  $A = 9.81263E-3 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used

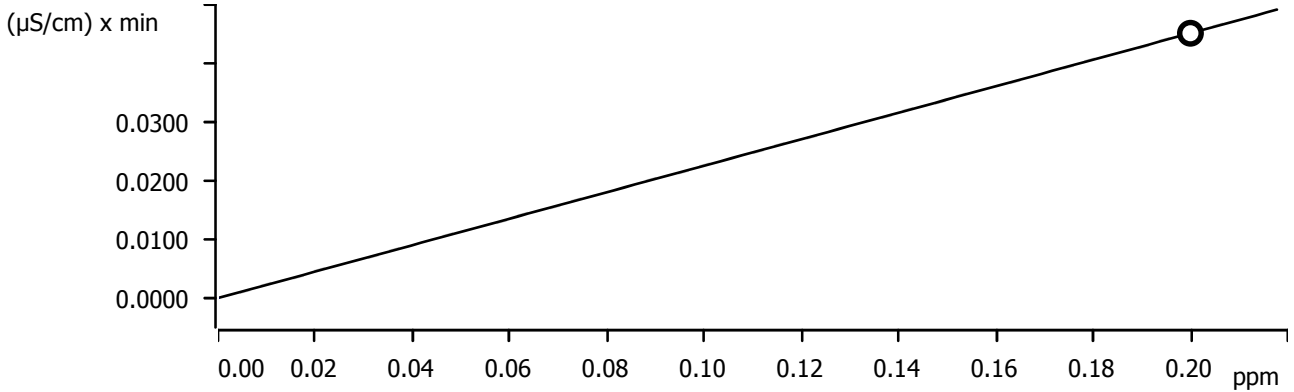
**Nitrate (Anions)**



Function: . . . . .  $A = 0.0580301 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used

**OrthophosP (Anions)**

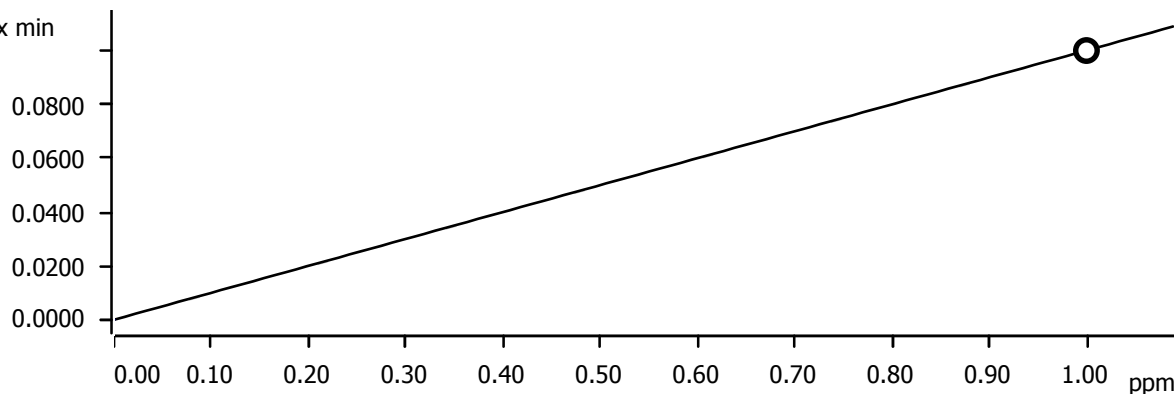


Function: . . . . .  $A = 0.0451275 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used

Sulfate (Anions)

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = 0.0200184 \times Q$

Relative standard deviation . . . . . 0.000000 %

Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used

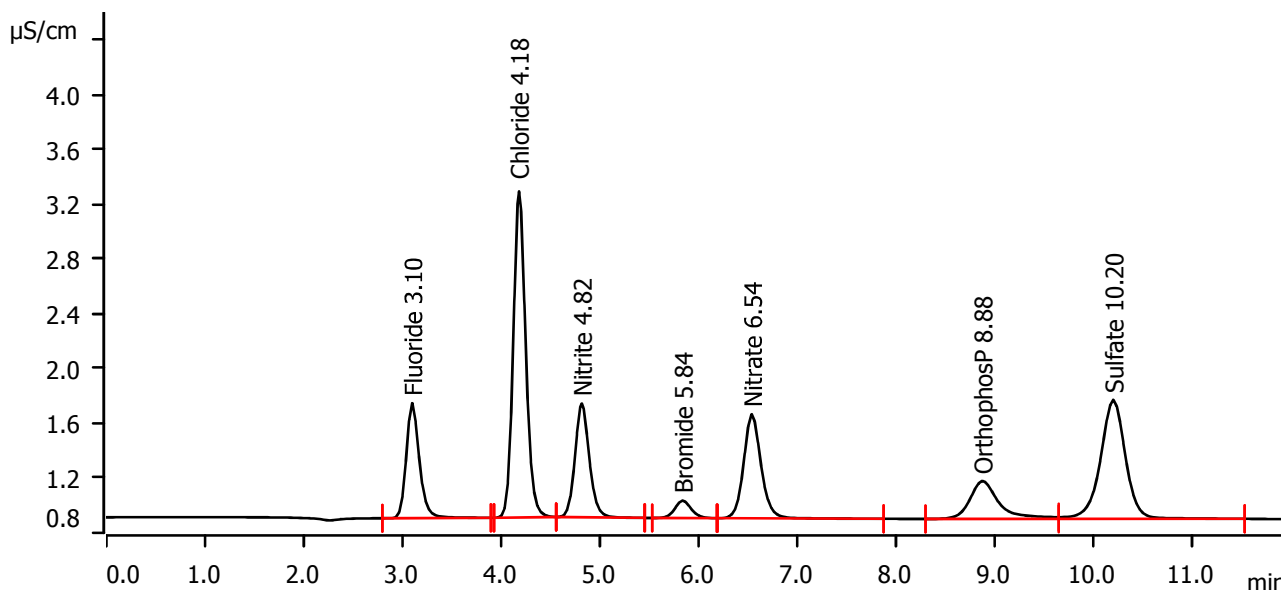
**Sample data**

Ident . . . . . STD2  
 Sample type . . . . . Standard 2  
 Determination start . . . . . 2013-06-06 11:04:58 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.39 MPa  
 Temperature . . . . . 30.0 °C

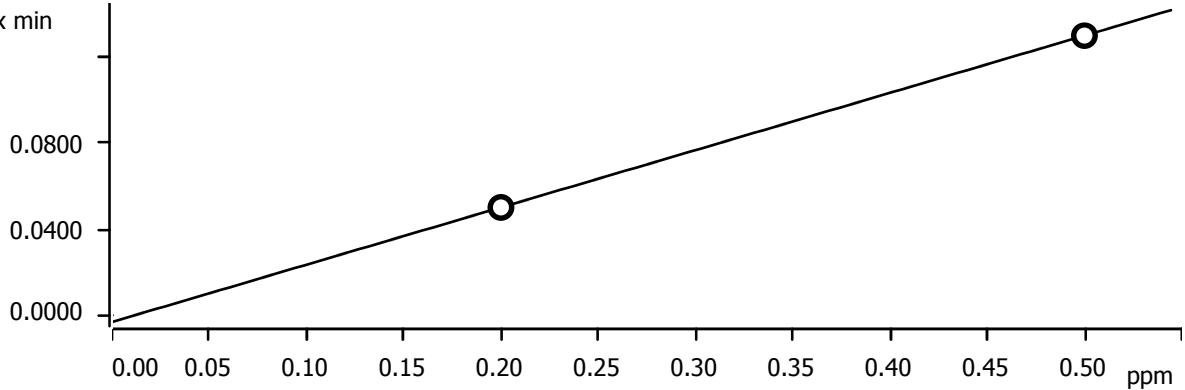
**Anions**



Peak number	Retention time min	Area (μS/cm) x min	Height μS/cm	Concentration ppm	Component name
1	3.098	0.1300	0.840	0.500	Fluoride
2	4.182	0.3474	2.382	2.500	Chloride
3	4.817	0.1395	0.831	0.500	Nitrite
4	5.838	0.0245	0.128	0.500	Bromide
5	6.538	0.1557	0.760	0.500	Nitrate
6	8.875	0.0952	0.277	0.500	OrthophosP
7	10.198	0.2562	0.869	2.500	Sulfate

**Fluoride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

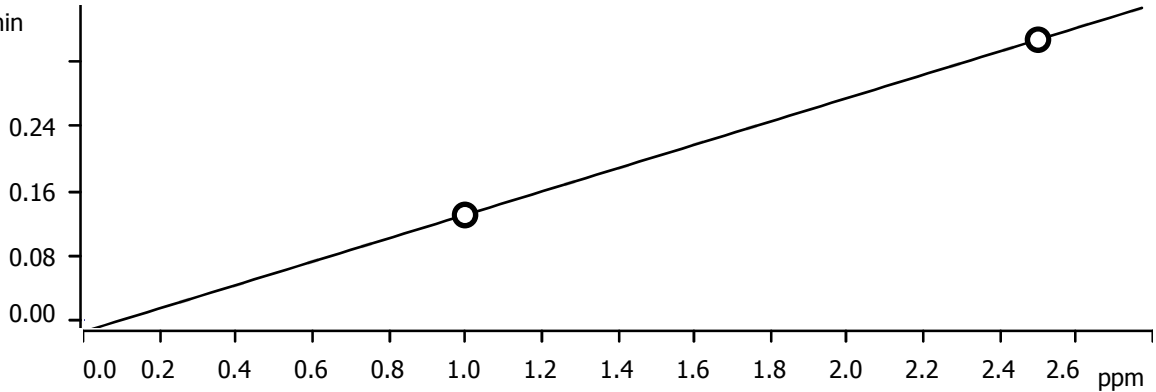


Function: . . . . .  $A = -3.03002E-3 + 0.0532279 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.130	STD2	2013-06-06 11:04:58 UTC-6	used

**Chloride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

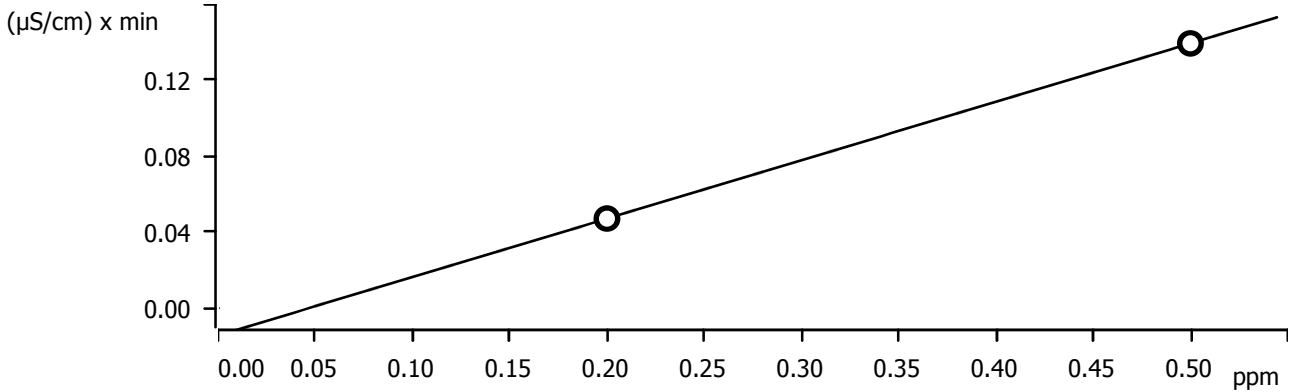


Function: . . . . .  $A = -0.0145998 + 0.0289611 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.347	STD2	2013-06-06 11:04:58 UTC-6	used



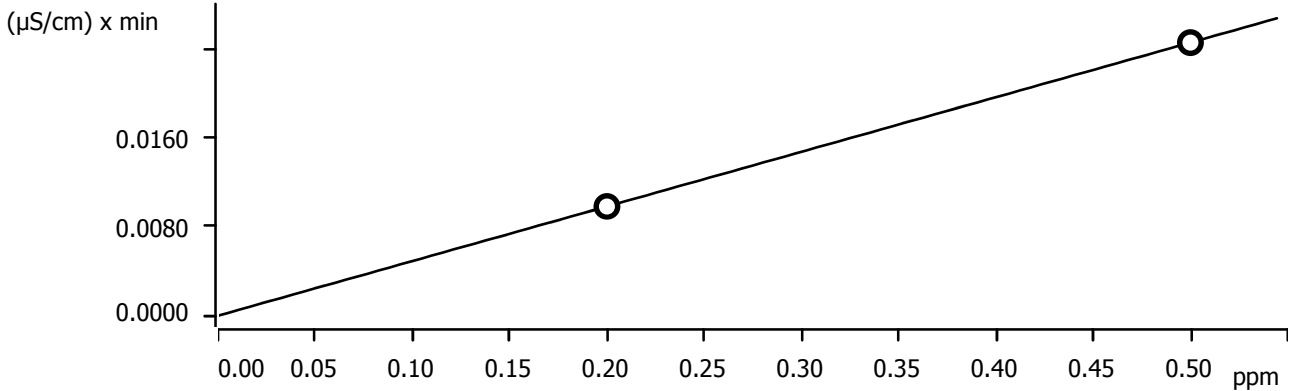
**Nitrite (Anions)**



Function: . . . . .  $A = -0.0143504 + 0.0615342 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.139	STD2	2013-06-06 11:04:58 UTC-6	used

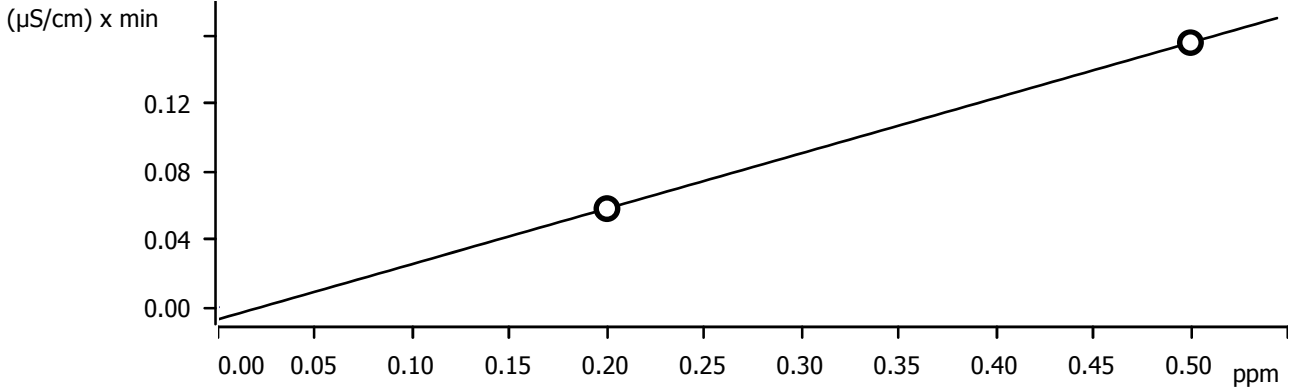
**Bromide (Anions)**



Function: . . . . .  $A = -1.82529E-7 + 9.81282E-3 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.025	STD2	2013-06-06 11:04:58 UTC-6	used

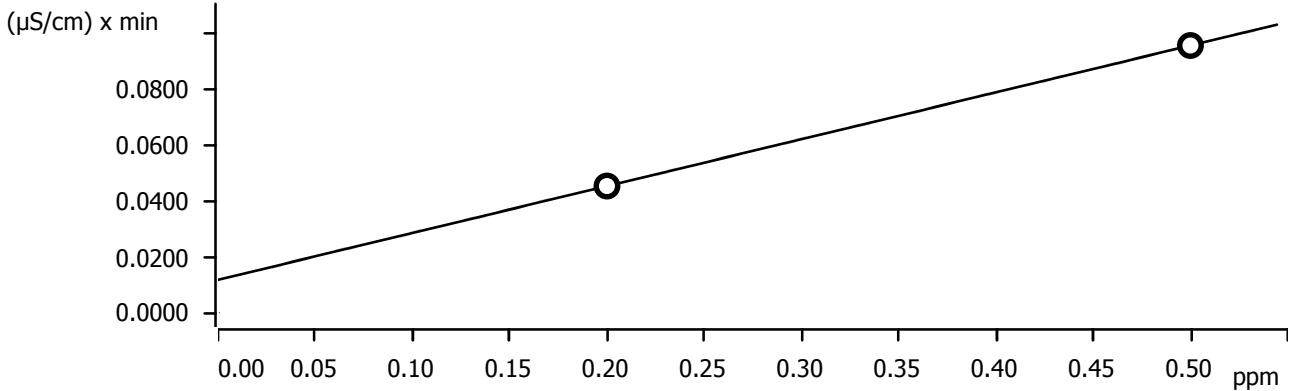
**Nitrate (Anions)**



Function: . . . . .  $A = -7.10327E-3 + 0.0651334 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.156	STD2	2013-06-06 11:04:58 UTC-6	used

**OrthophosP (Anions)**

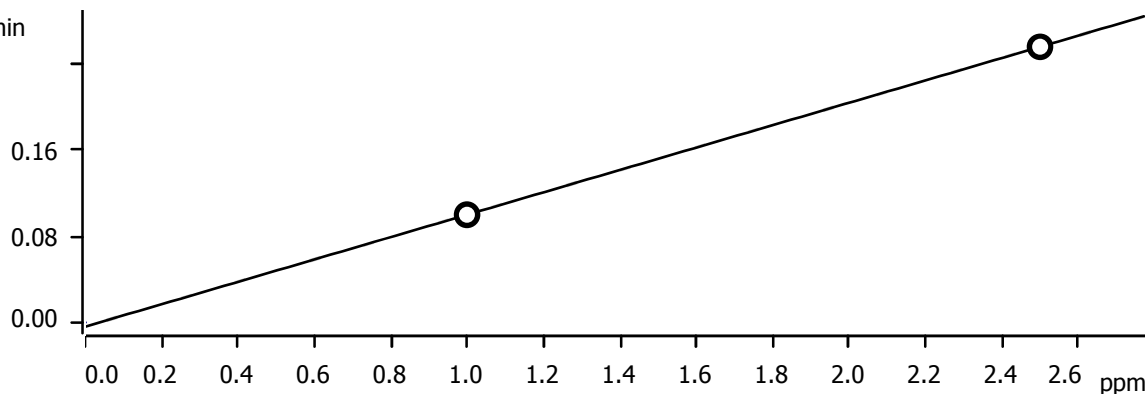


Function: . . . . .  $A = 0.0117401 + 0.0333873 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.095	STD2	2013-06-06 11:04:58 UTC-6	used

**Sulfate (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = -3.94779E-3 + 0.0208079 \times Q$

Relative standard deviation . . . . . 0.000000 %

Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.256	STD2	2013-06-06 11:04:58 UTC-6	used

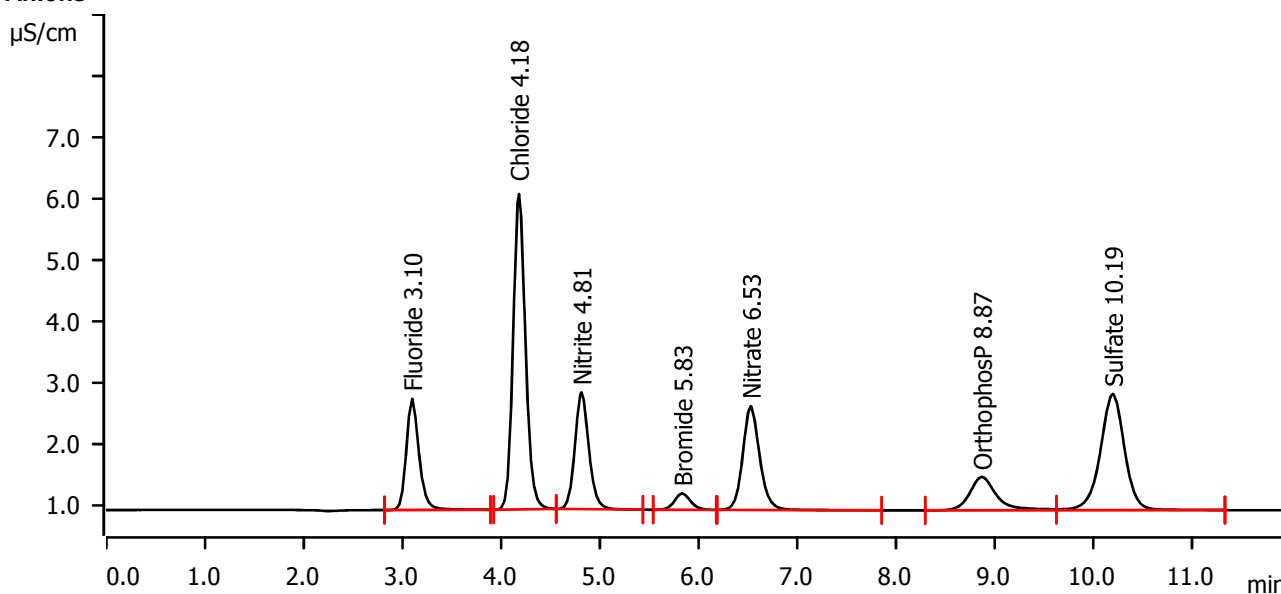
**Sample data**

Ident . . . . . STD3  
 Sample type . . . . . Standard 3  
 Determination start . . . . . 2013-06-06 11:20:19 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.45 MPa  
 Temperature . . . . . 30.0 °C

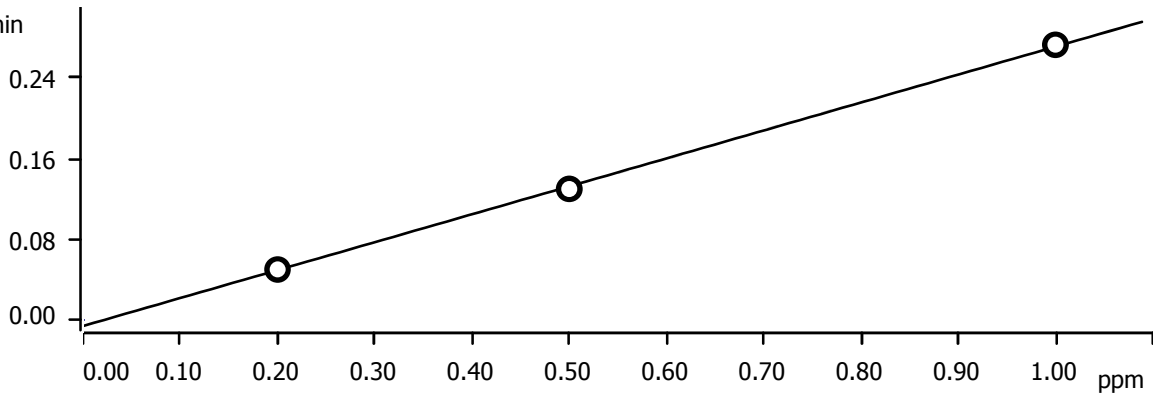
**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.098	0.2730	1.814	1.007	Fluoride
2	4.180	0.7454	5.153	5.046	Chloride
3	4.813	0.3138	1.906	1.012	Nitrite
4	5.832	0.0505	0.268	1.006	Bromide
5	6.527	0.3384	1.697	1.011	Nitrate
6	8.867	0.1740	0.549	0.994	OrthophosP
7	10.193	0.5411	1.900	5.044	Sulfate

**Fluoride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

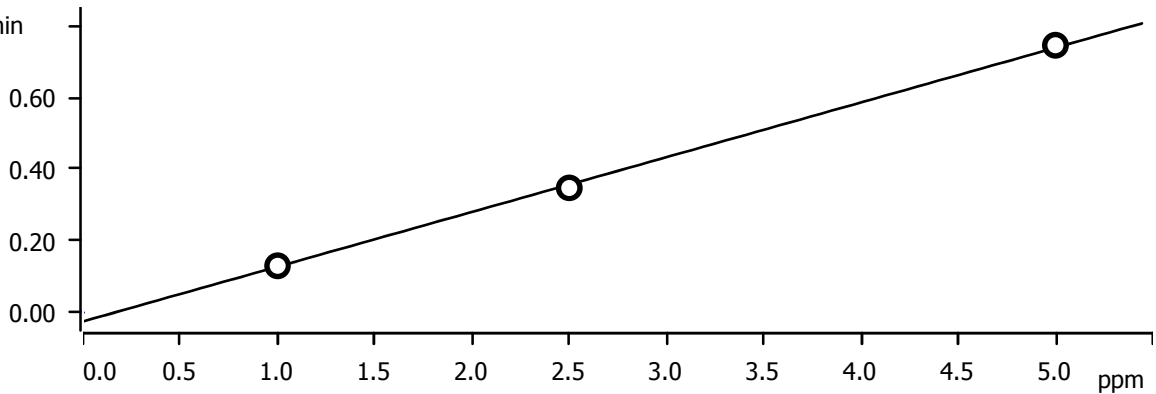


Function: . . . . .  $A = -5.82503E-3 + 0.0553779 \times Q$   
 Relative standard deviation . . . . . 2.176930 %  
 Correlation coefficient . . . . . 0.999788

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.130	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.273	STD3	2013-06-06 11:20:19 UTC-6	used

**Chloride (Anions)**

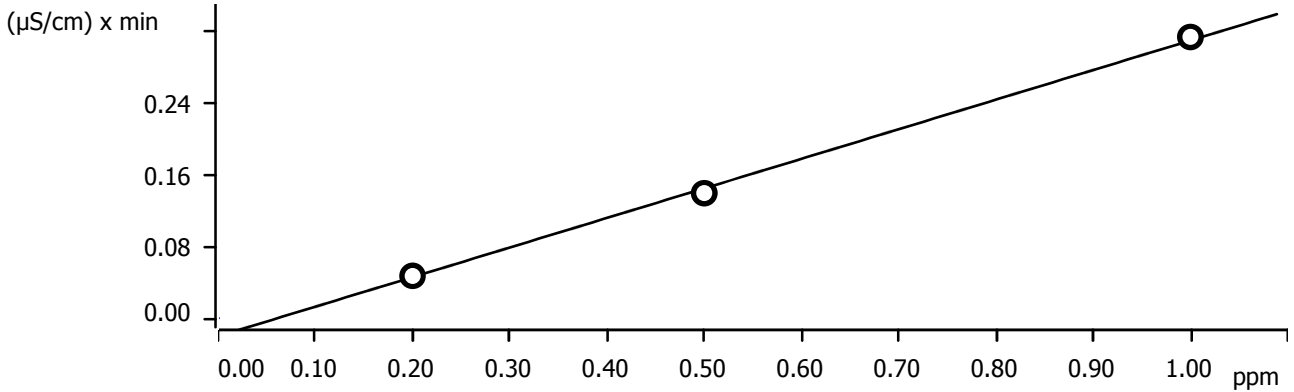
( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = -0.0247586 + 0.0305239 \times Q$   
 Relative standard deviation . . . . . 2.932268 %  
 Correlation coefficient . . . . . 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.347	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.745	STD3	2013-06-06 11:20:19 UTC-6	used

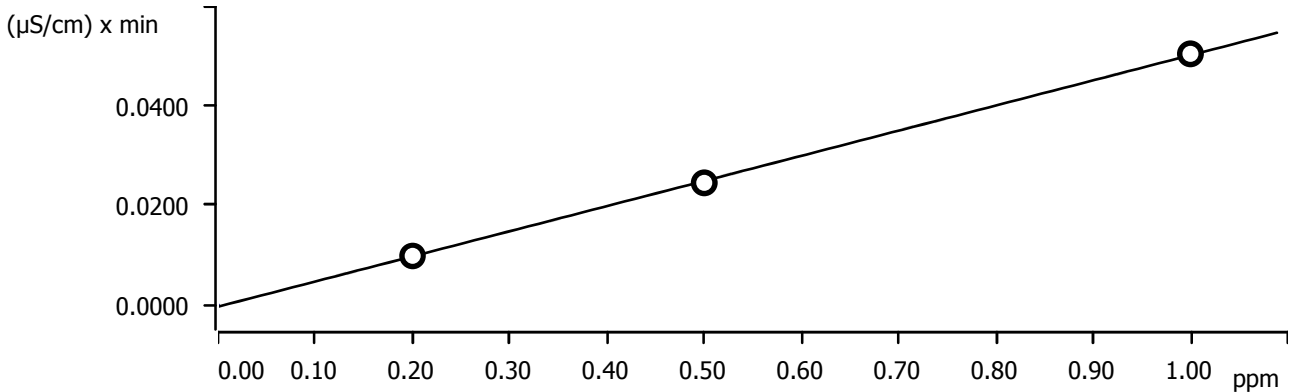
**Nitrite (Anions)**



Function: . . . . .  $A = -0.0201246 + 0.0659759 \times Q$   
 Relative standard deviation . . . . . 4.073249 %  
 Correlation coefficient . . . . . 0.999370

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.139	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.314	STD3	2013-06-06 11:20:19 UTC-6	used

**Bromide (Anions)**

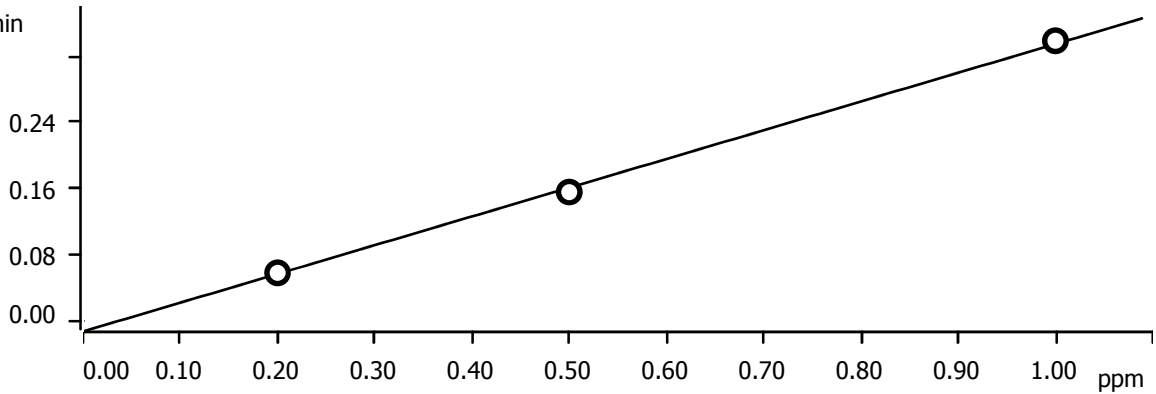


Function: . . . . .  $A = -4.08616E-4 + 0.0101270 \times Q$   
 Relative standard deviation . . . . . 1.699172 %  
 Correlation coefficient . . . . . 0.999864

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.025	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.051	STD3	2013-06-06 11:20:19 UTC-6	used

**Nitrate (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = -0.0127220 + 0.0694554 \times Q$

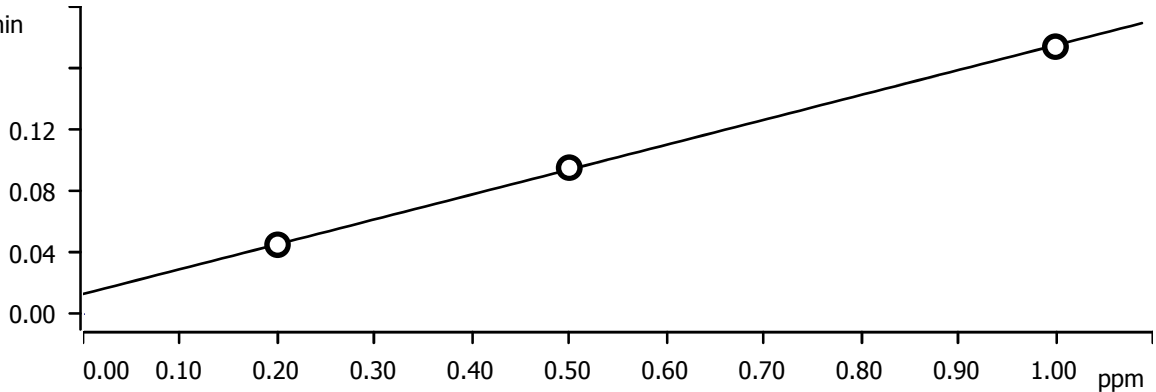
Relative standard deviation . . . . . 3.591889 %

Correlation coefficient . . . . . 0.999460

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.156	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.338	STD3	2013-06-06 11:20:19 UTC-6	used

**OrthophosP (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = 0.0130661 + 0.0323674 \times Q$

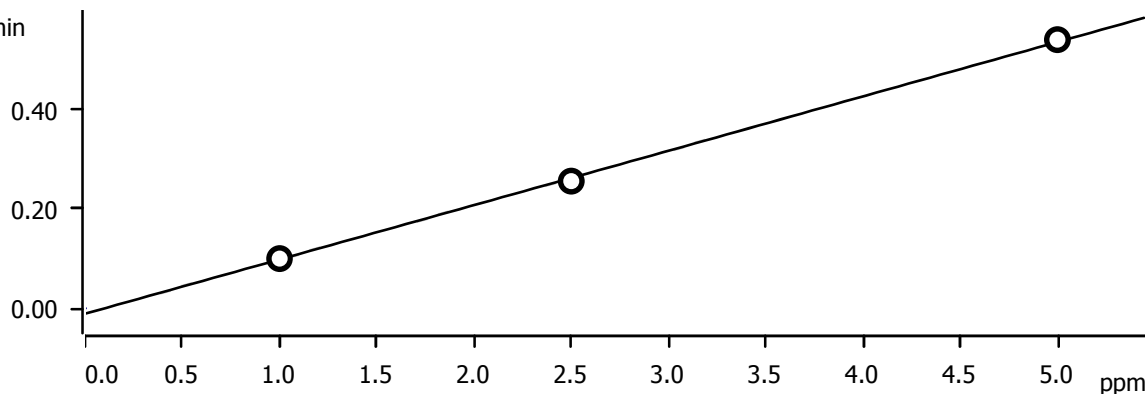
Relative standard deviation . . . . . 1.489146 %

Correlation coefficient . . . . . 0.999856

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.095	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.174	STD3	2013-06-06 11:20:19 UTC-6	used

**Sulfate (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = -0.0109761 + 0.0218892 \times Q$

Relative standard deviation . . . . . 2.764811 %

Correlation coefficient . . . . . 0.999658

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.256	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.541	STD3	2013-06-06 11:20:19 UTC-6	used



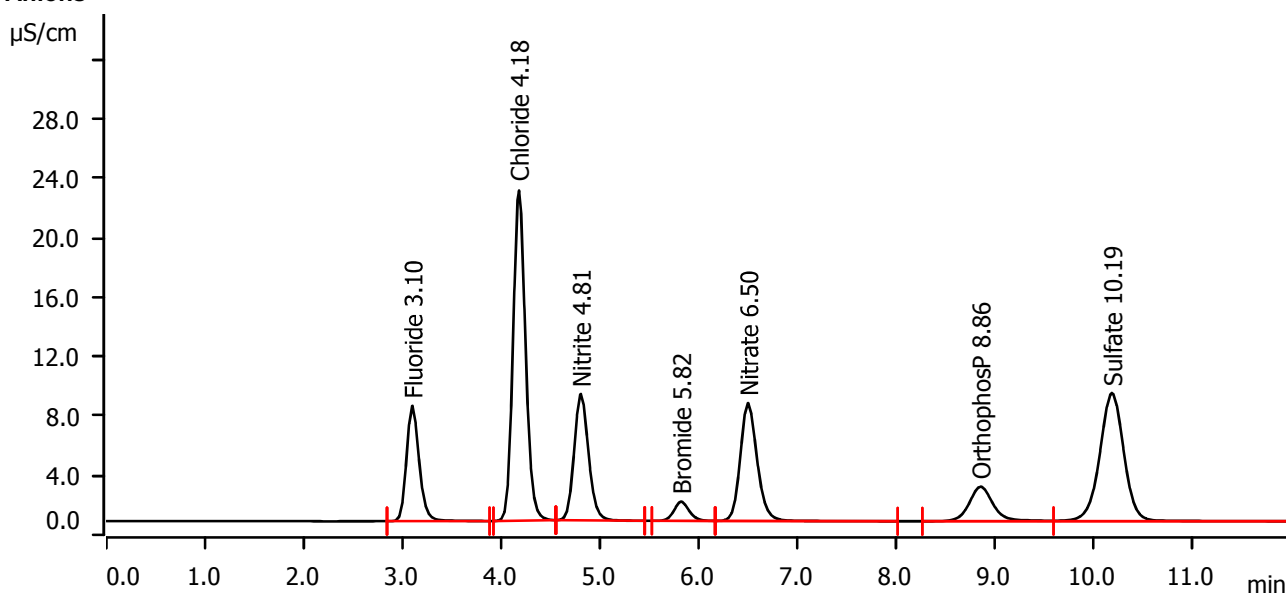
**Sample data**

Ident . . . . . STD4  
 Sample type . . . . . Standard 4  
 Determination start . . . . . 2013-06-06 11:35:40 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.45 MPa  
 Temperature . . . . . 30.0 °C

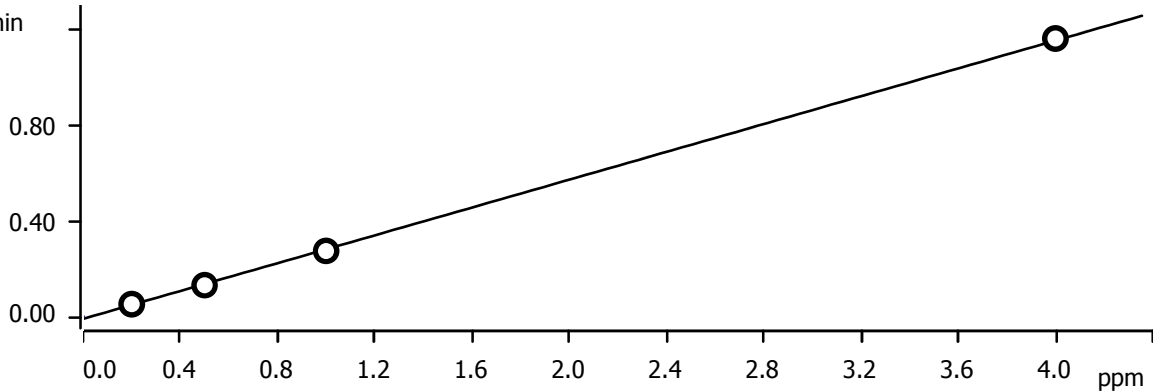
**Anions**



Peak number	Retention time min	Area ( $\mu\text{S/cm}$ ) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.100	1.1618	7.757	4.031	Fluoride
2	4.180	3.2470	22.208	20.200	Chloride
3	4.807	1.4398	8.500	4.057	Nitrite
4	5.823	0.2316	1.296	4.076	Bromide
5	6.500	1.5760	7.931	4.075	Nitrate
6	8.855	0.6637	2.328	4.003	OrthophosP
7	10.185	2.4592	8.633	20.340	Sulfate

**Fluoride (Anions)**

( $\mu\text{S/cm}$ ) x min

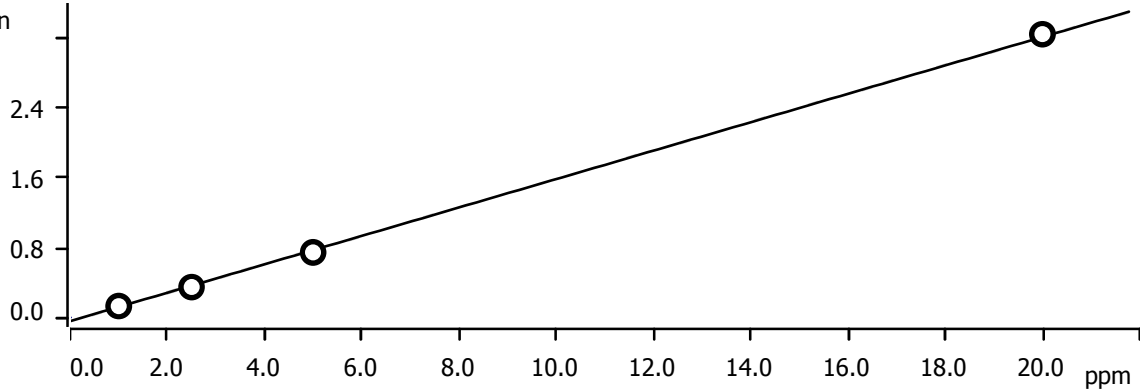


Function: . . . . .  $A = -0.0108089 + 0.0581843 \times Q$   
 Relative standard deviation . . . . . 2.209060 %  
 Correlation coefficient . . . . . 0.999900

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.130	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.273	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.162	STD4	2013-06-06 11:35:40 UTC-6	used

**Chloride (Anions)**

( $\mu\text{S/cm}$ ) x min

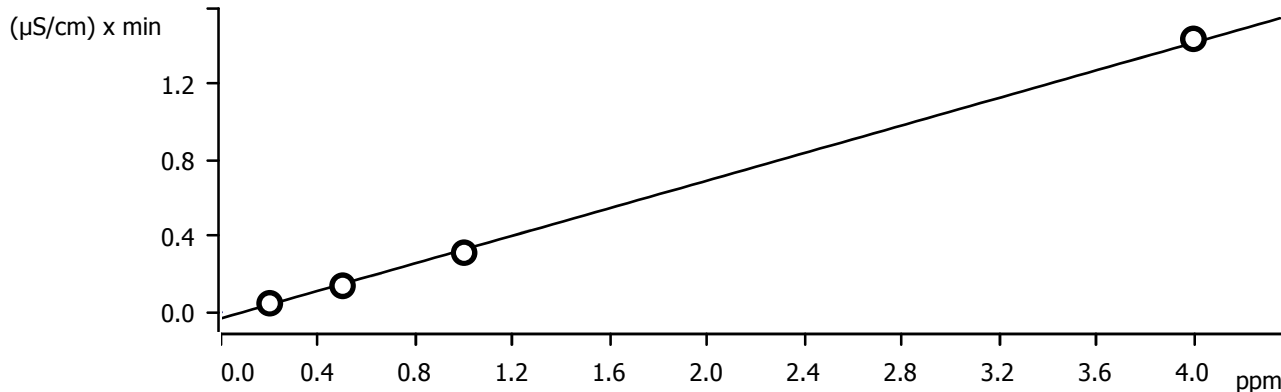


Function: . . . . .  $A = -0.0429642 + 0.0325743 \times Q$   
 Relative standard deviation . . . . . 2.915569 %  
 Correlation coefficient . . . . . 0.999830

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.347	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.745	STD3	2013-06-06 11:20:19 UTC-6	used

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 4	1	20.000	5.0	1.0	1.0	3.247	STD4	2013-06-06 11:35:40 UTC-6	used

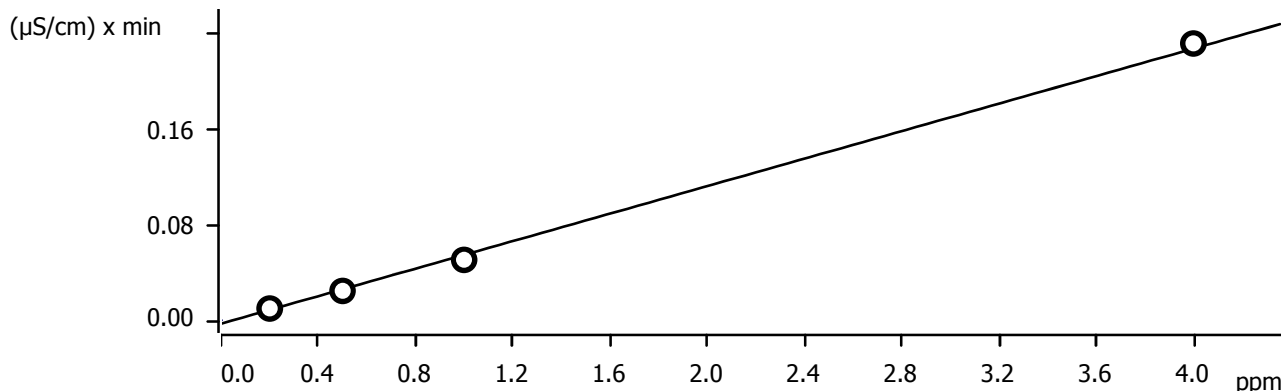
**Nitrite (Anions)**



Function: . . . . .  $A = -0.0317774 + 0.0725376 \times Q$   
 Relative standard deviation . . . . . 4.301465 %  
 Correlation coefficient . . . . . 0.999652

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.139	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.314	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.440	STD4	2013-06-06 11:35:40 UTC-6	used

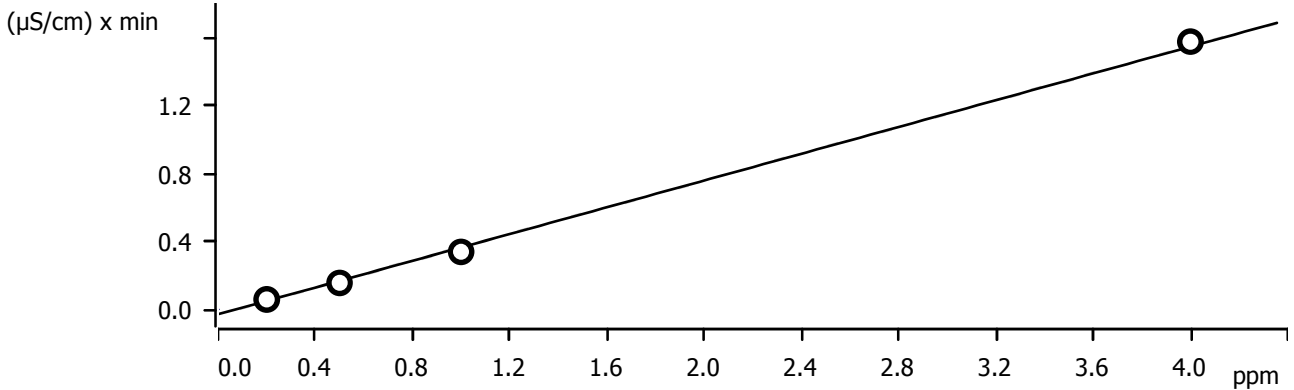
**Bromide (Anions)**



Function: . . . . .  $A = -2.85105E-3 + 0.0115023x Q$   
 Relative standard deviation . . . . . 5.618568 %  
 Correlation coefficient . . . . . 0.999379

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.025	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.051	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.232	STD4	2013-06-06 11:35:40 UTC-6	used

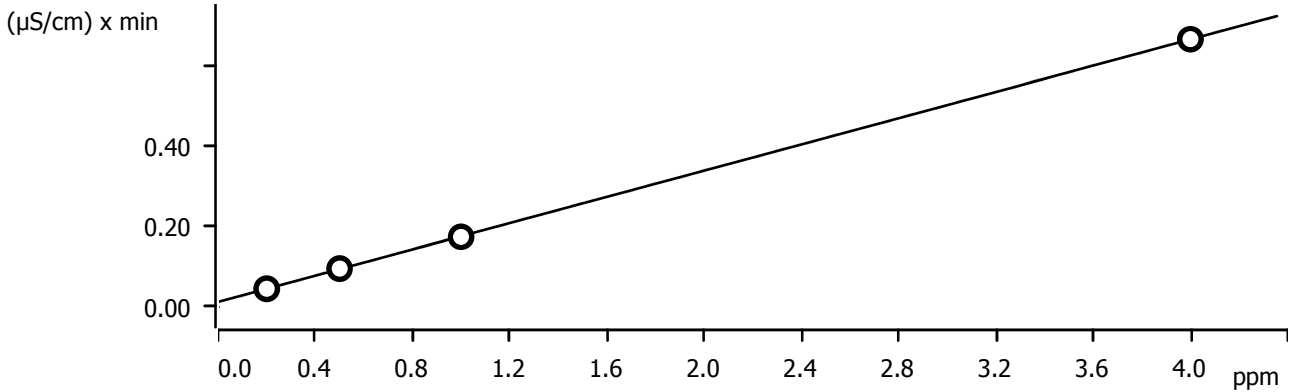
**Nitrate (Anions)**



Function: . . . . .  $A = -0.0292878 + 0.0787837x Q$   
 Relative standard deviation . . . . . 5.602288 %  
 Correlation coefficient . . . . . 0.999405

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.156	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.338	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.576	STD4	2013-06-06 11:35:40 UTC-6	used

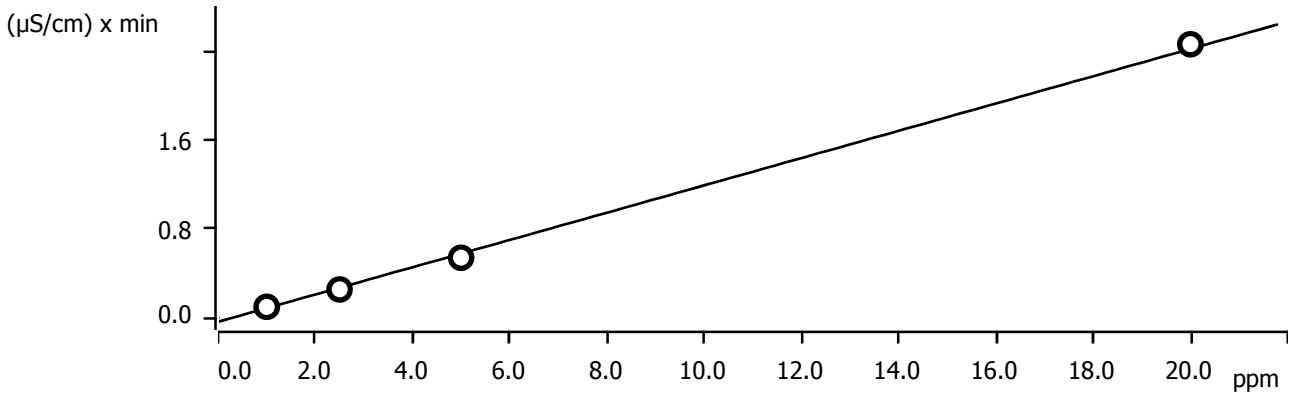
**OrthophosP (Anions)**



Function: . . . . .  $A = 0.0127940 + 0.0325206 \times Q$   
 Relative standard deviation . . . . . 0.541309 %  
 Correlation coefficient . . . . . 0.999993

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.095	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.174	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.664	STD4	2013-06-06 11:35:40 UTC-6	used

**Sulfate (Anions)**



Function: . . . . .  $A = -0.0343219 + 0.0245185 \times Q$   
 Relative standard deviation . . . . . 5.015716 %  
 Correlation coefficient . . . . . 0.999508

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.256	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.541	STD3	2013-06-06 11:20:19 UTC-6	used

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Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 4	1	20.000	5.0	1.0	1.0	2.459	STD4	2013-06-06 11:35:40 UTC-6	used

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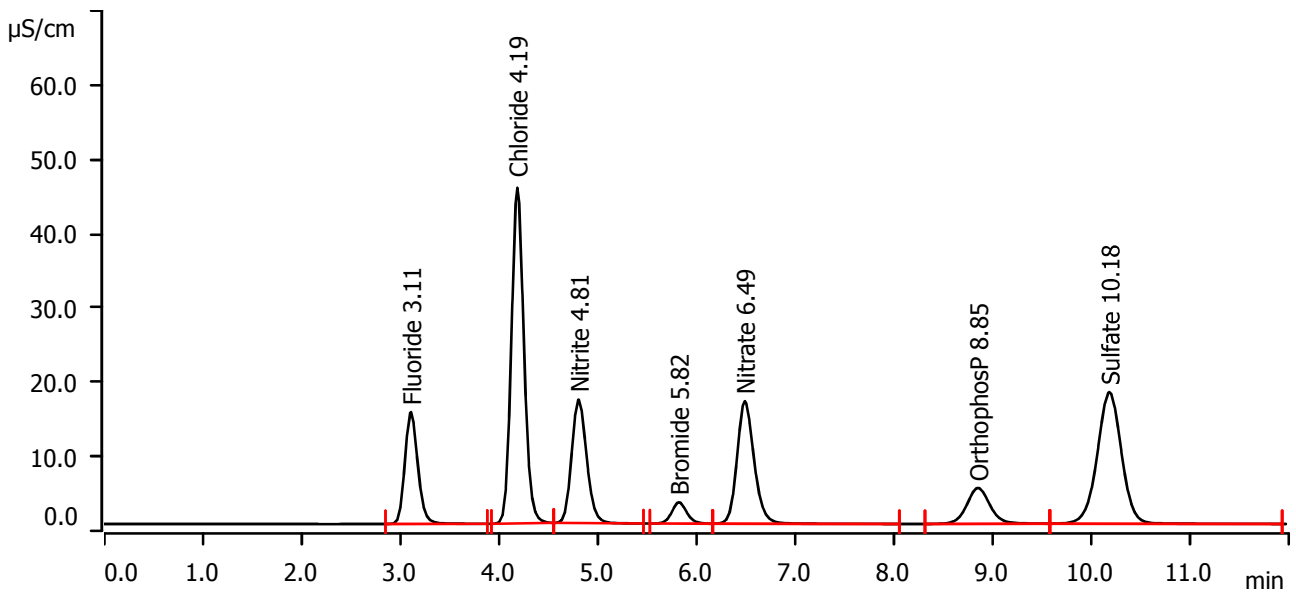
**Sample data**

Ident . . . . . STD5  
 Sample type . . . . . Standard 5  
 Determination start . . . . . 2013-06-06 11:51:02 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.51 MPa  
 Temperature . . . . . 30.0 °C

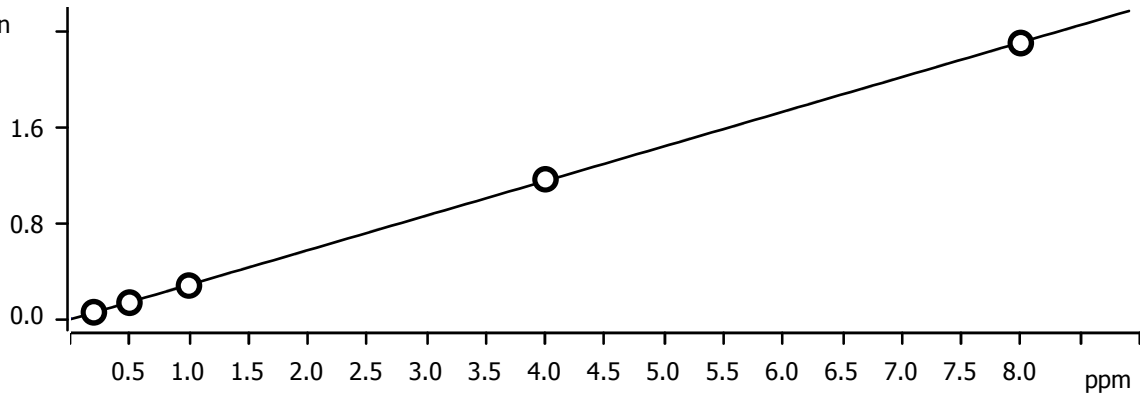
**Anions**



Peak number	Retention time min	Area ( $\mu\text{S/cm}$ ) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.107	2.3021	15.053	7.983	Fluoride
2	4.185	6.6361	45.167	40.343	Chloride
3	4.805	2.9383	16.608	8.064	Nitrite
4	5.820	0.5063	2.881	8.275	Bromide
5	6.488	3.3008	16.498	8.151	Nitrate
6	8.850	1.3149	4.833	8.003	OrthophosphP
7	10.180	5.0364	17.715	40.460	Sulfate

**Fluoride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

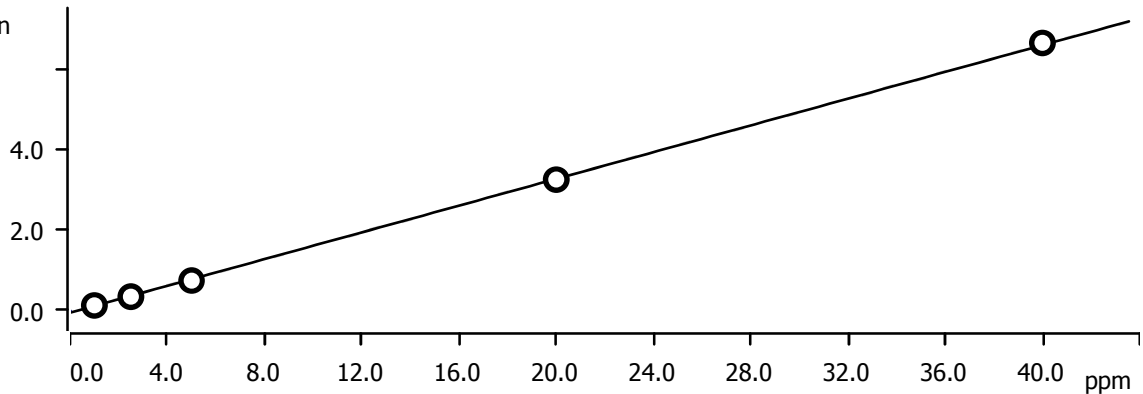


Function: . . . . .  $A = -0.0102806 + 0.0579352 \times Q$   
 Relative standard deviation . . . . . 1.213250 %  
 Correlation coefficient . . . . . 0.999963

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.130	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.273	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.162	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	2.302	STD5	2013-06-06 11:51:02 UTC-6	used

**Chloride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



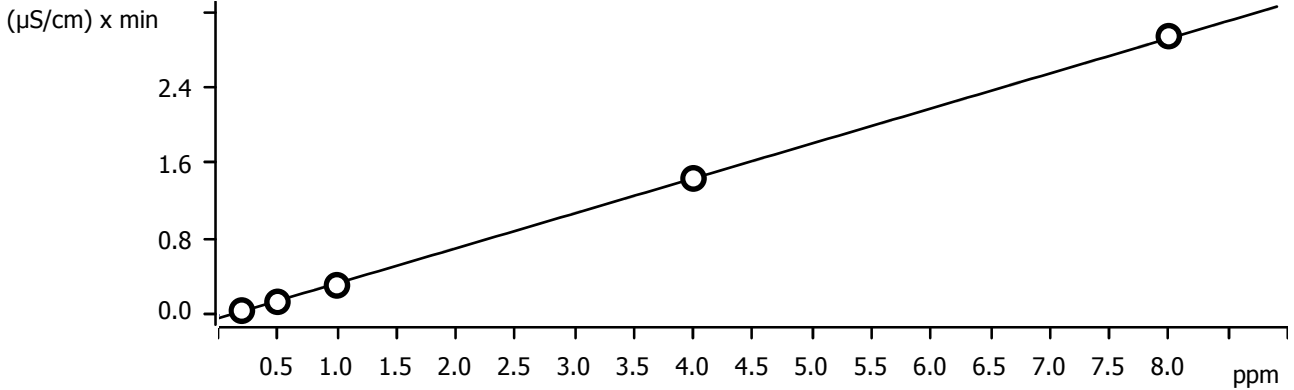
Function: . . . . .  $A = -0.0489795 + 0.0331415 \times Q$   
 Relative standard deviation . . . . . 1.878507 %  
 Correlation coefficient . . . . . 0.999915

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.347	STD2	2013-06-06 11:04:58 UTC-6	used



Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 3	1	5.000	5.0	1.0	1.0	0.745	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	20.000	5.0	1.0	1.0	3.247	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	40.000	5.0	1.0	1.0	6.636	STD5	2013-06-06 11:51:02 UTC-6	used

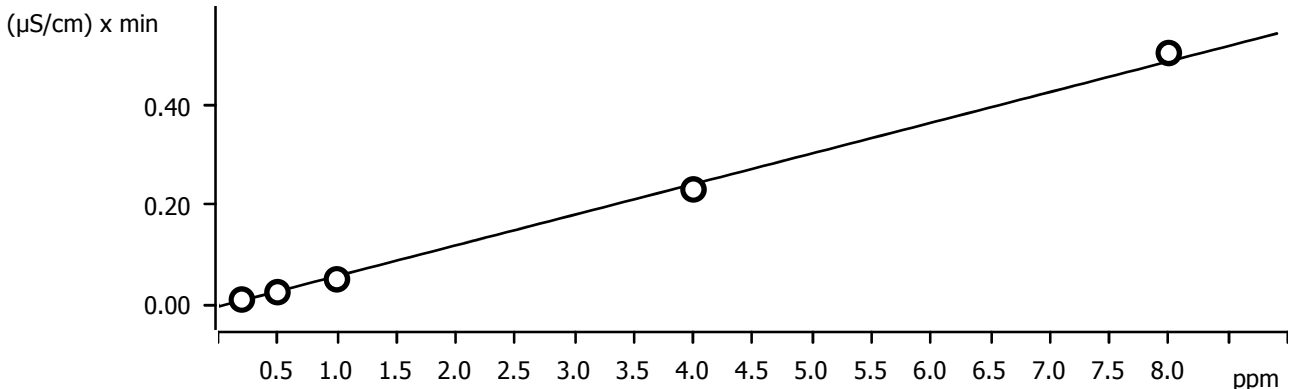
**Nitrite (Anions)**



Function: . . . . .  $A = -0.0342886 + 0.0737217 \times Q$   
 Relative standard deviation . . . . . 2.011694 %  
 Correlation coefficient . . . . . 0.999905

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.139	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.314	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.440	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	2.938	STD5	2013-06-06 11:51:02 UTC-6	used

**Bromide (Anions)**

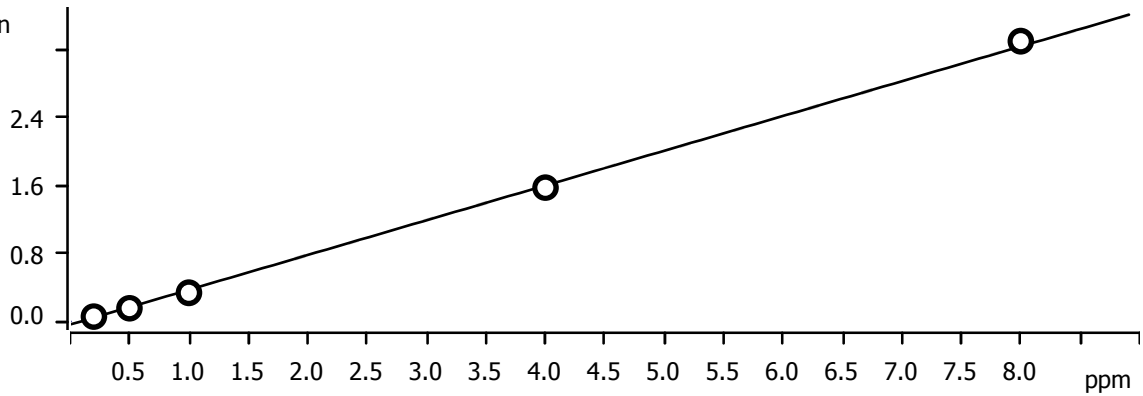


Function: . . . . .  $A = -4.64855E-3 + 0.0123498 \times Q$   
 Relative standard deviation . . . . . 7.484020 %  
 Correlation coefficient . . . . . 0.998720

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.025	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.051	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.232	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	0.506	STD5	2013-06-06 11:51:02 UTC-6	used

**Nitrate (Anions)**

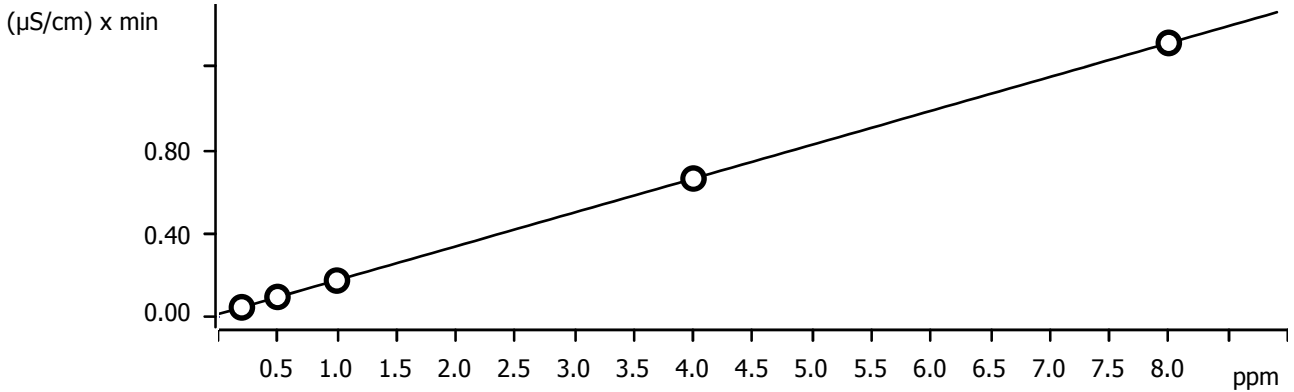
( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = -0.0358372 + 0.0818717 \times Q$   
 Relative standard deviation . . . . . 4.126487 %  
 Correlation coefficient . . . . . 0.999605

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.156	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.338	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.576	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	3.301	STD5	2013-06-06 11:51:02 UTC-6	used

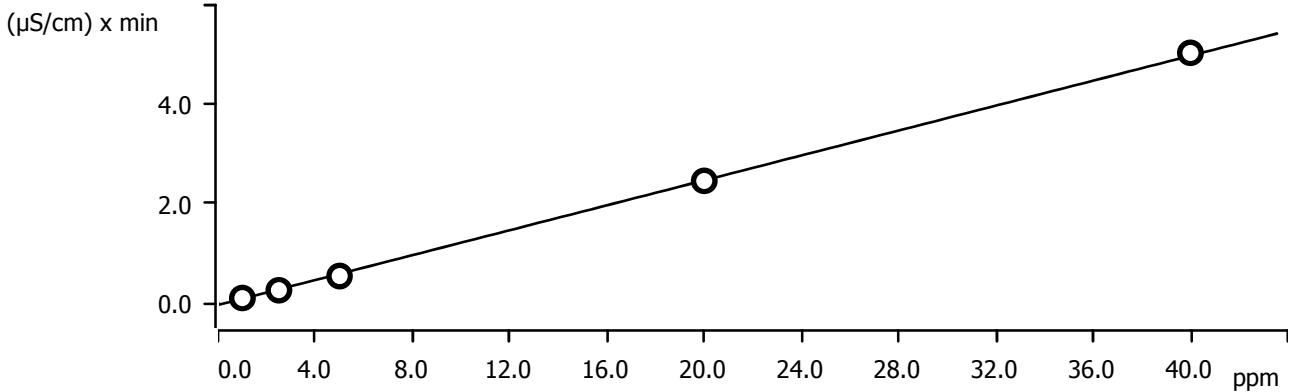
**OrthophosP (Anions)**



Function: . . . . .  $A = 0.0127461 + 0.0325431 \times Q$   
 Relative standard deviation . . . . . 0.240141 %  
 Correlation coefficient . . . . . 0.999998

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.095	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.174	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.664	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	1.315	STD5	2013-06-06 11:51:02 UTC-6	used

**Sulfate (Anions)**



Function: . . . . .  $A = -0.0404395 + 0.0250953 \times Q$   
 Relative standard deviation . . . . . 2.675146 %  
 Correlation coefficient . . . . . 0.999829

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.256	STD2	2013-06-06 11:04:58 UTC-6	used

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Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 3	1	5.000	5.0	1.0	1.0	0.541	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	20.000	5.0	1.0	1.0	2.459	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	40.000	5.0	1.0	1.0	5.036	STD5	2013-06-06 11:51:02 UTC-6	used

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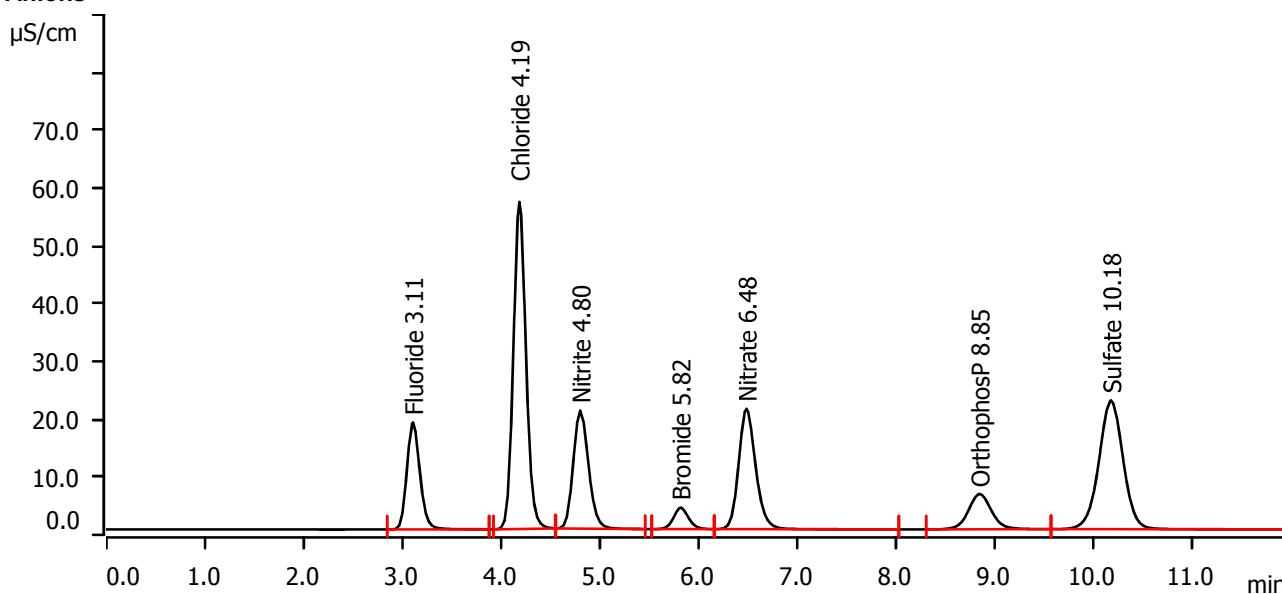
**Sample data**

Ident . . . . . STD6  
 Sample type . . . . . Standard 6  
 Determination start . . . . . 2013-06-06 12:06:23 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.45 MPa  
 Temperature . . . . . 30.0 °C

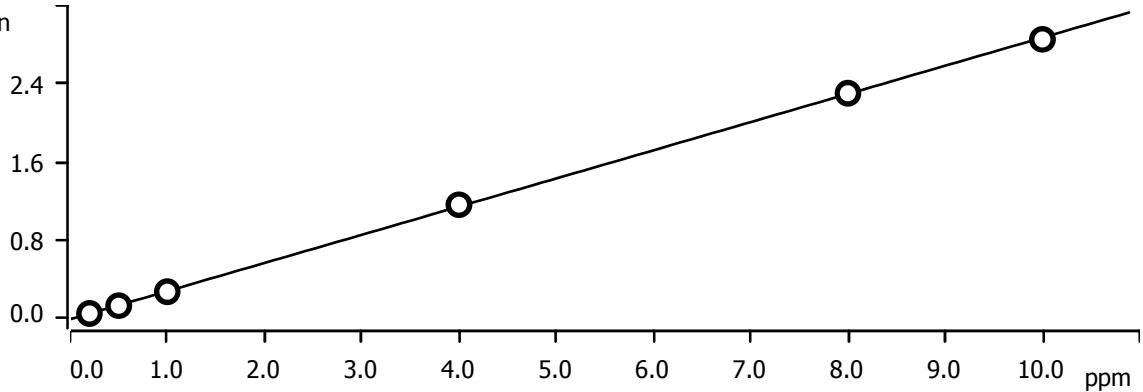
**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.107	2.8527	18.501	9.936	Fluoride
2	4.185	8.3394	56.590	50.336	Chloride
3	4.802	3.6735	20.402	10.032	Nitrite
4	5.818	0.6504	3.705	10.322	Bromide
5	6.483	4.1750	20.819	10.154	Nitrate
6	8.845	1.6605	6.120	10.069	OrthophosP
7	10.177	6.3612	22.286	50.549	Sulfate

**Fluoride (Anions)**

( $\mu\text{S/cm}$ ) x min

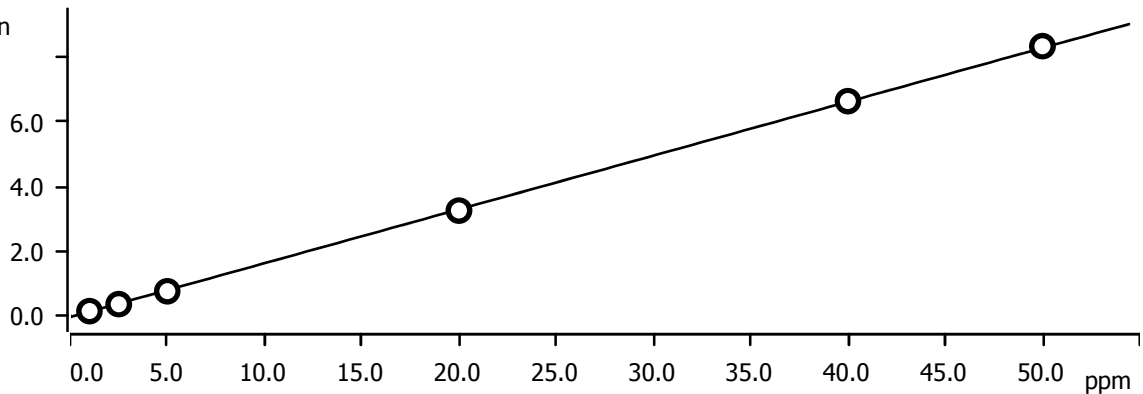


Function: . . . . .  $A = -9.53621E-3 + 0.0576123 \times Q$   
 Relative standard deviation . . . . . 1.260344 %  
 Correlation coefficient . . . . . 0.999944

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.130	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.273	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.162	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	2.302	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	10.000	5.0	1.0	1.0	2.853	STD6	2013-06-06 12:06:23 UTC-6	used

**Chloride (Anions)**

( $\mu\text{S/cm}$ ) x min



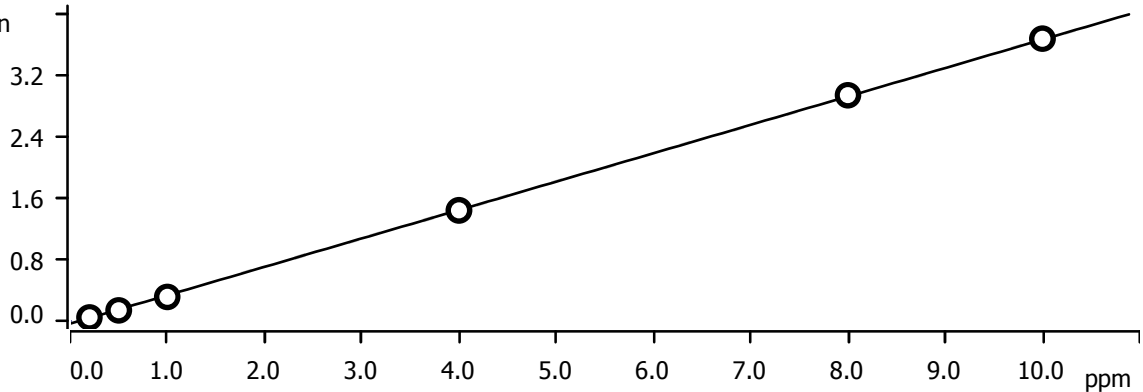
Function: . . . . .  $A = -0.0512478 + 0.0333384 \times Q$   
 Relative standard deviation . . . . . 1.262825 %

Correlation coefficient . . . . . 0.999946

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.347	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.745	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	20.000	5.0	1.0	1.0	3.247	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	40.000	5.0	1.0	1.0	6.636	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	50.000	5.0	1.0	1.0	8.339	STD6	2013-06-06 12:06:23 UTC-6	used

**Nitrite (Anions)**

(µS/cm) x min



Function: . . . . .  $A = -0.0347676 + 0.0739295 \times Q$

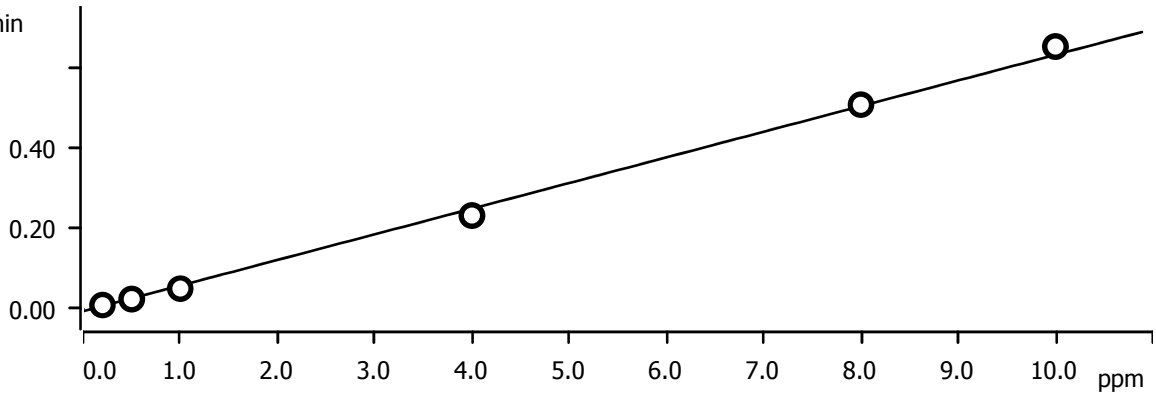
Relative standard deviation . . . . . 1.126174 %

Correlation coefficient . . . . . 0.999958

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.139	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.314	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.440	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	2.938	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	10.000	5.0	1.0	1.0	3.674	STD6	2013-06-06 12:06:23 UTC-6	used

**Bromide (Anions)**

( $\mu\text{S/cm}$ ) x min



Function: . . . . .  $A = -5.47637E-3 + 0.0127090 \times Q$

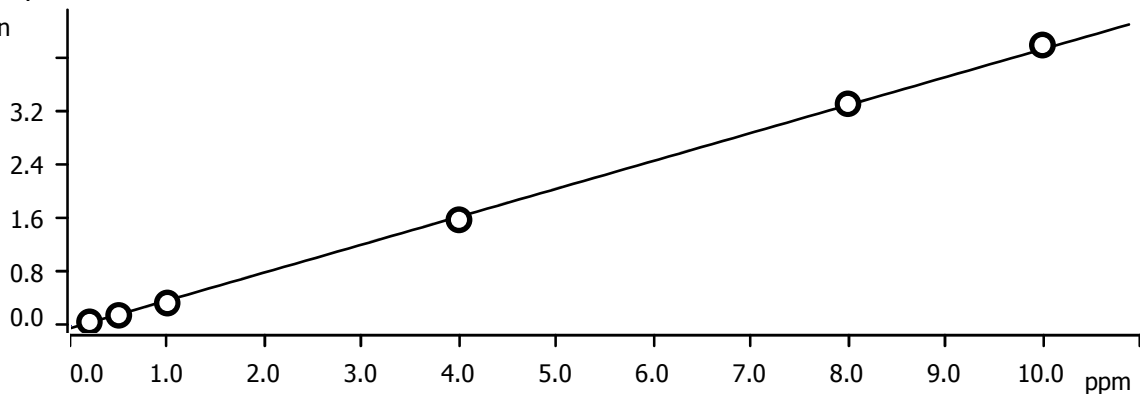
Relative standard deviation . . . . . 5.728822 %

Correlation coefficient . . . . . 0.998943

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.025	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.051	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.232	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	0.506	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	10.000	5.0	1.0	1.0	0.650	STD6	2013-06-06 12:06:23 UTC-6	used

**Nitrate (Anions)**

( $\mu\text{S/cm}$ ) x min



Function: . . . . .  $A = -0.0384181 + 0.0829915 \times Q$

Relative standard deviation . . . . . 2.850763 %

Correlation coefficient . . . . . 0.999733

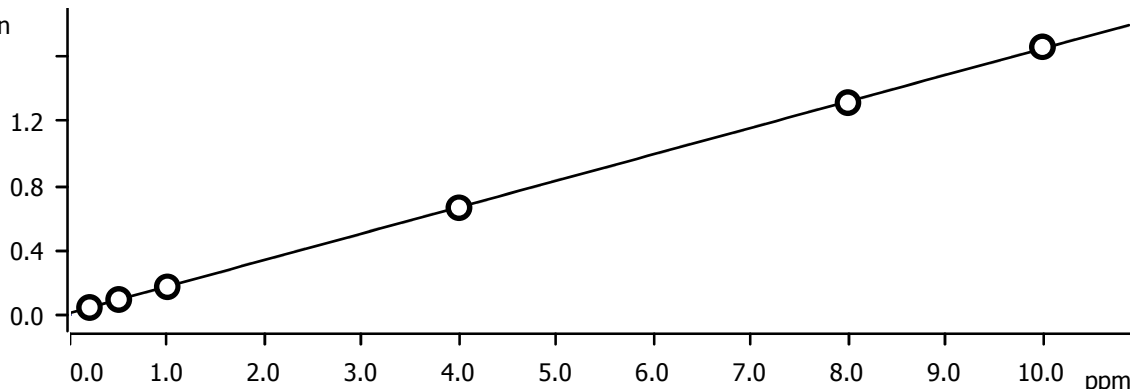
Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used



Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 2	1	0.500	5.0	1.0	1.0	0.156	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.338	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.576	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	3.301	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	10.000	5.0	1.0	1.0	4.175	STD6	2013-06-06 12:06:23 UTC-6	used

**OrthophosP (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

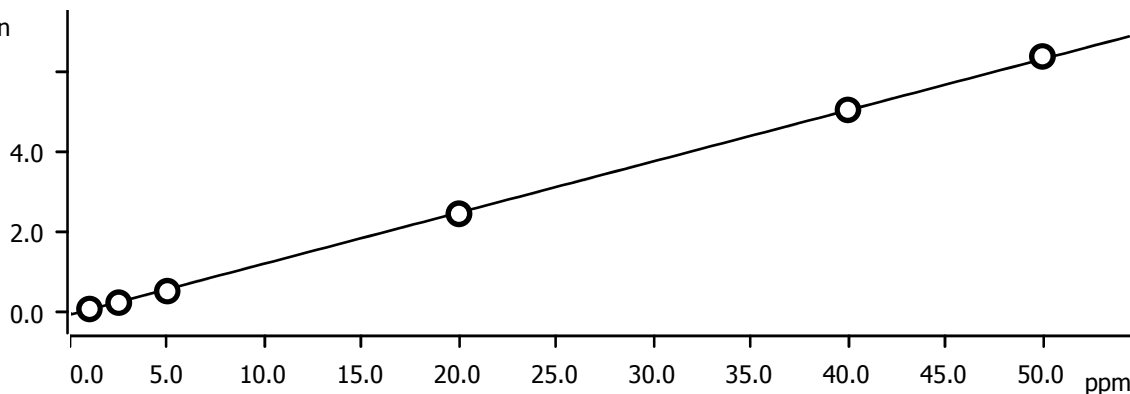


Function: . . . . .  $A = 0.0122916 + 0.0327403 \times Q$   
 Relative standard deviation . . . . . 1.050831 %  
 Correlation coefficient . . . . . 0.999959

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.095	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.174	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.664	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	1.315	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	10.000	5.0	1.0	1.0	1.661	STD6	2013-06-06 12:06:23 UTC-6	used

**Sulfate (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = -0.0432543 + 0.0253396 \times Q$   
 Relative standard deviation . . . . . 1.924656 %  
 Correlation coefficient . . . . . 0.999875

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.256	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.541	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	20.000	5.0	1.0	1.0	2.459	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	40.000	5.0	1.0	1.0	5.036	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	50.000	5.0	1.0	1.0	6.361	STD6	2013-06-06 12:06:23 UTC-6	used

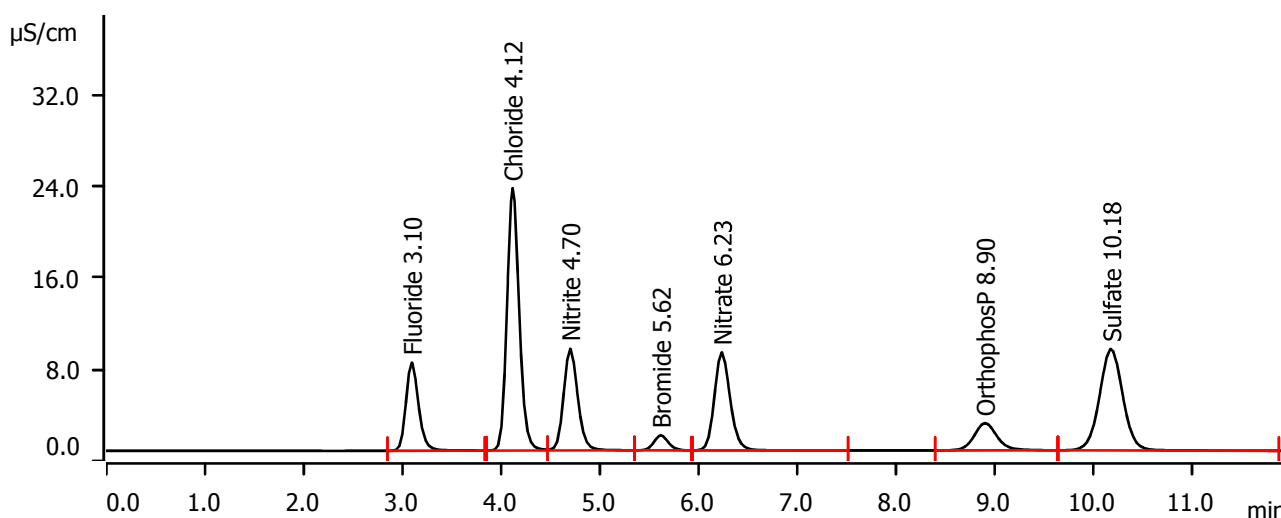
**Sample data**

Ident . . . . . ICV  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 10:29:07 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	1.1515	7.711	4.030	Fluoride
2	4.117	3.3044	22.972	20.131	Chloride
3	4.700	1.4829	8.890	4.106	Nitrite
4	5.617	0.2230	1.320	3.595	Bromide
5	6.233	1.5929	8.582	3.931	Nitrate
6	8.900	0.6475	2.398	3.880	OrthophosP
7	10.177	2.4366	8.876	19.573	Sulfate

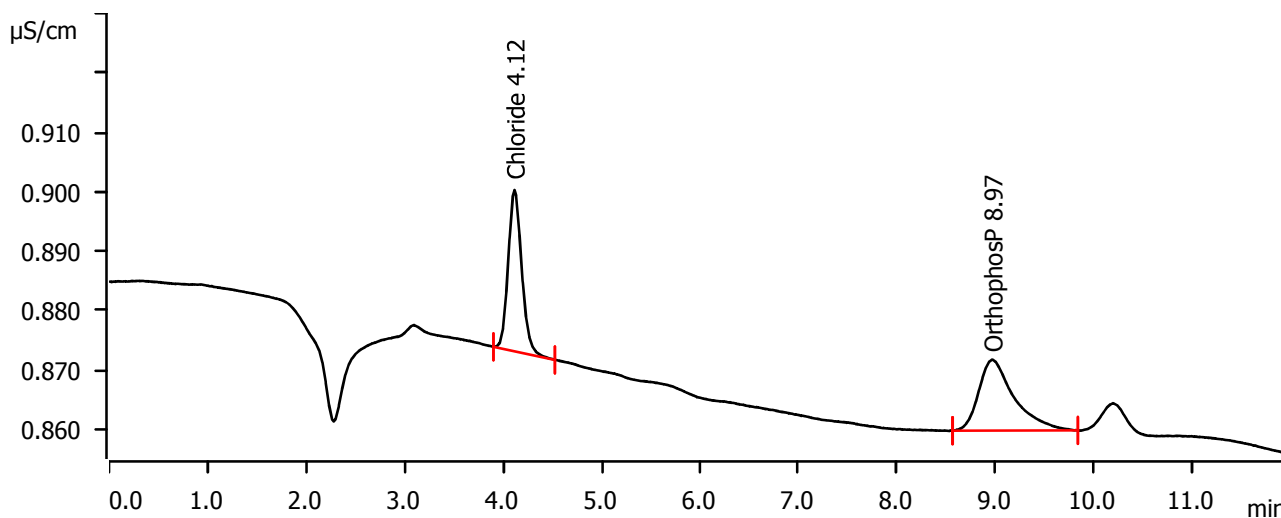
**Sample data**

Ident . . . . . ICB  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 10:45:01 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.117	0.0043	0.027	0.333	Chloride
2	8.968	0.0050	0.012	-0.045	Orthophosph

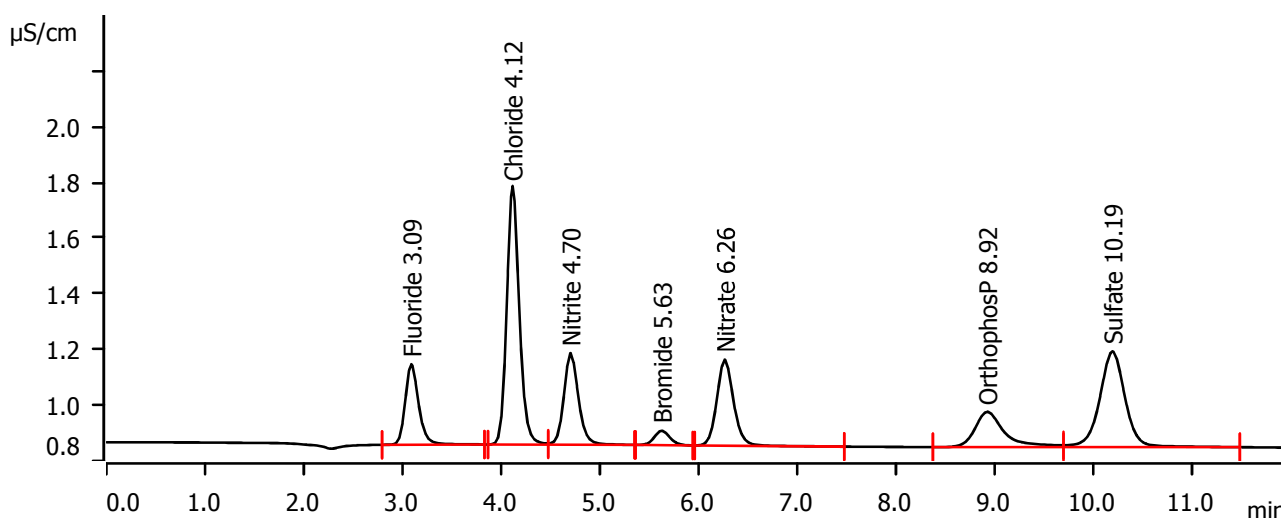
**Sample data**

Ident . . . . . MRL  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 11:00:46 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.090	0.0458	0.289	0.192	Fluoride
2	4.115	0.1367	0.929	1.128	Chloride
3	4.703	0.0565	0.329	0.247	Nitrite
4	5.627	0.0095	0.052	0.236	Bromide
5	6.263	0.0609	0.309	0.239	Nitrate
6	8.923	0.0443	0.127	0.195	OrthophosP
7	10.190	0.1027	0.344	1.152	Sulfate

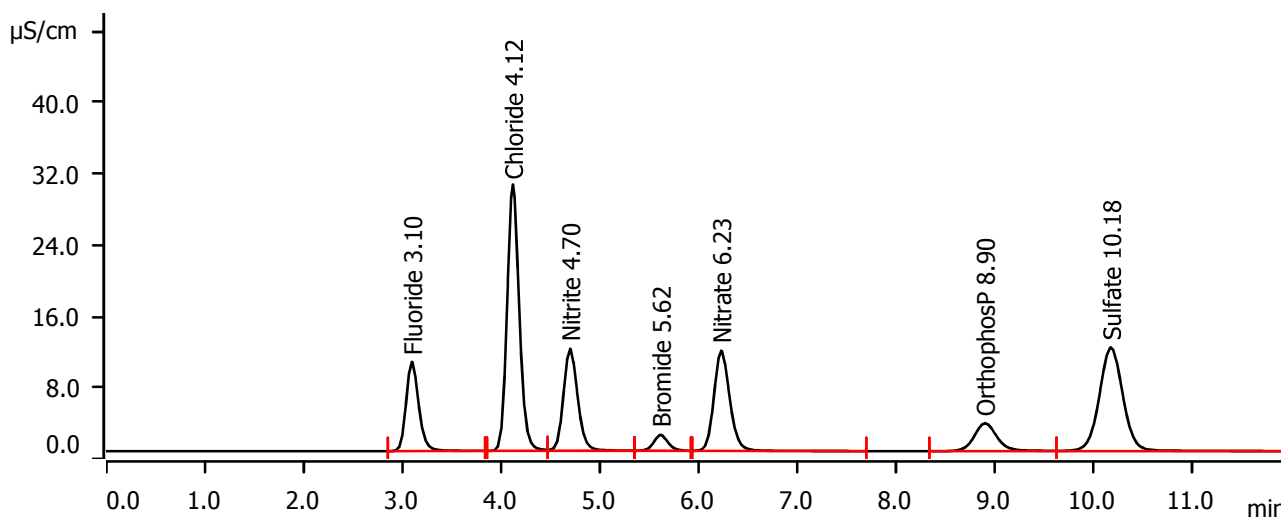
**Sample data**

Ident . . . . . LCS 280-F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 11:16:39 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.097	1.4924	10.014	5.214	Fluoride
2	4.118	4.2725	29.893	25.939	Chloride
3	4.698	1.9150	11.440	5.275	Nitrite
4	5.615	0.2954	1.773	4.735	Bromide
5	6.228	2.0837	11.235	5.114	Nitrate
6	8.900	0.8557	3.149	5.152	OrthophosP
7	10.175	3.2430	11.645	25.938	Sulfate

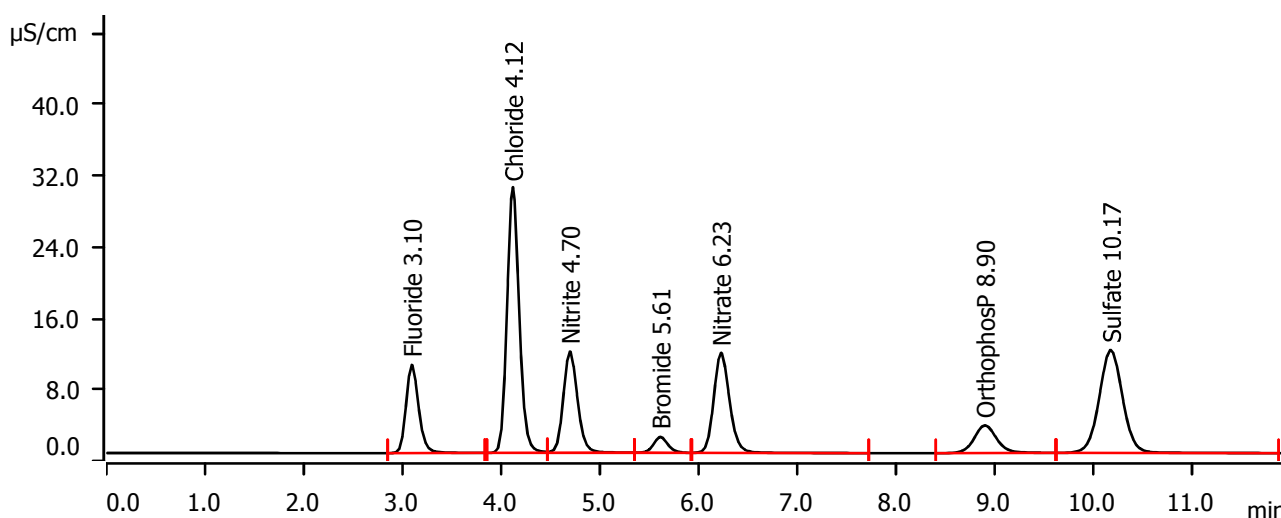
**Sample data**

Ident . . . . . LCSD 280-F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 11:32:32 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area ( $\mu\text{S/cm}$ ) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.095	1.4718	9.900	5.142	Fluoride
2	4.118	4.2685	29.823	25.915	Chloride
3	4.697	1.9013	11.362	5.238	Nitrite
4	5.613	0.2958	1.771	4.740	Bromide
5	6.227	2.0830	11.223	5.112	Nitrate
6	8.900	0.8250	3.115	4.965	OrthophosphP
7	10.173	3.1826	11.556	25.461	Sulfate

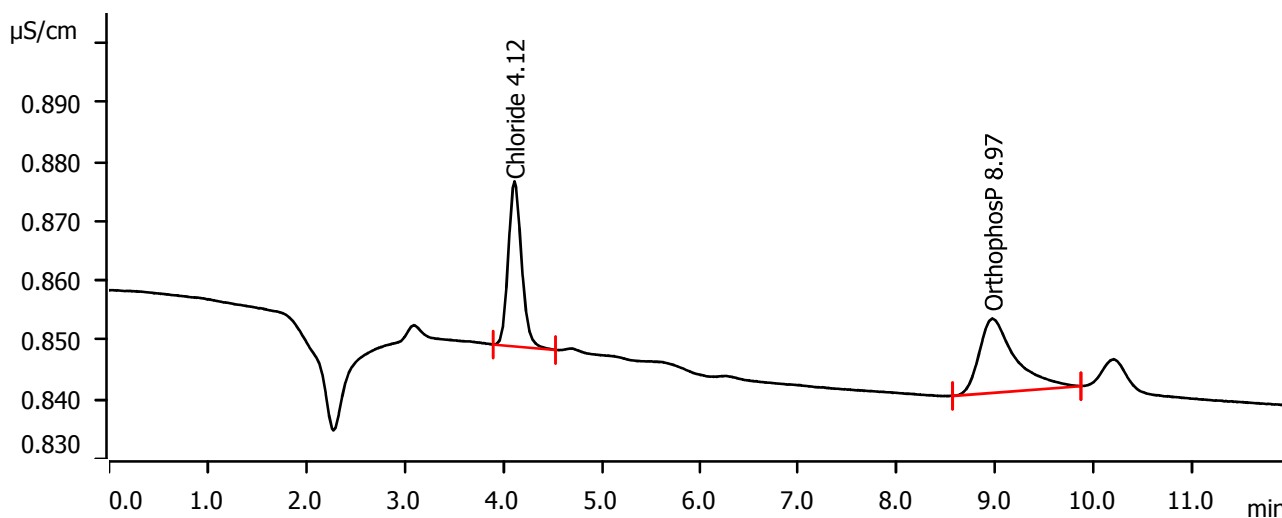
**Sample data**

Ident . . . . . MB 280-F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 11:48:24 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.117	0.0044	0.028	0.334	Chloride
2	8.970	0.0053	0.013	-0.043	OrthophosP



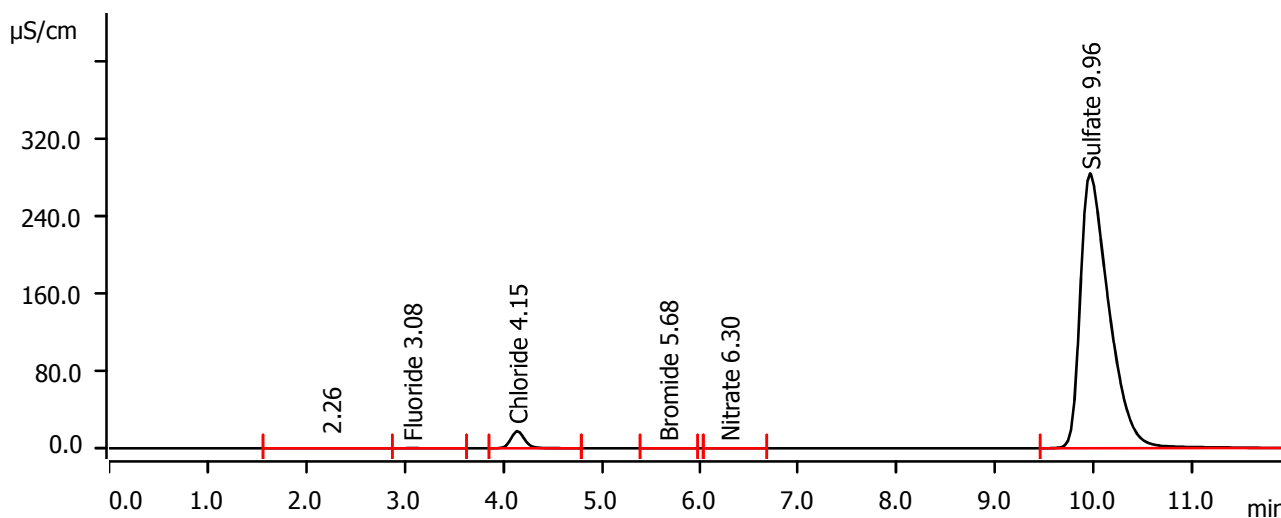
**Sample data**

Ident . . . . . 280-43746-a-1 2X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 12:04:10 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 2

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.257	0.0097	0.022	invalid	
2	3.078	0.0148	0.082	0.169	Fluoride
3	4.145	2.8321	17.647	34.595	Chloride
4	5.675	0.0083	0.048	0.434	Bromide
5	6.302	0.0101	0.052	0.234	Nitrate
6	9.960	95.3302	283.681	1505.524	Sulfate

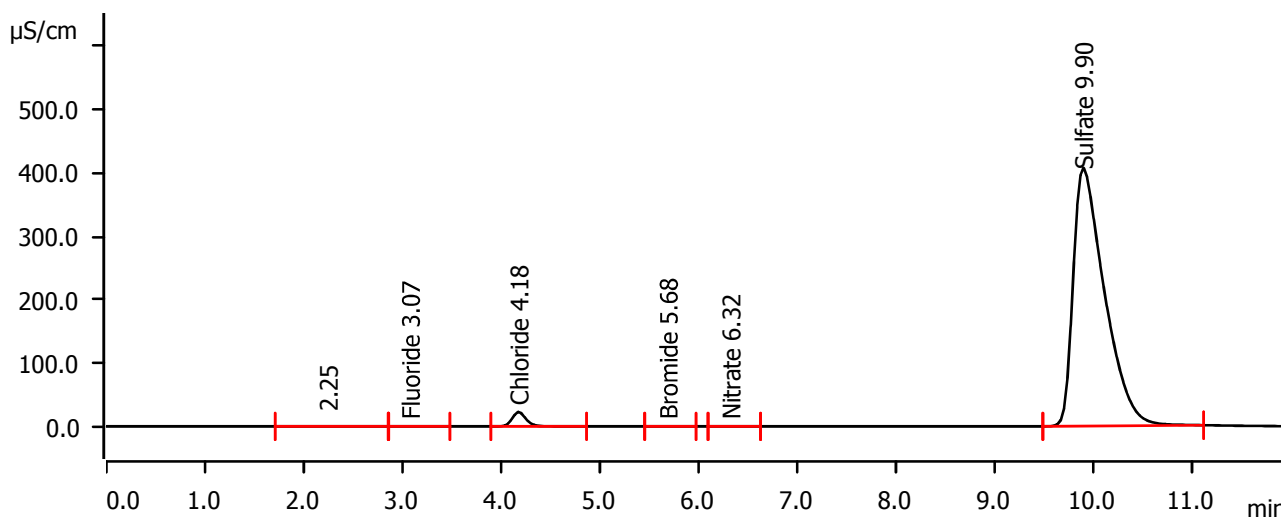
**Sample data**

Ident . . . . . 280-43746-a-4 2X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 12:20:03 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 2

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.245	0.0124	0.035	invalid	
2	3.072	0.0157	0.089	0.175	Fluoride
3	4.177	3.6660	22.608	44.600	Chloride
4	5.683	0.0090	0.051	0.455	Bromide
5	6.320	0.0023	0.012	0.196	Nitrate
6	9.895	149.0077	405.603	2352.855	Sulfate

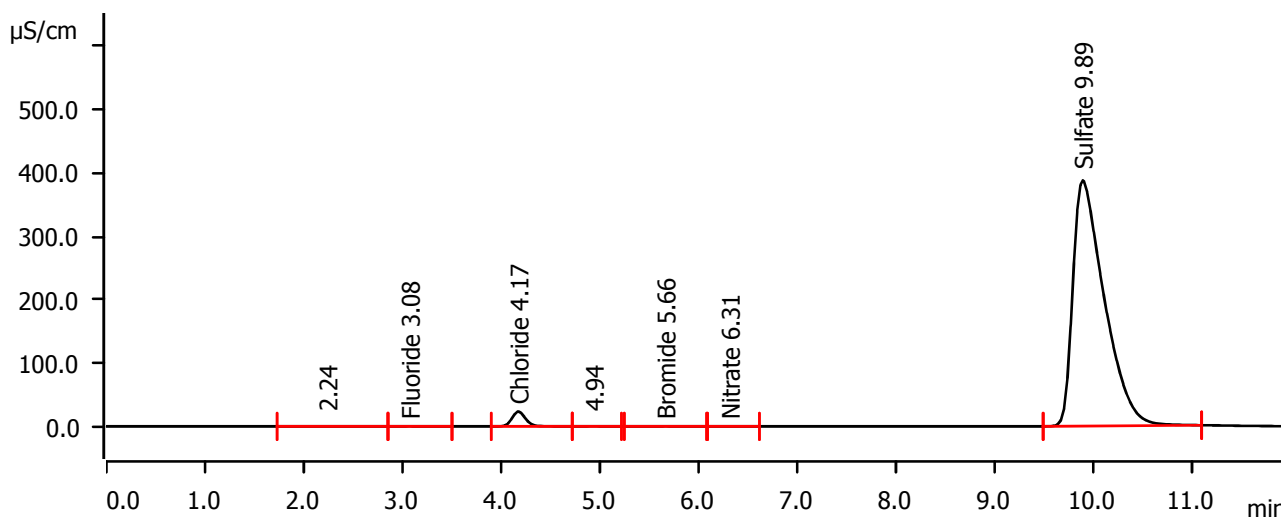
**Sample data**

Ident . . . . . 280-43746-a-7 2X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 12:35:55 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 2

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.243	0.0102	0.029	invalid	
2	3.075	0.0207	0.120	0.210	Fluoride
3	4.173	3.6983	23.413	44.987	Chloride
4	4.935	0.0153	0.078	invalid	
5	5.662	0.0263	0.098	1.002	Bromide
6	6.313	0.0080	0.042	0.224	Nitrate
7	9.890	142.1550	386.191	2244.682	Sulfate

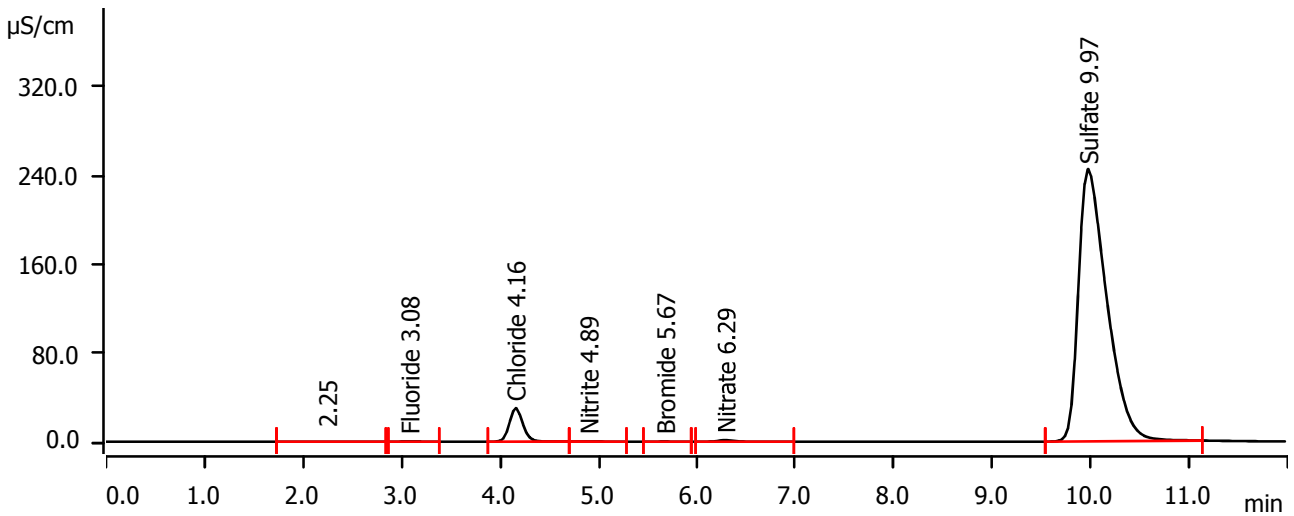
**Sample data**

Ident . . . . . 280-43746-a-10 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 12:51:47 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.247	0.0066	0.019	invalid	
2	3.080	0.0433	0.269	0.183	Fluoride
3	4.160	4.7677	30.038	28.909	Chloride
4	4.887	0.0124	0.056	0.128	Nitrite
5	5.673	0.0115	0.069	0.267	Bromide
6	6.288	0.2496	1.379	0.694	Nitrate
7	9.972	81.3431	244.509	642.365	Sulfate

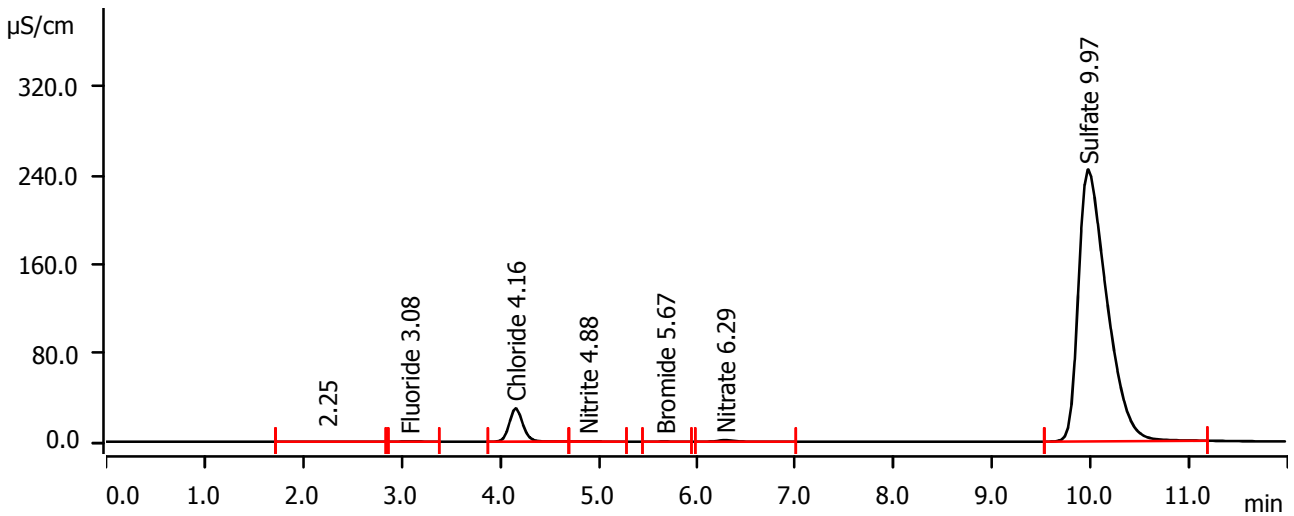
**Sample data**

Ident . . . . . DU 280-43746-a-10 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 13:07:41 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.247	0.0065	0.019	invalid	
2	3.080	0.0432	0.267	0.183	Fluoride
3	4.160	4.7671	29.949	28.906	Chloride
4	4.883	0.0120	0.055	0.126	Nitrite
5	5.673	0.0115	0.069	0.268	Bromide
6	6.287	0.2498	1.375	0.695	Nitrate
7	9.972	81.3985	244.206	642.803	Sulfate

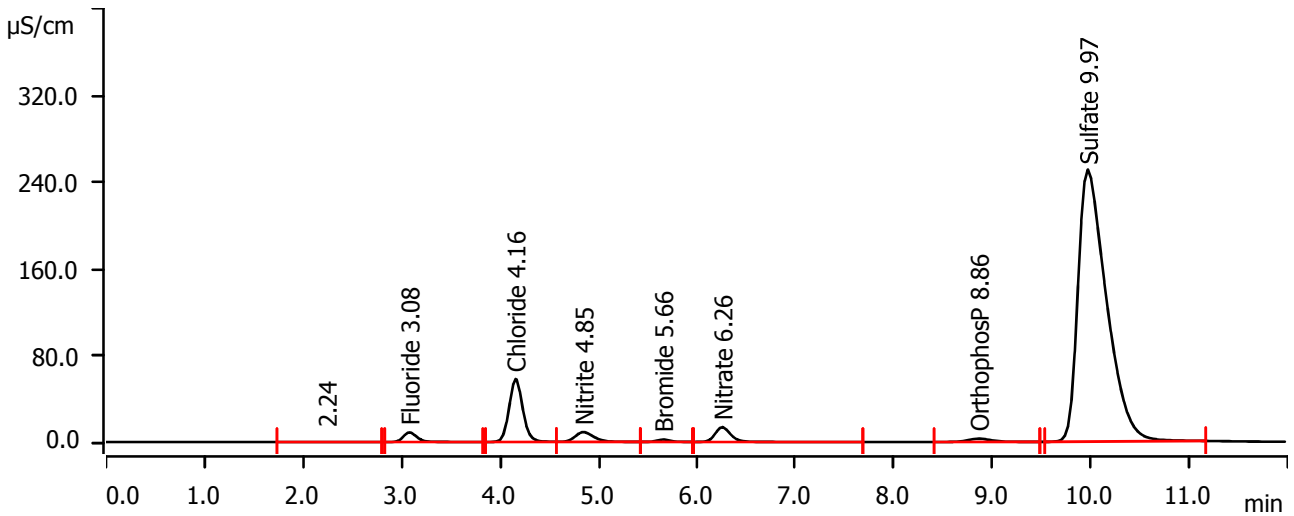
**Sample data**

Ident . . . . . MS 280-43746-a-10 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 13:23:33 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.39 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.243	0.0078	0.023	invalid	
2	3.082	1.4040	8.820	4.907	Fluoride
3	4.160	9.3271	57.953	56.262	Chloride
4	4.847	2.0012	9.085	5.508	Nitrite
5	5.658	0.3383	2.164	5.410	Bromide
6	6.257	2.4767	13.589	6.061	Nitrate
7	8.862	0.8240	3.016	4.959	OrthophosP
8	9.967	83.7182	250.369	661.112	Sulfate

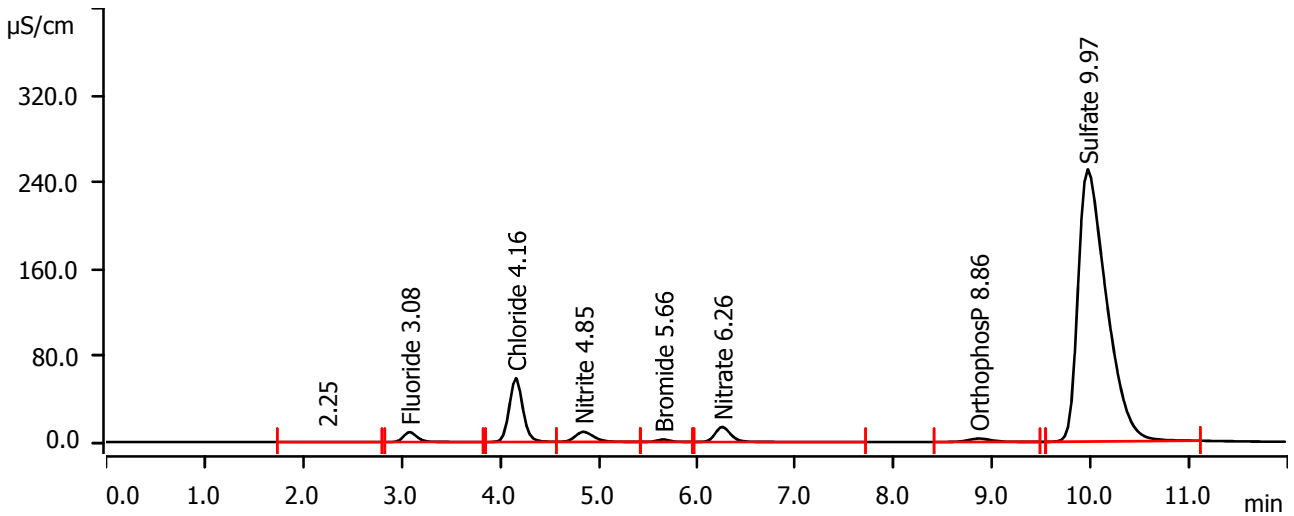
**Sample data**

Ident . . . . . MSD 280-43746-a-10 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 13:39:28 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.245	0.0081	0.024	invalid	
2	3.083	1.4281	9.008	4.991	Fluoride
3	4.162	9.4047	58.569	56.727	Chloride
4	4.847	2.0423	9.295	5.619	Nitrite
5	5.657	0.3447	2.208	5.510	Bromide
6	6.257	2.5143	13.806	6.152	Nitrate
7	8.862	0.8417	3.085	5.066	OrthophosP
8	9.967	83.6454	250.464	660.537	Sulfate

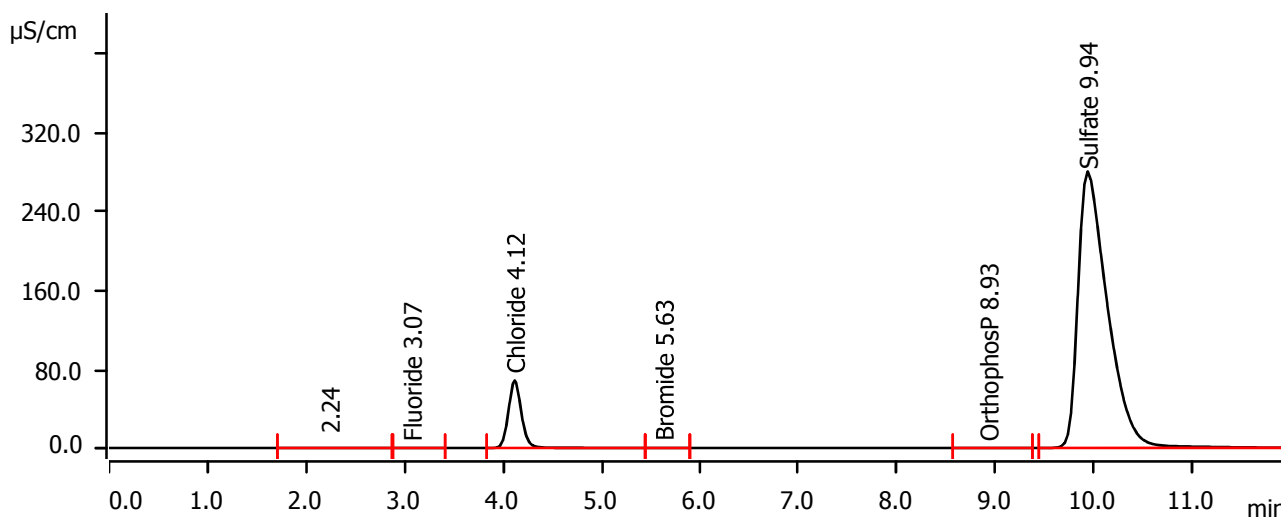
**Sample data**

Ident . . . . . 280-43748-m-1 5X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 13:55:23 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 5

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.243	0.0074	0.022	invalid	
2	3.073	0.0045	0.027	0.243	Fluoride
3	4.120	10.4151	68.214	313.944	Chloride
4	5.627	0.0133	0.077	1.474	Bromide
5	8.932	0.0063	0.020	-0.182	OrthophosP
6	9.937	96.7800	279.240	3821.026	Sulfate



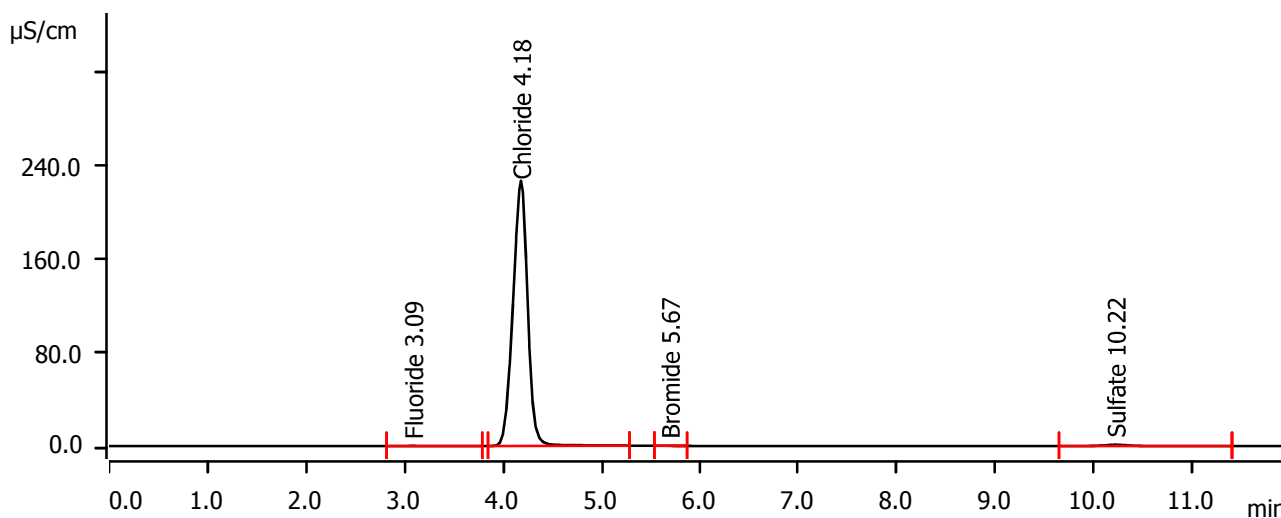
**Sample data**

Ident . . . . . 280-43753-a-1 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 14:11:16 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.087	0.0175	0.085	0.094	Fluoride
2	4.183	39.0486	226.087	234.564	Chloride
3	5.673	0.0070	0.047	0.196	Bromide
4	10.217	0.3222	1.178	2.884	Sulfate

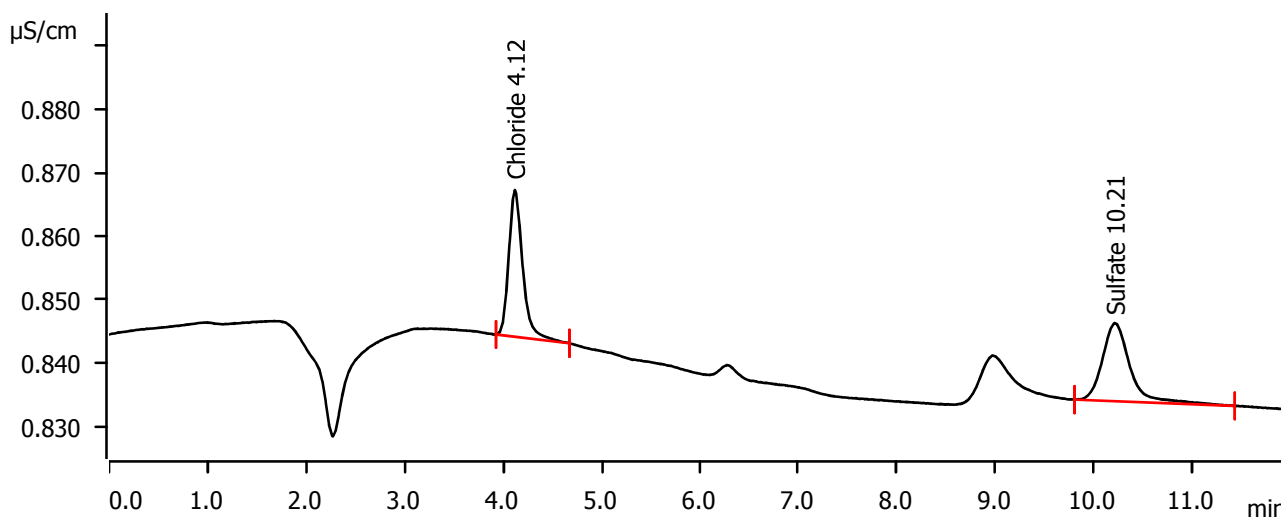
**Sample data**

Ident . . . . . 280-43753-a-2  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 14:27:07 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.122	0.0038	0.023	0.330	Chloride
2	10.212	0.0040	0.012	0.373	Sulfate

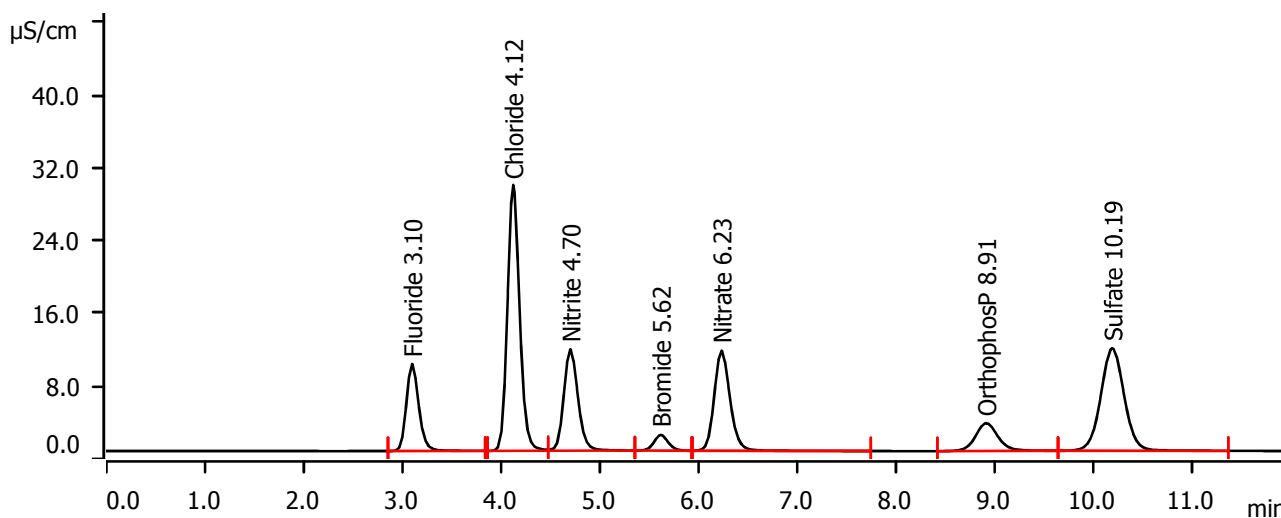
**Sample data**

Ident . . . . . CCV  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 14:42:55 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area ( $\mu\text{S/cm}$ ) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.098	1.4021	9.560	4.900	Fluoride
2	4.122	4.1732	29.237	25.343	Chloride
3	4.702	1.8610	11.149	5.128	Nitrite
4	5.617	0.2890	1.736	4.635	Bromide
5	6.232	2.0388	11.003	5.006	Nitrate
6	8.913	0.8106	3.056	4.876	OrthophosP
7	10.188	3.0977	11.286	24.791	Sulfate

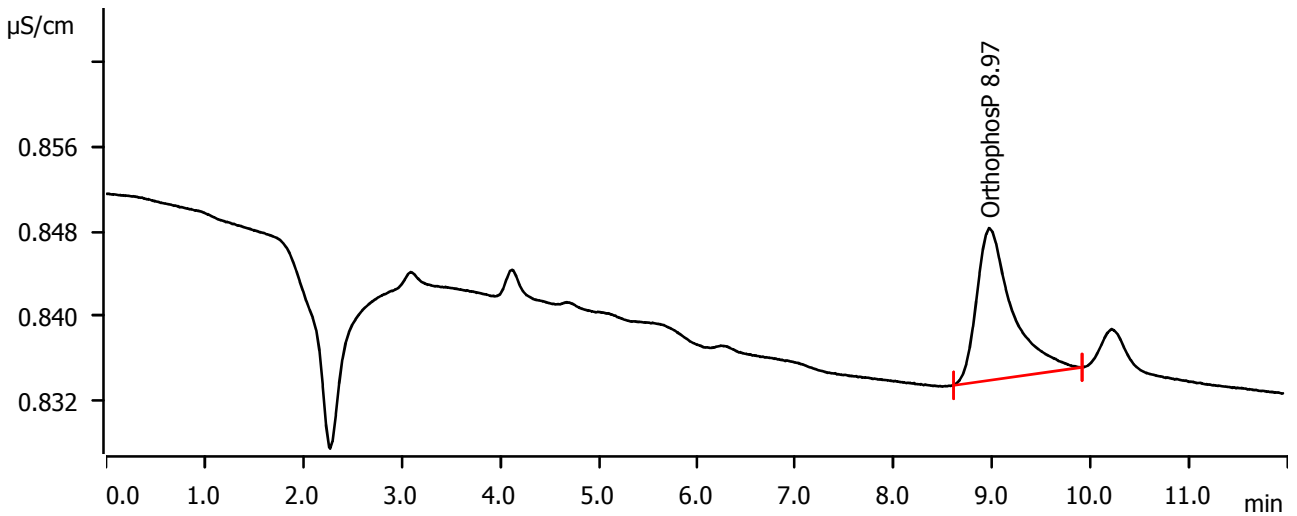
**Sample data**

Ident . . . . . CCB  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 14:58:50 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	8.965	0.0060	0.014	-0.038	OrthophosP

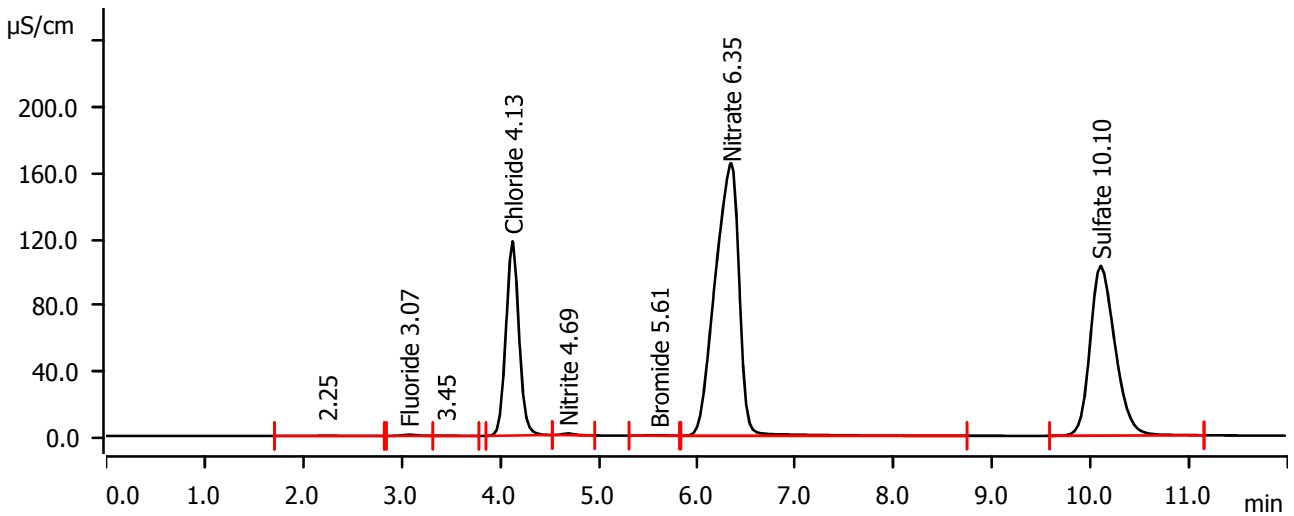
**Sample data**

Ident . . . . . 280-43752-a-1 2X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 15:14:37 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 2

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.247	0.0101	0.030	invalid	
2	3.073	0.1137	0.714	0.856	Fluoride
3	3.447	0.0127	0.068	invalid	
4	4.128	18.0402	117.659	217.065	Chloride
5	4.687	0.1564	1.008	1.035	Nitrite
6	5.608	0.0702	0.290	2.383	Bromide
7	6.345	46.7322	165.250	225.424	Nitrate
8	10.097	30.1798	102.847	477.089	Sulfate

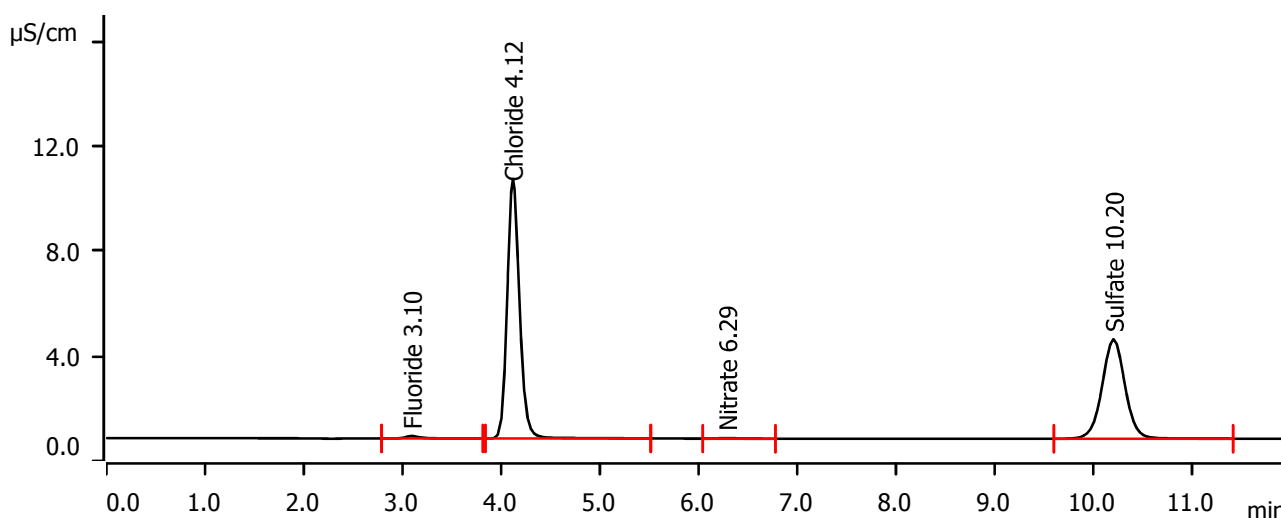
**Sample data**

Ident . . . . . 280-43751-b-1 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 15:30:35 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	0.0159	0.091	0.088	Fluoride
2	4.118	1.4342	9.905	8.911	Chloride
3	6.287	0.0043	0.022	0.103	Nitrate
4	10.202	1.0236	3.796	8.421	Sulfate

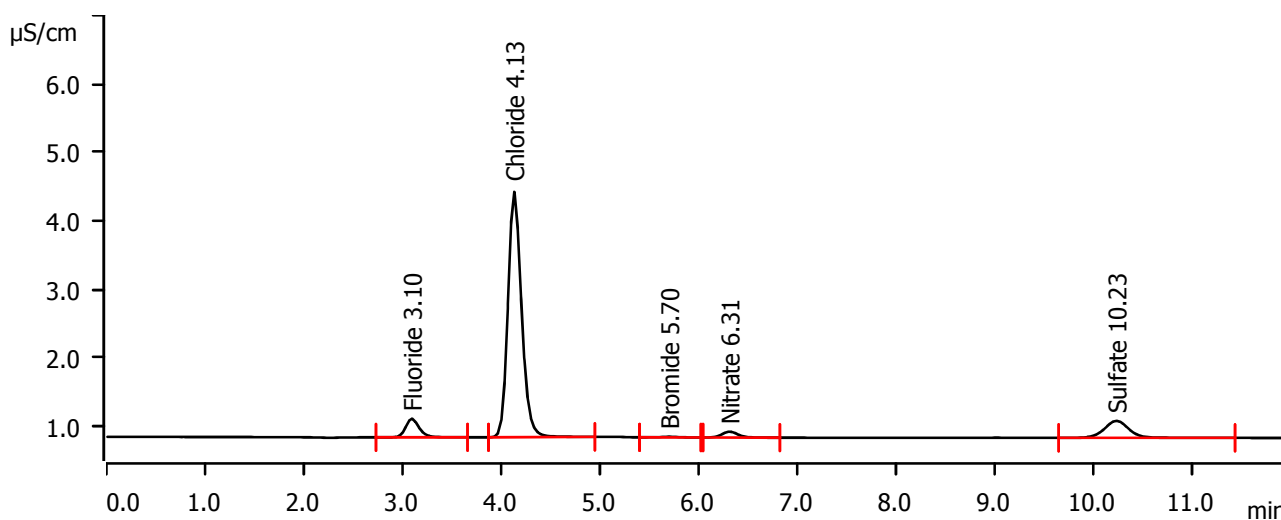
**Sample data**

Ident . . . . . 280-43751-b-2 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 15:46:27 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	0.0435	0.271	0.184	Fluoride
2	4.132	0.5719	3.579	3.738	Chloride
3	5.698	0.0022	0.010	0.121	Bromide
4	6.313	0.0162	0.086	0.132	Nitrate
5	10.232	0.0724	0.250	0.913	Sulfate

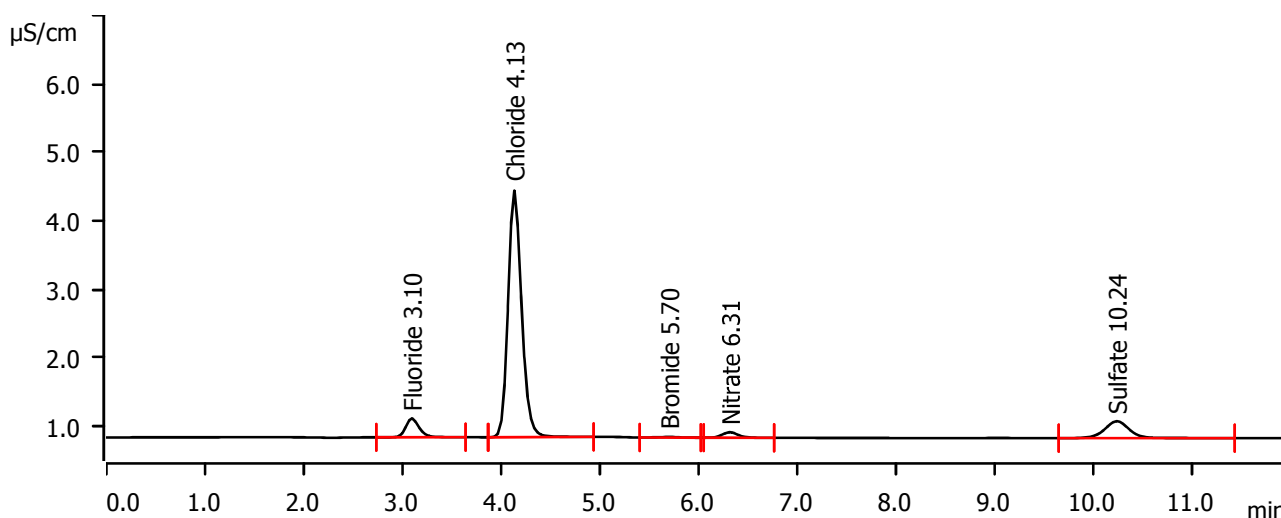
**Sample data**

Ident . . . . . DU 280-43751-b-2 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 16:02:21 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	0.0437	0.275	0.185	Fluoride
2	4.133	0.5723	3.597	3.741	Chloride
3	5.698	0.0022	0.010	0.120	Bromide
4	6.313	0.0150	0.080	0.129	Nitrate
5	10.235	0.0712	0.247	0.903	Sulfate



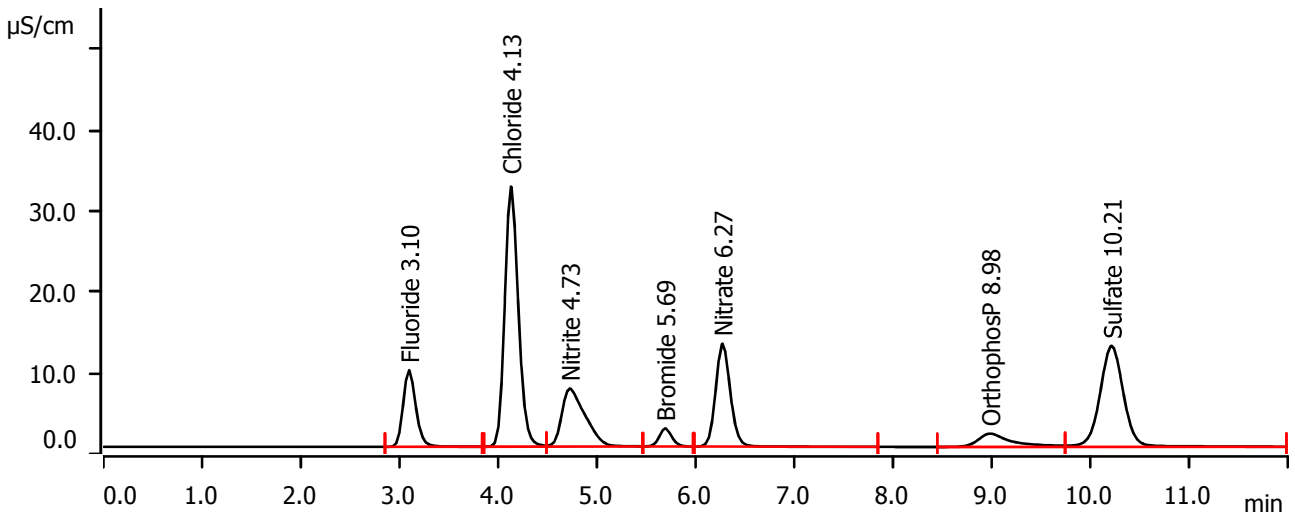
**Sample data**

Ident . . . . . MS 280-43751-b-2 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 16:18:15 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.097	1.4280	9.454	4.990	Fluoride
2	4.130	5.1346	32.093	31.110	Chloride
3	4.725	1.9510	7.172	5.372	Nitrite
4	5.692	0.3294	2.227	5.270	Bromide
5	6.272	2.2025	12.710	5.400	Nitrate
6	8.982	0.6507	1.641	3.900	OrthophosphP
7	10.212	3.4496	12.475	27.568	Sulfate

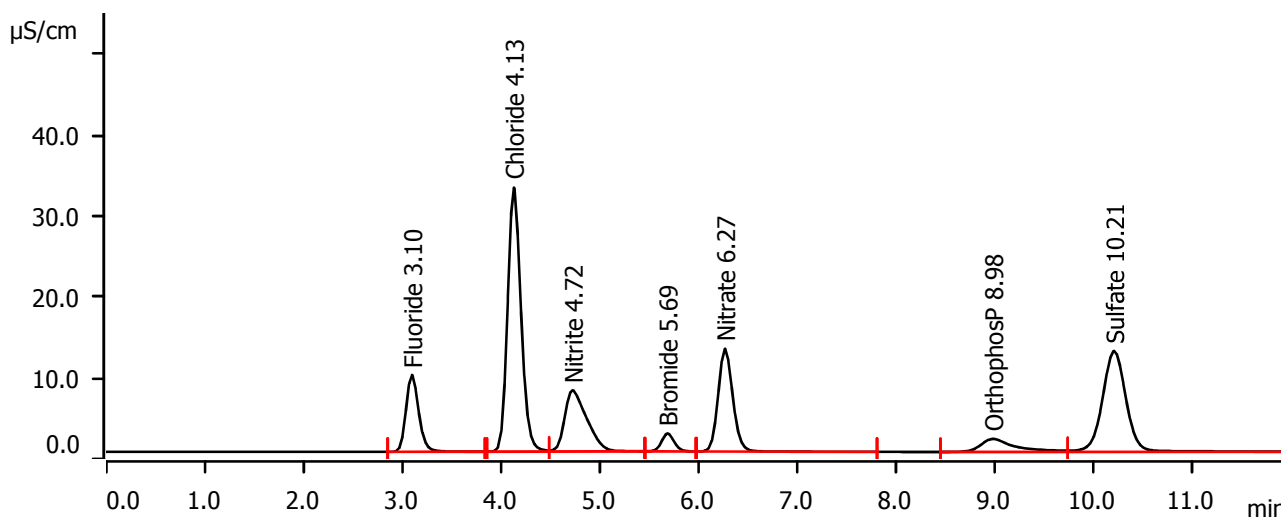
**Sample data**

Ident . . . . . MSD 280-43751-b-2 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 16:34:13 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.097	1.4260	9.495	4.983	Fluoride
2	4.128	5.1340	32.597	31.107	Chloride
3	4.723	1.9593	7.571	5.395	Nitrite
4	5.685	0.3299	2.225	5.278	Bromide
5	6.267	2.2003	12.702	5.395	Nitrate
6	8.980	0.6462	1.617	3.872	OrthophosphP
7	10.207	3.4523	12.466	27.590	Sulfate

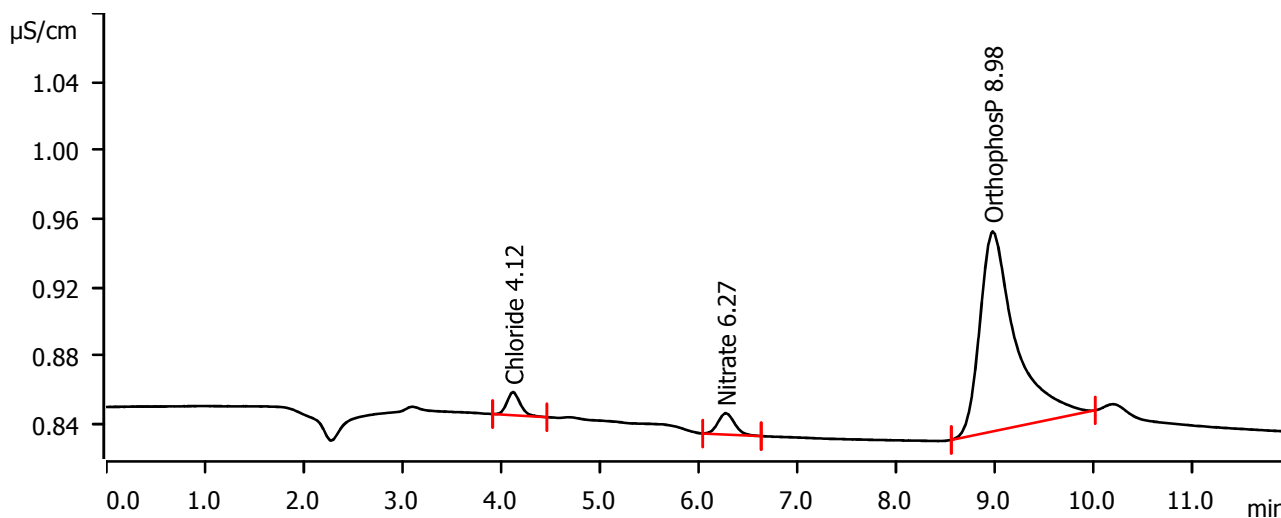
**Sample data**

Ident . . . . . 280-43751-b-3  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 16:50:11 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.120	0.0021	0.014	0.320	Chloride
2	6.273	0.0024	0.013	0.098	Nitrate
3	8.978	0.0490	0.117	0.224	OrthophosP

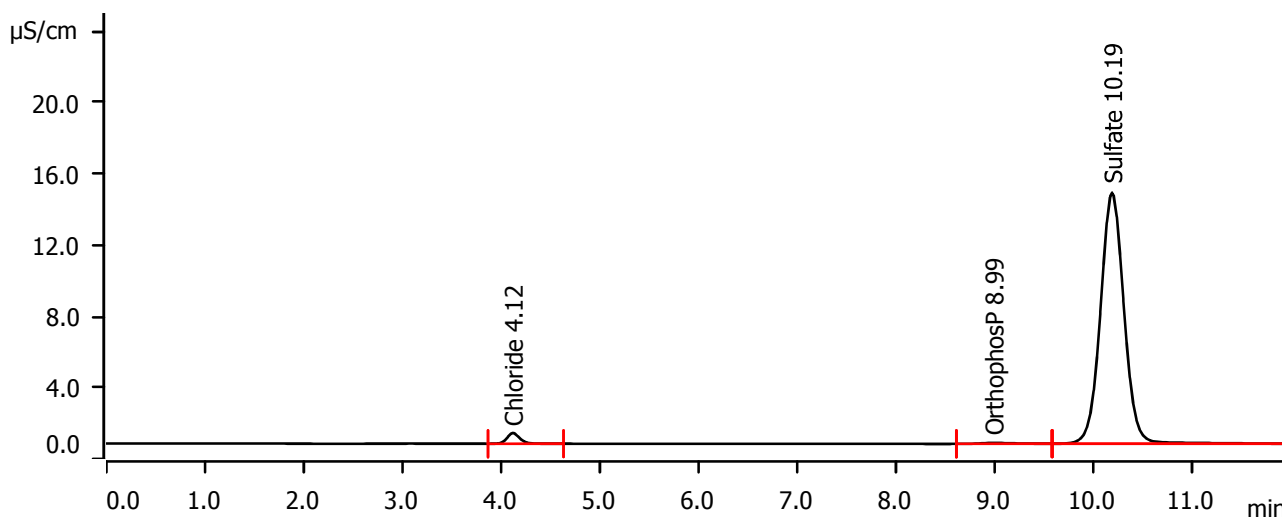
**Sample data**

Ident . . . . . 280-43746-a-1 50X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 17:06:03 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 50

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.118	0.0888	0.603	42.014	Chloride
2	8.992	0.0200	0.055	2.347	OrthophosP
3	10.187	3.8956	14.083	1554.440	Sulfate

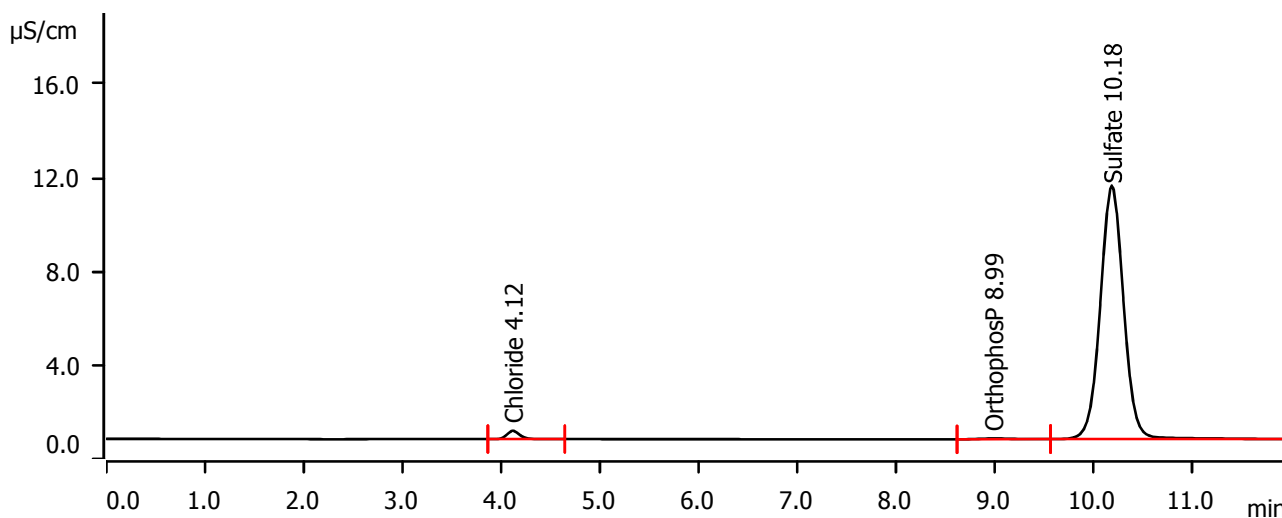
**Sample data**

Ident . . . . . 280-43746-a-4 100X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 17:21:54 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 100

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.118	0.0528	0.354	62.421	Chloride
2	8.987	0.0117	0.033	-0.370	OrthophosP
3	10.183	2.9723	10.809	2380.112	Sulfate

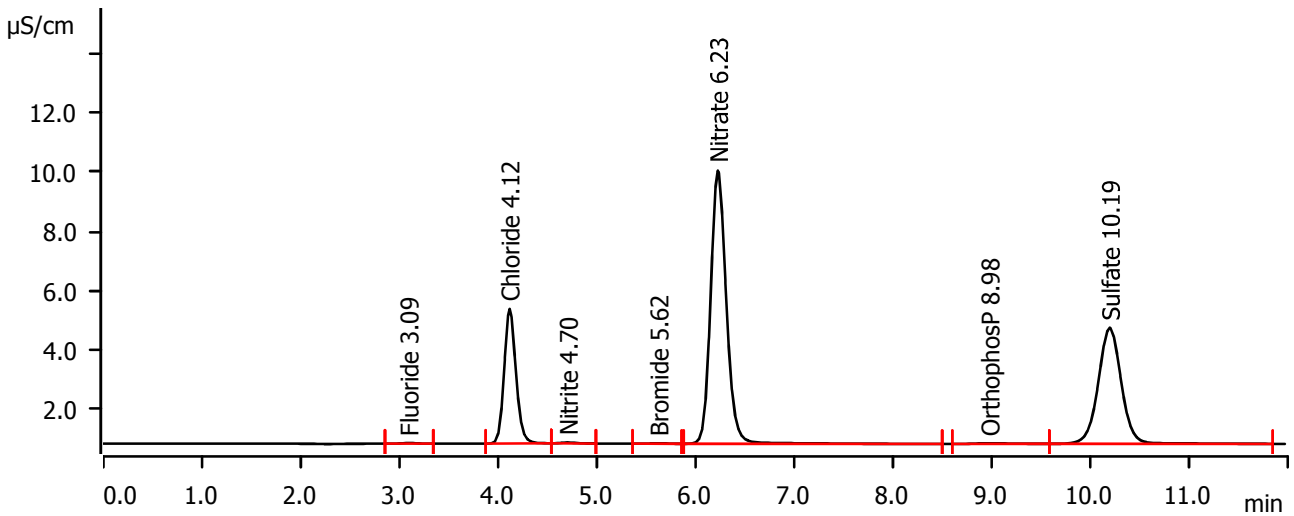
**Sample data**

Ident . . . . . 280-43752-a-1 50X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 17:37:44 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 50

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.093	0.0039	0.026	2.333	Fluoride
2	4.117	0.6275	4.529	203.581	Chloride
3	4.703	0.0049	0.030	5.372	Nitrite
4	5.620	0.0029	0.016	6.568	Bromide
5	6.225	1.6990	9.198	209.348	Nitrate
6	8.975	0.0085	0.023	-1.168	OrthophosP
7	10.193	1.0581	3.909	434.634	Sulfate

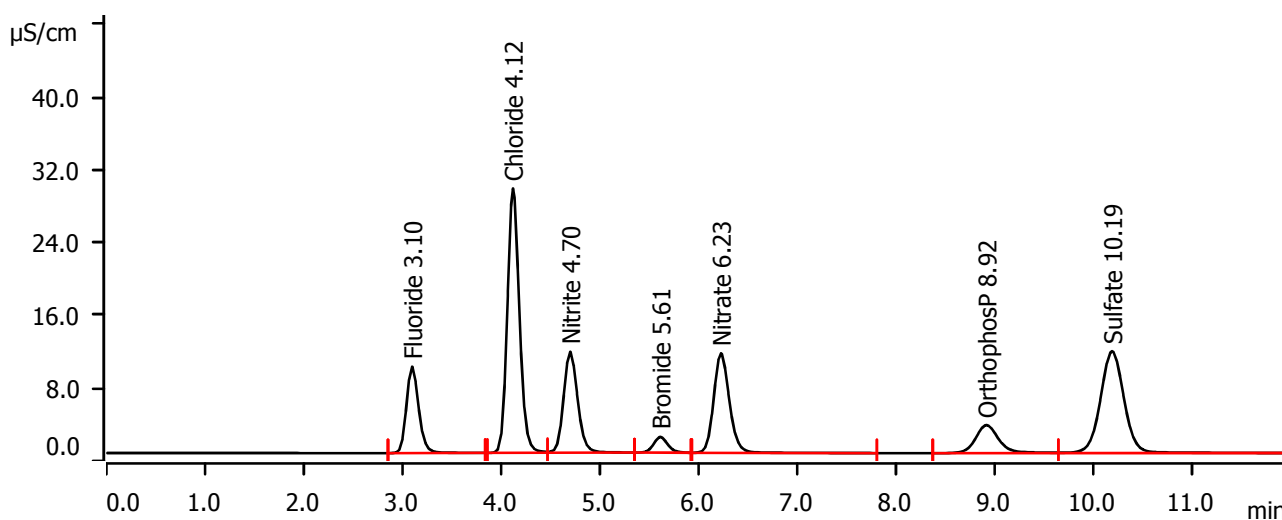
**Sample data**

Ident . . . . . CCV  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 17:53:40 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area ( $\mu\text{S/cm}$ ) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.098	1.3771	9.493	4.814	Fluoride
2	4.120	4.1126	29.080	24.979	Chloride
3	4.698	1.8364	11.101	5.062	Nitrite
4	5.612	0.2854	1.727	4.578	Bromide
5	6.227	2.0118	10.937	4.941	Nitrate
6	8.915	0.8477	3.090	5.103	OrthophosP
7	10.187	3.1229	11.212	24.990	Sulfate

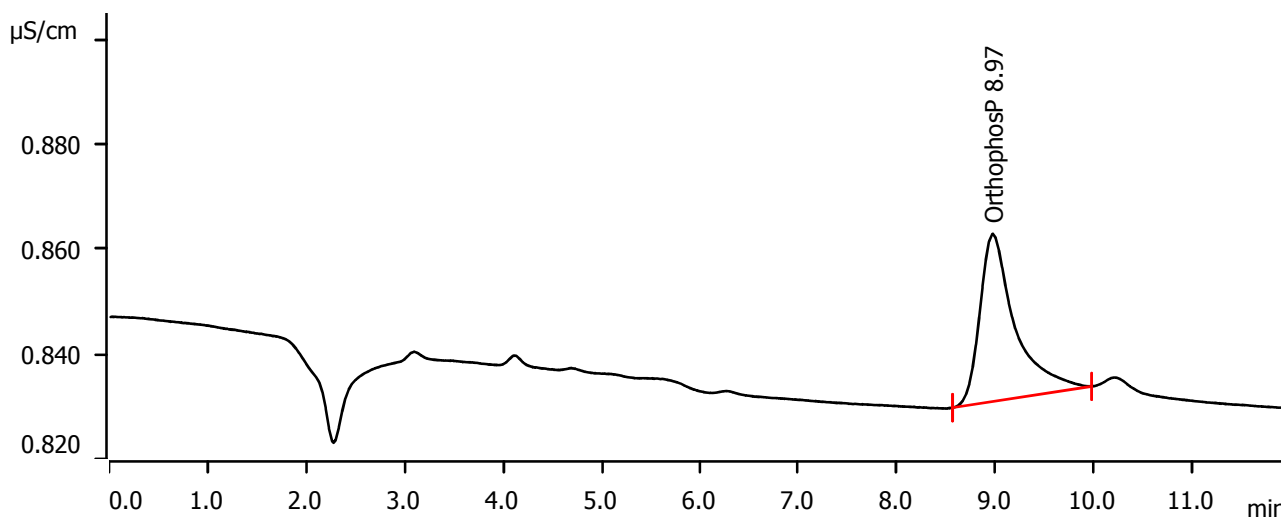
**Sample data**

Ident . . . . . CCB  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 18:09:35 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	8.973	0.0133	0.032	0.006	OrthophosP



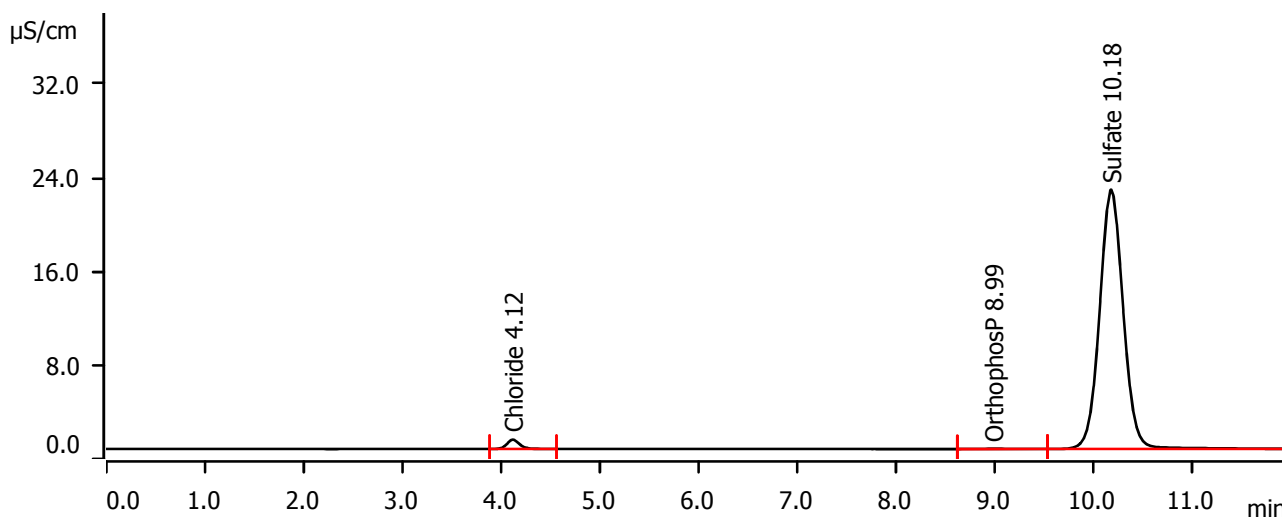
**Sample data**

Ident . . . . . 280-43746-a-7 50X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 18:25:22 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 50

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.118	0.1161	0.803	50.188	Chloride
2	8.985	0.0073	0.021	-1.513	OrthophosP
3	10.177	6.1482	22.120	2443.397	Sulfate

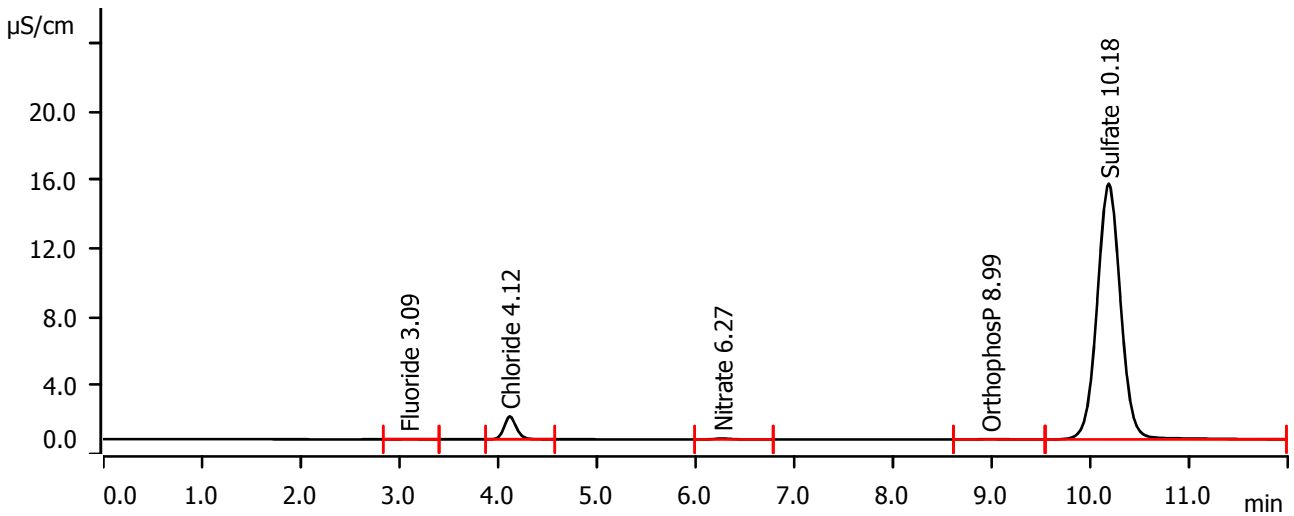
**Sample data**

Ident . . . . . 280-43746-a-10 20X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 18:41:11 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 20

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.093	0.0023	0.014	0.824	Fluoride
2	4.118	0.1913	1.339	29.101	Chloride
3	6.270	0.0103	0.052	2.348	Nitrate
4	8.992	0.0057	0.016	-0.808	OrthophosP
5	10.183	4.1315	14.930	659.012	Sulfate

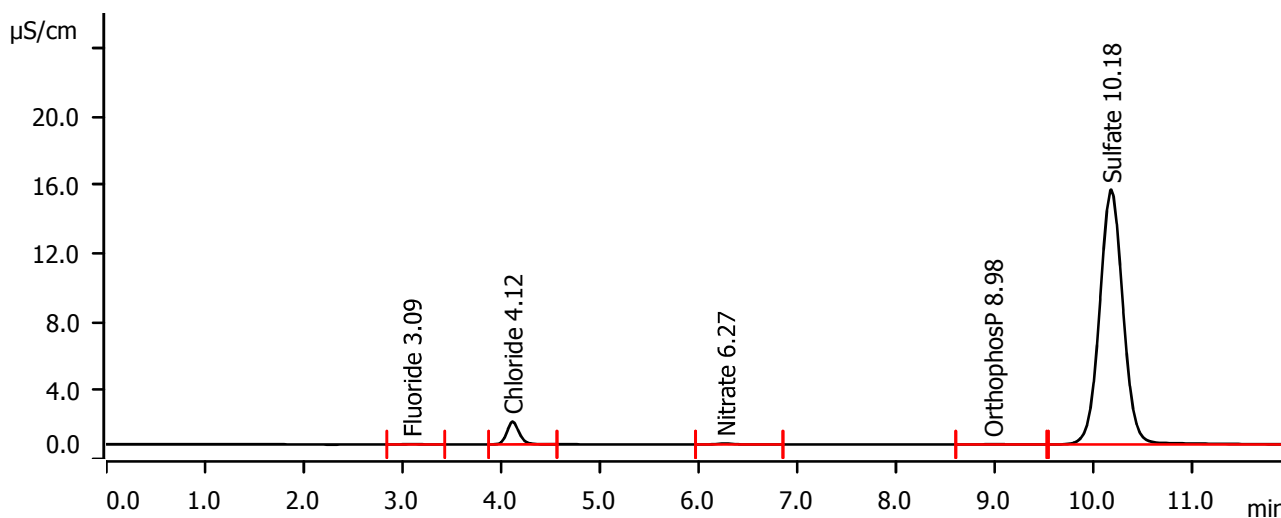
**Sample data**

Ident . . . . . DU 280-43746-a-10 20X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 18:57:03 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 20

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.090	0.0022	0.014	0.817	Fluoride
2	4.115	0.1897	1.332	28.909	Chloride
3	6.267	0.0103	0.052	2.346	Nitrate
4	8.983	0.0046	0.013	-0.945	OrthophosP
5	10.177	4.1084	14.871	655.359	Sulfate

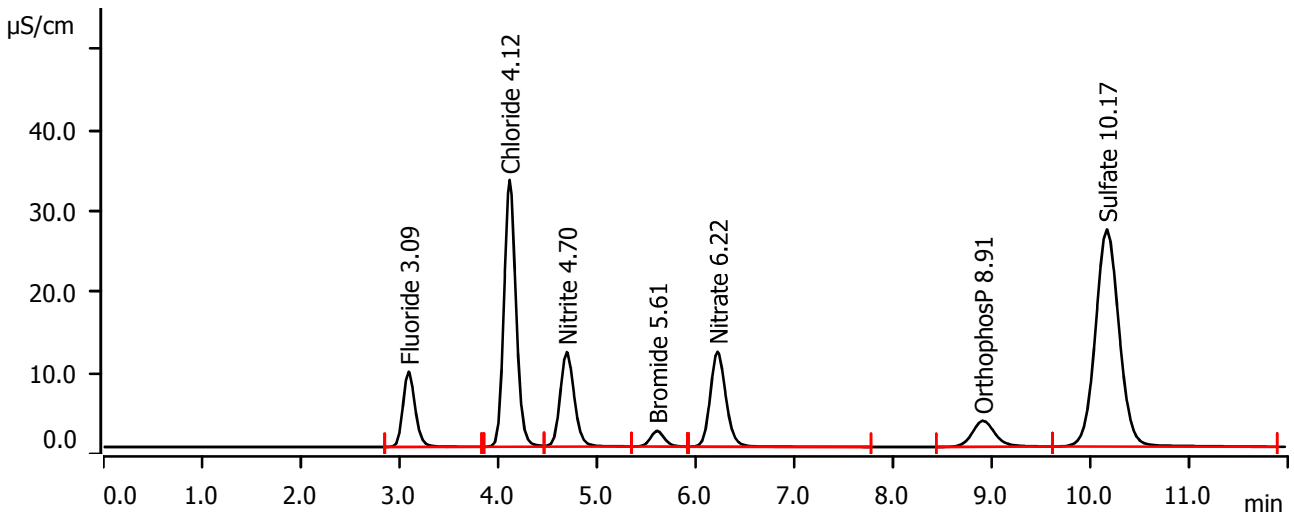
**Sample data**

Ident . . . . . MS 280-43746-a-10 20X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 19:12:55 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 20

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.093	1.3368	9.280	93.478	Fluoride
2	4.117	4.6507	32.938	564.146	Chloride
3	4.695	1.9352	11.663	106.586	Nitrite
4	5.610	0.3163	1.934	101.287	Bromide
5	6.222	2.1456	11.721	105.265	Nitrate
6	8.910	0.8642	3.218	104.085	OrthophosP
7	10.165	7.4734	26.800	1186.540	Sulfate

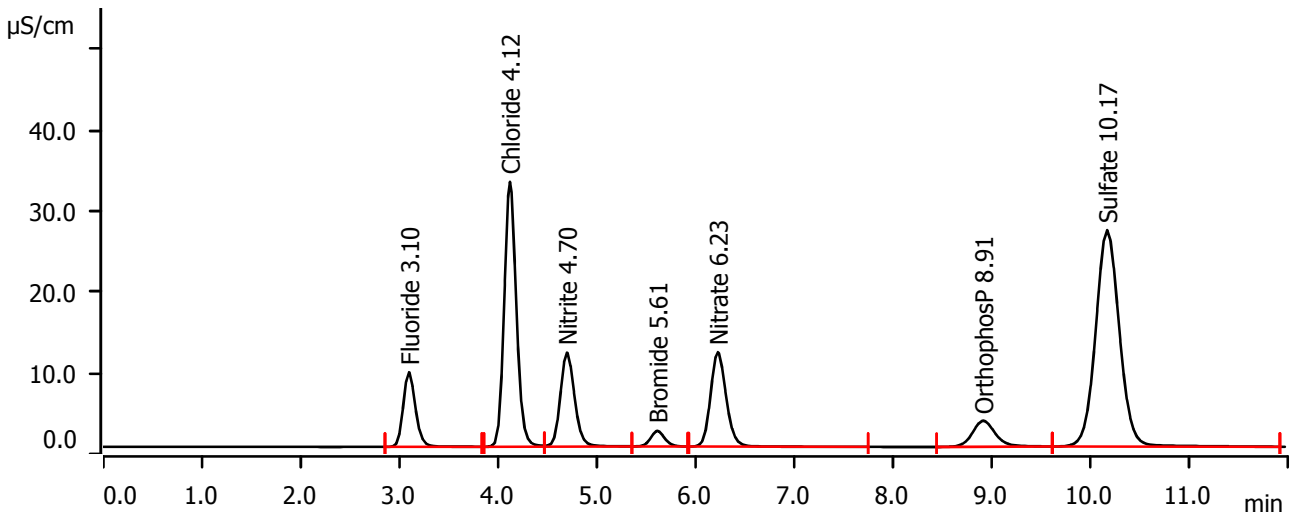
**Sample data**

Ident . . . . . MSD 280-43746-a-10 20X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 19:28:50 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 20

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area ( $\mu\text{S/cm}$ ) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.097	1.3374	9.208	93.519	Fluoride
2	4.120	4.6468	32.692	563.683	Chloride
3	4.697	1.9333	11.586	106.481	Nitrite
4	5.612	0.3164	1.924	101.304	Bromide
5	6.225	2.1438	11.660	105.178	Nitrate
6	8.912	0.8640	3.213	104.060	OrthophosP
7	10.167	7.4669	26.699	1185.527	Sulfate

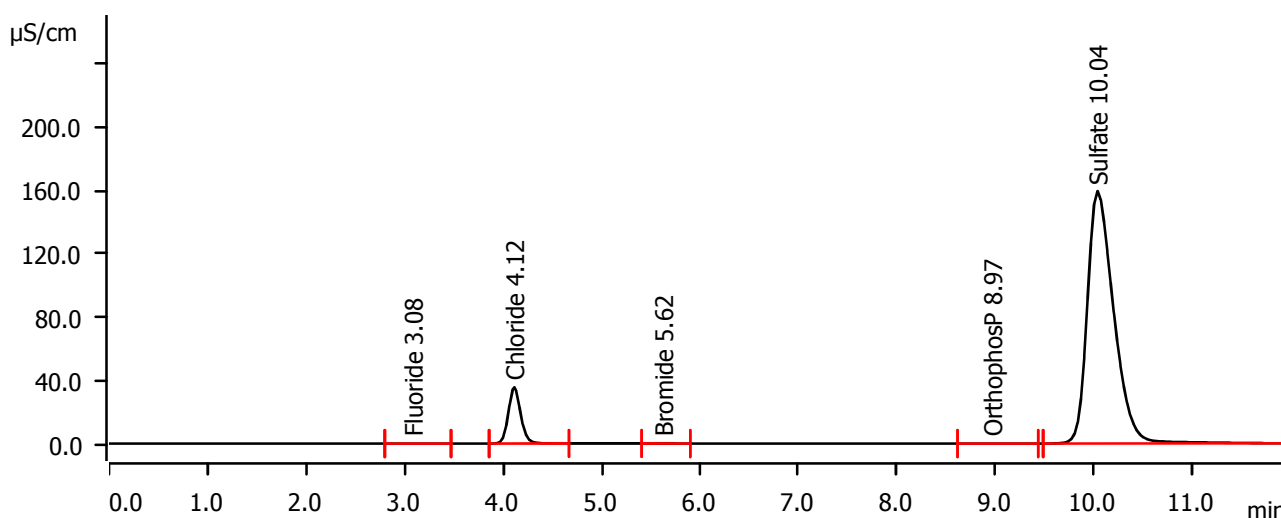
**Sample data**

Ident . . . . . 280-43748-m-1 10X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 19:44:43 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 10

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.083	0.0025	0.015	0.418	Fluoride
2	4.115	5.0731	35.282	307.414	Chloride
3	5.620	0.0066	0.038	1.904	Bromide
4	8.967	0.0091	0.028	-0.193	OrthophosP
5	10.037	49.2557	158.578	3891.060	Sulfate

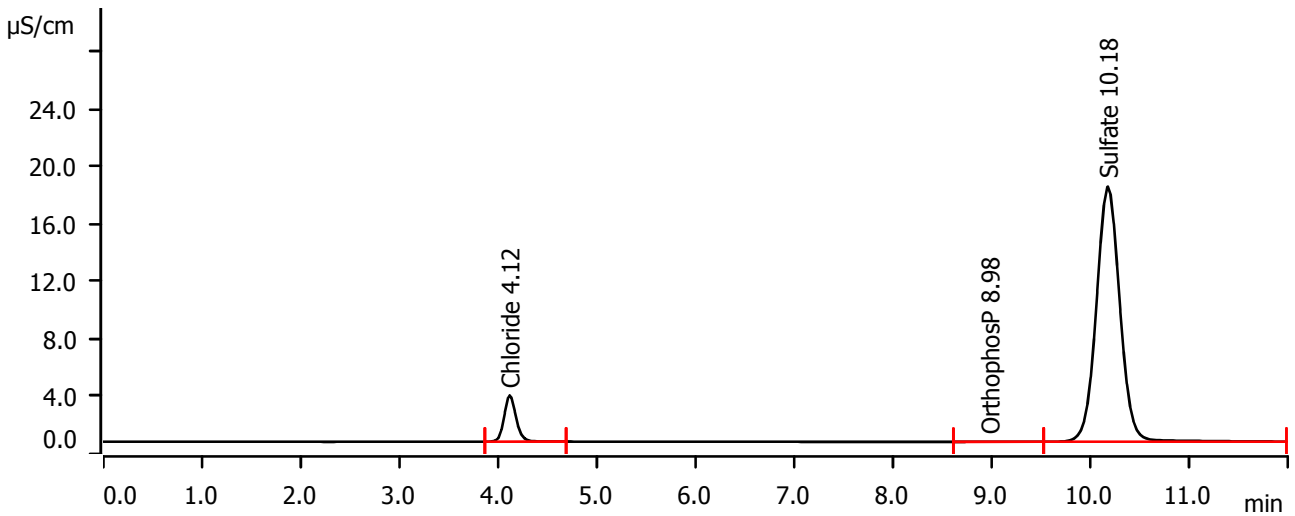
**Sample data**

Ident . . . . . 280-43748-m-1 100X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 20:00:33 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 100

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.117	0.4482	3.215	299.595	Chloride
2	8.977	0.0054	0.015	-4.235	OrthophosP
3	10.175	4.9212	17.751	3918.312	Sulfate

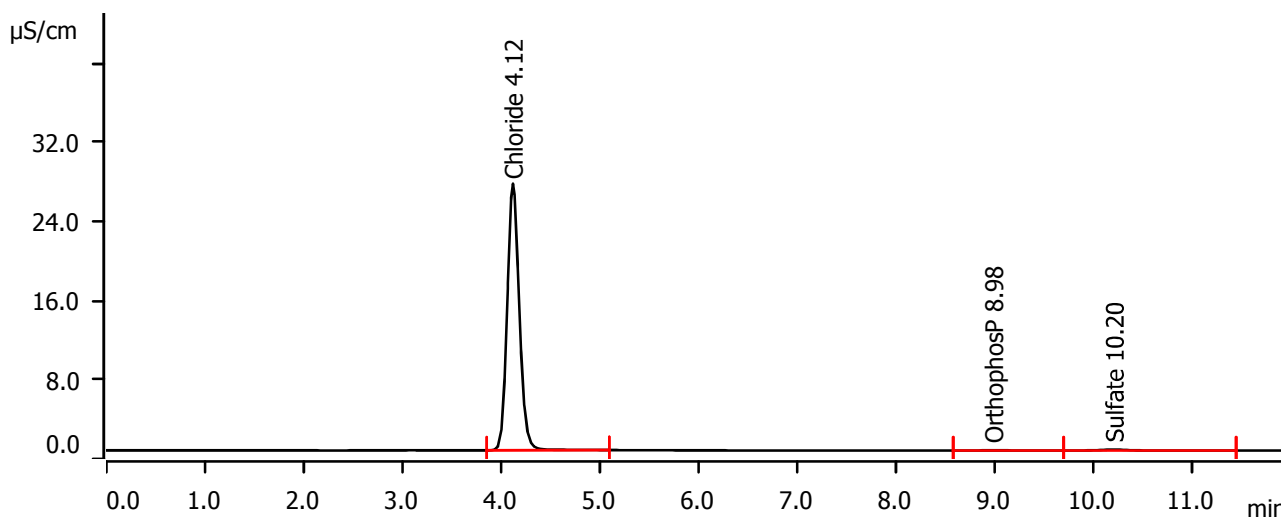
**Sample data**

Ident . . . . . 280-43753-a-1 10X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 20:16:21 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 10

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.120	3.8258	26.932	232.587	Chloride
2	8.982	0.0054	0.012	-0.419	OrthophosP
3	10.202	0.0309	0.101	5.853	Sulfate



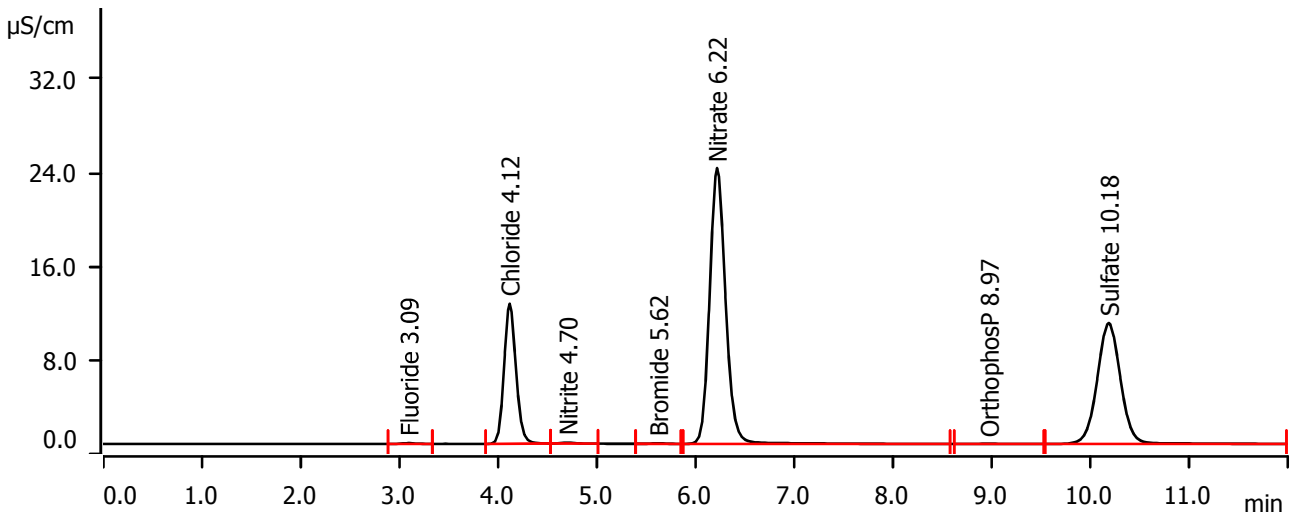
**Sample data**

Ident . . . . . 280-43752-a-1 20X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 20:32:09 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 20

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.092	0.0095	0.062	1.321	Fluoride
2	4.117	1.6695	11.943	206.455	Chloride
3	4.702	0.0128	0.078	2.572	Nitrite
4	5.617	0.0070	0.040	3.918	Bromide
5	6.217	4.4198	23.519	214.877	Nitrate
6	8.968	0.0043	0.013	-0.975	OrthophosP
7	10.183	2.8364	10.318	454.569	Sulfate

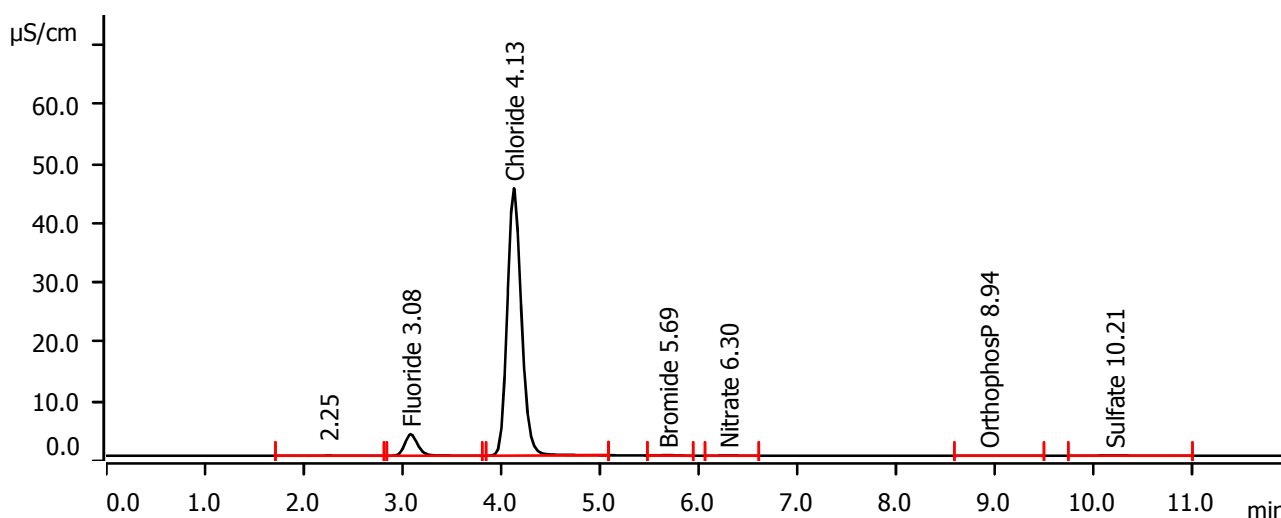
**Sample data**

Ident . . . . . 280-43756-b-1  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 20:48:00 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.252	0.0067	0.020	invalid	
2	3.083	0.5508	3.623	1.945	Fluoride
3	4.128	7.4776	44.995	45.166	Chloride
4	5.685	0.0146	0.092	0.315	Bromide
5	6.300	0.0082	0.045	0.112	Nitrate
6	8.940	0.0032	0.011	-0.055	OrthophosP
7	10.212	0.0198	0.068	0.498	Sulfate

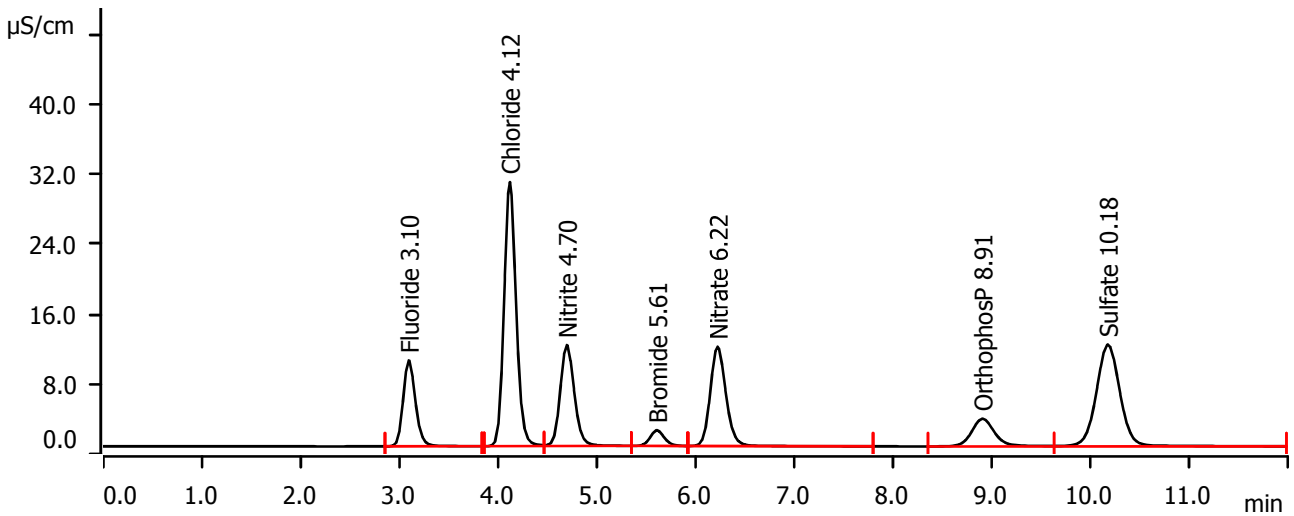
**Sample data**

Ident . . . . . CCV  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 21:03:49 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	1.4283	9.839	4.992	Fluoride
2	4.118	4.2790	30.232	25.977	Chloride
3	4.695	1.9160	11.549	5.277	Nitrite
4	5.608	0.2975	1.799	4.767	Bromide
5	6.222	2.0941	11.370	5.139	Nitrate
6	8.905	0.8618	3.174	5.189	OrthophosP
7	10.175	3.2472	11.665	25.971	Sulfate

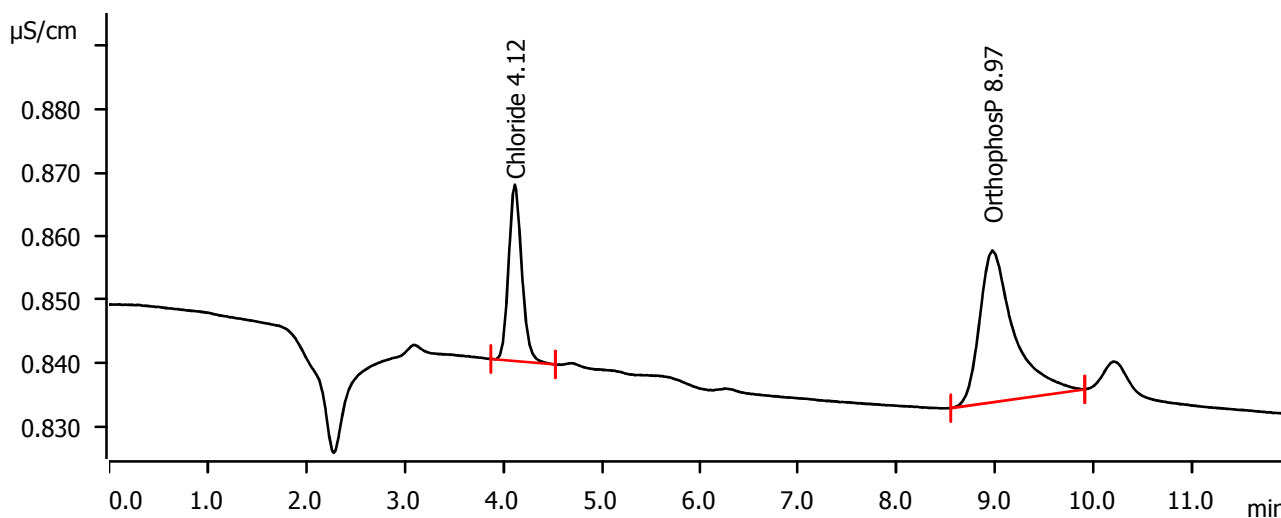
**Sample data**

Ident . . . . . CCB  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 21:19:39 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.120	0.0043	0.028	0.333	Chloride
2	8.970	0.0097	0.024	-0.016	Orthophosph

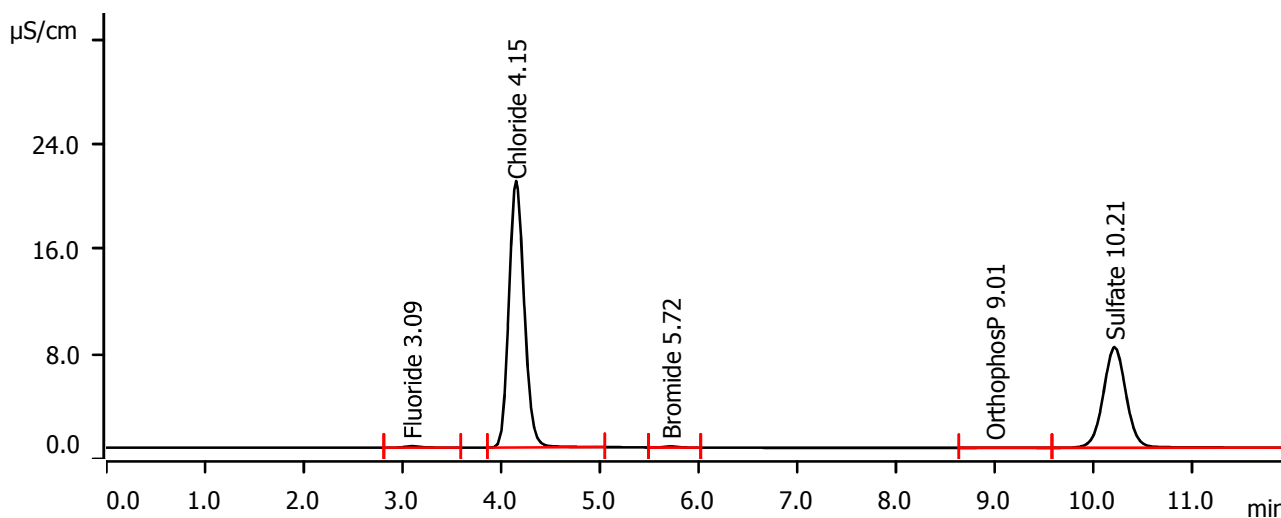
**Sample data**

Ident . . . . . 280-43754-a-8  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 21:35:22 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.092	0.0186	0.108	0.098	Fluoride
2	4.152	3.6467	20.338	22.184	Chloride
3	5.715	0.0153	0.097	0.327	Bromide
4	9.007	0.0061	0.017	-0.038	OrthophosP
5	10.212	2.0595	7.686	16.597	Sulfate

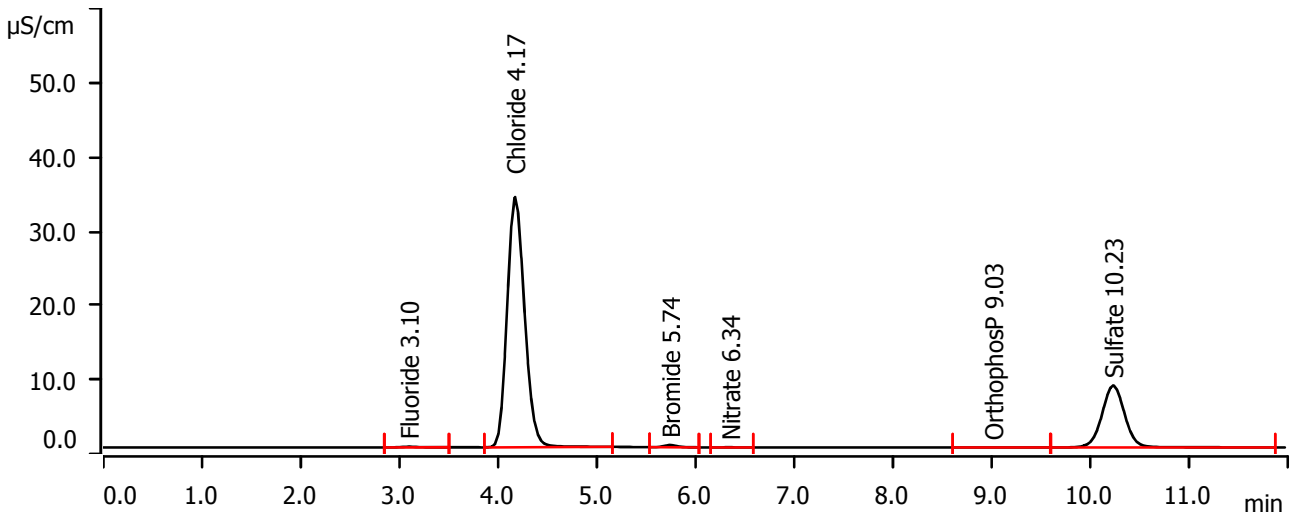
**Sample data**

Ident . . . . . 280-43754-a-9  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 21:51:09 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	0.0168	0.091	0.092	Fluoride
2	4.172	6.8857	33.697	41.616	Chloride
3	5.740	0.0442	0.289	0.781	Bromide
4	6.342	0.0020	0.012	0.097	Nitrate
5	9.028	0.0049	0.014	-0.045	OrthophosP
6	10.228	2.2320	8.350	17.958	Sulfate

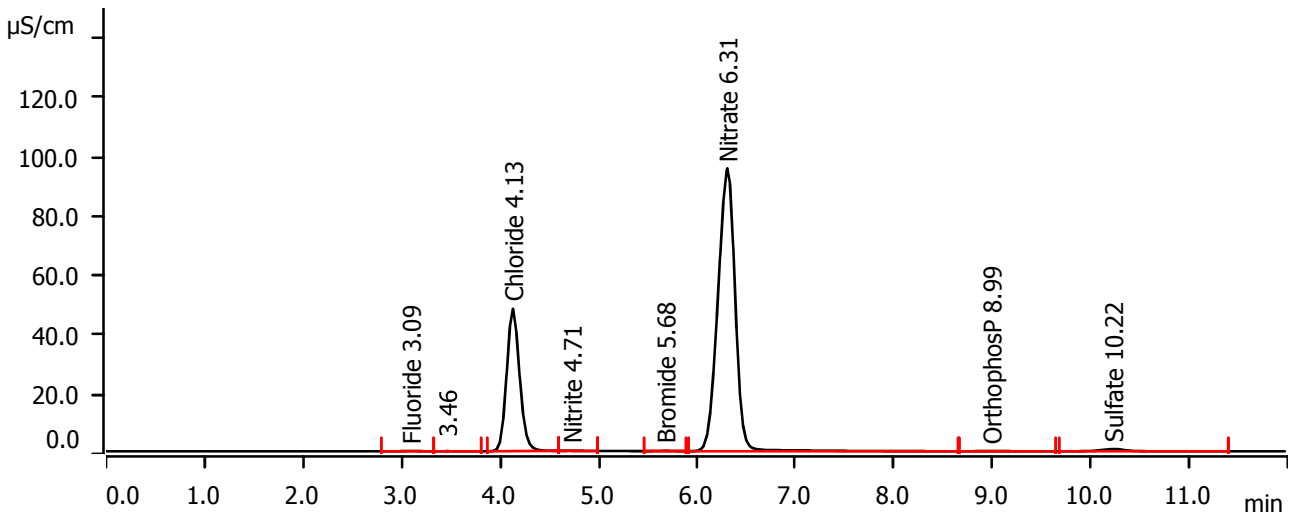
**Sample data**

Ident . . . . . 280-43754-a-10  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 22:06:59 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.093	0.0122	0.070	0.075	Fluoride
2	3.462	0.0033	0.016	invalid	
3	4.132	7.2857	47.906	44.015	Chloride
4	4.708	0.0058	0.031	0.110	Nitrite
5	5.678	0.0193	0.120	0.390	Bromide
6	6.308	19.3783	95.209	46.792	Nitrate
7	8.988	0.0105	0.032	-0.011	OrthophosphP
8	10.223	0.2055	0.754	1.964	Sulfate

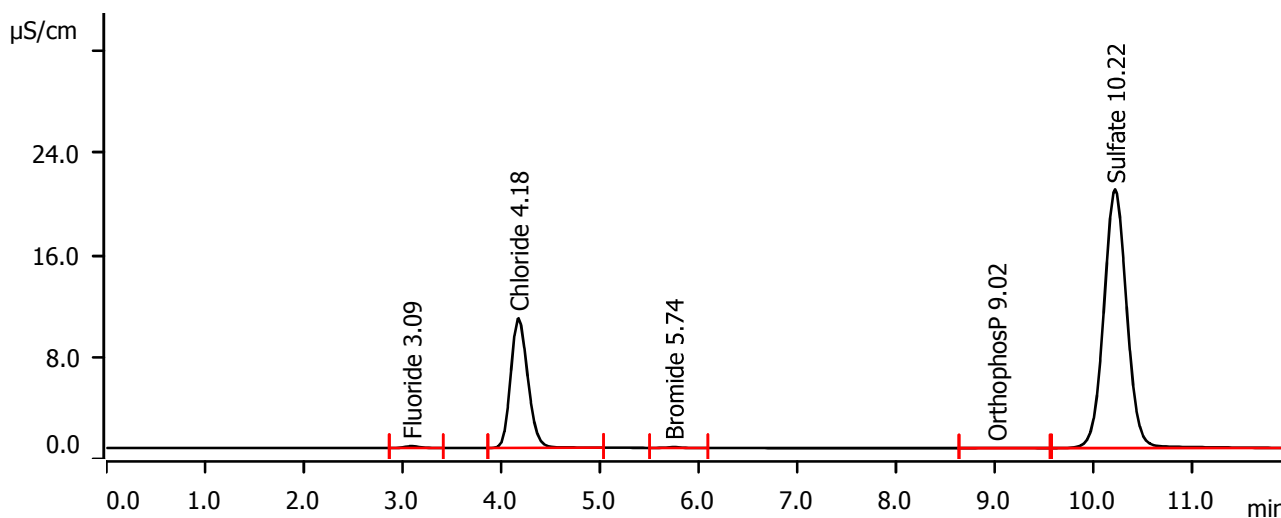
**Sample data**

Ident . . . . . 280-43754-a-11  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 22:22:49 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.092	0.0239	0.144	0.116	Fluoride
2	4.175	2.0470	10.184	12.587	Chloride
3	5.743	0.0106	0.064	0.254	Bromide
4	9.020	0.0061	0.018	-0.038	OrthophosP
5	10.217	5.4999	20.319	43.751	Sulfate



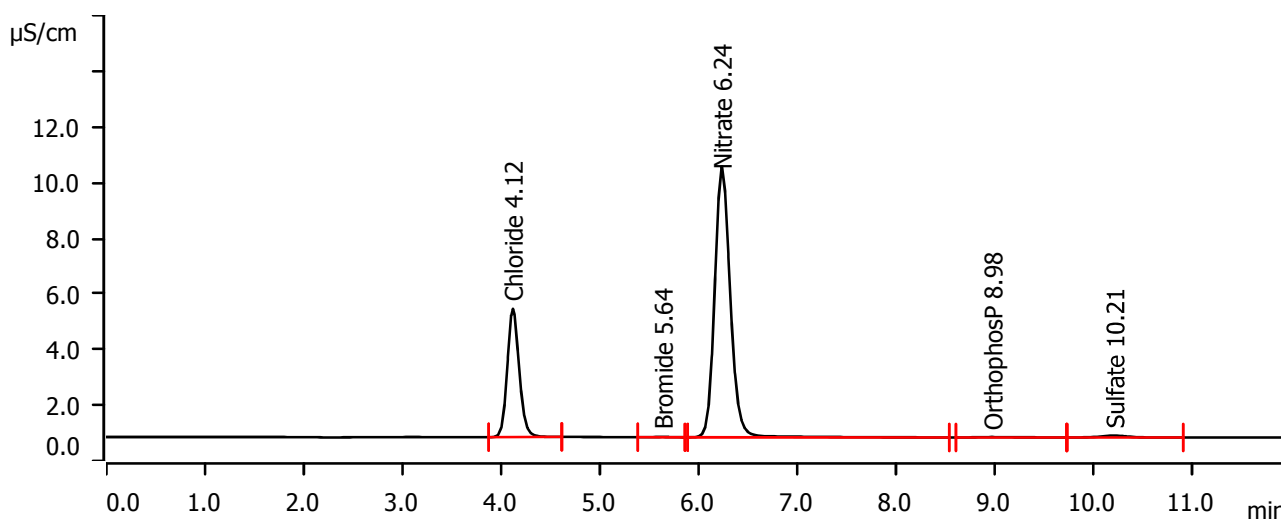
**Sample data**

Ident . . . . . 280-43754-a-10 10X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 22:38:38 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 10

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.118	0.6453	4.606	41.788	Chloride
2	5.635	0.0019	0.011	1.158	Bromide
3	6.235	1.7908	9.732	44.081	Nitrate
4	8.978	0.0049	0.013	-0.449	OrthophosP
5	10.208	0.0202	0.069	5.005	Sulfate

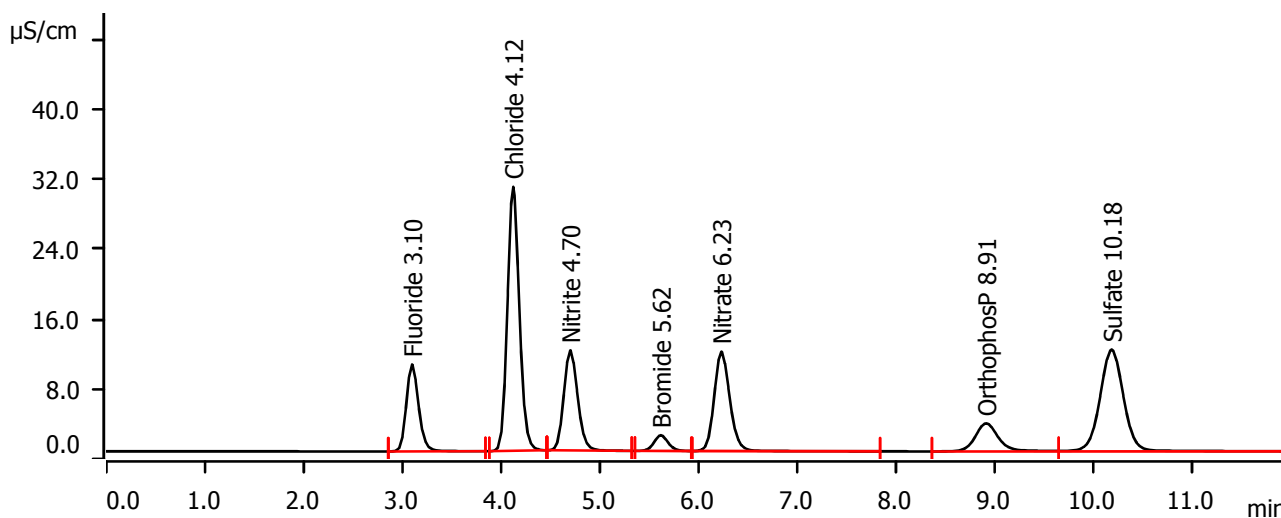
**Sample data**

Ident . . . . . CCV  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 22:54:27 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area ( $\mu\text{S/cm}$ ) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.098	1.4442	9.937	5.047	Fluoride
2	4.122	4.2360	30.207	25.720	Chloride
3	4.700	1.8697	11.458	5.152	Nitrite
4	5.617	0.2967	1.802	4.756	Bromide
5	6.230	2.0863	11.374	5.120	Nitrate
6	8.912	0.8838	3.211	5.324	OrthophosP
7	10.182	3.2397	11.654	25.911	Sulfate

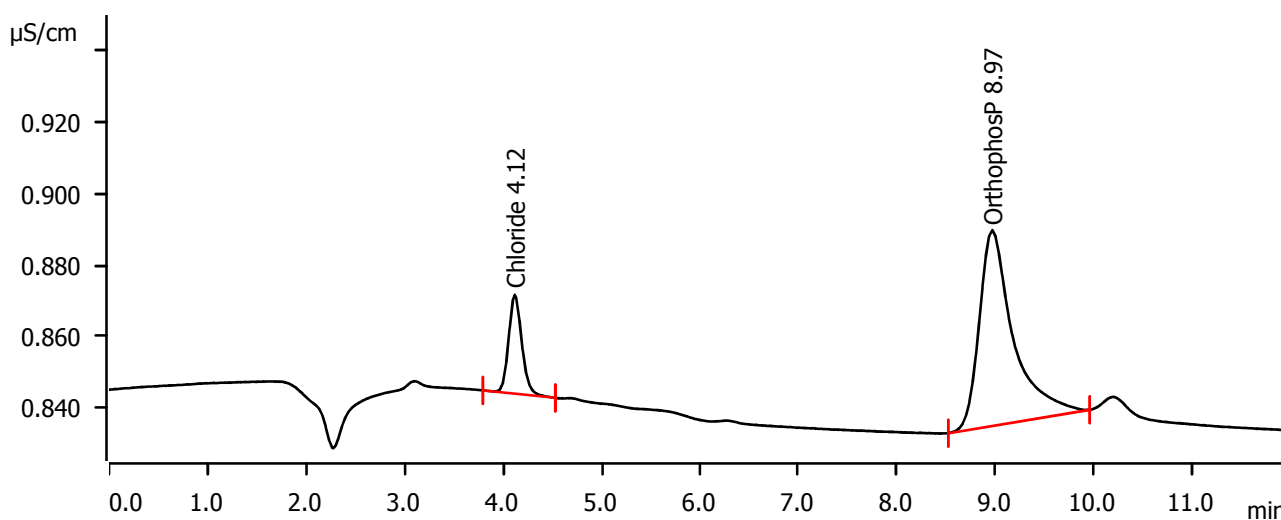
**Sample data**

Ident . . . . . CCB  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 23:10:19 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.120	0.0043	0.028	0.333	Chloride
2	8.967	0.0220	0.055	0.059	OrthophospP

**Wet Chemistry Data Review Checklist  
For Tests with Calibration Curves**

Test Name/ Method #: IC

SOP # WC # 0020

Instrument: IC10 Analyst: E. KUDIA

Analysis Date: 06-26-13

Lot / Sample Numbers	Matrix	Prep Batch	Batch	Method	Special Inst
<u>280-43746, 43748</u>	<u>AQ</u>		<u>180678</u>		
<u>43753, 43752</u>	<u>↓</u>		<u>180677</u>		
<u>43751, 43754</u>	<u>↓</u>				

A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Minimum of five standards in ICAL or as specified in method?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
2. Correlation coefficient $\geq 0.995$ ?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3. Second-source ICV analyzed, and recovery within acceptance limits?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
4. ICB analyzed immediately after the ICV & results < the RL	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
5. CCV analyzed after every ten samples & recovery within acceptance limits?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
6. CCB analyzed after every CCV & results < RL?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
7. Absolute value of the intercept is $< \pm \frac{1}{2}$ the RL?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
B. Sample Results				
1. All samples greater than highest calibration standard diluted and reanalyzed?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
2. Do associated RLs/MDLs reflect dilutions or limited sample volume?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3. All reported results bracketed by in control CCV results?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
4. Sample analyses done within holding time?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
5. Initial pH check documented for all samples? (If Applicable)			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Preparation benchsheet completed and included in package?			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. Client requirements reviewed and met?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
8. Were data manually transcribed from instrument printouts into TALS verified 100% including significant figures and correct units? (If Applicable)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
9. Do the prep and analysis dates in TALS reflect the actual dates?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
11. Raw data copies prepared, scanned, and uploaded?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
12. Manual integrations done properly and initialed and dated?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
13. STD/True Value information is updated and included?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
C. Preparation/Matrix QC				
1. Method blank < RL or all reported samples > 10x blank have NCM?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
2. Method blank < 1/2 RL or NCM provided?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3. LCS/LCSD run for batch and within QC limits?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
4. MS/MSD run at required frequency and within limits or NCM written?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
5. DUP run at required frequency and RPD within acceptance limits or NCM written?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>

Analyst: E. Kudia

Date: 06-27-13

2nd Level Reviewer: [Signature]

Date: 7/9/13

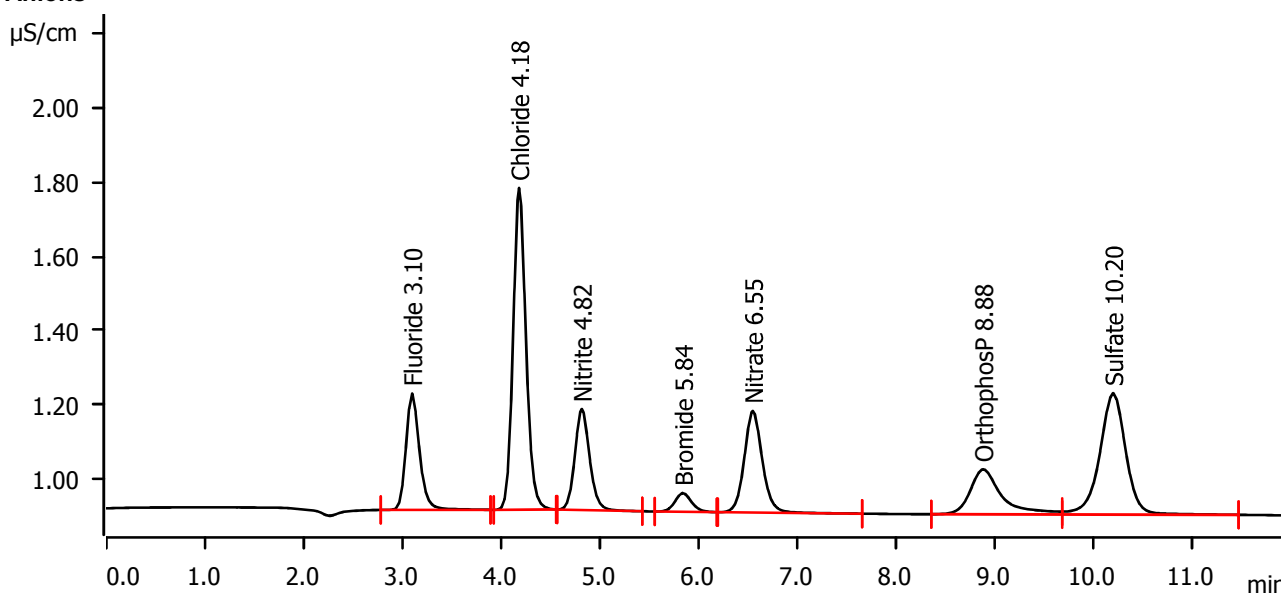
**Sample data**

Ident . . . . . STD1  
 Sample type . . . . . Standard 1  
 Determination start . . . . . 2013-06-06 10:49:36 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

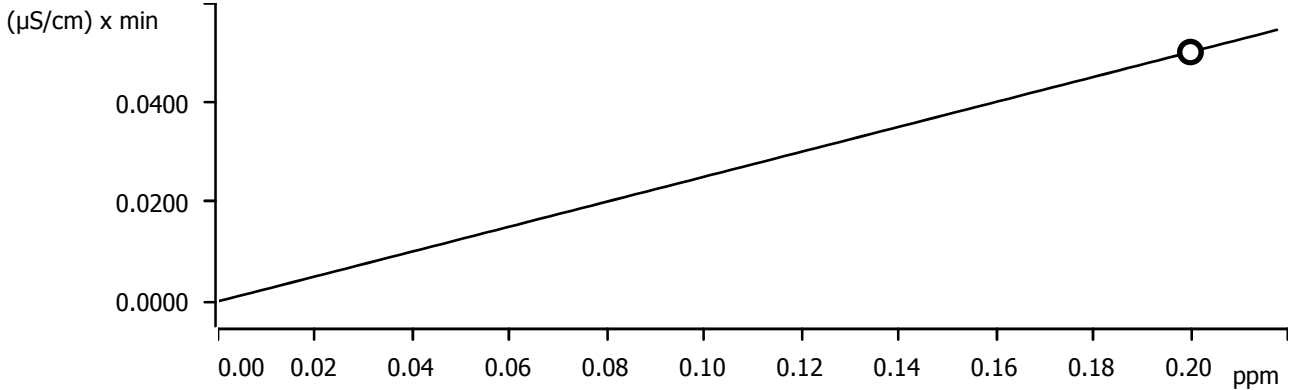
Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.51 MPa  
 Temperature . . . . . 30.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.098	0.0502	0.313	0.200	Fluoride
2	4.182	0.1302	0.866	1.000	Chloride
3	4.817	0.0472	0.272	0.200	Nitrite
4	5.840	0.0098	0.050	0.200	Bromide
5	6.548	0.0580	0.273	0.200	Nitrate
6	8.882	0.0451	0.121	0.200	OrthophosP
7	10.197	0.1001	0.327	1.000	Sulfate

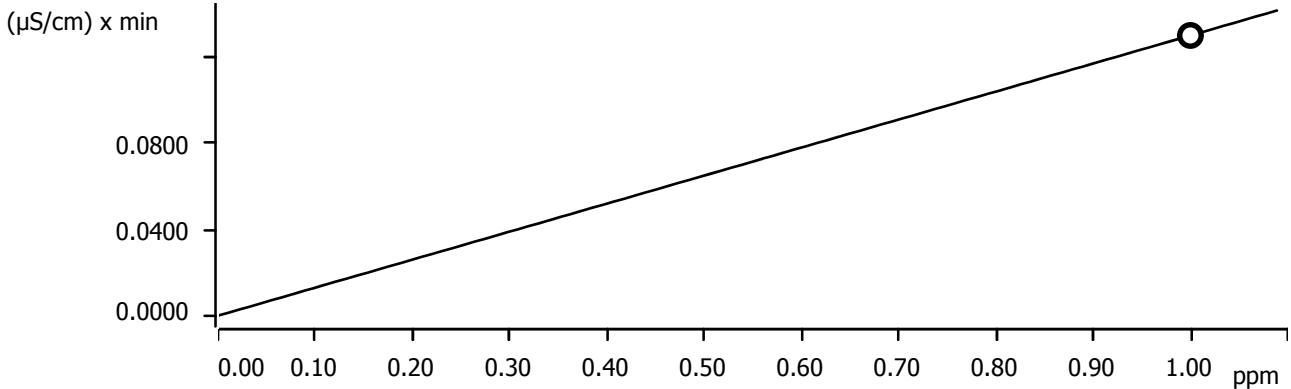
**Fluoride (Anions)**



Function: . . . . .  $A = 0.0501979 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used

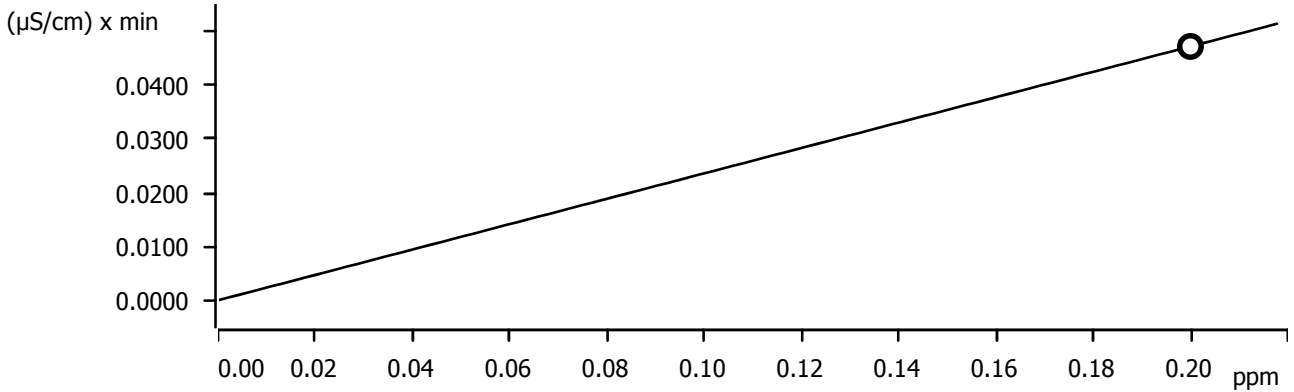
**Chloride (Anions)**



Function: . . . . .  $A = 0.0260411 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used

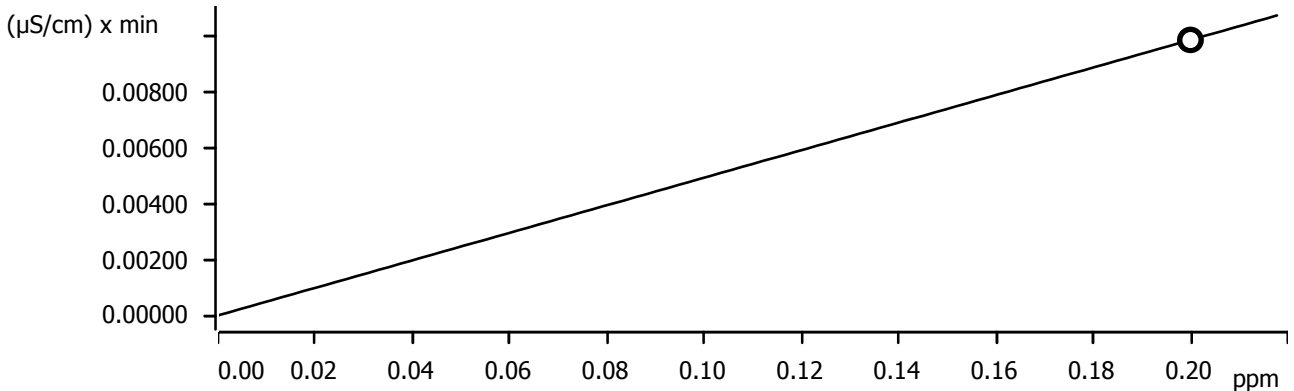
**Nitrite (Anions)**



Function: . . . . .  $A = 0.0471838 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used

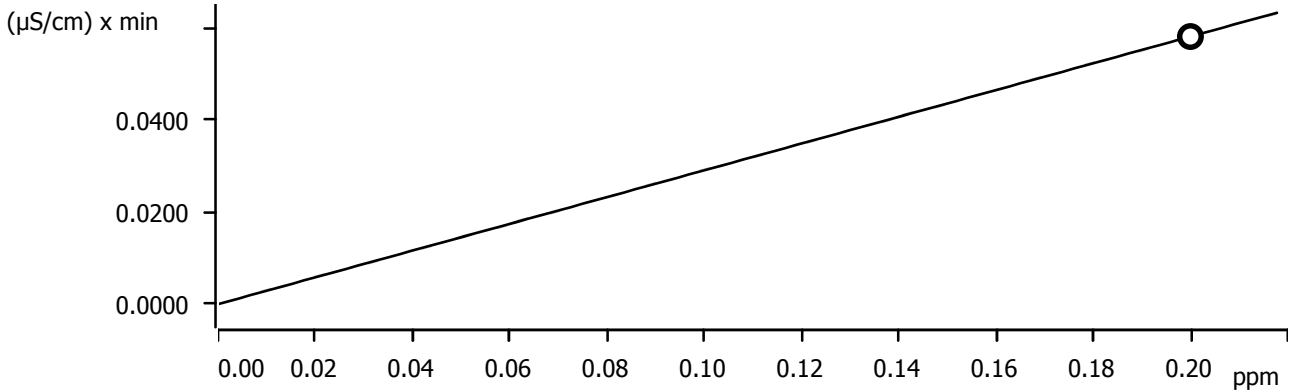
**Bromide (Anions)**



Function: . . . . .  $A = 9.81263E-3 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used

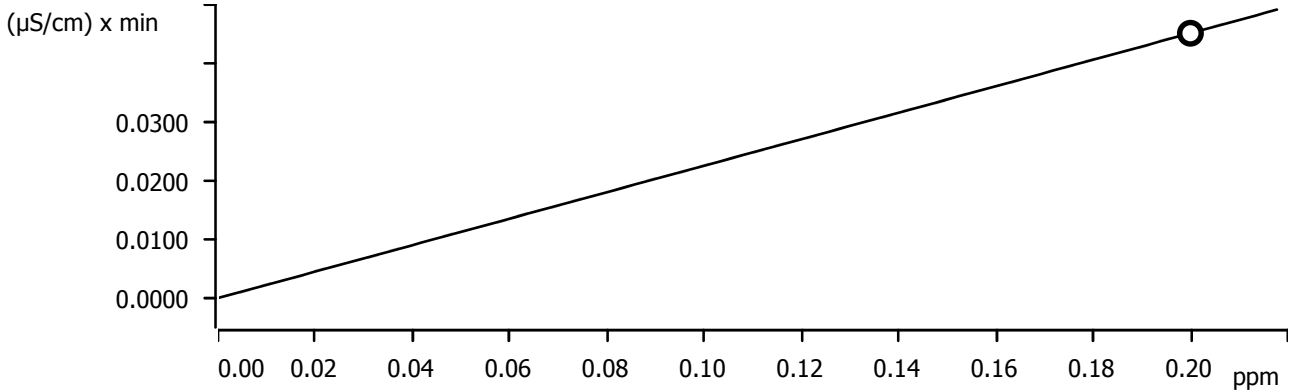
**Nitrate (Anions)**



Function: . . . . .  $A = 0.0580301 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used

**OrthophosP (Anions)**



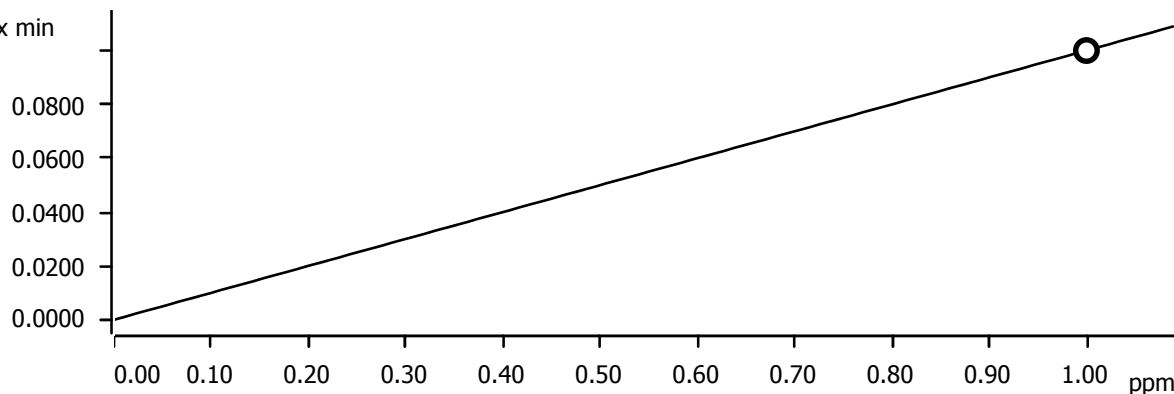
Function: . . . . .  $A = 0.0451275 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used



**Sulfate (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = 0.0200184 \times Q$

Relative standard deviation . . . . . 0.000000 %

Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used

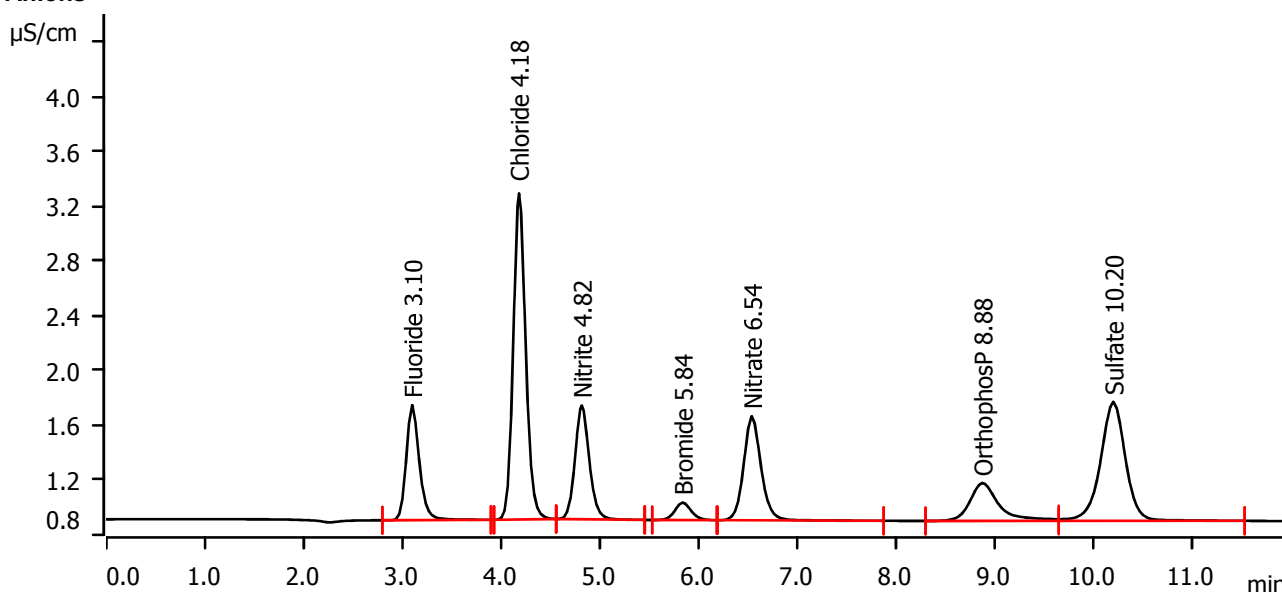
**Sample data**

Ident . . . . . STD2  
 Sample type . . . . . Standard 2  
 Determination start . . . . . 2013-06-06 11:04:58 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.39 MPa  
 Temperature . . . . . 30.0 °C

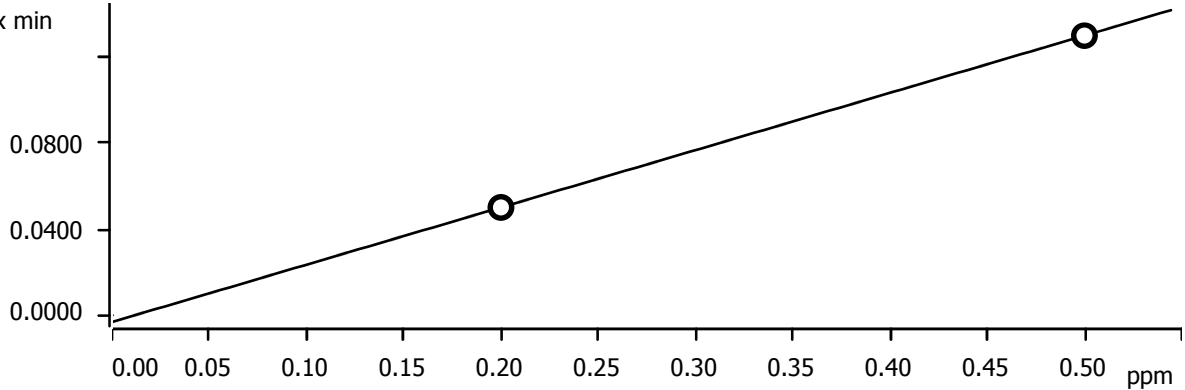
**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.098	0.1300	0.840	0.500	Fluoride
2	4.182	0.3474	2.382	2.500	Chloride
3	4.817	0.1395	0.831	0.500	Nitrite
4	5.838	0.0245	0.128	0.500	Bromide
5	6.538	0.1557	0.760	0.500	Nitrate
6	8.875	0.0952	0.277	0.500	OrthophosP
7	10.198	0.2562	0.869	2.500	Sulfate

**Fluoride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

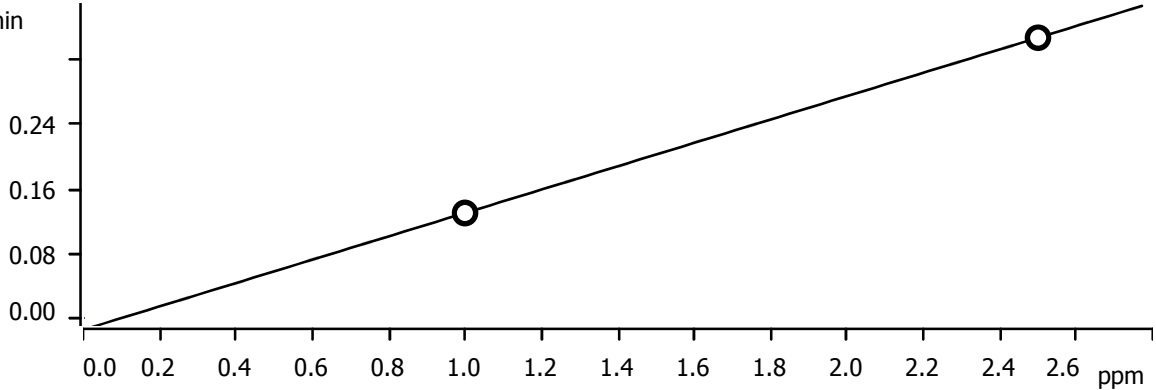


Function: . . . . .  $A = -3.03002E-3 + 0.0532279 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.130	STD2	2013-06-06 11:04:58 UTC-6	used

**Chloride (Anions)**

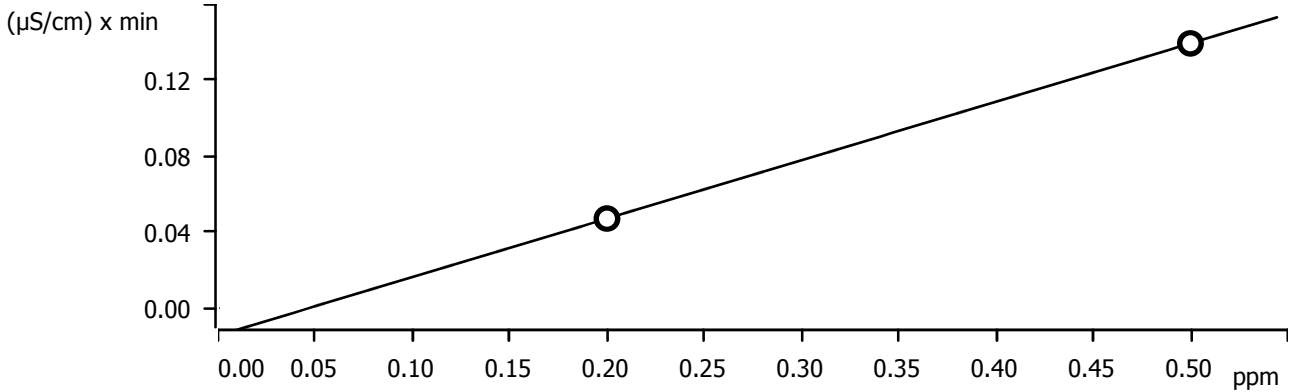
( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = -0.0145998 + 0.0289611 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.347	STD2	2013-06-06 11:04:58 UTC-6	used

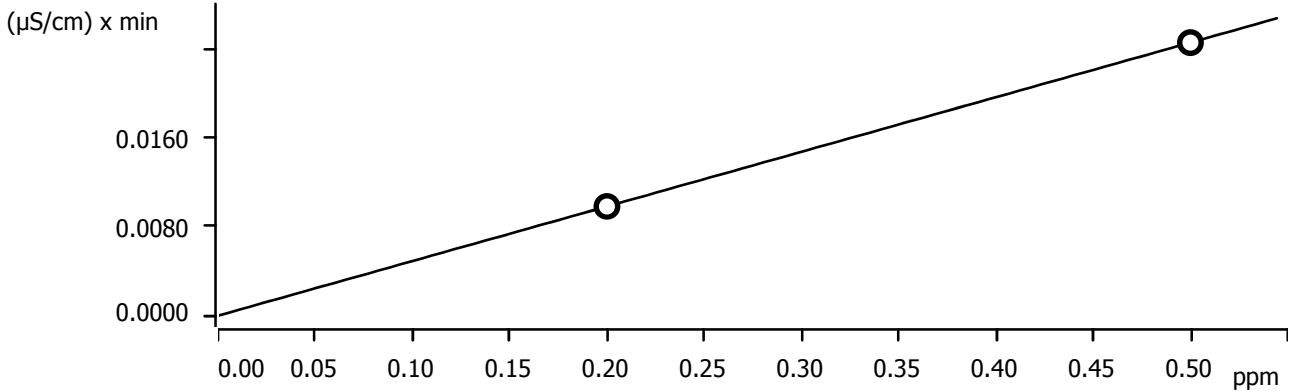
**Nitrite (Anions)**



Function: . . . . .  $A = -0.0143504 + 0.0615342 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.139	STD2	2013-06-06 11:04:58 UTC-6	used

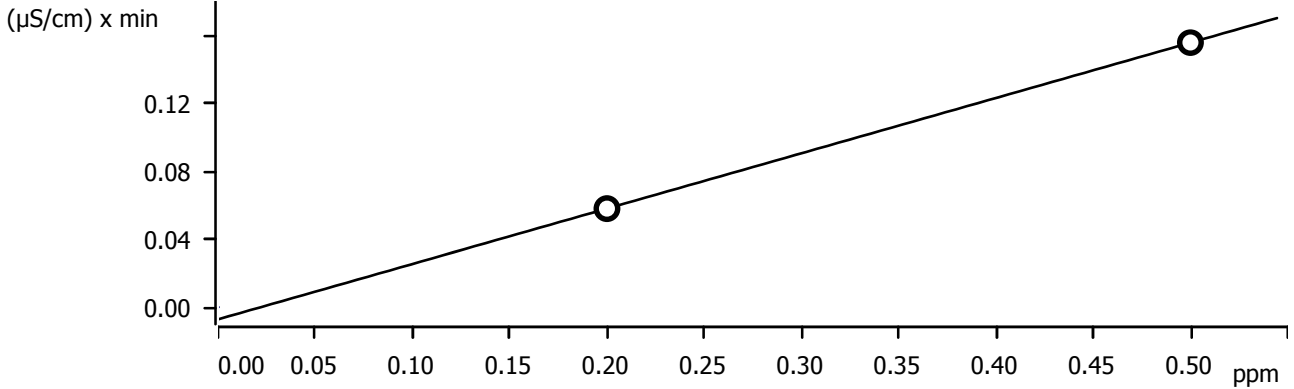
**Bromide (Anions)**



Function: . . . . .  $A = -1.82529E-7 + 9.81282E-3 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.025	STD2	2013-06-06 11:04:58 UTC-6	used

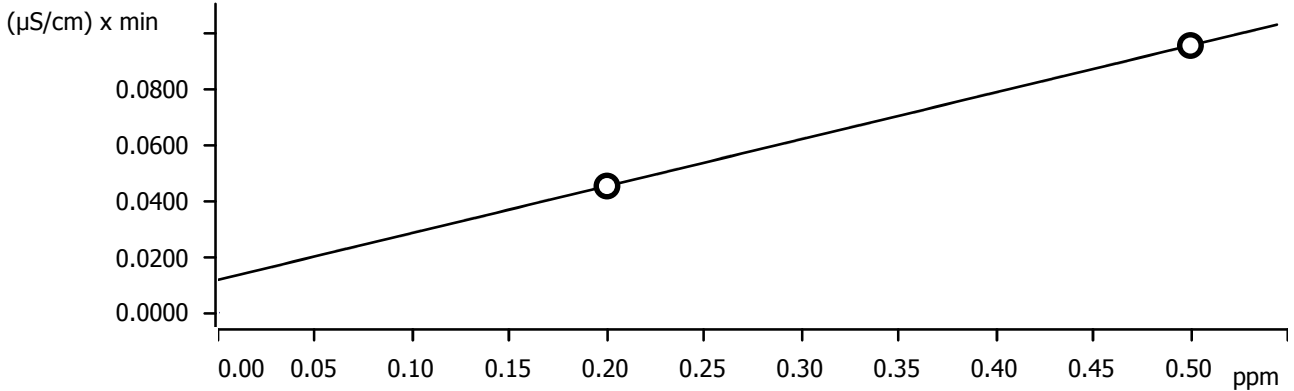
**Nitrate (Anions)**



Function: . . . . .  $A = -7.10327E-3 + 0.0651334 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.156	STD2	2013-06-06 11:04:58 UTC-6	used

**OrthophosP (Anions)**

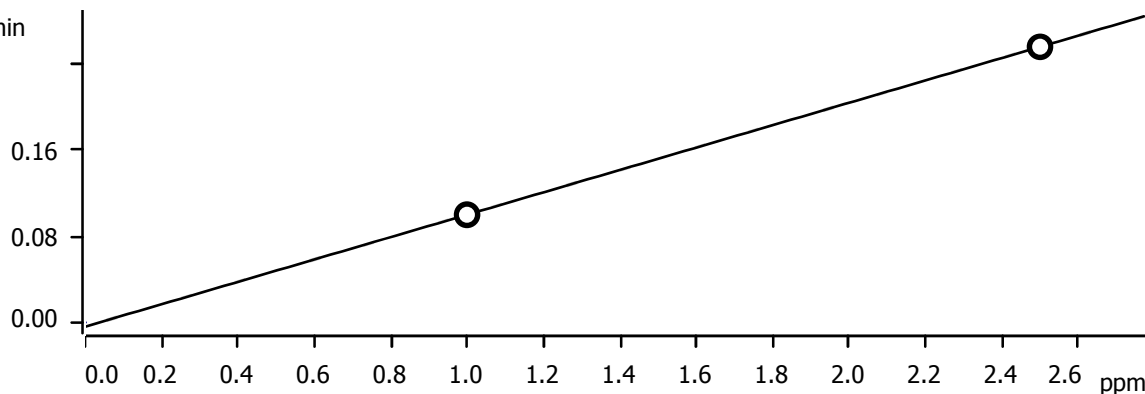


Function: . . . . .  $A = 0.0117401 + 0.0333873 \times Q$   
 Relative standard deviation . . . . . 0.000000 %  
 Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.095	STD2	2013-06-06 11:04:58 UTC-6	used

**Sulfate (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = -3.94779E-3 + 0.0208079 \times Q$

Relative standard deviation . . . . . 0.000000 %

Correlation coefficient . . . . . 1.000000

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.256	STD2	2013-06-06 11:04:58 UTC-6	used

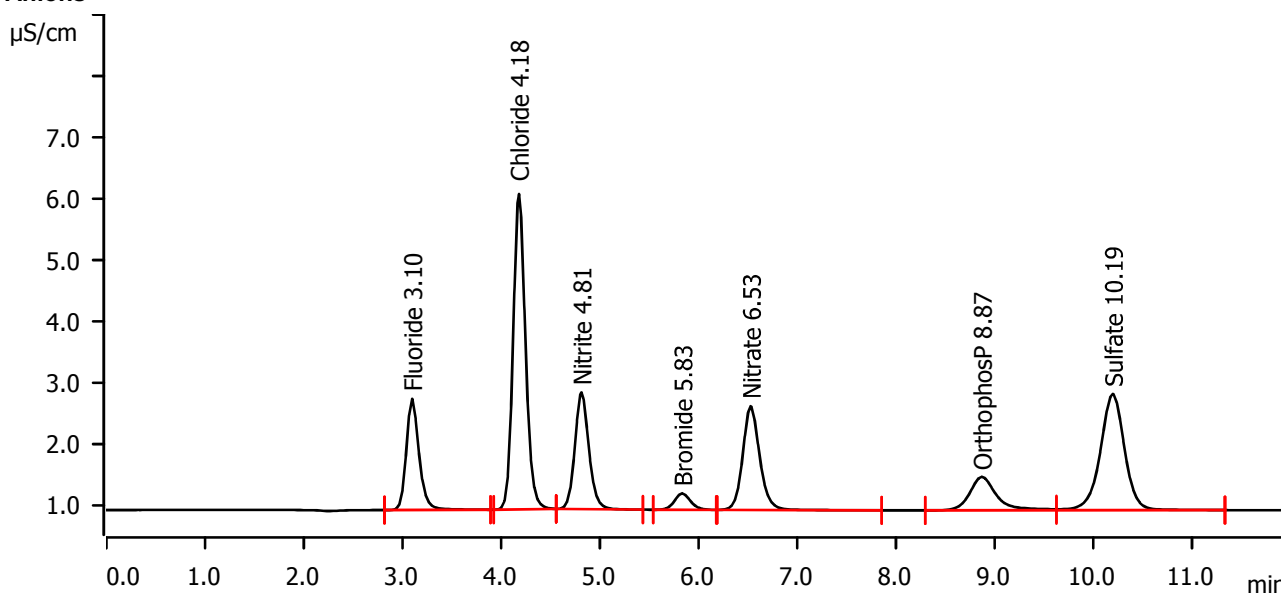
**Sample data**

Ident . . . . . STD3  
 Sample type . . . . . Standard 3  
 Determination start . . . . . 2013-06-06 11:20:19 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.45 MPa  
 Temperature . . . . . 30.0 °C

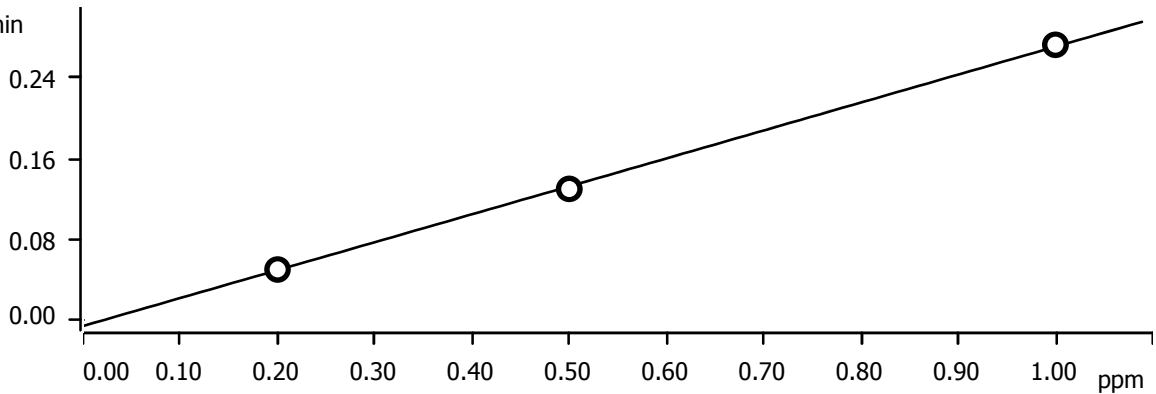
**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.098	0.2730	1.814	1.007	Fluoride
2	4.180	0.7454	5.153	5.046	Chloride
3	4.813	0.3138	1.906	1.012	Nitrite
4	5.832	0.0505	0.268	1.006	Bromide
5	6.527	0.3384	1.697	1.011	Nitrate
6	8.867	0.1740	0.549	0.994	OrthophosP
7	10.193	0.5411	1.900	5.044	Sulfate

**Fluoride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

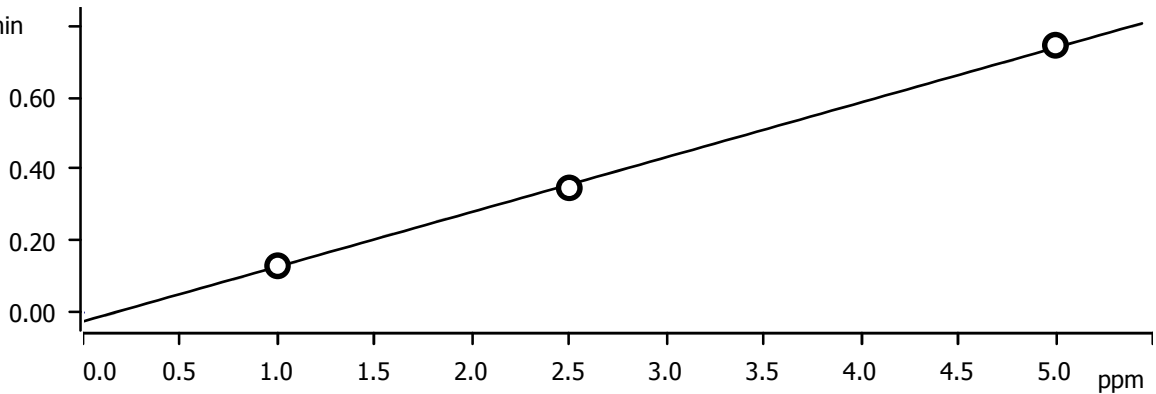


Function: . . . . .  $A = -5.82503E-3 + 0.0553779 \times Q$   
 Relative standard deviation . . . . . 2.176930 %  
 Correlation coefficient . . . . . 0.999788

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.130	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.273	STD3	2013-06-06 11:20:19 UTC-6	used

**Chloride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

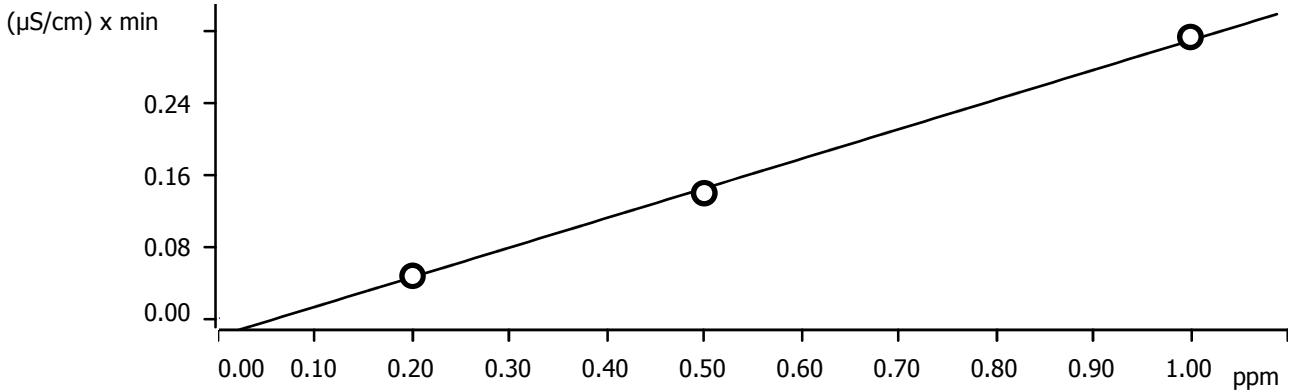


Function: . . . . .  $A = -0.0247586 + 0.0305239 \times Q$   
 Relative standard deviation . . . . . 2.932268 %  
 Correlation coefficient . . . . . 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.347	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.745	STD3	2013-06-06 11:20:19 UTC-6	used



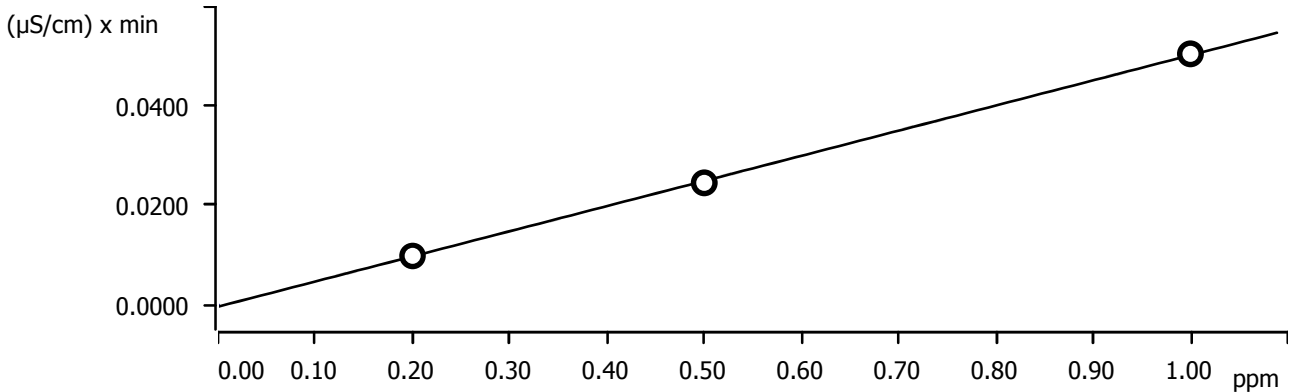
**Nitrite (Anions)**



Function: . . . . .  $A = -0.0201246 + 0.0659759 \times Q$   
 Relative standard deviation . . . . . 4.073249 %  
 Correlation coefficient . . . . . 0.999370

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.139	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.314	STD3	2013-06-06 11:20:19 UTC-6	used

**Bromide (Anions)**

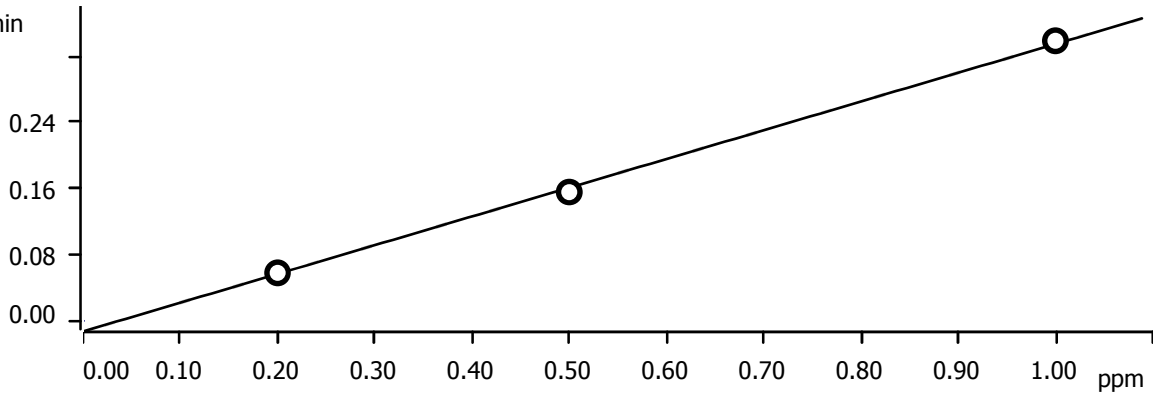


Function: . . . . .  $A = -4.08616E-4 + 0.0101270 \times Q$   
 Relative standard deviation . . . . . 1.699172 %  
 Correlation coefficient . . . . . 0.999864

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.025	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.051	STD3	2013-06-06 11:20:19 UTC-6	used

**Nitrate (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = -0.0127220 + 0.0694554 \times Q$

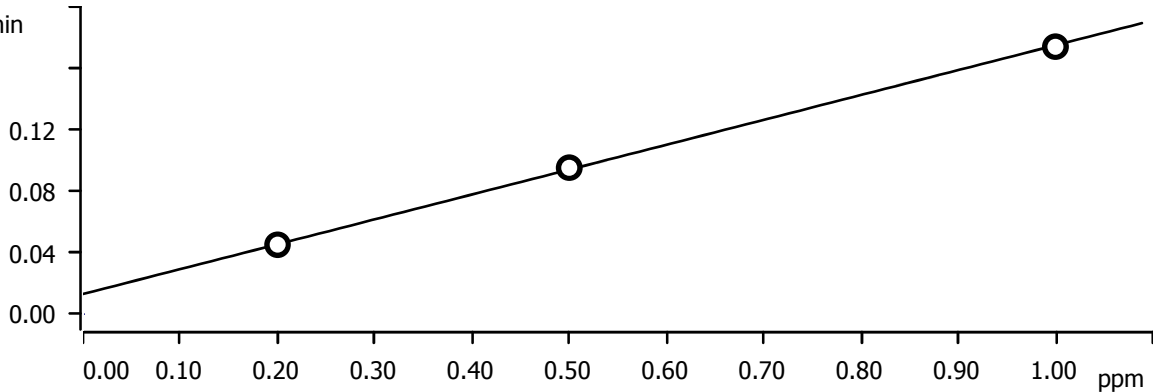
Relative standard deviation . . . . . 3.591889 %

Correlation coefficient . . . . . 0.999460

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.156	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.338	STD3	2013-06-06 11:20:19 UTC-6	used

**OrthophosP (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = 0.0130661 + 0.0323674 \times Q$

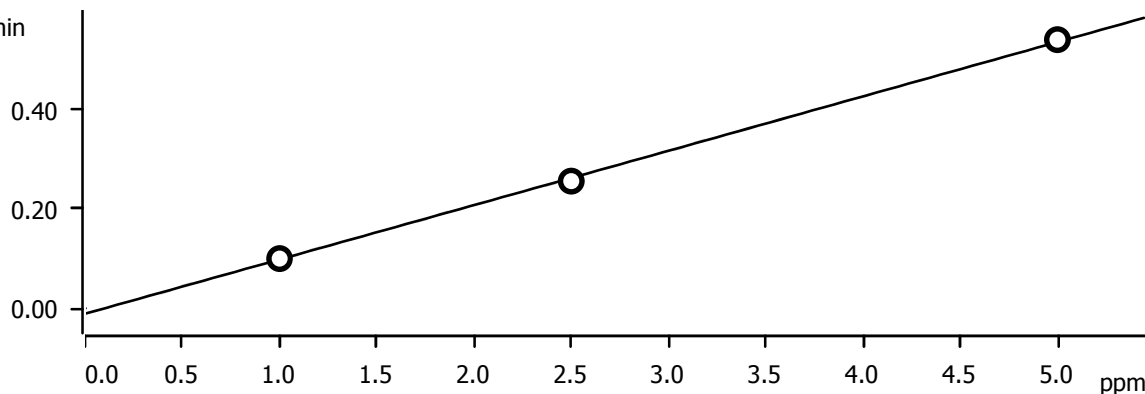
Relative standard deviation . . . . . 1.489146 %

Correlation coefficient . . . . . 0.999856

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.095	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.174	STD3	2013-06-06 11:20:19 UTC-6	used

**Sulfate (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = -0.0109761 + 0.0218892 \times Q$   
 Relative standard deviation . . . . . 2.764811 %  
 Correlation coefficient . . . . . 0.999658

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.256	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.541	STD3	2013-06-06 11:20:19 UTC-6	used

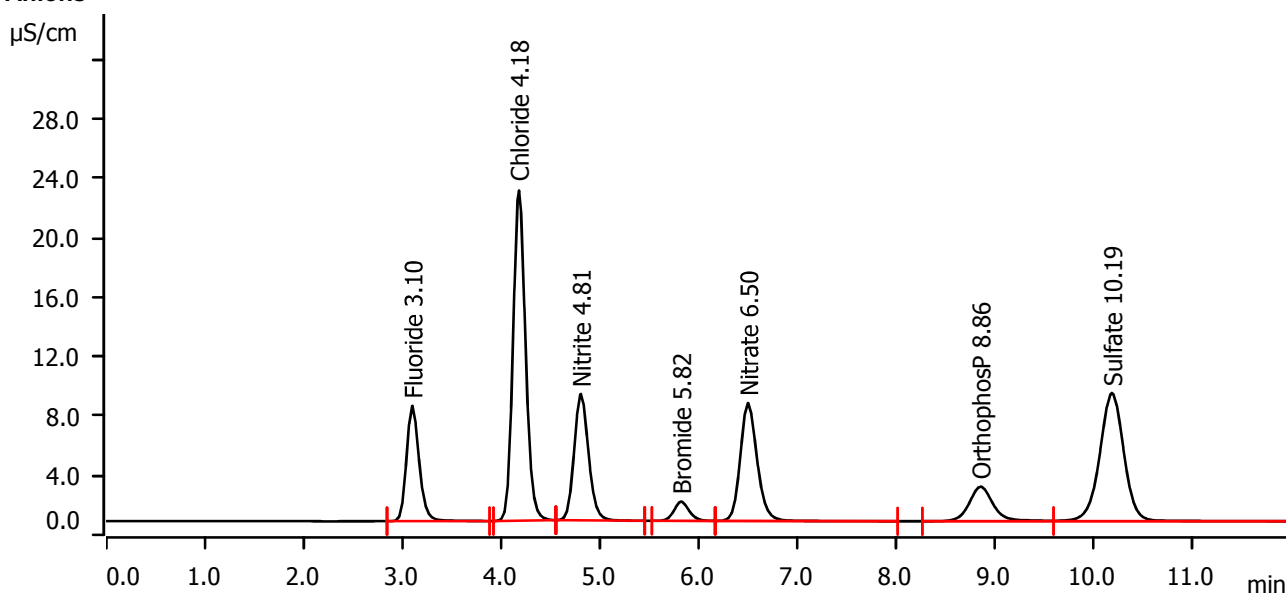
**Sample data**

Ident . . . . . STD4  
 Sample type . . . . . Standard 4  
 Determination start . . . . . 2013-06-06 11:35:40 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.45 MPa  
 Temperature . . . . . 30.0 °C

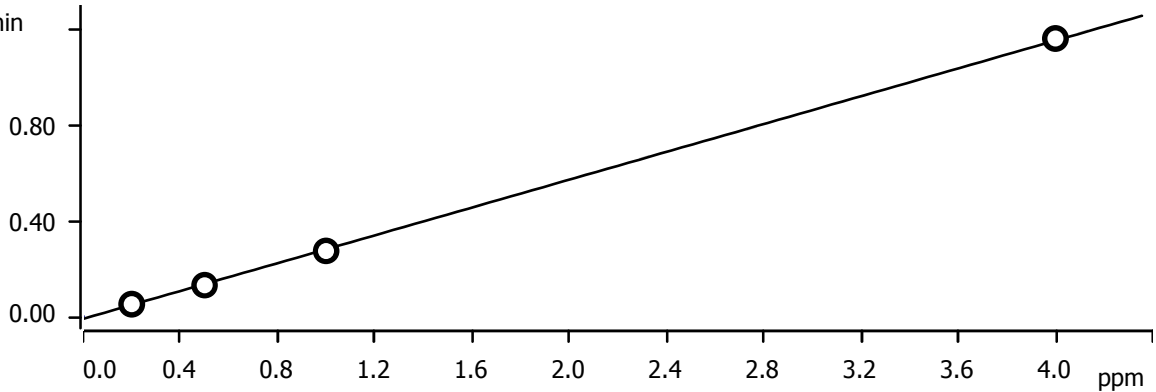
**Anions**



Peak number	Retention time min	Area (μS/cm) x min	Height μS/cm	Concentration ppm	Component name
1	3.100	1.1618	7.757	4.031	Fluoride
2	4.180	3.2470	22.208	20.200	Chloride
3	4.807	1.4398	8.500	4.057	Nitrite
4	5.823	0.2316	1.296	4.076	Bromide
5	6.500	1.5760	7.931	4.075	Nitrate
6	8.855	0.6637	2.328	4.003	OrthophosP
7	10.185	2.4592	8.633	20.340	Sulfate

**Fluoride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

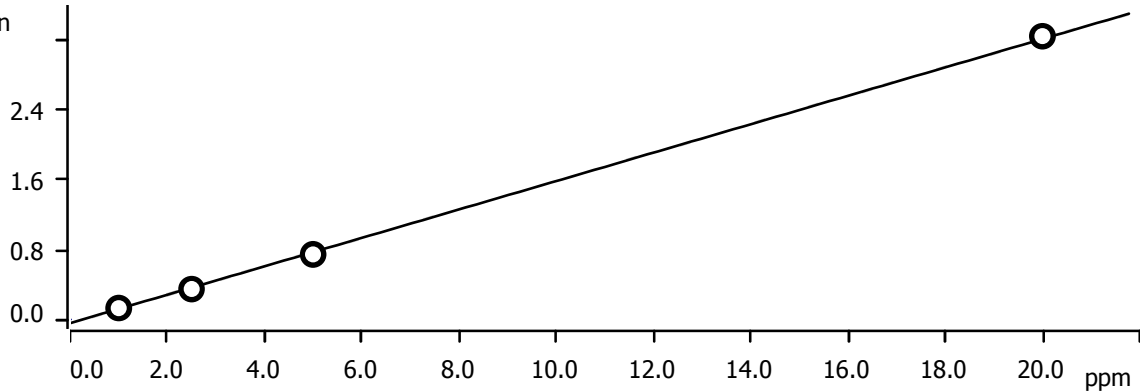


Function: . . . . .  $A = -0.0108089 + 0.0581843 \times Q$   
 Relative standard deviation . . . . . 2.209060 %  
 Correlation coefficient . . . . . 0.999900

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.130	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.273	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.162	STD4	2013-06-06 11:35:40 UTC-6	used

**Chloride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

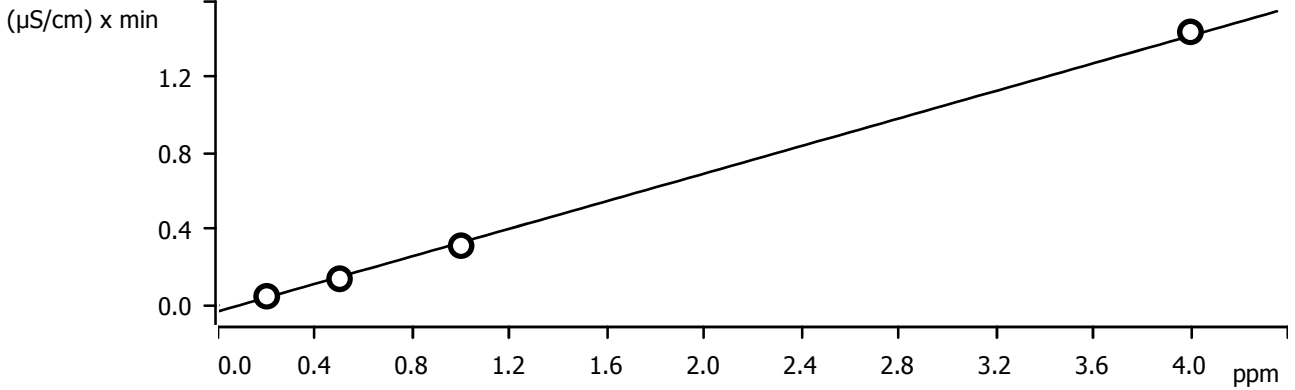


Function: . . . . .  $A = -0.0429642 + 0.0325743 \times Q$   
 Relative standard deviation . . . . . 2.915569 %  
 Correlation coefficient . . . . . 0.999830

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.347	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.745	STD3	2013-06-06 11:20:19 UTC-6	used

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 4	1	20.000	5.0	1.0	1.0	3.247	STD4	2013-06-06 11:35:40 UTC-6	used

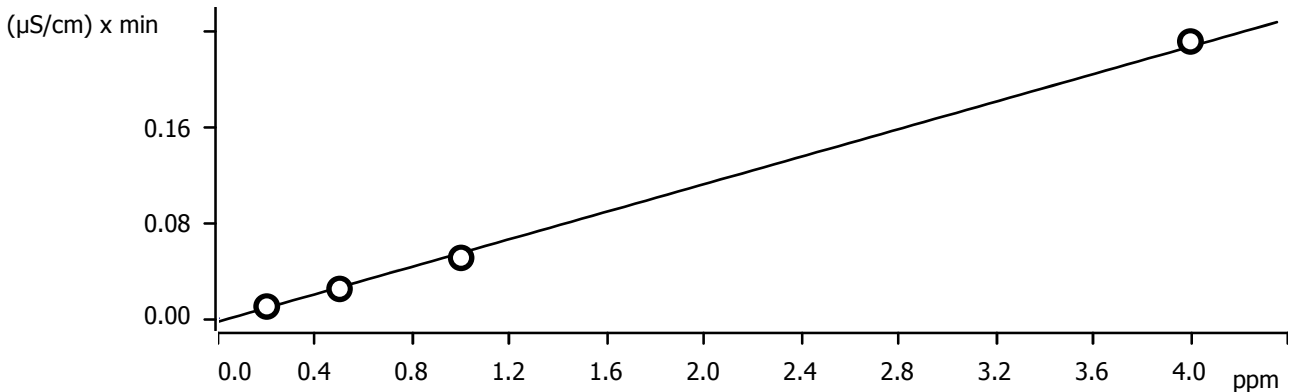
**Nitrite (Anions)**



Function: . . . . .  $A = -0.0317774 + 0.0725376 \times Q$   
 Relative standard deviation . . . . . 4.301465 %  
 Correlation coefficient . . . . . 0.999652

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.139	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.314	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.440	STD4	2013-06-06 11:35:40 UTC-6	used

**Bromide (Anions)**

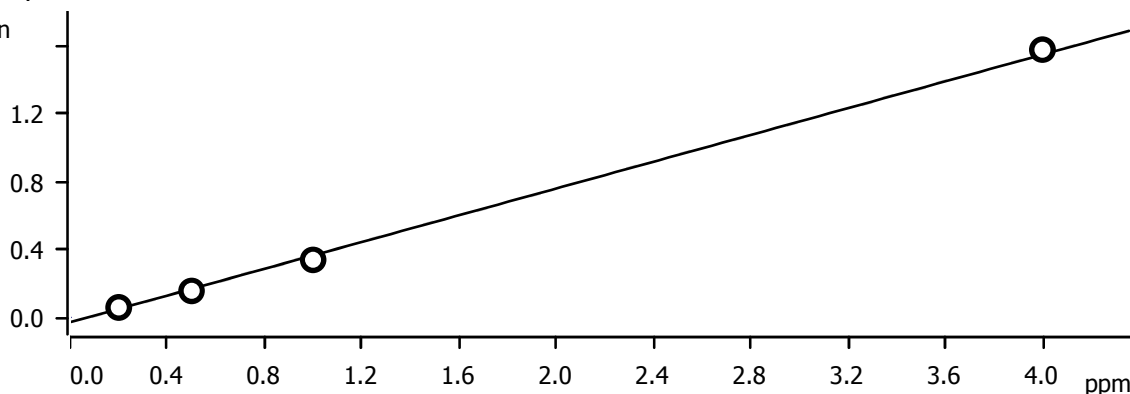


Function: . . . . .  $A = -2.85105E-3 + 0.0115023x Q$   
 Relative standard deviation . . . . . 5.618568 %  
 Correlation coefficient . . . . . 0.999379

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.025	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.051	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.232	STD4	2013-06-06 11:35:40 UTC-6	used

**Nitrate (Anions)**

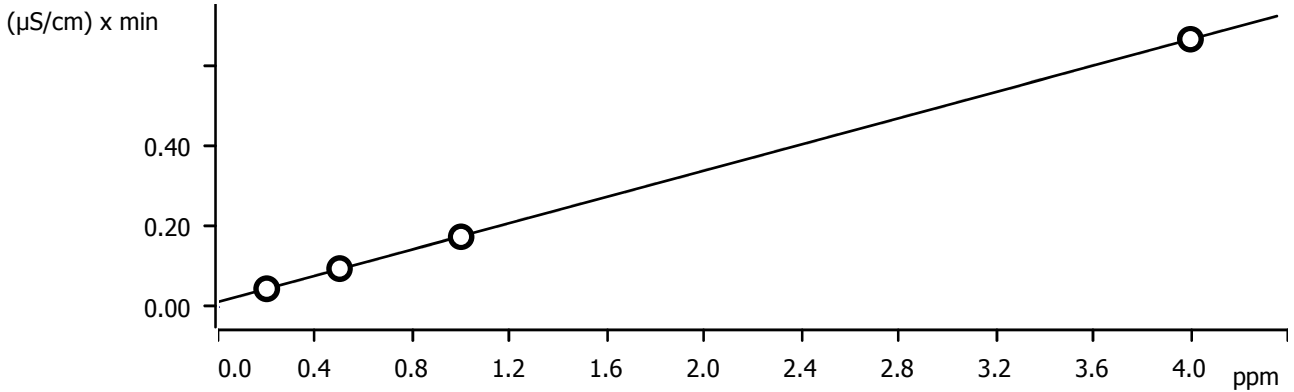
( $\mu\text{S/cm}$ ) x min



Function: . . . . .  $A = -0.0292878 + 0.0787837x Q$   
 Relative standard deviation . . . . . 5.602288 %  
 Correlation coefficient . . . . . 0.999405

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.156	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.338	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.576	STD4	2013-06-06 11:35:40 UTC-6	used

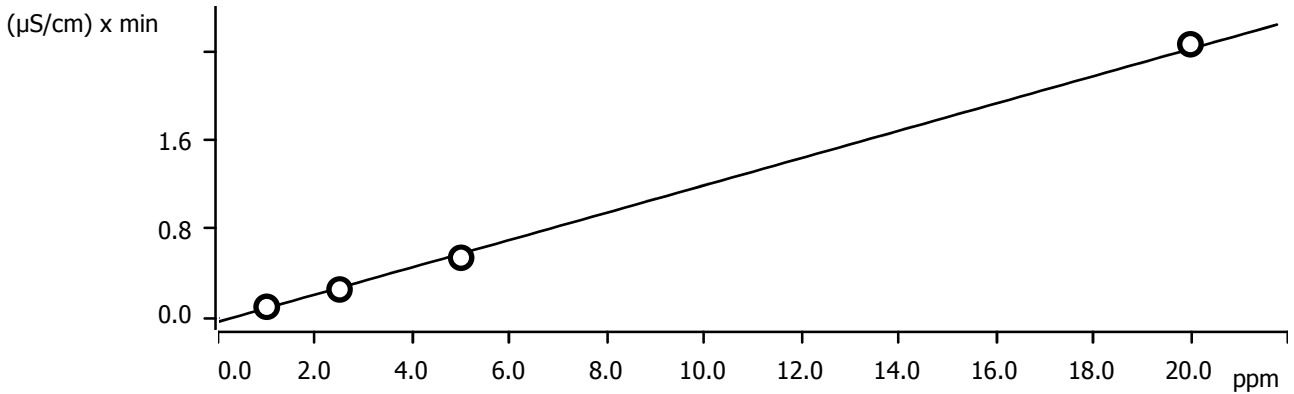
**OrthophosP (Anions)**



Function: . . . . .  $A = 0.0127940 + 0.0325206 \times Q$   
 Relative standard deviation . . . . . 0.541309 %  
 Correlation coefficient . . . . . 0.999993

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.095	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.174	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.664	STD4	2013-06-06 11:35:40 UTC-6	used

**Sulfate (Anions)**



Function: . . . . .  $A = -0.0343219 + 0.0245185 \times Q$   
 Relative standard deviation . . . . . 5.015716 %  
 Correlation coefficient . . . . . 0.999508

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.256	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.541	STD3	2013-06-06 11:20:19 UTC-6	used



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Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 4	1	20.000	5.0	1.0	1.0	2.459	STD4	2013-06-06 11:35:40 UTC-6	used

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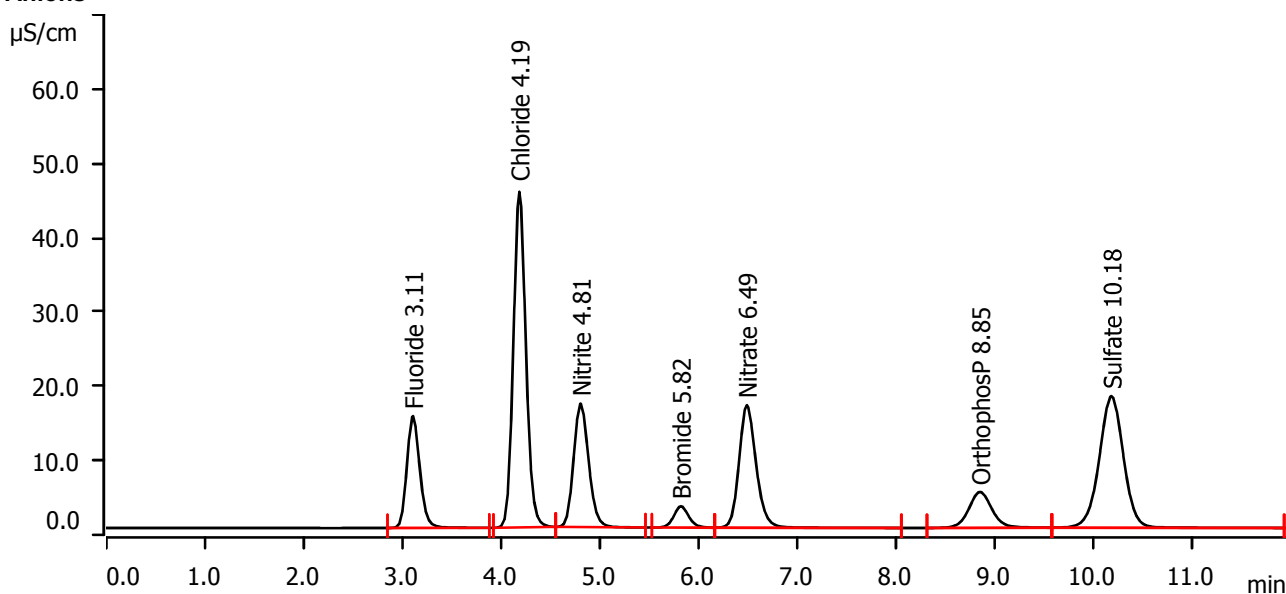
**Sample data**

Ident . . . . . STD5  
 Sample type . . . . . Standard 5  
 Determination start . . . . . 2013-06-06 11:51:02 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.51 MPa  
 Temperature . . . . . 30.0 °C

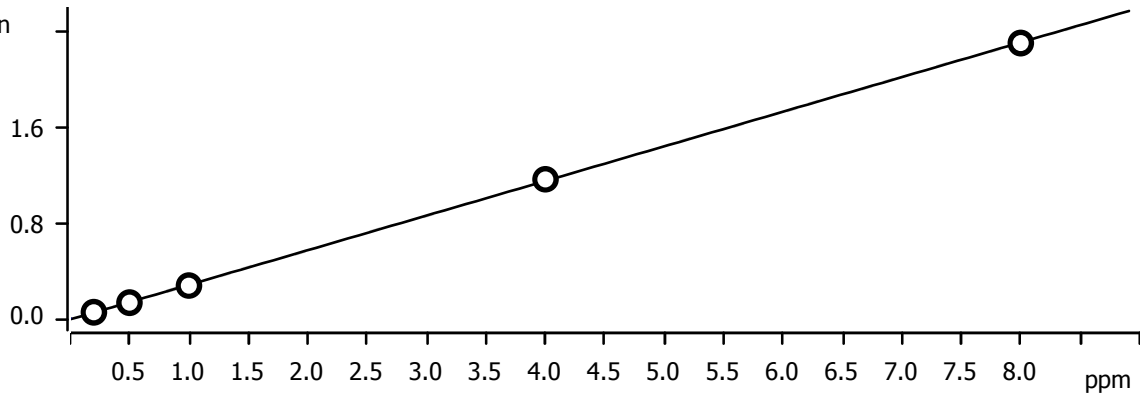
**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.107	2.3021	15.053	7.983	Fluoride
2	4.185	6.6361	45.167	40.343	Chloride
3	4.805	2.9383	16.608	8.064	Nitrite
4	5.820	0.5063	2.881	8.275	Bromide
5	6.488	3.3008	16.498	8.151	Nitrate
6	8.850	1.3149	4.833	8.003	OrthophosphP
7	10.180	5.0364	17.715	40.460	Sulfate

**Fluoride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

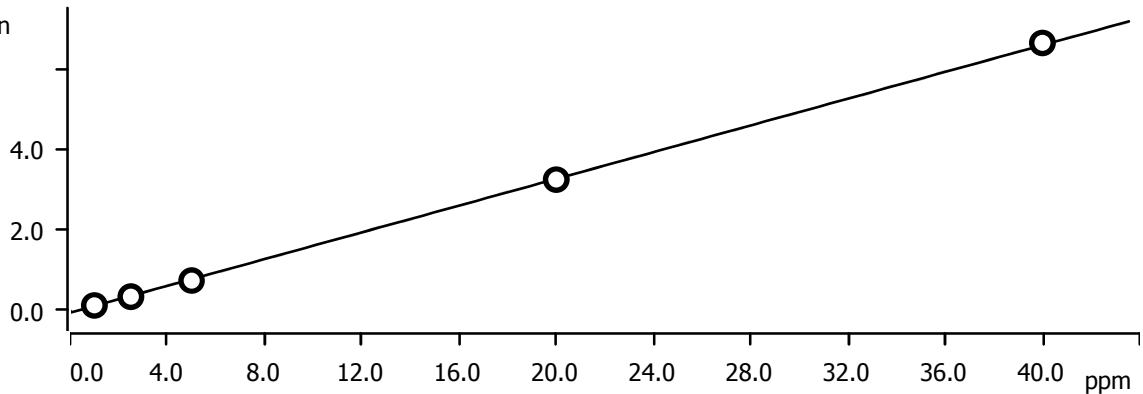


Function: . . . . .  $A = -0.0102806 + 0.0579352 \times Q$   
 Relative standard deviation . . . . . 1.213250 %  
 Correlation coefficient . . . . . 0.999963

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.130	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.273	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.162	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	2.302	STD5	2013-06-06 11:51:02 UTC-6	used

**Chloride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

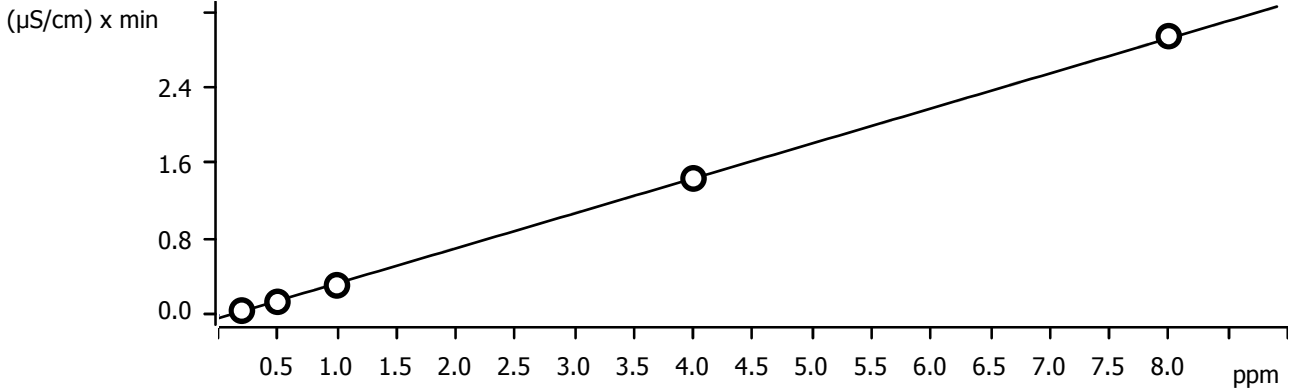


Function: . . . . .  $A = -0.0489795 + 0.0331415 \times Q$   
 Relative standard deviation . . . . . 1.878507 %  
 Correlation coefficient . . . . . 0.999915

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.347	STD2	2013-06-06 11:04:58 UTC-6	used

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 3	1	5.000	5.0	1.0	1.0	0.745	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	20.000	5.0	1.0	1.0	3.247	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	40.000	5.0	1.0	1.0	6.636	STD5	2013-06-06 11:51:02 UTC-6	used

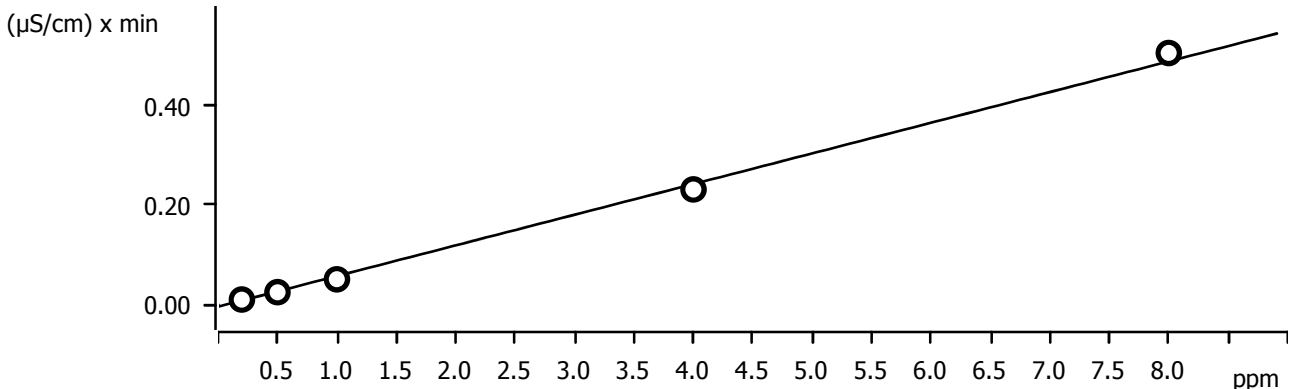
**Nitrite (Anions)**



Function: . . . . .  $A = -0.0342886 + 0.0737217 \times Q$   
 Relative standard deviation . . . . . 2.011694 %  
 Correlation coefficient . . . . . 0.999905

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.139	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.314	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.440	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	2.938	STD5	2013-06-06 11:51:02 UTC-6	used

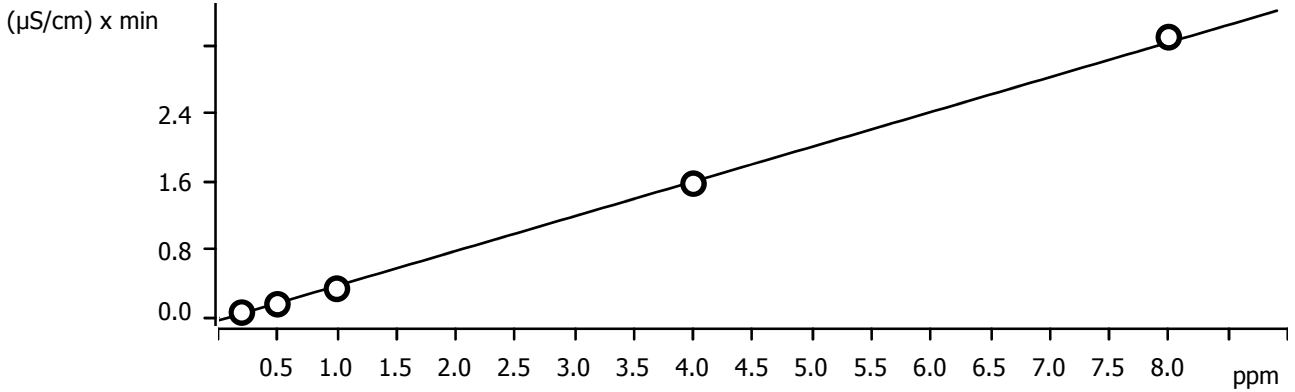
**Bromide (Anions)**



Function: . . . . .  $A = -4.64855E-3 + 0.0123498 \times Q$   
 Relative standard deviation . . . . . 7.484020 %  
 Correlation coefficient . . . . . 0.998720

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.025	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.051	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.232	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	0.506	STD5	2013-06-06 11:51:02 UTC-6	used

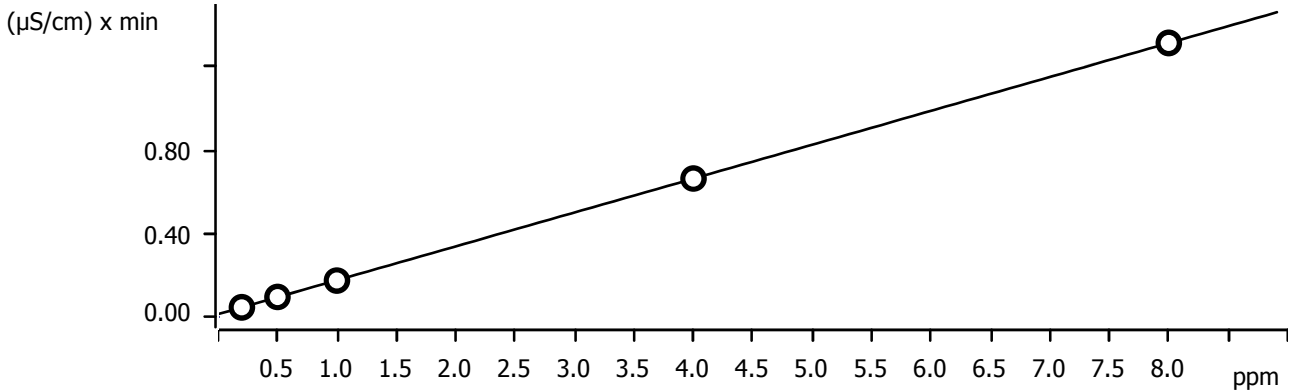
**Nitrate (Anions)**



Function: . . . . .  $A = -0.0358372 + 0.0818717 \times Q$   
 Relative standard deviation . . . . . 4.126487 %  
 Correlation coefficient . . . . . 0.999605

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.156	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.338	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.576	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	3.301	STD5	2013-06-06 11:51:02 UTC-6	used

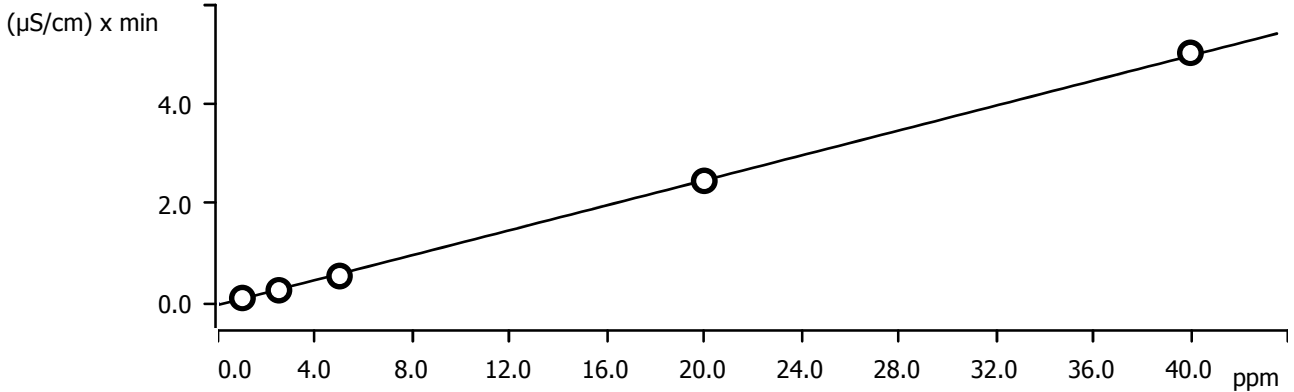
**OrthophosP (Anions)**



Function: . . . . .  $A = 0.0127461 + 0.0325431 \times Q$   
 Relative standard deviation . . . . . 0.240141 %  
 Correlation coefficient . . . . . 0.999998

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.095	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.174	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.664	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	1.315	STD5	2013-06-06 11:51:02 UTC-6	used

**Sulfate (Anions)**



Function: . . . . .  $A = -0.0404395 + 0.0250953 \times Q$   
 Relative standard deviation . . . . . 2.675146 %  
 Correlation coefficient . . . . . 0.999829

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.256	STD2	2013-06-06 11:04:58 UTC-6	used

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 3	1	5.000	5.0	1.0	1.0	0.541	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	20.000	5.0	1.0	1.0	2.459	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	40.000	5.0	1.0	1.0	5.036	STD5	2013-06-06 11:51:02 UTC-6	used

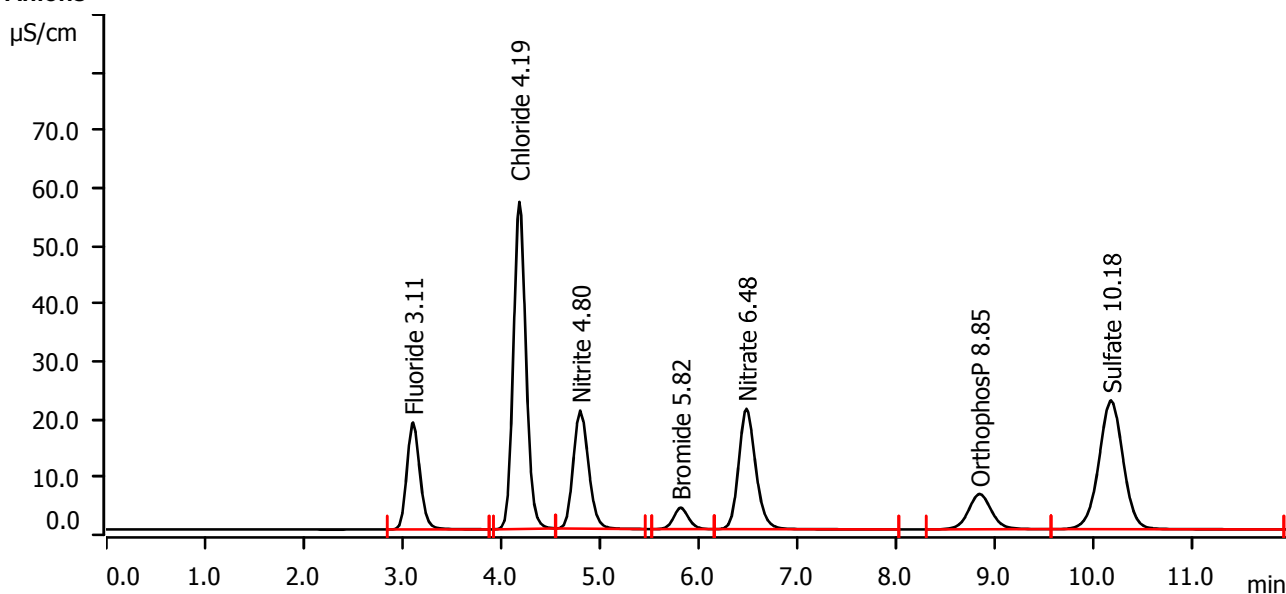
**Sample data**

Ident . . . . . STD6  
 Sample type . . . . . Standard 6  
 Determination start . . . . . 2013-06-06 12:06:23 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.45 MPa  
 Temperature . . . . . 30.0 °C

**Anions**

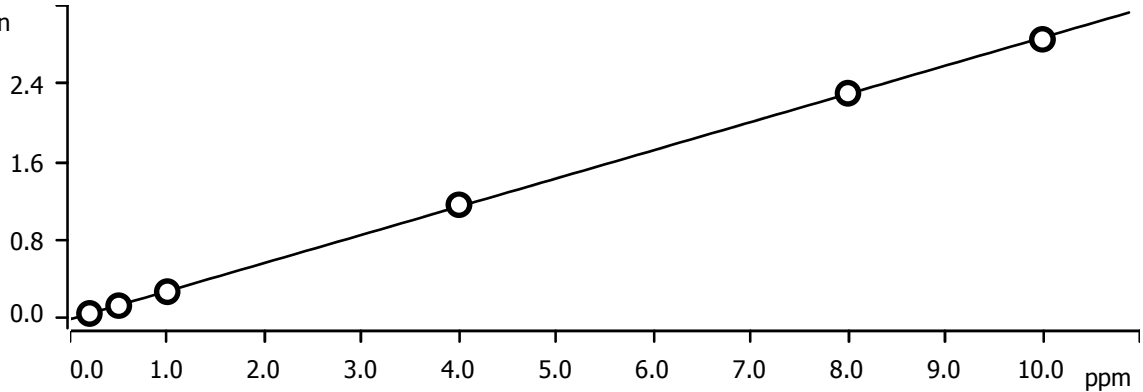


Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.107	2.8527	18.501	9.936	Fluoride
2	4.185	8.3394	56.590	50.336	Chloride
3	4.802	3.6735	20.402	10.032	Nitrite
4	5.818	0.6504	3.705	10.322	Bromide
5	6.483	4.1750	20.819	10.154	Nitrate
6	8.845	1.6605	6.120	10.069	OrthophosP
7	10.177	6.3612	22.286	50.549	Sulfate



**Fluoride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

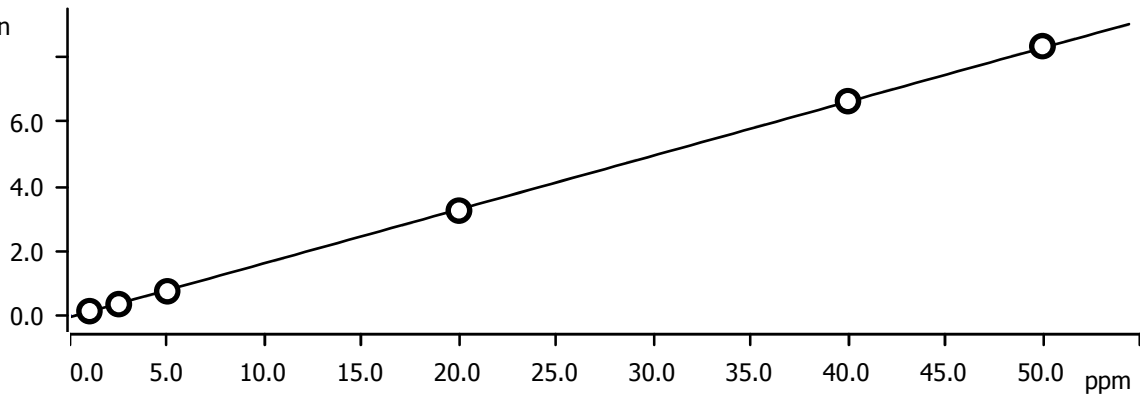


Function: . . . . .  $A = -9.53621E-3 + 0.0576123 \times Q$   
 Relative standard deviation . . . . . 1.260344 %  
 Correlation coefficient . . . . . 0.999944

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.050	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.130	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.273	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.162	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	2.302	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	10.000	5.0	1.0	1.0	2.853	STD6	2013-06-06 12:06:23 UTC-6	used

**Chloride (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



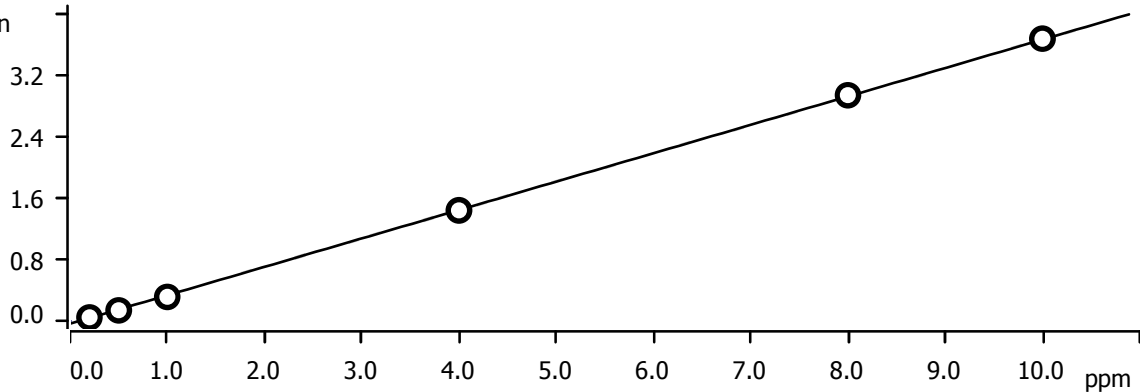
Function: . . . . .  $A = -0.0512478 + 0.0333384 \times Q$   
 Relative standard deviation . . . . . 1.262825 %

Correlation coefficient . . . . . 0.999946

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.130	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.347	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.745	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	20.000	5.0	1.0	1.0	3.247	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	40.000	5.0	1.0	1.0	6.636	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	50.000	5.0	1.0	1.0	8.339	STD6	2013-06-06 12:06:23 UTC-6	used

**Nitrite (Anions)**

(µS/cm) x min



Function: . . . . .  $A = -0.0347676 + 0.0739295 \times Q$

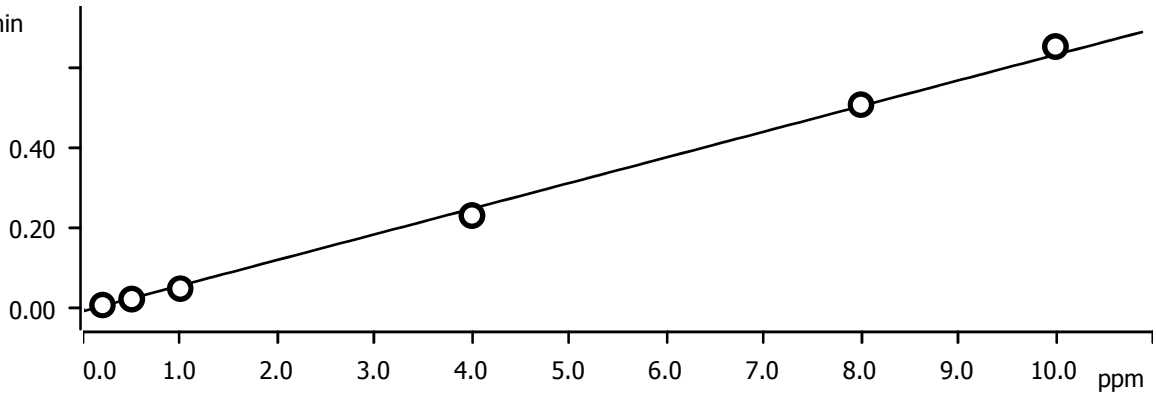
Relative standard deviation . . . . . 1.126174 %

Correlation coefficient . . . . . 0.999958

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.047	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.139	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.314	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.440	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	2.938	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	10.000	5.0	1.0	1.0	3.674	STD6	2013-06-06 12:06:23 UTC-6	used

**Bromide (Anions)**

( $\mu\text{S/cm}$ ) x min



Function: . . . . .  $A = -5.47637E-3 + 0.0127090 \times Q$

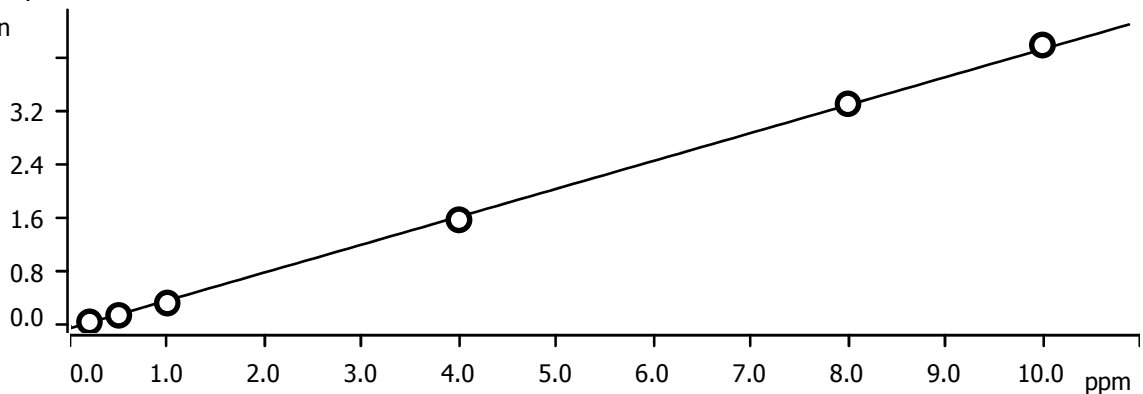
Relative standard deviation . . . . . 5.728822 %

Correlation coefficient . . . . . 0.998943

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.010	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.025	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.051	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.232	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	0.506	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	10.000	5.0	1.0	1.0	0.650	STD6	2013-06-06 12:06:23 UTC-6	used

**Nitrate (Anions)**

( $\mu\text{S/cm}$ ) x min



Function: . . . . .  $A = -0.0384181 + 0.0829915 \times Q$

Relative standard deviation . . . . . 2.850763 %

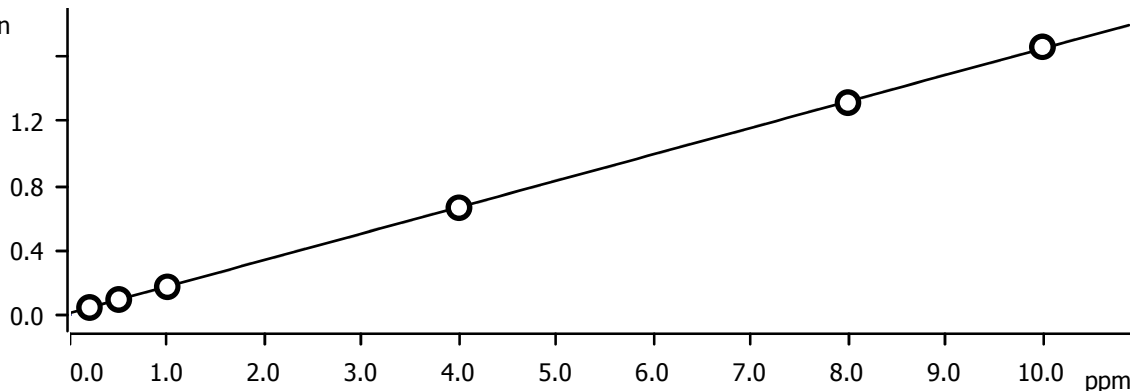
Correlation coefficient . . . . . 0.999733

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.058	STD1	2013-06-06 10:49:36 UTC-6	used

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 2	1	0.500	5.0	1.0	1.0	0.156	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.338	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	1.576	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	3.301	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	10.000	5.0	1.0	1.0	4.175	STD6	2013-06-06 12:06:23 UTC-6	used

**OrthophosP (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min

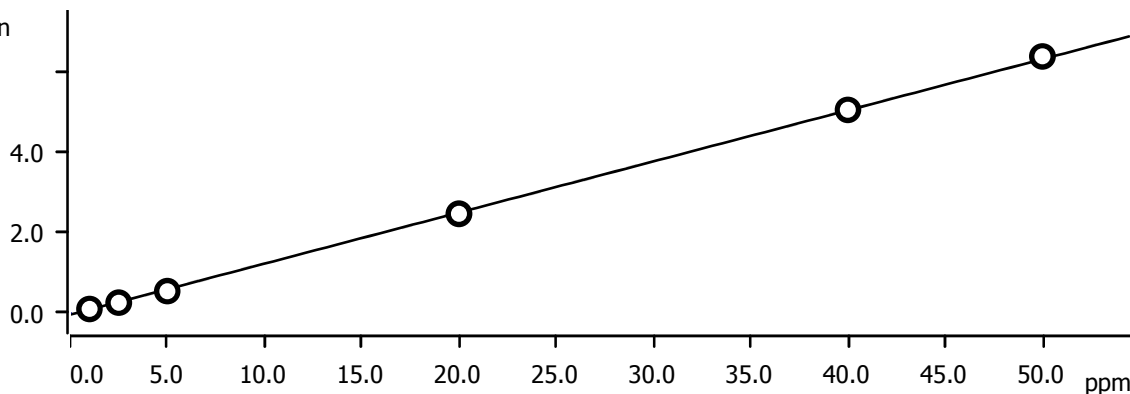


Function: . . . . .  $A = 0.0122916 + 0.0327403 \times Q$   
 Relative standard deviation . . . . . 1.050831 %  
 Correlation coefficient . . . . . 0.999959

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.200	5.0	1.0	1.0	0.045	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	0.500	5.0	1.0	1.0	0.095	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	1.000	5.0	1.0	1.0	0.174	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	4.000	5.0	1.0	1.0	0.664	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	8.000	5.0	1.0	1.0	1.315	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	10.000	5.0	1.0	1.0	1.661	STD6	2013-06-06 12:06:23 UTC-6	used

**Sulfate (Anions)**

( $\mu\text{S}/\text{cm}$ ) x min



Function: . . . . .  $A = -0.0432543 + 0.0253396 \times Q$   
 Relative standard deviation . . . . . 1.924656 %  
 Correlation coefficient . . . . . 0.999875

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	1.000	5.0	1.0	1.0	0.100	STD1	2013-06-06 10:49:36 UTC-6	used
Standard 2	1	2.500	5.0	1.0	1.0	0.256	STD2	2013-06-06 11:04:58 UTC-6	used
Standard 3	1	5.000	5.0	1.0	1.0	0.541	STD3	2013-06-06 11:20:19 UTC-6	used
Standard 4	1	20.000	5.0	1.0	1.0	2.459	STD4	2013-06-06 11:35:40 UTC-6	used
Standard 5	1	40.000	5.0	1.0	1.0	5.036	STD5	2013-06-06 11:51:02 UTC-6	used
Standard 6	1	50.000	5.0	1.0	1.0	6.361	STD6	2013-06-06 12:06:23 UTC-6	used

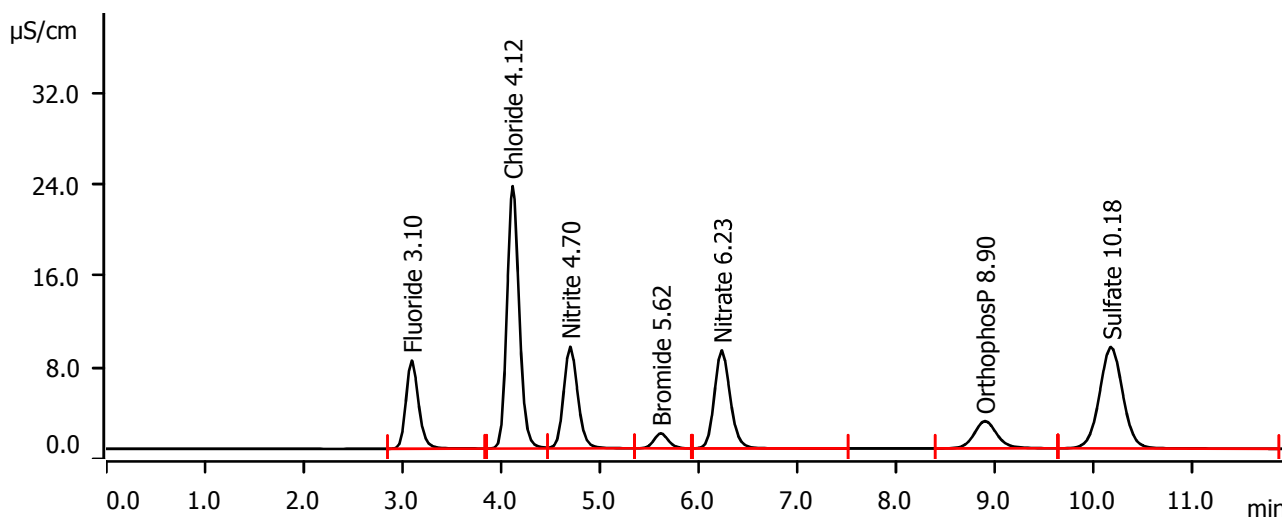
**Sample data**

Ident . . . . . ICV  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 10:29:07 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	1.1515	7.711	4.030	Fluoride
2	4.117	3.3044	22.972	20.131	Chloride
3	4.700	1.4829	8.890	4.106	Nitrite
4	5.617	0.2230	1.320	3.595	Bromide
5	6.233	1.5929	8.582	3.931	Nitrate
6	8.900	0.6475	2.398	3.880	OrthophosP
7	10.177	2.4366	8.876	19.573	Sulfate

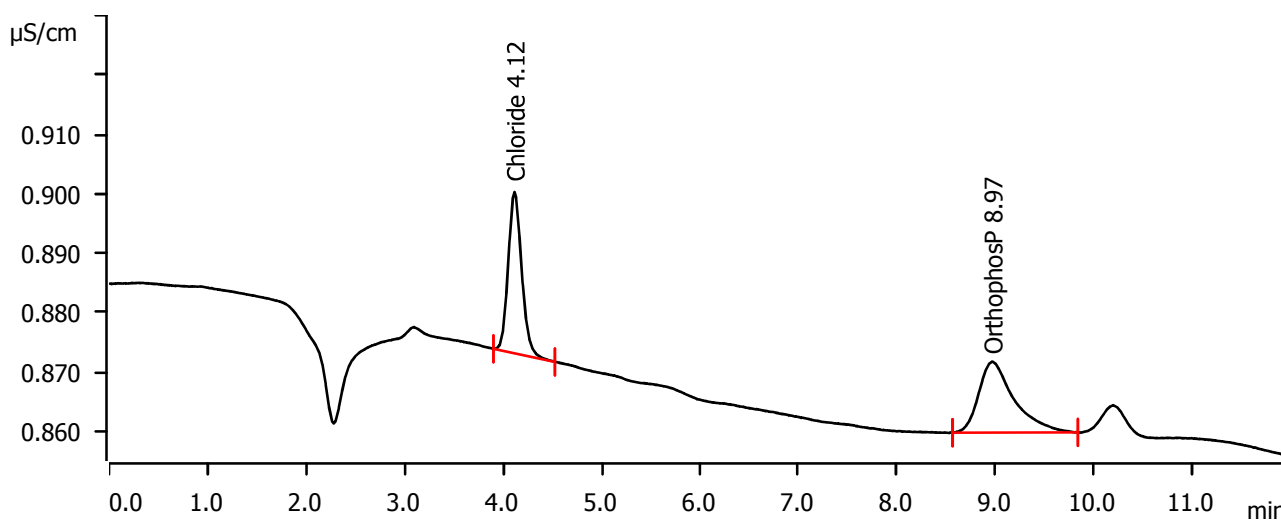
**Sample data**

Ident . . . . . ICB  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 10:45:01 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.117	0.0043	0.027	0.333	Chloride
2	8.968	0.0050	0.012	-0.045	Orthophosph

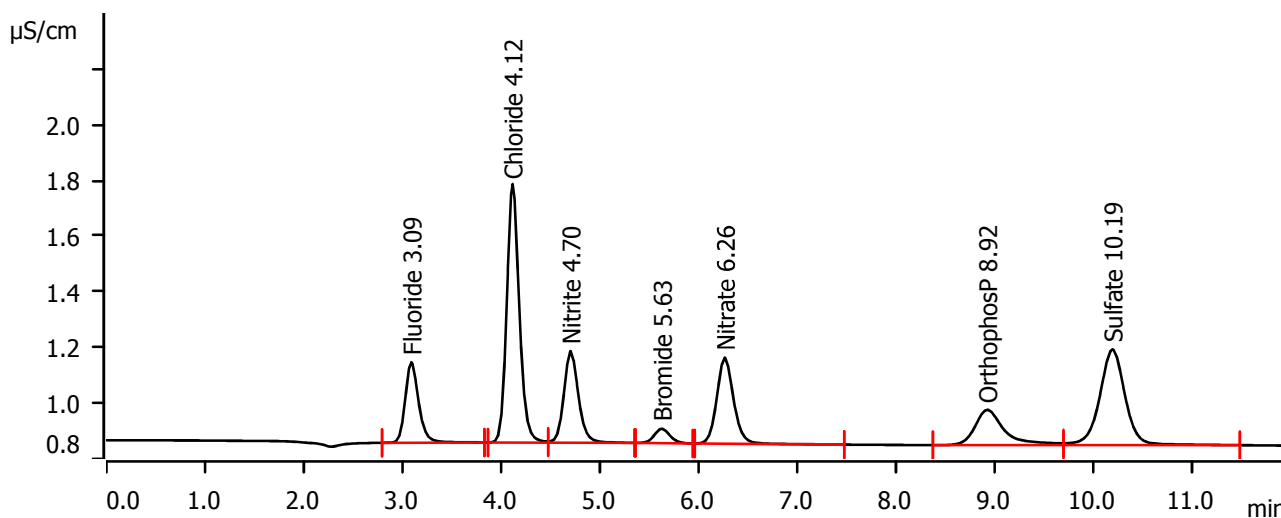
**Sample data**

Ident . . . . . MRL  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 11:00:46 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.090	0.0458	0.289	0.192	Fluoride
2	4.115	0.1367	0.929	1.128	Chloride
3	4.703	0.0565	0.329	0.247	Nitrite
4	5.627	0.0095	0.052	0.236	Bromide
5	6.263	0.0609	0.309	0.239	Nitrate
6	8.923	0.0443	0.127	0.195	OrthophosP
7	10.190	0.1027	0.344	1.152	Sulfate



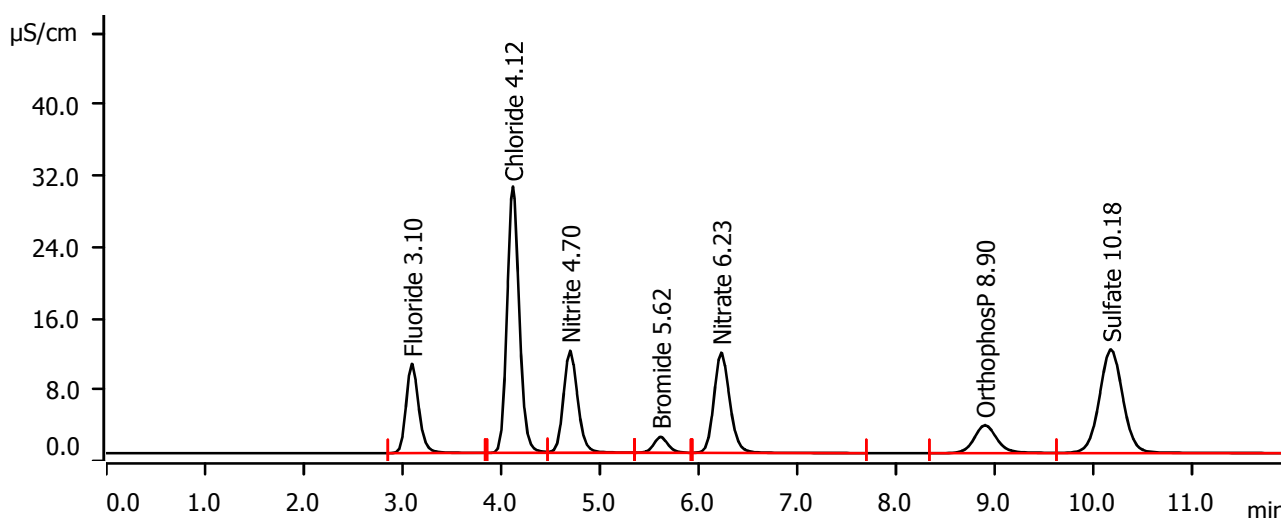
**Sample data**

Ident . . . . . LCS 280-F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 11:16:39 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.097	1.4924	10.014	5.214	Fluoride
2	4.118	4.2725	29.893	25.939	Chloride
3	4.698	1.9150	11.440	5.275	Nitrite
4	5.615	0.2954	1.773	4.735	Bromide
5	6.228	2.0837	11.235	5.114	Nitrate
6	8.900	0.8557	3.149	5.152	OrthophosP
7	10.175	3.2430	11.645	25.938	Sulfate

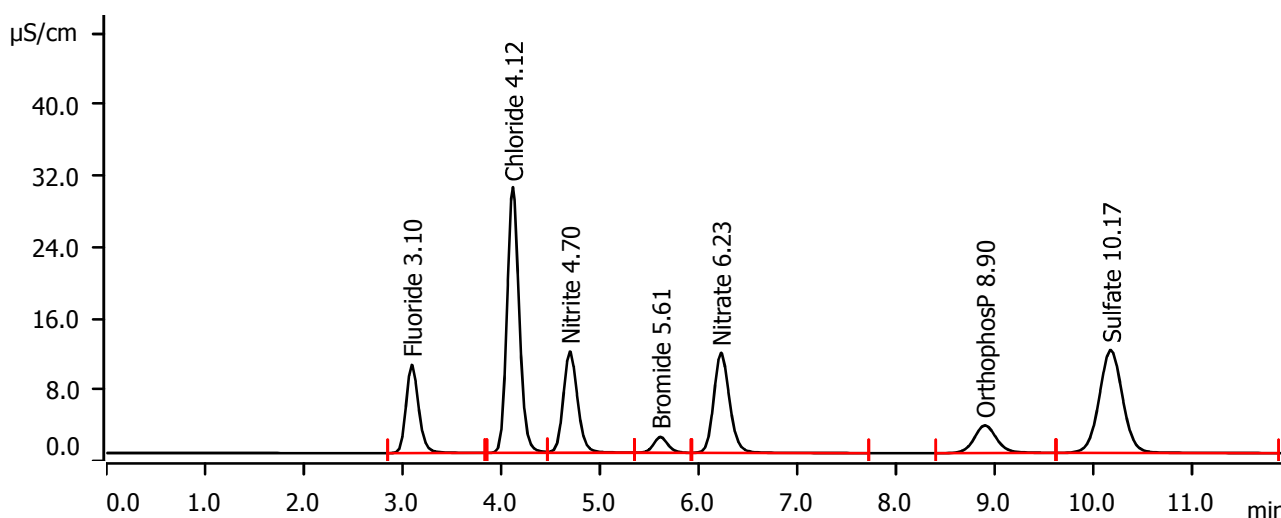
**Sample data**

Ident . . . . . LCSD 280-F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 11:32:32 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	1.4718	9.900	5.142	Fluoride
2	4.118	4.2685	29.823	25.915	Chloride
3	4.697	1.9013	11.362	5.238	Nitrite
4	5.613	0.2958	1.771	4.740	Bromide
5	6.227	2.0830	11.223	5.112	Nitrate
6	8.900	0.8250	3.115	4.965	OrthophosP
7	10.173	3.1826	11.556	25.461	Sulfate

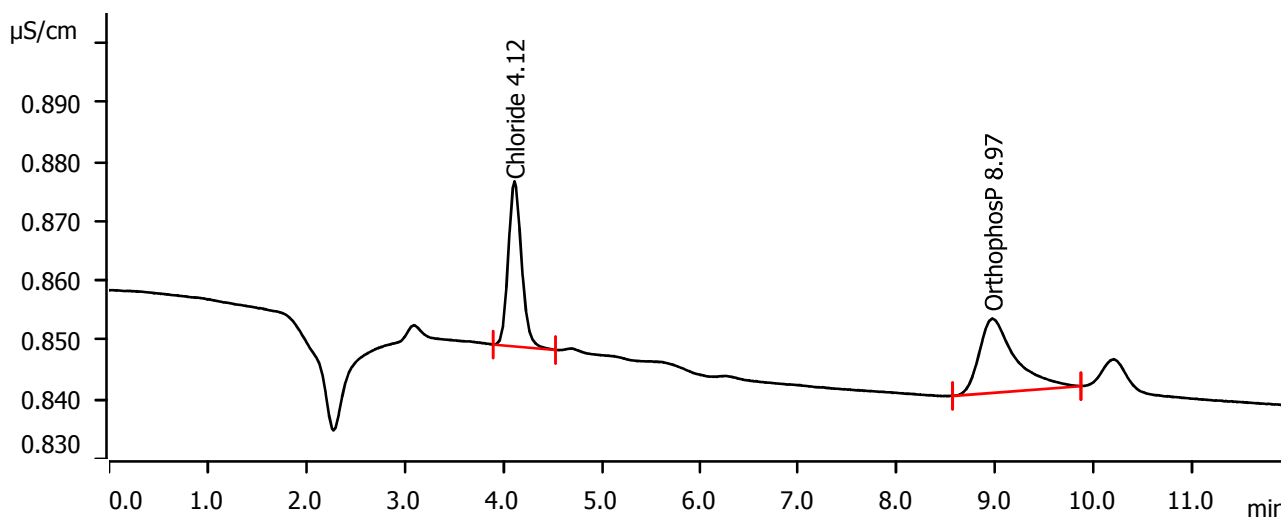
**Sample data**

Ident . . . . . MB 280-F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 11:48:24 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.117	0.0044	0.028	0.334	Chloride
2	8.970	0.0053	0.013	-0.043	OrthophosP

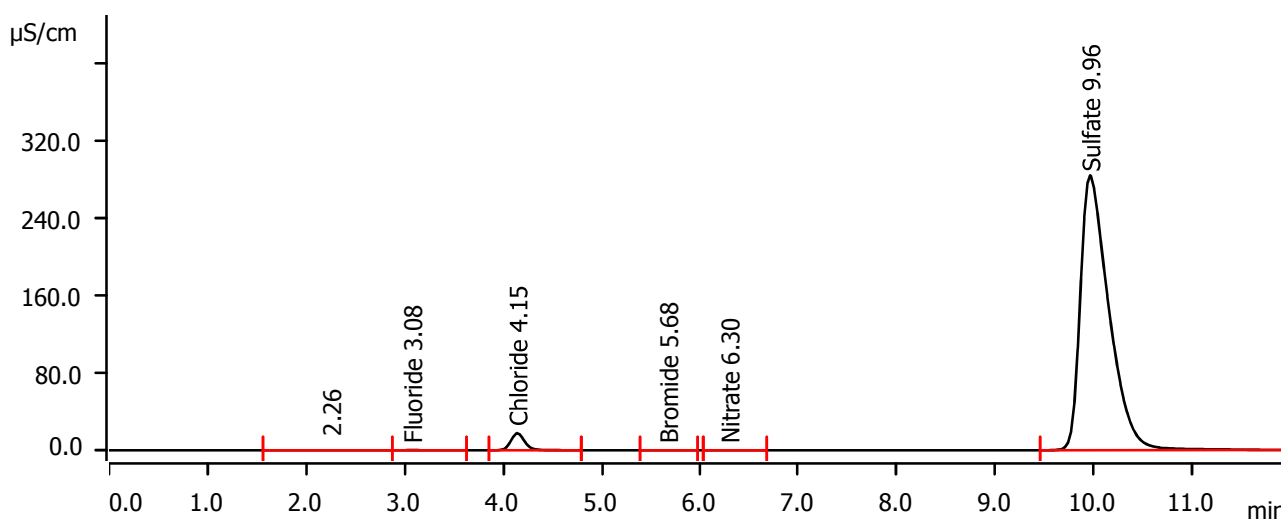
**Sample data**

Ident . . . . . 280-43746-a-1 2X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 12:04:10 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 2

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.257	0.0097	0.022	invalid	
2	3.078	0.0148	0.082	0.169	Fluoride
3	4.145	2.8321	17.647	34.595	Chloride
4	5.675	0.0083	0.048	0.434	Bromide
5	6.302	0.0101	0.052	0.234	Nitrate
6	9.960	95.3302	283.681	1505.524	Sulfate

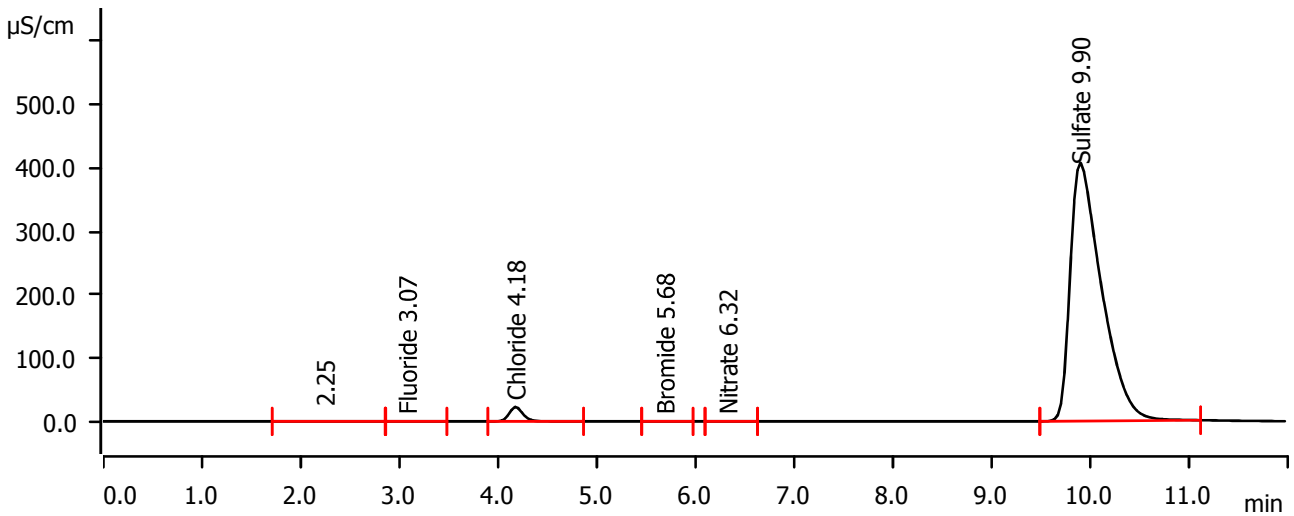
**Sample data**

Ident . . . . . 280-43746-a-4 2X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 12:20:03 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 2

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.245	0.0124	0.035	invalid	
2	3.072	0.0157	0.089	0.175	Fluoride
3	4.177	3.6660	22.608	44.600	Chloride
4	5.683	0.0090	0.051	0.455	Bromide
5	6.320	0.0023	0.012	0.196	Nitrate
6	9.895	149.0077	405.603	2352.855	Sulfate

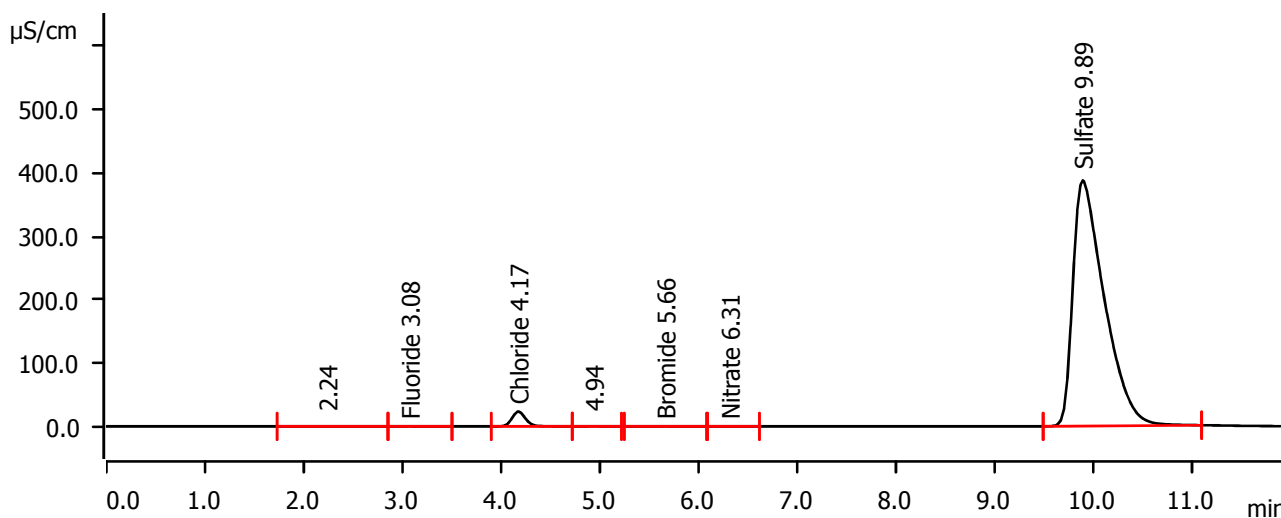
**Sample data**

Ident . . . . . 280-43746-a-7 2X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 12:35:55 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 2

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.243	0.0102	0.029	invalid	
2	3.075	0.0207	0.120	0.210	Fluoride
3	4.173	3.6983	23.413	44.987	Chloride
4	4.935	0.0153	0.078	invalid	
5	5.662	0.0263	0.098	1.002	Bromide
6	6.313	0.0080	0.042	0.224	Nitrate
7	9.890	142.1550	386.191	2244.682	Sulfate

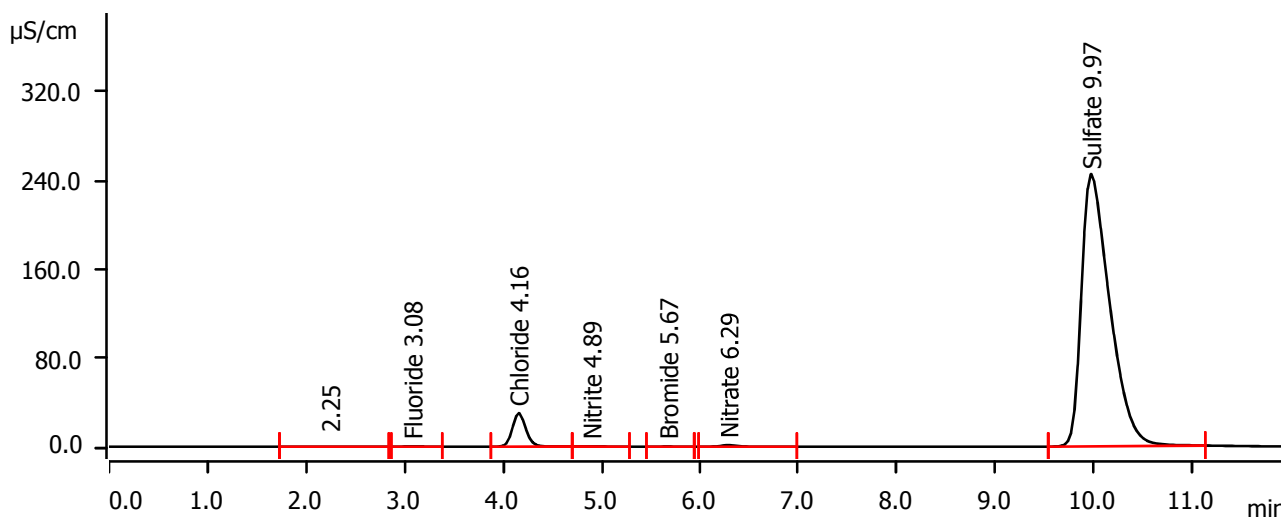
**Sample data**

Ident . . . . . 280-43746-a-10 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 12:51:47 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.247	0.0066	0.019	invalid	
2	3.080	0.0433	0.269	0.183	Fluoride
3	4.160	4.7677	30.038	28.909	Chloride
4	4.887	0.0124	0.056	0.128	Nitrite
5	5.673	0.0115	0.069	0.267	Bromide
6	6.288	0.2496	1.379	0.694	Nitrate
7	9.972	81.3431	244.509	642.365	Sulfate

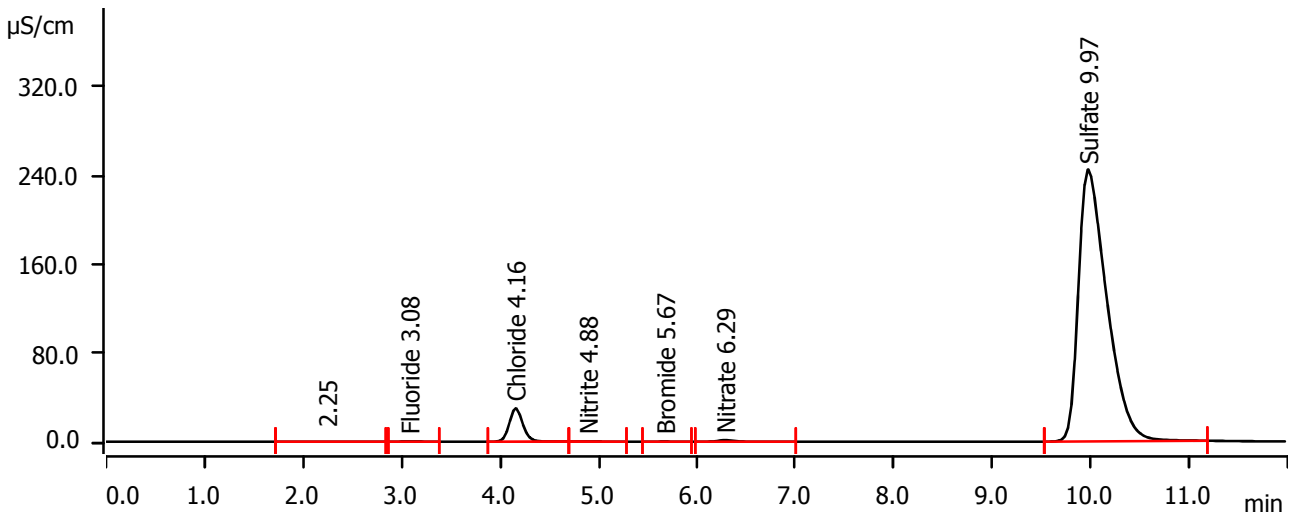
**Sample data**

Ident . . . . . DU 280-43746-a-10 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 13:07:41 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.247	0.0065	0.019	invalid	
2	3.080	0.0432	0.267	0.183	Fluoride
3	4.160	4.7671	29.949	28.906	Chloride
4	4.883	0.0120	0.055	0.126	Nitrite
5	5.673	0.0115	0.069	0.268	Bromide
6	6.287	0.2498	1.375	0.695	Nitrate
7	9.972	81.3985	244.206	642.803	Sulfate



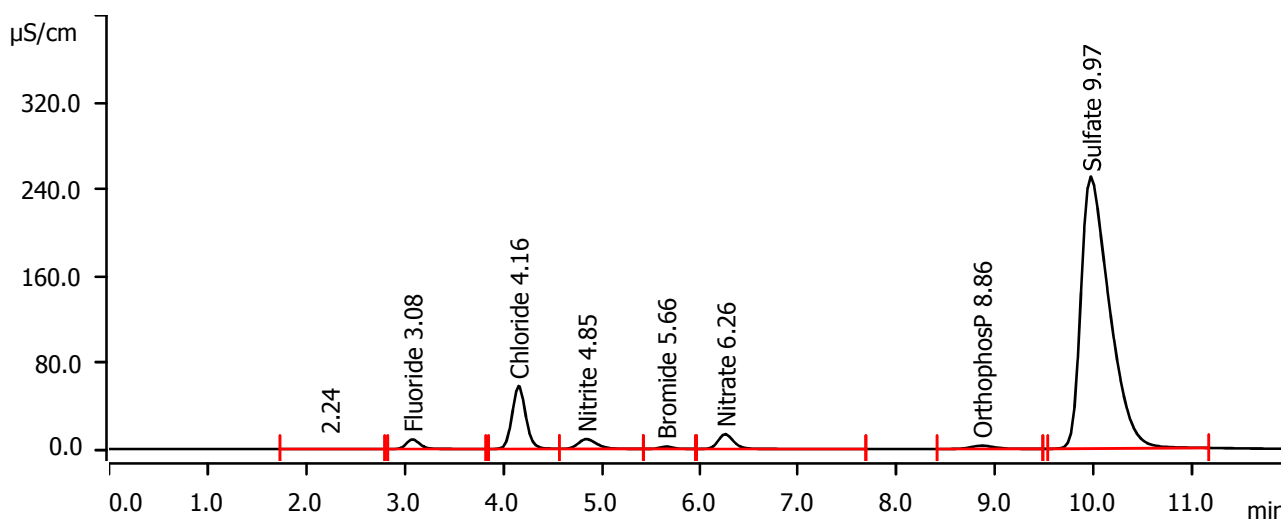
**Sample data**

Ident . . . . . MS 280-43746-a-10 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 13:23:33 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.39 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.243	0.0078	0.023	invalid	
2	3.082	1.4040	8.820	4.907	Fluoride
3	4.160	9.3271	57.953	56.262	Chloride
4	4.847	2.0012	9.085	5.508	Nitrite
5	5.658	0.3383	2.164	5.410	Bromide
6	6.257	2.4767	13.589	6.061	Nitrate
7	8.862	0.8240	3.016	4.959	OrthophosP
8	9.967	83.7182	250.369	661.112	Sulfate

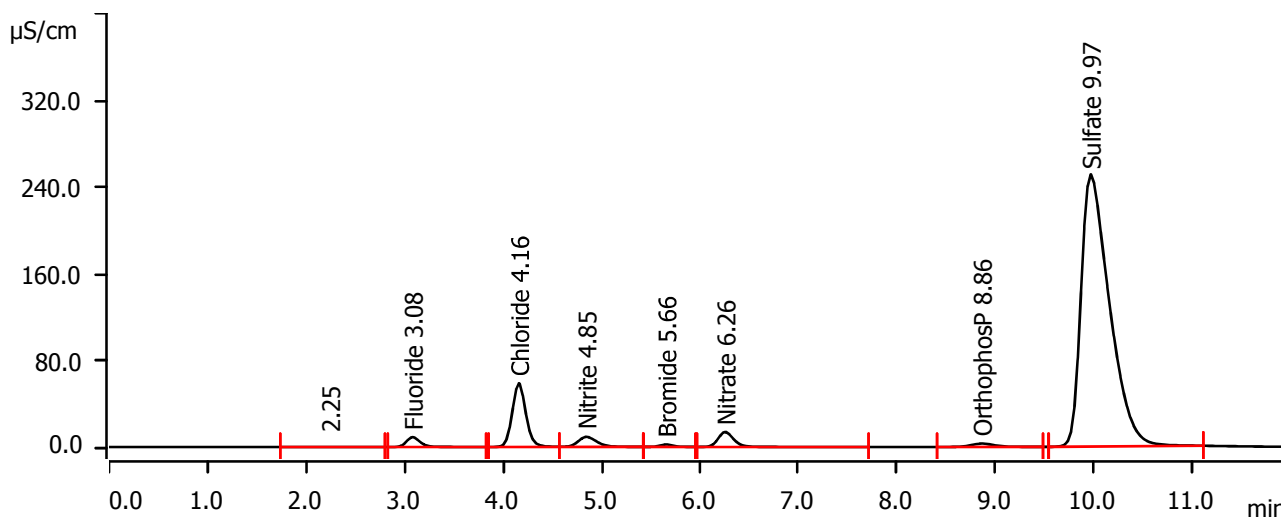
**Sample data**

Ident . . . . . MSD 280-43746-a-10 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 13:39:28 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.245	0.0081	0.024	invalid	
2	3.083	1.4281	9.008	4.991	Fluoride
3	4.162	9.4047	58.569	56.727	Chloride
4	4.847	2.0423	9.295	5.619	Nitrite
5	5.657	0.3447	2.208	5.510	Bromide
6	6.257	2.5143	13.806	6.152	Nitrate
7	8.862	0.8417	3.085	5.066	OrthophosP
8	9.967	83.6454	250.464	660.537	Sulfate

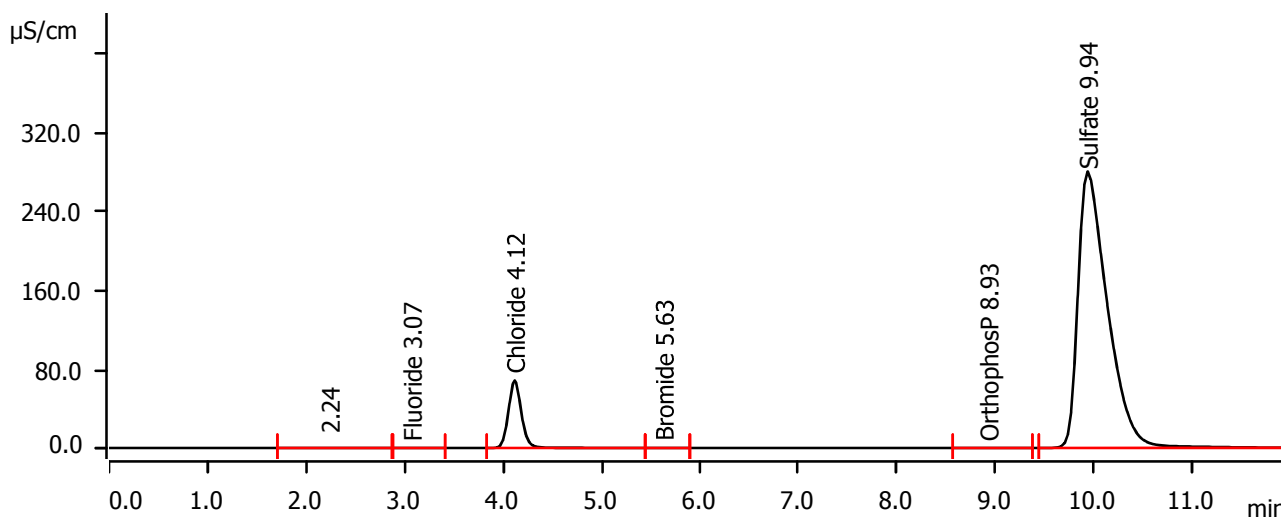
**Sample data**

Ident . . . . . 280-43748-m-1 5X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 13:55:23 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 5

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.243	0.0074	0.022	invalid	
2	3.073	0.0045	0.027	0.243	Fluoride
3	4.120	10.4151	68.214	313.944	Chloride
4	5.627	0.0133	0.077	1.474	Bromide
5	8.932	0.0063	0.020	-0.182	OrthophosP
6	9.937	96.7800	279.240	3821.026	Sulfate

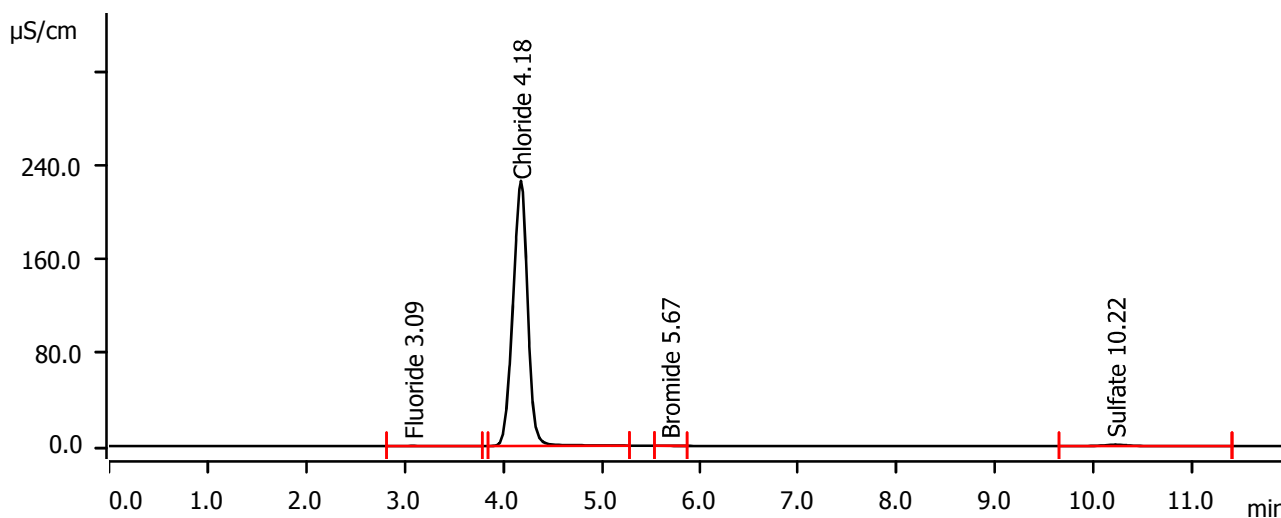
**Sample data**

Ident . . . . . 280-43753-a-1 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 14:11:16 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.087	0.0175	0.085	0.094	Fluoride
2	4.183	39.0486	226.087	234.564	Chloride
3	5.673	0.0070	0.047	0.196	Bromide
4	10.217	0.3222	1.178	2.884	Sulfate

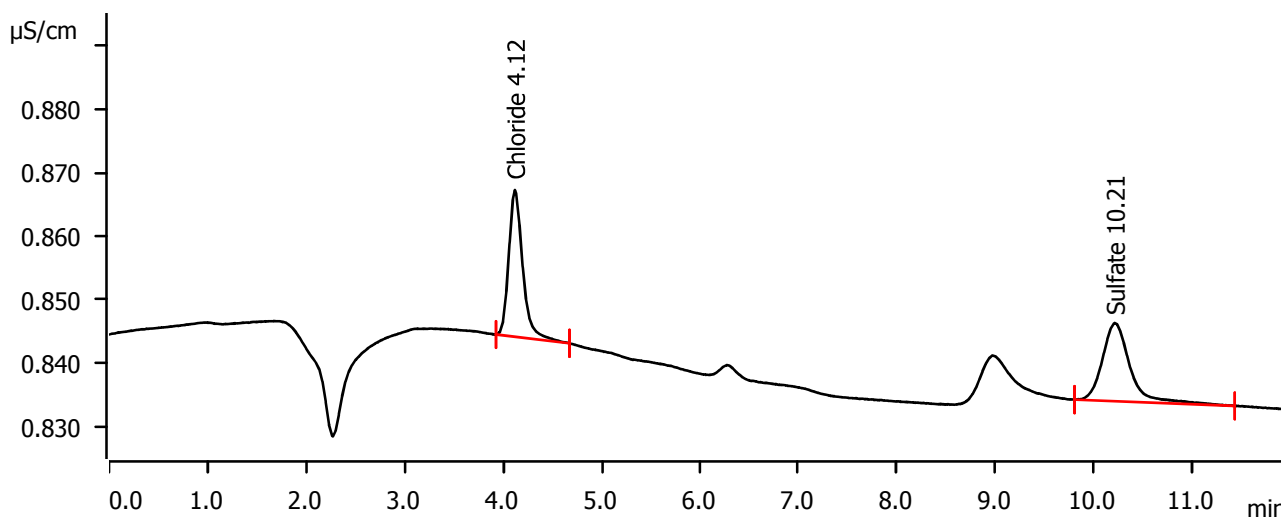
**Sample data**

Ident . . . . . 280-43753-a-2  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 14:27:07 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.122	0.0038	0.023	0.330	Chloride
2	10.212	0.0040	0.012	0.373	Sulfate

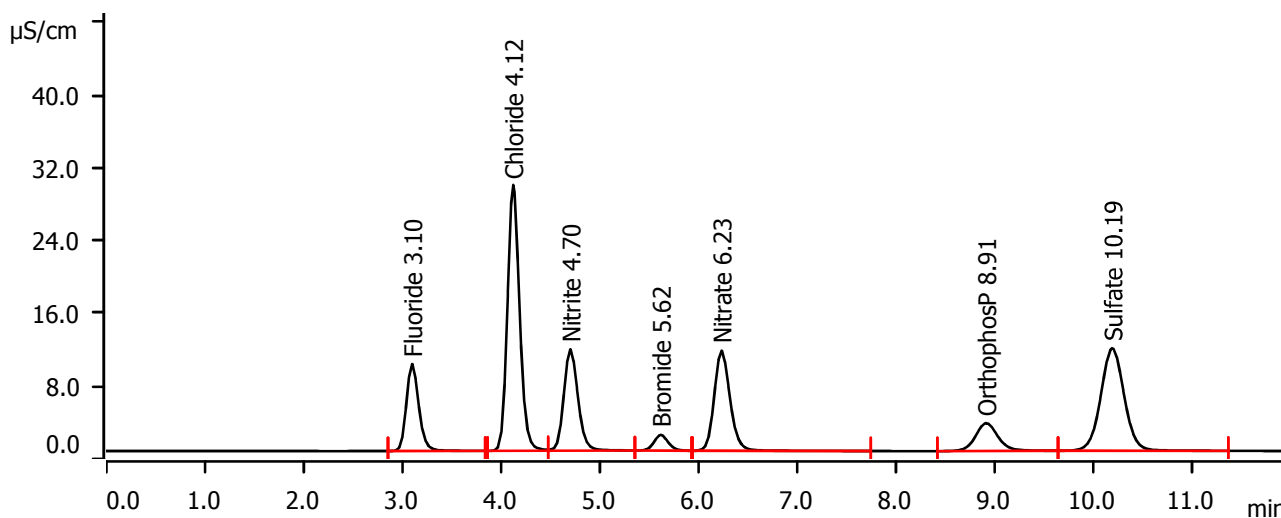
**Sample data**

Ident . . . . . CCV  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 14:42:55 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area ( $\mu\text{S/cm}$ ) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.098	1.4021	9.560	4.900	Fluoride
2	4.122	4.1732	29.237	25.343	Chloride
3	4.702	1.8610	11.149	5.128	Nitrite
4	5.617	0.2890	1.736	4.635	Bromide
5	6.232	2.0388	11.003	5.006	Nitrate
6	8.913	0.8106	3.056	4.876	OrthophosP
7	10.188	3.0977	11.286	24.791	Sulfate

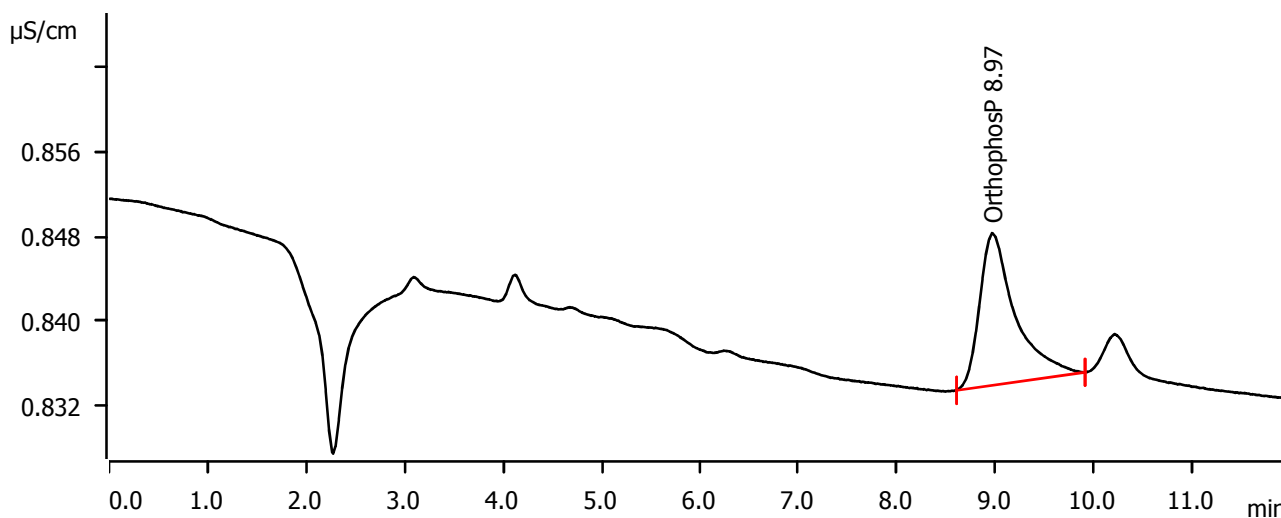
**Sample data**

Ident . . . . . CCB  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 14:58:50 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	8.965	0.0060	0.014	-0.038	OrthophosP

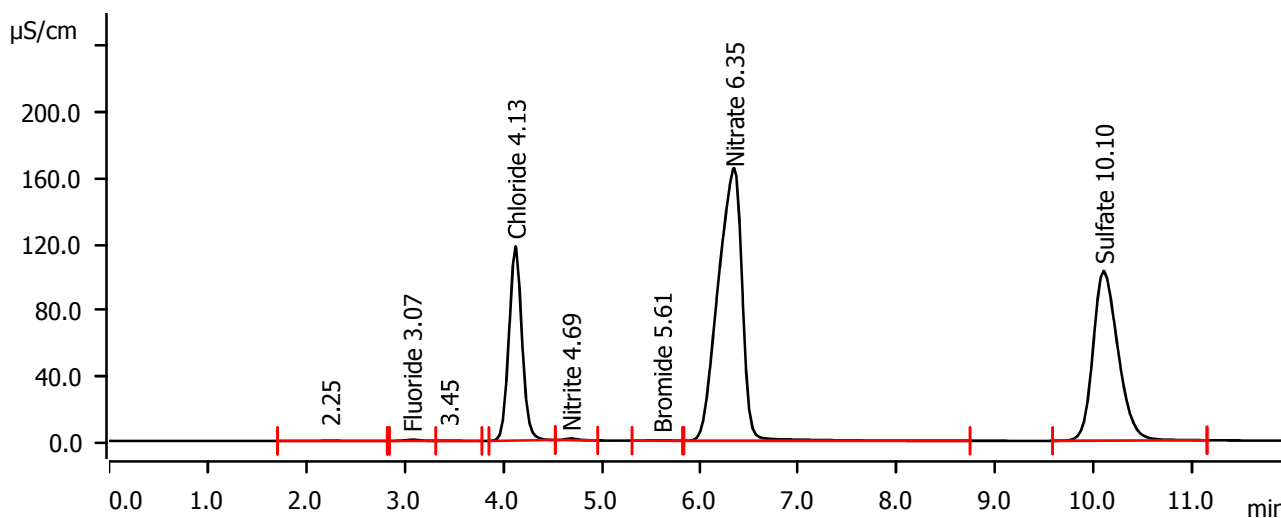
**Sample data**

Ident . . . . . 280-43752-a-1 2X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 15:14:37 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 2

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.247	0.0101	0.030	invalid	
2	3.073	0.1137	0.714	0.856	Fluoride
3	3.447	0.0127	0.068	invalid	
4	4.128	18.0402	117.659	217.065	Chloride
5	4.687	0.1564	1.008	1.035	Nitrite
6	5.608	0.0702	0.290	2.383	Bromide
7	6.345	46.7322	165.250	225.424	Nitrate
8	10.097	30.1798	102.847	477.089	Sulfate



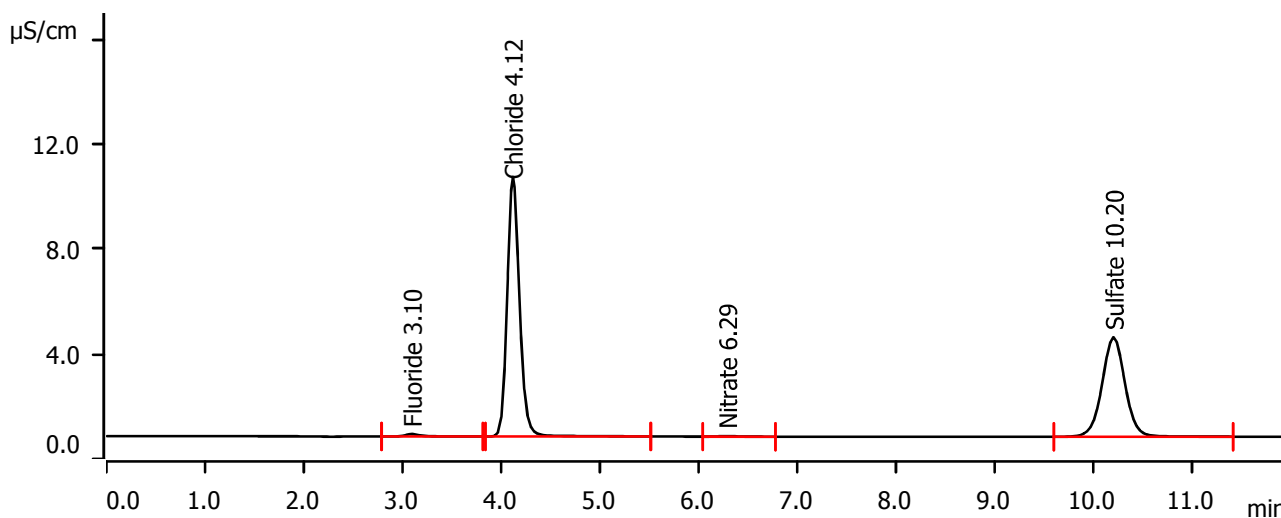
**Sample data**

Ident . . . . . 280-43751-b-1 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 15:30:35 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	0.0159	0.091	0.088	Fluoride
2	4.118	1.4342	9.905	8.911	Chloride
3	6.287	0.0043	0.022	0.103	Nitrate
4	10.202	1.0236	3.796	8.421	Sulfate

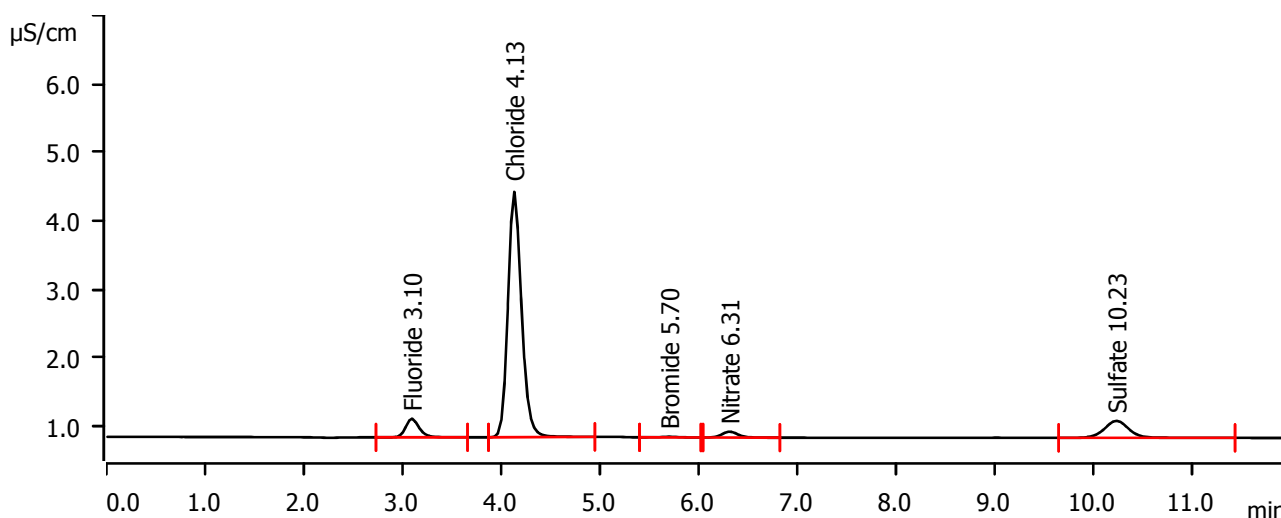
**Sample data**

Ident . . . . . 280-43751-b-2 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 15:46:27 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	0.0435	0.271	0.184	Fluoride
2	4.132	0.5719	3.579	3.738	Chloride
3	5.698	0.0022	0.010	0.121	Bromide
4	6.313	0.0162	0.086	0.132	Nitrate
5	10.232	0.0724	0.250	0.913	Sulfate

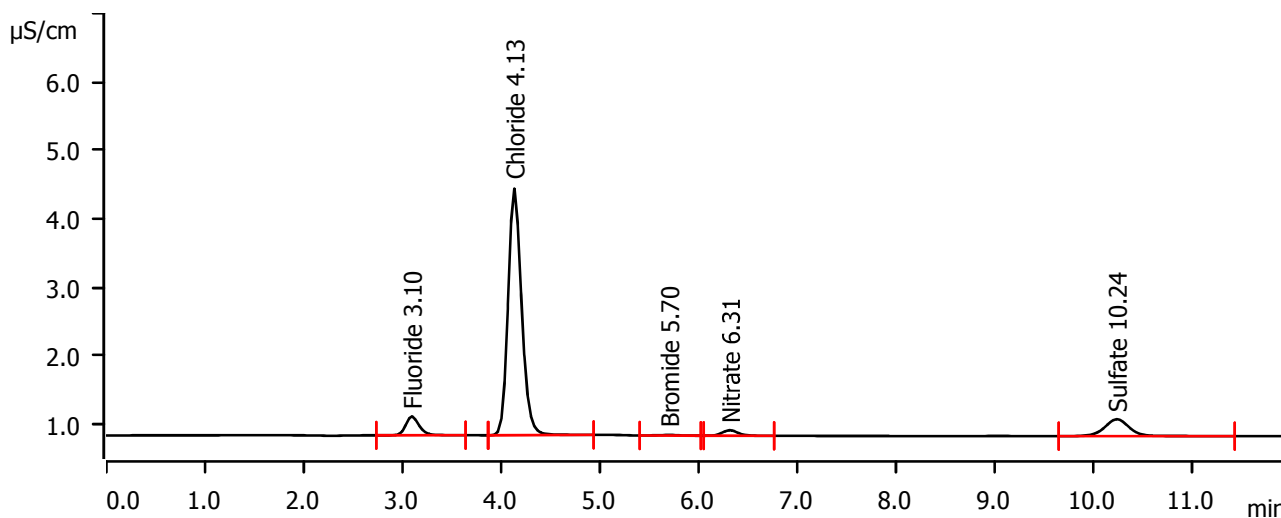
**Sample data**

Ident . . . . . DU 280-43751-b-2 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 16:02:21 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	0.0437	0.275	0.185	Fluoride
2	4.133	0.5723	3.597	3.741	Chloride
3	5.698	0.0022	0.010	0.120	Bromide
4	6.313	0.0150	0.080	0.129	Nitrate
5	10.235	0.0712	0.247	0.903	Sulfate

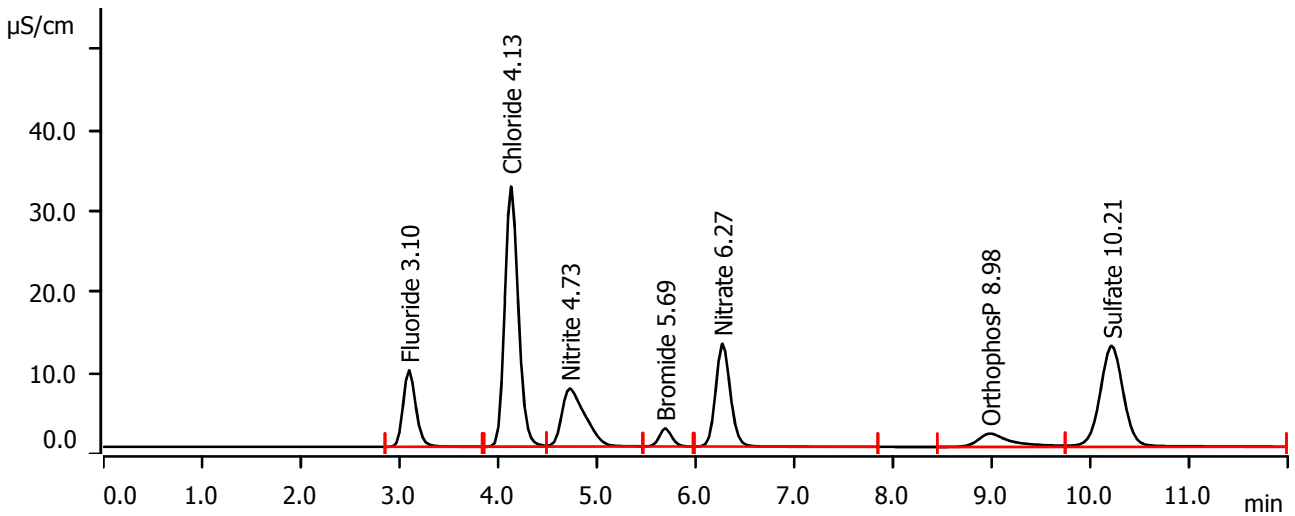
**Sample data**

Ident . . . . . MS 280-43751-b-2 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 16:18:15 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.097	1.4280	9.454	4.990	Fluoride
2	4.130	5.1346	32.093	31.110	Chloride
3	4.725	1.9510	7.172	5.372	Nitrite
4	5.692	0.3294	2.227	5.270	Bromide
5	6.272	2.2025	12.710	5.400	Nitrate
6	8.982	0.6507	1.641	3.900	OrthophosphP
7	10.212	3.4496	12.475	27.568	Sulfate

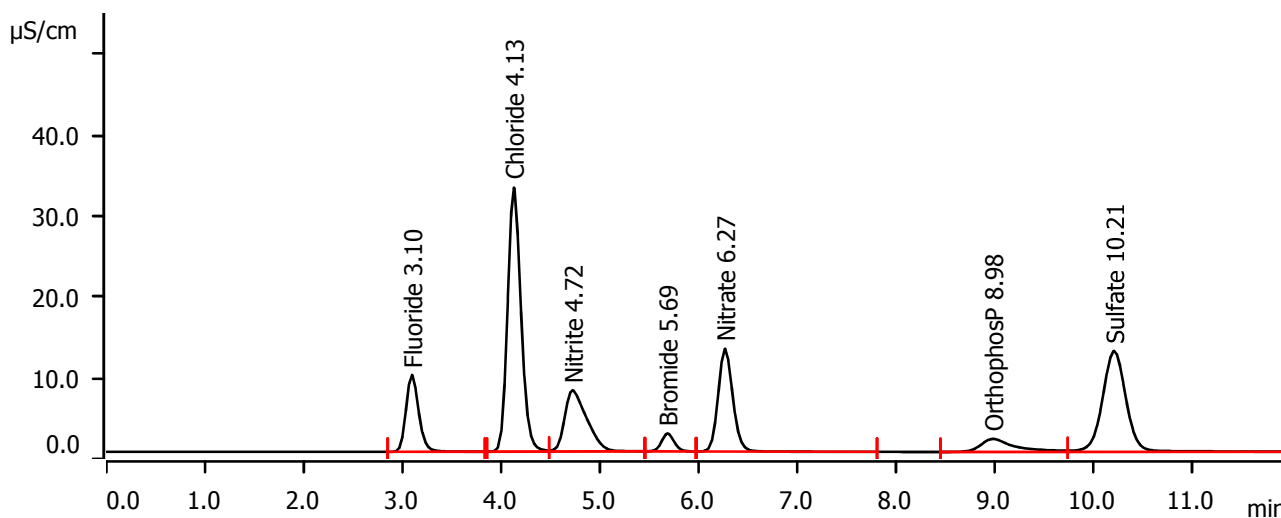
**Sample data**

Ident . . . . . MSD 280-43751-b-2 1X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 16:34:13 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.097	1.4260	9.495	4.983	Fluoride
2	4.128	5.1340	32.597	31.107	Chloride
3	4.723	1.9593	7.571	5.395	Nitrite
4	5.685	0.3299	2.225	5.278	Bromide
5	6.267	2.2003	12.702	5.395	Nitrate
6	8.980	0.6462	1.617	3.872	OrthophosphP
7	10.207	3.4523	12.466	27.590	Sulfate

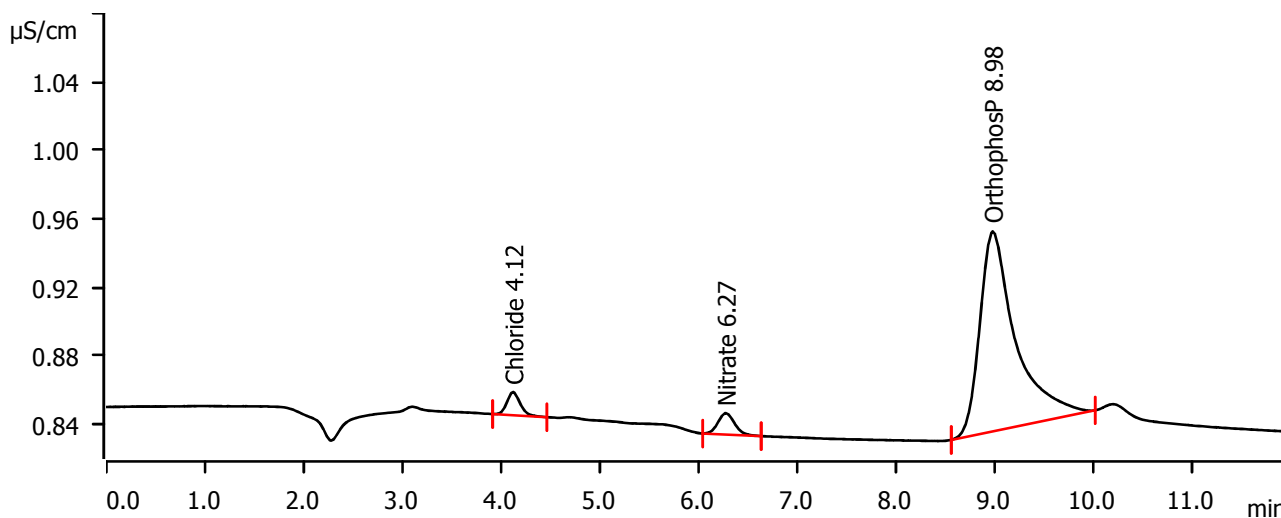
**Sample data**

Ident . . . . . 280-43751-b-3  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 16:50:11 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.120	0.0021	0.014	0.320	Chloride
2	6.273	0.0024	0.013	0.098	Nitrate
3	8.978	0.0490	0.117	0.224	OrthophosP

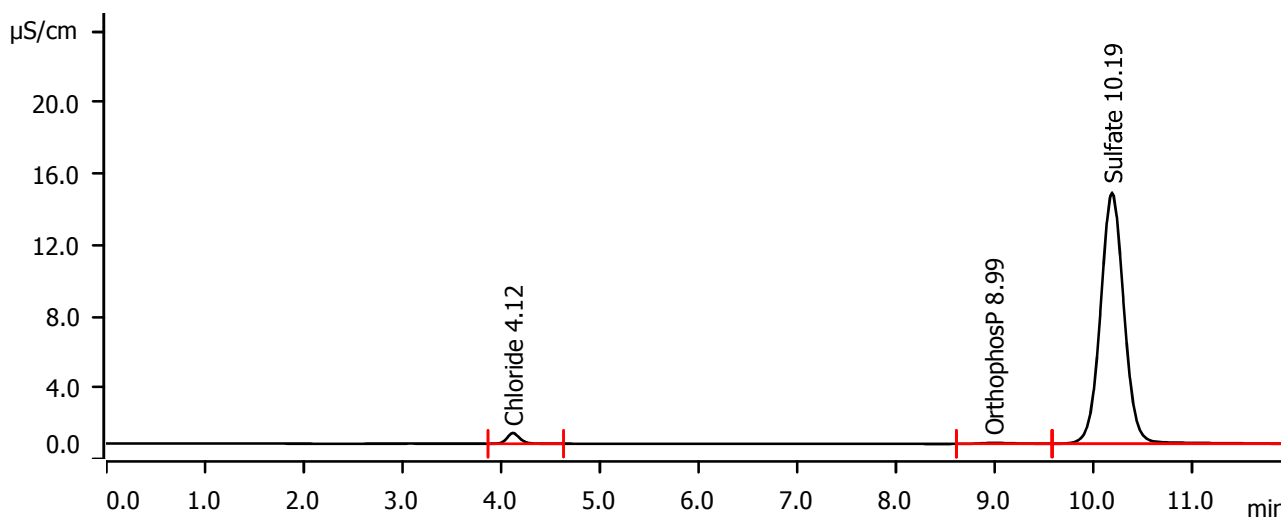
**Sample data**

Ident . . . . . 280-43746-a-1 50X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 17:06:03 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 50

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.118	0.0888	0.603	42.014	Chloride
2	8.992	0.0200	0.055	2.347	OrthophosP
3	10.187	3.8956	14.083	1554.440	Sulfate

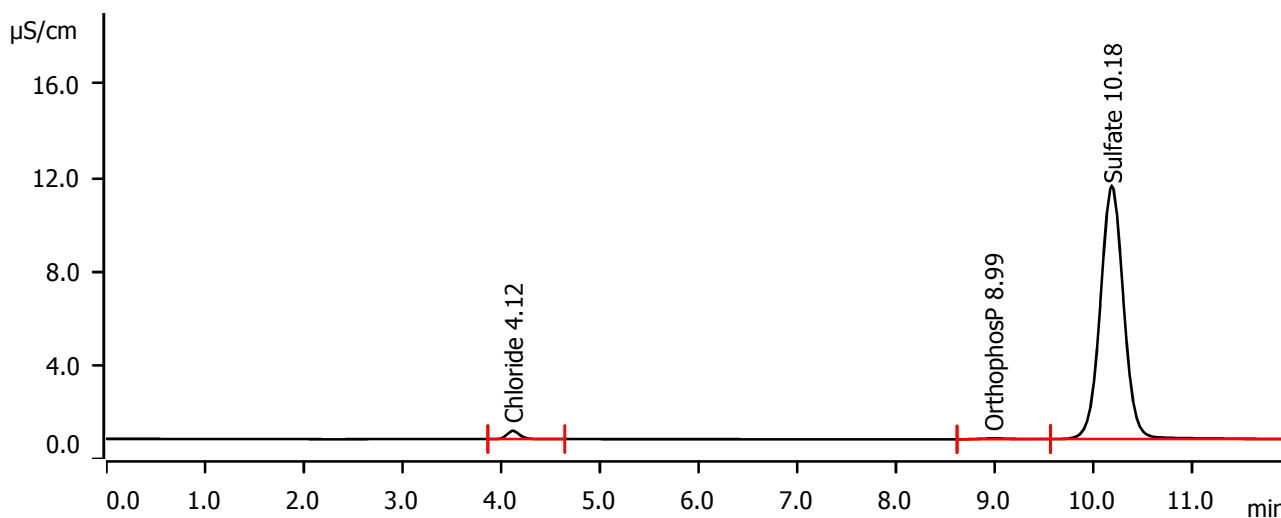
**Sample data**

Ident . . . . . 280-43746-a-4 100X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 17:21:54 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 100

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.118	0.0528	0.354	62.421	Chloride
2	8.987	0.0117	0.033	-0.370	Orthophosph
3	10.183	2.9723	10.809	2380.112	Sulfate



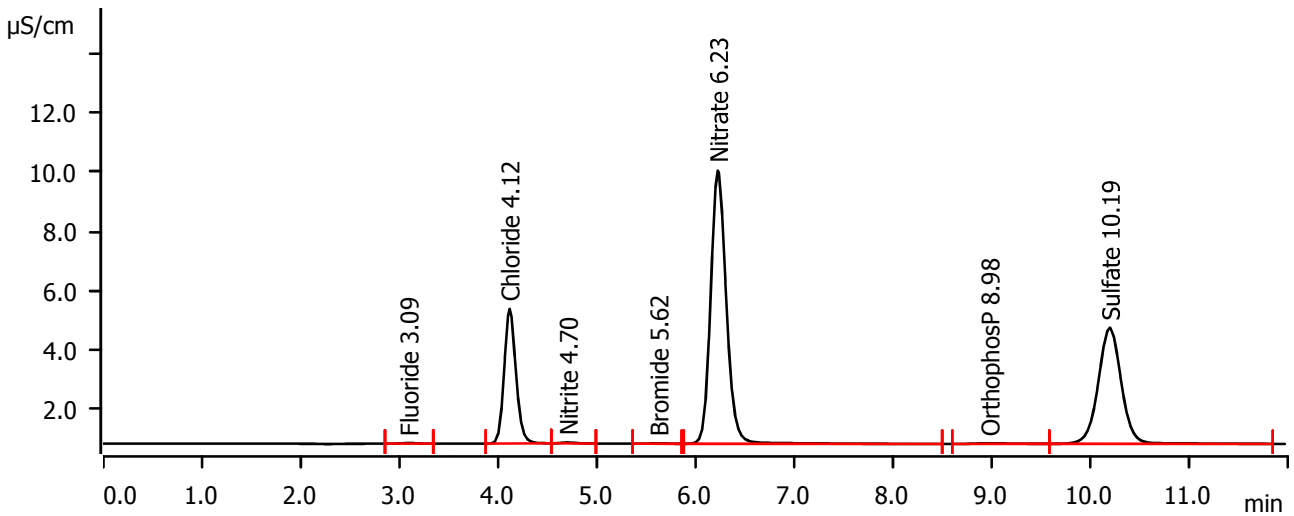
**Sample data**

Ident . . . . . 280-43752-a-1 50X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 17:37:44 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 50

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.093	0.0039	0.026	2.333	Fluoride
2	4.117	0.6275	4.529	203.581	Chloride
3	4.703	0.0049	0.030	5.372	Nitrite
4	5.620	0.0029	0.016	6.568	Bromide
5	6.225	1.6990	9.198	209.348	Nitrate
6	8.975	0.0085	0.023	-1.168	OrthophosP
7	10.193	1.0581	3.909	434.634	Sulfate

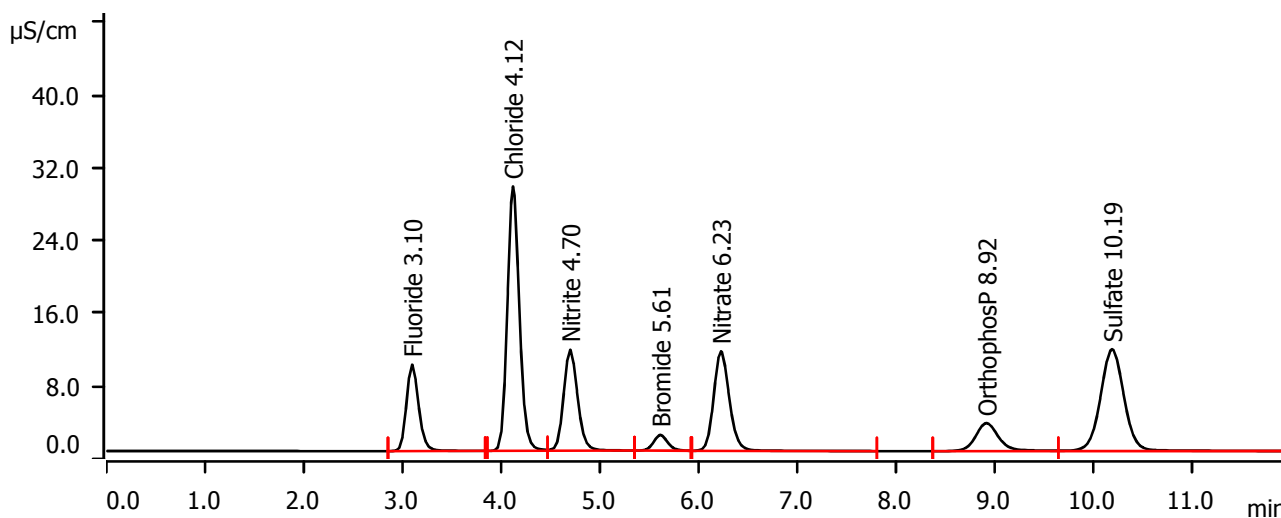
**Sample data**

Ident . . . . . CCV  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 17:53:40 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.098	1.3771	9.493	4.814	Fluoride
2	4.120	4.1126	29.080	24.979	Chloride
3	4.698	1.8364	11.101	5.062	Nitrite
4	5.612	0.2854	1.727	4.578	Bromide
5	6.227	2.0118	10.937	4.941	Nitrate
6	8.915	0.8477	3.090	5.103	OrthophosphP
7	10.187	3.1229	11.212	24.990	Sulfate

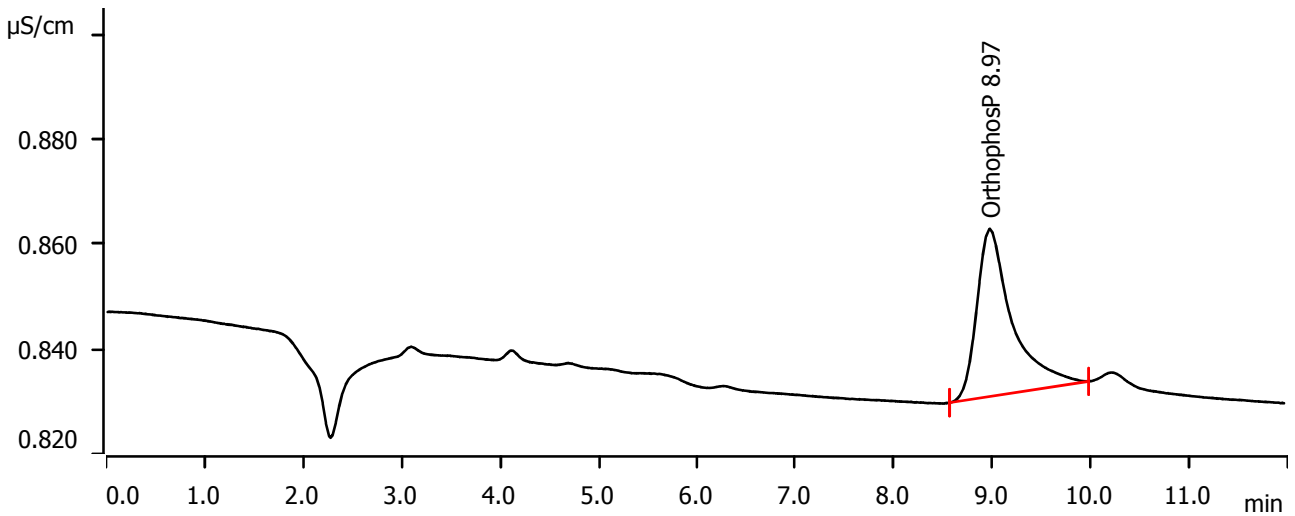
**Sample data**

Ident . . . . . CCB  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 18:09:35 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	8.973	0.0133	0.032	0.006	OrthophosP

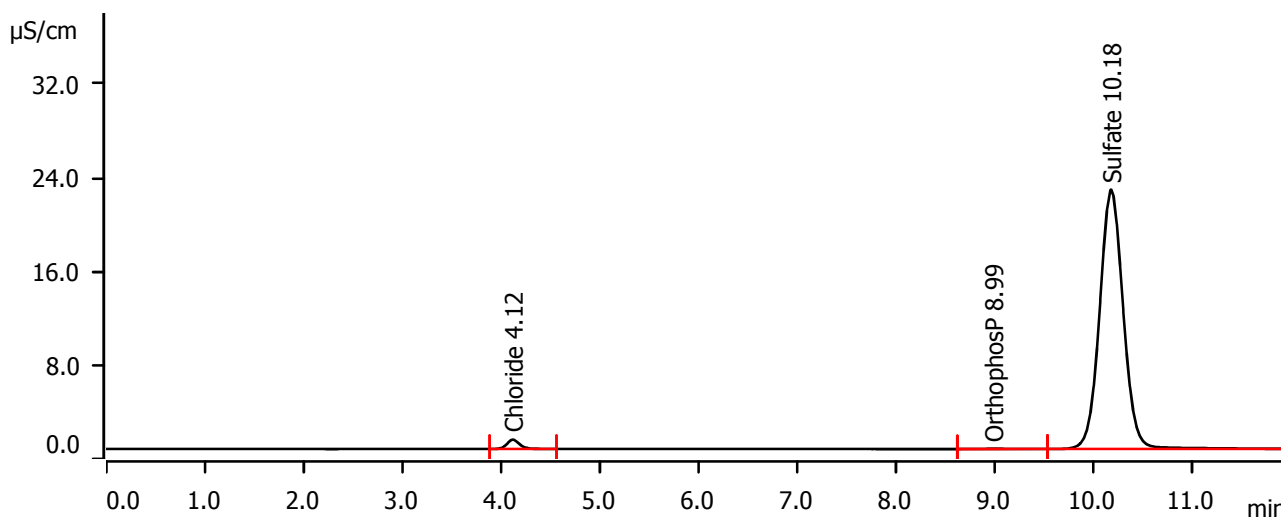
**Sample data**

Ident . . . . . 280-43746-a-7 50X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 18:25:22 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 50

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.118	0.1161	0.803	50.188	Chloride
2	8.985	0.0073	0.021	-1.513	OrthophosP
3	10.177	6.1482	22.120	2443.397	Sulfate

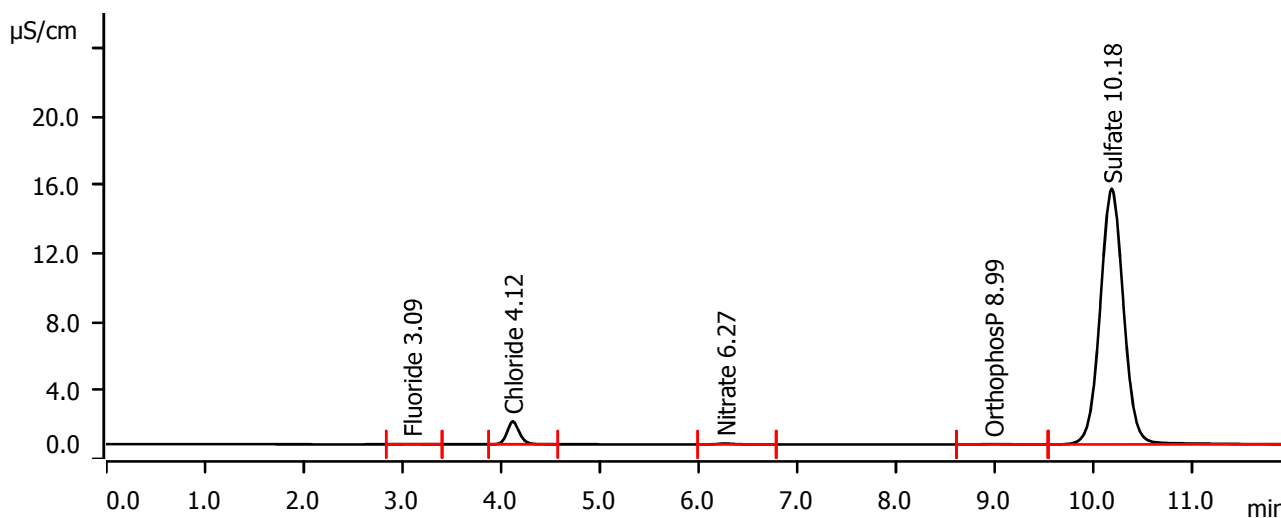
**Sample data**

Ident . . . . . 280-43746-a-10 20X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 18:41:11 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 20

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.093	0.0023	0.014	0.824	Fluoride
2	4.118	0.1913	1.339	29.101	Chloride
3	6.270	0.0103	0.052	2.348	Nitrate
4	8.992	0.0057	0.016	-0.808	OrthophosP
5	10.183	4.1315	14.930	659.012	Sulfate

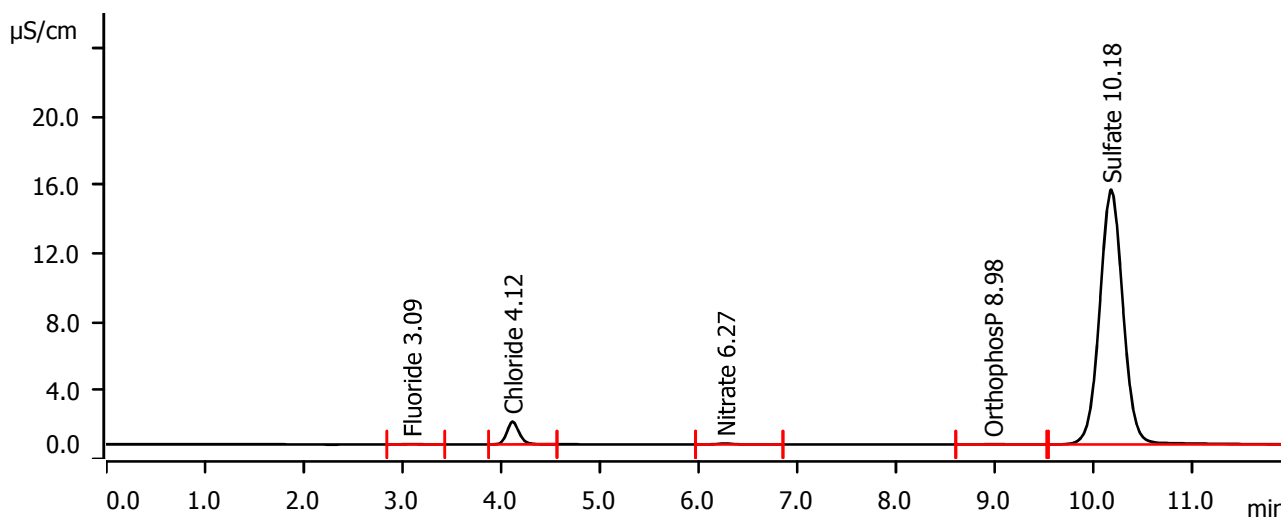
**Sample data**

Ident . . . . . DU 280-43746-a-10 20X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 18:57:03 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 20

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.090	0.0022	0.014	0.817	Fluoride
2	4.115	0.1897	1.332	28.909	Chloride
3	6.267	0.0103	0.052	2.346	Nitrate
4	8.983	0.0046	0.013	-0.945	OrthophosP
5	10.177	4.1084	14.871	655.359	Sulfate

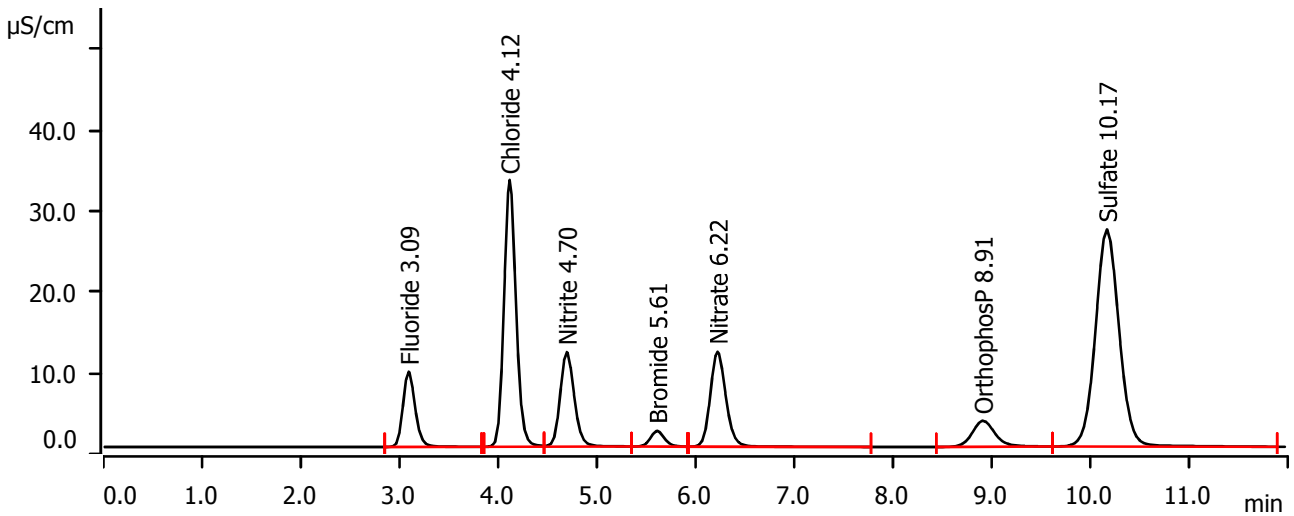
**Sample data**

Ident . . . . . MS 280-43746-a-10 20X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 19:12:55 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 20

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.093	1.3368	9.280	93.478	Fluoride
2	4.117	4.6507	32.938	564.146	Chloride
3	4.695	1.9352	11.663	106.586	Nitrite
4	5.610	0.3163	1.934	101.287	Bromide
5	6.222	2.1456	11.721	105.265	Nitrate
6	8.910	0.8642	3.218	104.085	OrthophosP
7	10.165	7.4734	26.800	1186.540	Sulfate

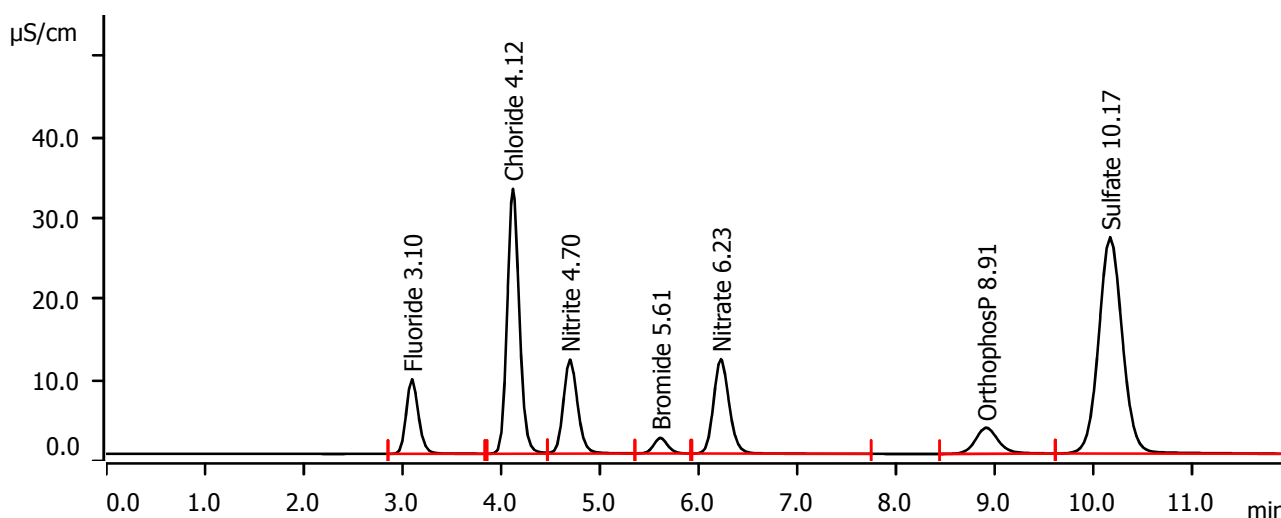
**Sample data**

Ident . . . . . MSD 280-43746-a-10 20X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 19:28:50 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 20

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.097	1.3374	9.208	93.519	Fluoride
2	4.120	4.6468	32.692	563.683	Chloride
3	4.697	1.9333	11.586	106.481	Nitrite
4	5.612	0.3164	1.924	101.304	Bromide
5	6.225	2.1438	11.660	105.178	Nitrate
6	8.912	0.8640	3.213	104.060	OrthophosP
7	10.167	7.4669	26.699	1185.527	Sulfate



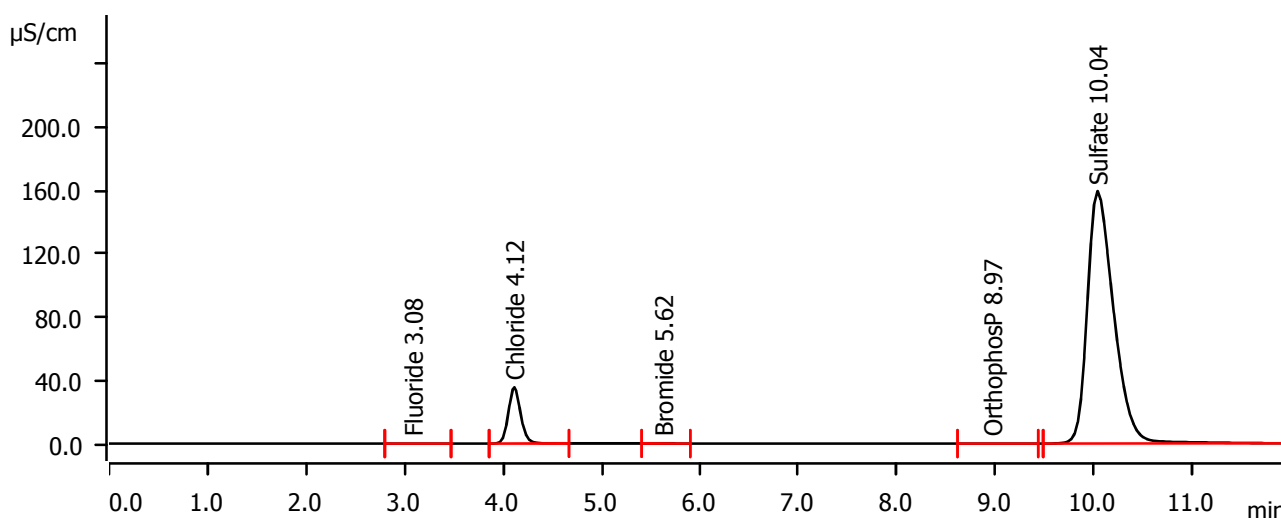
**Sample data**

Ident . . . . . 280-43748-m-1 10X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 19:44:43 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 10

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.083	0.0025	0.015	0.418	Fluoride
2	4.115	5.0731	35.282	307.414	Chloride
3	5.620	0.0066	0.038	1.904	Bromide
4	8.967	0.0091	0.028	-0.193	OrthophosP
5	10.037	49.2557	158.578	3891.060	Sulfate

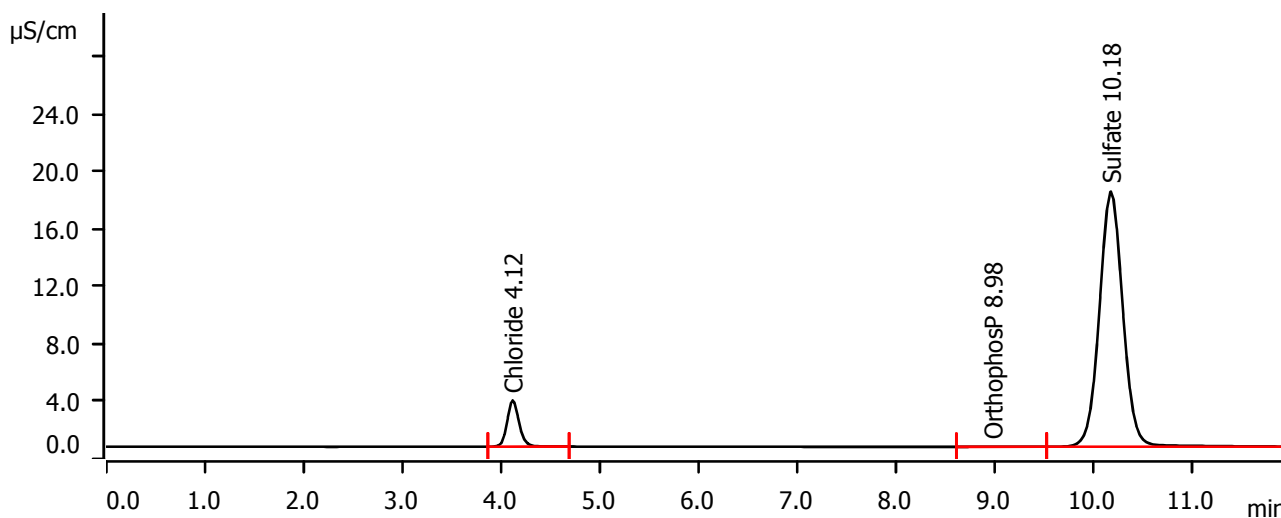
**Sample data**

Ident . . . . . 280-43748-m-1 100X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 20:00:33 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 100

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.117	0.4482	3.215	299.595	Chloride
2	8.977	0.0054	0.015	-4.235	OrthophosP
3	10.175	4.9212	17.751	3918.312	Sulfate

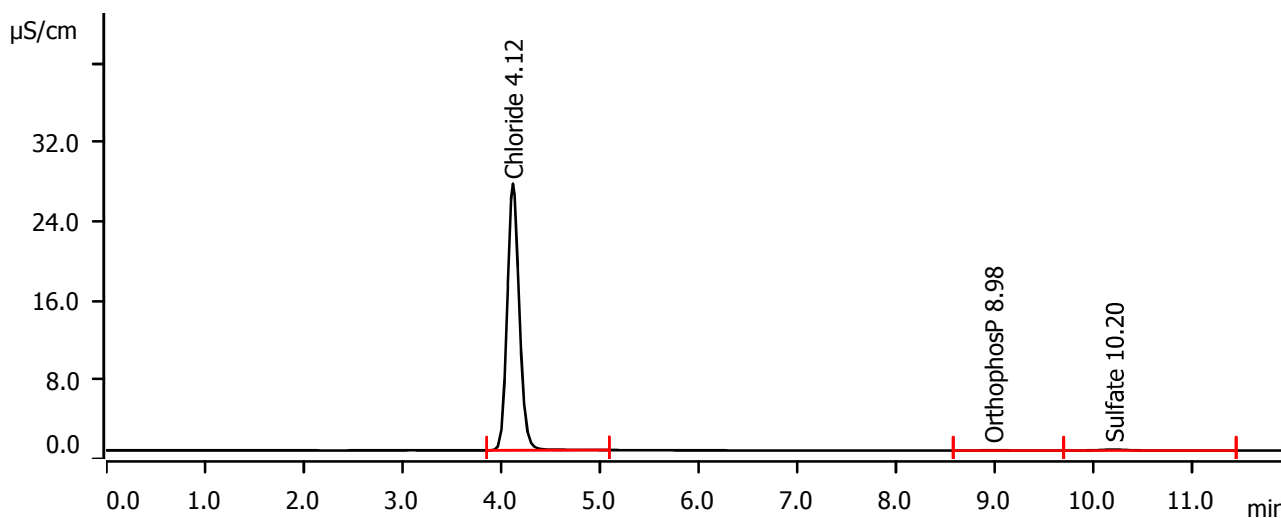
**Sample data**

Ident . . . . . 280-43753-a-1 10X F  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 20:16:21 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 10

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.120	3.8258	26.932	232.587	Chloride
2	8.982	0.0054	0.012	-0.419	OrthophosphP
3	10.202	0.0309	0.101	5.853	Sulfate

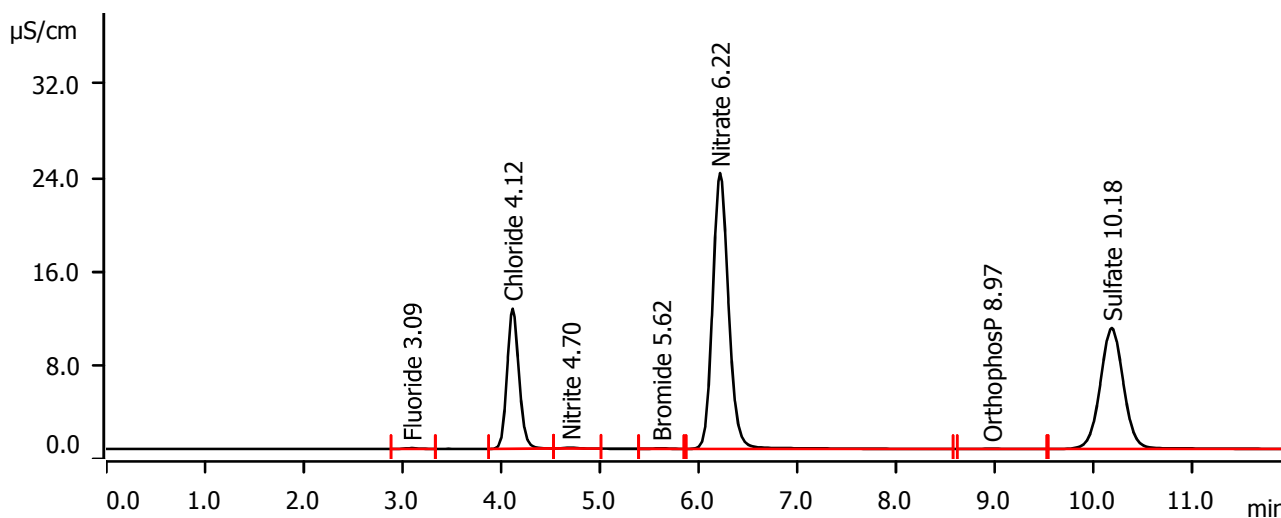
**Sample data**

Ident . . . . . 280-43752-a-1 20X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 20:32:09 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 20

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.092	0.0095	0.062	1.321	Fluoride
2	4.117	1.6695	11.943	206.455	Chloride
3	4.702	0.0128	0.078	2.572	Nitrite
4	5.617	0.0070	0.040	3.918	Bromide
5	6.217	4.4198	23.519	214.877	Nitrate
6	8.968	0.0043	0.013	-0.975	OrthophosP
7	10.183	2.8364	10.318	454.569	Sulfate

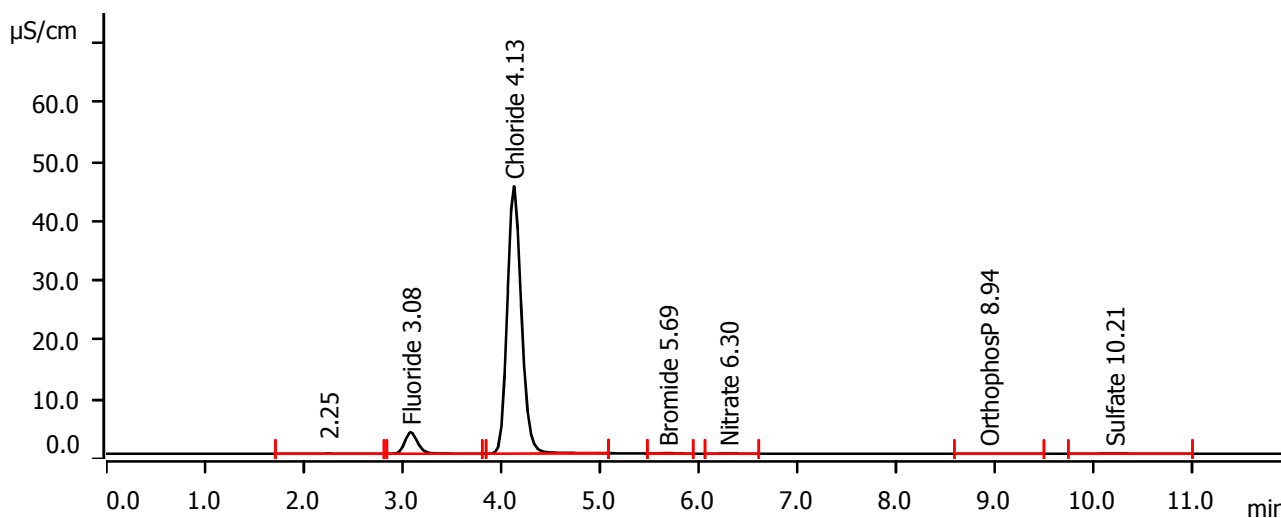
**Sample data**

Ident . . . . . 280-43756-b-1  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 20:48:00 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	2.252	0.0067	0.020	invalid	
2	3.083	0.5508	3.623	1.945	Fluoride
3	4.128	7.4776	44.995	45.166	Chloride
4	5.685	0.0146	0.092	0.315	Bromide
5	6.300	0.0082	0.045	0.112	Nitrate
6	8.940	0.0032	0.011	-0.055	OrthophosP
7	10.212	0.0198	0.068	0.498	Sulfate

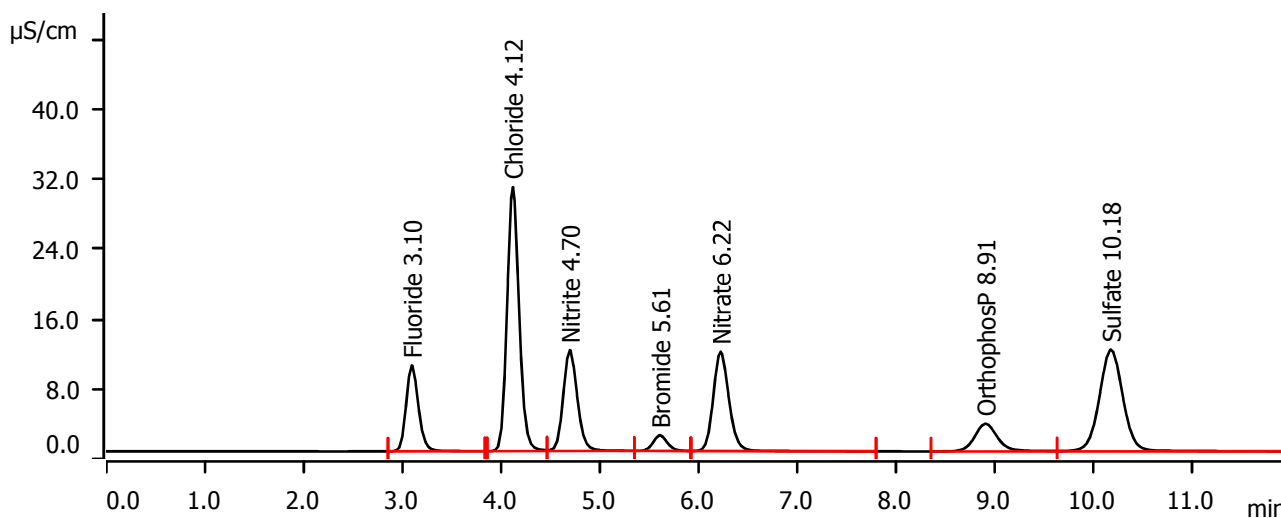
**Sample data**

Ident . . . . . CCV  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 21:03:49 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	1.4283	9.839	4.992	Fluoride
2	4.118	4.2790	30.232	25.977	Chloride
3	4.695	1.9160	11.549	5.277	Nitrite
4	5.608	0.2975	1.799	4.767	Bromide
5	6.222	2.0941	11.370	5.139	Nitrate
6	8.905	0.8618	3.174	5.189	OrthophosP
7	10.175	3.2472	11.665	25.971	Sulfate

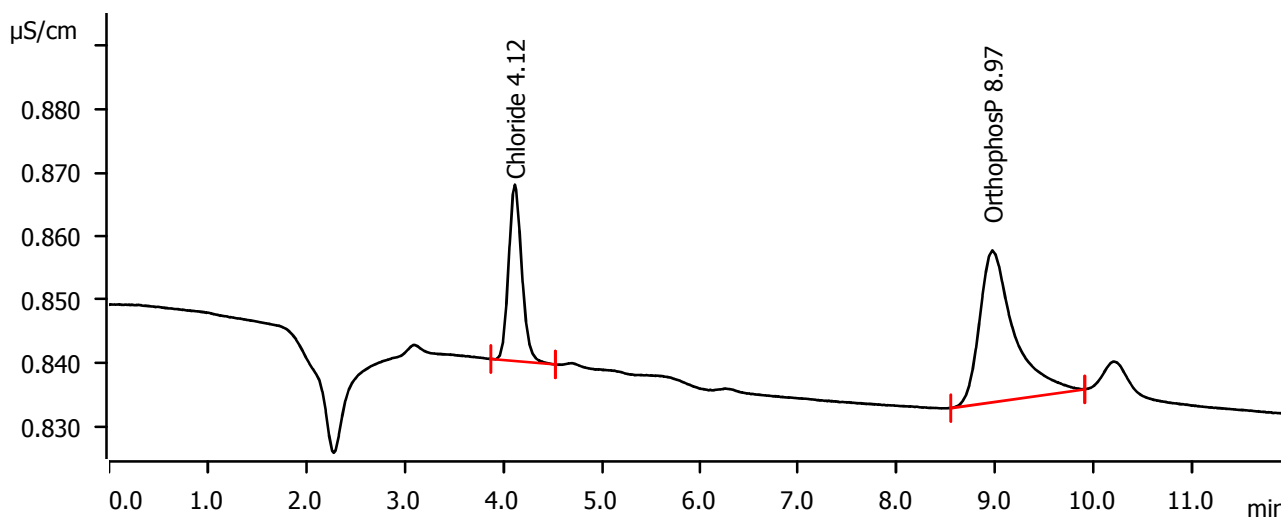
**Sample data**

Ident . . . . . CCB  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 21:19:39 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.120	0.0043	0.028	0.333	Chloride
2	8.970	0.0097	0.024	-0.016	Orthophosph

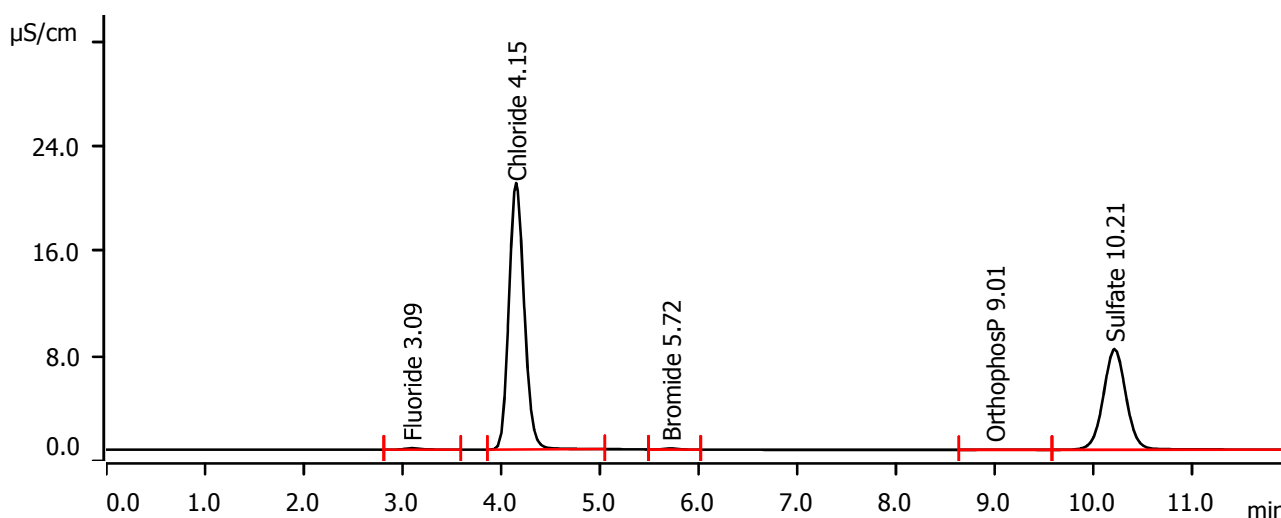
**Sample data**

Ident . . . . . 280-43754-a-8  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 21:35:22 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.34 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.092	0.0186	0.108	0.098	Fluoride
2	4.152	3.6467	20.338	22.184	Chloride
3	5.715	0.0153	0.097	0.327	Bromide
4	9.007	0.0061	0.017	-0.038	OrthophosP
5	10.212	2.0595	7.686	16.597	Sulfate



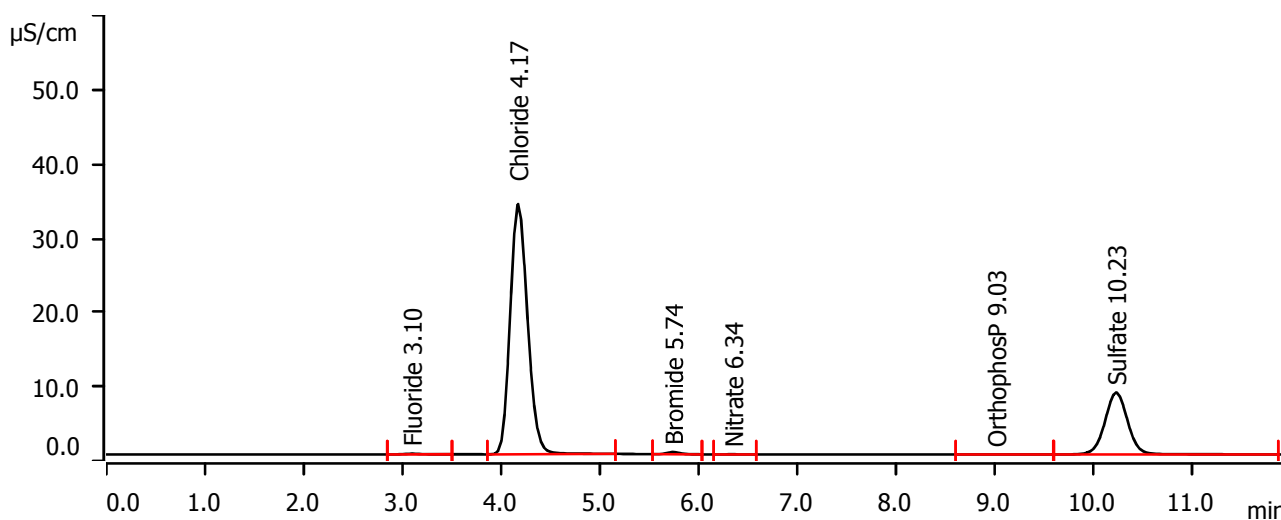
**Sample data**

Ident . . . . . 280-43754-a-9  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 21:51:09 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.22 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.095	0.0168	0.091	0.092	Fluoride
2	4.172	6.8857	33.697	41.616	Chloride
3	5.740	0.0442	0.289	0.781	Bromide
4	6.342	0.0020	0.012	0.097	Nitrate
5	9.028	0.0049	0.014	-0.045	OrthophosP
6	10.228	2.2320	8.350	17.958	Sulfate

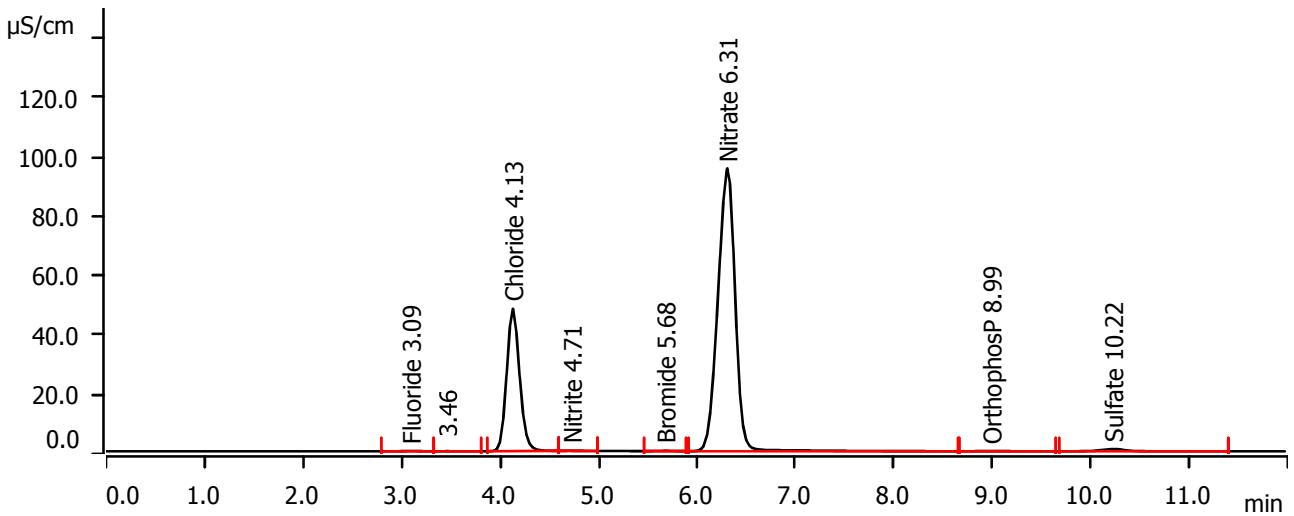
**Sample data**

Ident . . . . . 280-43754-a-10  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 22:06:59 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.093	0.0122	0.070	0.075	Fluoride
2	3.462	0.0033	0.016	invalid	
3	4.132	7.2857	47.906	44.015	Chloride
4	4.708	0.0058	0.031	0.110	Nitrite
5	5.678	0.0193	0.120	0.390	Bromide
6	6.308	19.3783	95.209	46.792	Nitrate
7	8.988	0.0105	0.032	-0.011	OrthophosP
8	10.223	0.2055	0.754	1.964	Sulfate

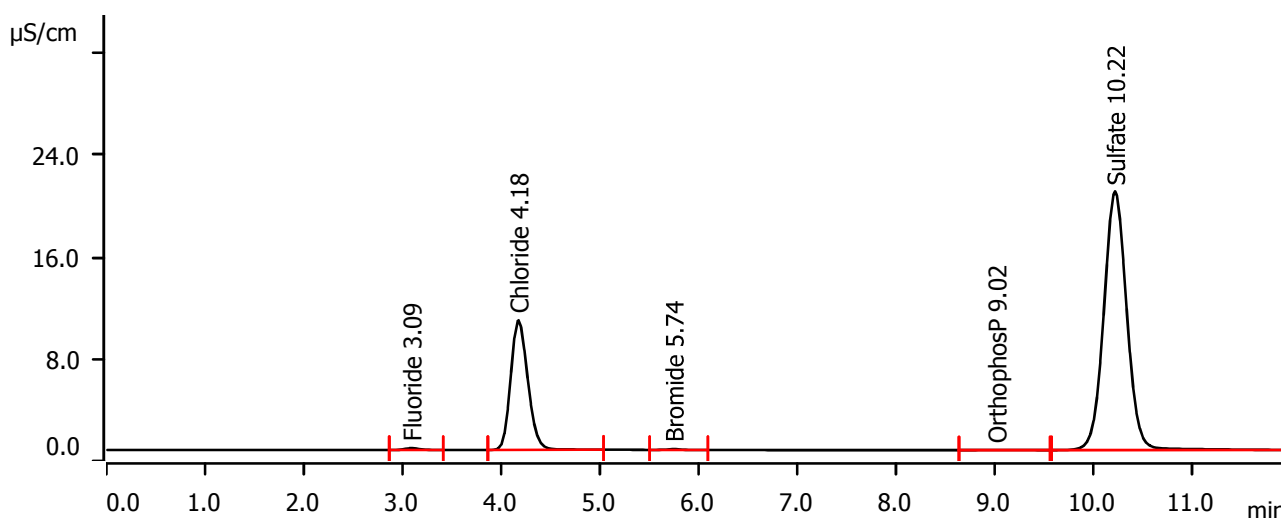
**Sample data**

Ident . . . . . 280-43754-a-11  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 22:22:49 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.092	0.0239	0.144	0.116	Fluoride
2	4.175	2.0470	10.184	12.587	Chloride
3	5.743	0.0106	0.064	0.254	Bromide
4	9.020	0.0061	0.018	-0.038	OrthophosP
5	10.217	5.4999	20.319	43.751	Sulfate

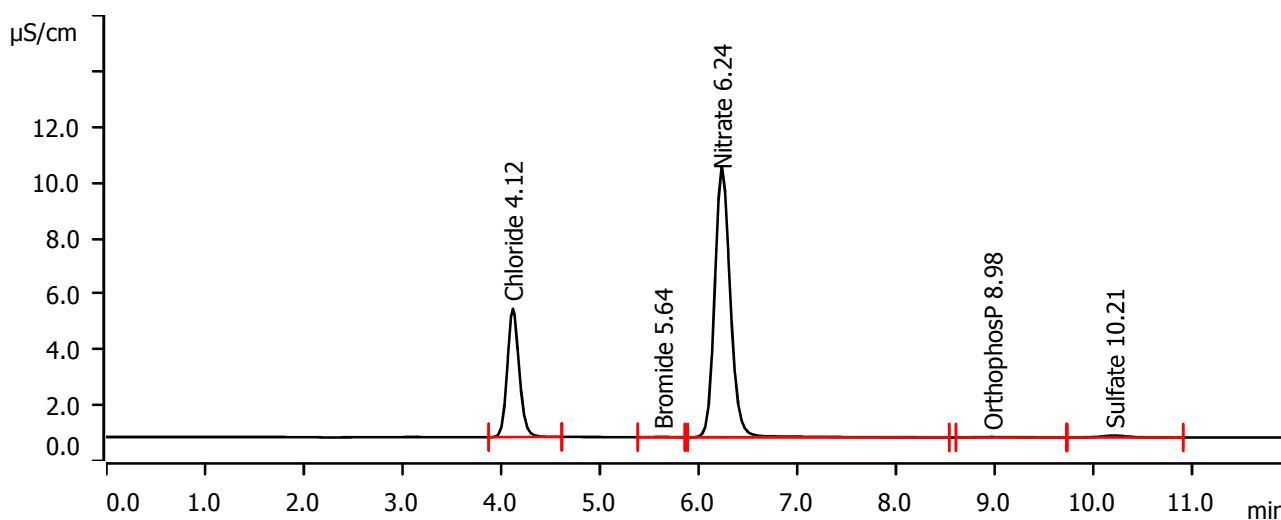
**Sample data**

Ident . . . . . 280-43754-a-10 10X  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 22:38:38 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 10

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.118	0.6453	4.606	41.788	Chloride
2	5.635	0.0019	0.011	1.158	Bromide
3	6.235	1.7908	9.732	44.081	Nitrate
4	8.978	0.0049	0.013	-0.449	OrthophosP
5	10.208	0.0202	0.069	5.005	Sulfate

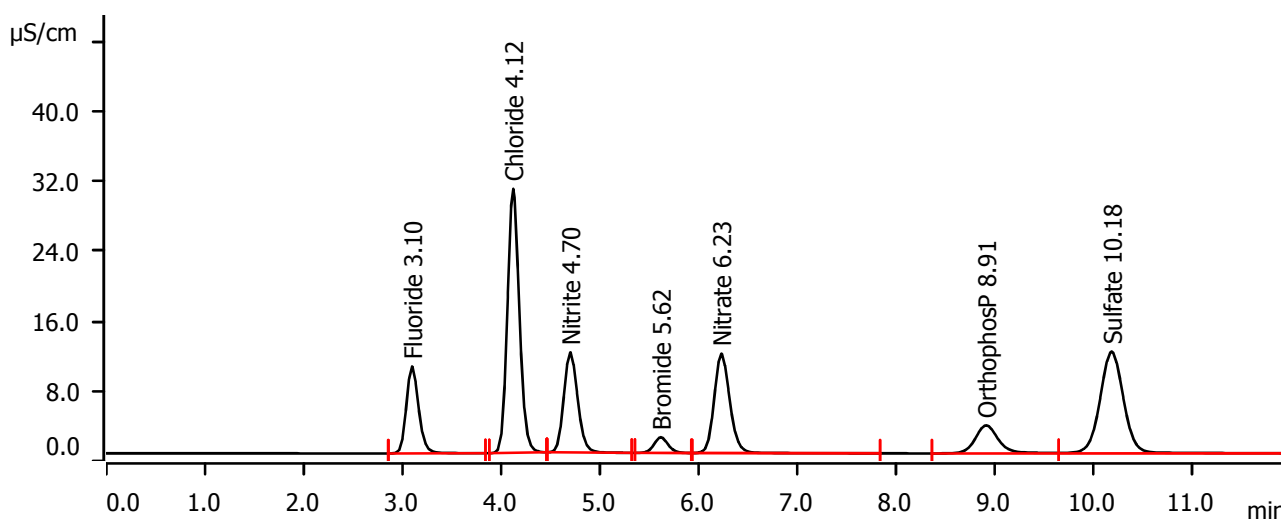
**Sample data**

Ident . . . . . CCV  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 22:54:27 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area ( $\mu\text{S/cm}$ ) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.098	1.4442	9.937	5.047	Fluoride
2	4.122	4.2360	30.207	25.720	Chloride
3	4.700	1.8697	11.458	5.152	Nitrite
4	5.617	0.2967	1.802	4.756	Bromide
5	6.230	2.0863	11.374	5.120	Nitrate
6	8.912	0.8838	3.211	5.324	OrthophosP
7	10.182	3.2397	11.654	25.911	Sulfate

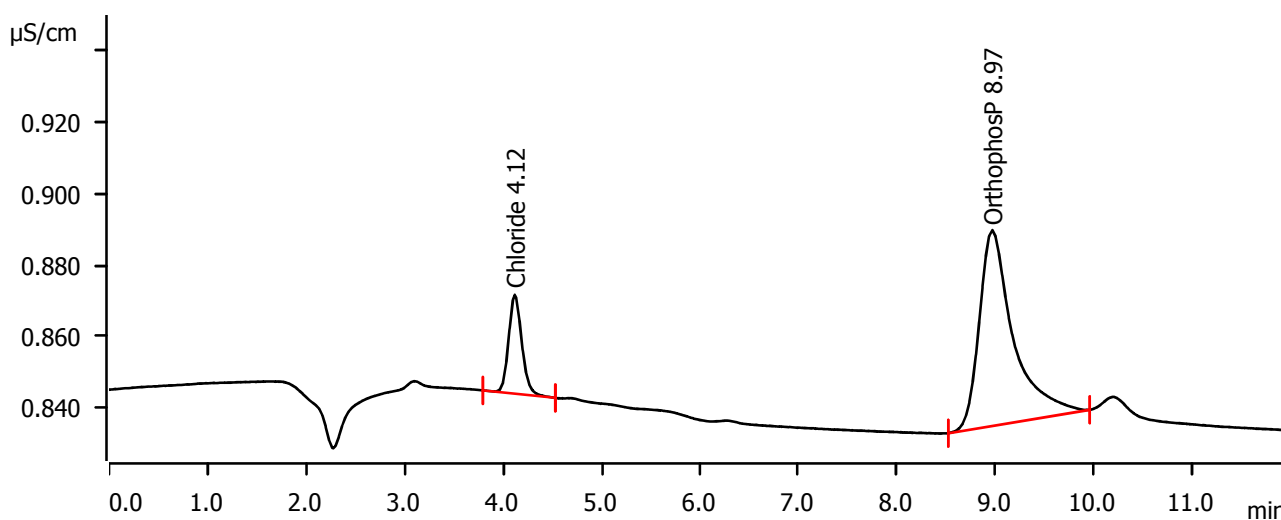
**Sample data**

Ident . . . . . CCB  
 Sample type . . . . . Sample  
 Determination start . . . . . 2013-06-26 23:10:19 UTC-6  
 Method . . . . . Anions  
 Operator . . . . .  
 Dilution . . . . . 1

**Anions**

Data source . . . . . Conductivity detector 1 (881 Compact IC pro 1)  
 Channel . . . . . Conductivity  
 Recording time . . . . . 12.0 min  
 Integration . . . . . Automatically  
 Column type . . . . . Metrosep A Supp 5 - 100/4.0  
 Eluent composition . . . . . not defined  
 Flow . . . . . 0.700 mL/min  
 Pressure . . . . . 5.28 MPa  
 Temperature . . . . . 35.0 °C

**Anions**



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	4.120	0.0043	0.028	0.333	Chloride
2	8.967	0.0220	0.055	0.059	OrthophospP

SHZ D.B. 07-18-13

	Analysis	Sample Name	Dilution	Result	Date / Time	Vial
1	NPOC	ICV	1.000	pH < 2		1
2	NPOC	ICB	1.000			2
3	NPOC	LCS 7060	1.000	pH < 2		3
4	NPOC	LCSD	1.000			4
5	NPOC	MB	1.000			5
6	NPOC	INORG CARB REM CK	1.000	pH > 8, < 9, 1 drop conc. H <sub>2</sub> SO <sub>4</sub> , final pH < 2		6
7	NPOC	280-43751-c-3	1.000	pH < 2		7
8	NPOC	280-43752-b-1	1.000	pH < 2		8
9	NPOC	MS 280-43752-b-1	1.000			9
10	NPOC	MSD 280-43752-b-1	1.000			10
11	NPOC	280-43753-b-1	1.000	pH < 2		11
12	NPOC	280-43753-b-2	1.000	pH < 2		12
13	NPOC	280-43998-b-1	1.000	pH < 2		13
14	NPOC	280-44231-d-1	1.000	pH < 2		14
15	NPOC	280-44231-d-2	1.000	pH < 2		15
16	NPOC	CCV	1.000			16
17	NPOC	CCB	1.000			17
18	NPOC	* 280-44275-d-1 <sup>E.D.B.</sup> <del>07-18-13</del>	1.000	pH < 2		18
19	NPOC	280-44275-d-2	1.000	pH < 2		19
20	NPOC	280-44283-d-2	1.000	pH < 2		20
21	NPOC	280-44176-b-2	1.000	pH < 2		21
22	NPOC	280-44176-b-3	1.000	pH < 2		22
23	NPOC	280-44176-b-4	1.000	pH < 2		23
24	NPOC	280-44176-d-5	1.000	pH < 2		24
25	NPOC	MS 280-44176-d-5	1.000			25
26	NPOC	MSD 280-44176-d-5	1.000			26
27	NPOC	280-44176-d-6	1.000	pH < 2		27
28	NPOC	CCV	1.000			28
29	NPOC	CCB	1.000			29
30	NPOC	280-44300-b-2	1.000	pH < 2		30
31	NPOC	280-44300-b-3	1.000	pH < 2		31
32	NPOC	280-44300-b-4	1.000	pH < 2		32
33	NPOC	280-44300-b-5	1.000	pH < 2		33
34	NPOC	280-44300-b-6	1.000	pH < 2		34
35	NPOC	CCV	1.000			35
36	NPOC	CCB	1.000			36

WC-5000-B

WC-1000-H

0.2% H<sub>2</sub>SO<sub>4</sub> - 00107

H<sub>2</sub>SO<sub>4</sub> - 00052

\* container D has client-label of <sup>D.B. 07-18-13</sup> ~~no~~ NCC and preservation = cool GC, but it label of Sulfuric. pH for container D of 44275-1 = 7. So, container E was used w/ pH of < 2. D.B. 07-18-13

	Analysis	Sample Name	Dilution	Result	Date / Time	Vial
1	NPOC	ICV	1.000	NPOC:20.13mg/L	7/18/2013 6:04:10 PM	1
2	NPOC	ICB	1.000	NPOC:0.1068mg/	7/18/2013 6:18:52 PM	2
3	NPOC	LCS	1.000	NPOC:25.46mg/L	7/18/2013 6:33:41 PM	3
4	NPOC	LCSD	1.000	NPOC:25.51mg/L	7/18/2013 6:48:30 PM	4
5	NPOC	MB	1.000	NPOC:0.09292m	7/18/2013 7:03:11 PM	5
6	NPOC	INORG CARB REM CK	1.000	NPOC:0.1650mg/	7/18/2013 7:17:51 PM	6
7	NPOC	280-43751-c-3	1.000	NPOC:0.3129mg/	7/18/2013 7:32:32 PM	7
8	NPOC	280-43752-b-1	1.000	NPOC:29.10mg/L	7/18/2013 7:47:13 PM	8
9	NPOC	MS 280-43752-b-1	1.000	NPOC:54.01mg/L	7/18/2013 8:01:56 PM	9
10	NPOC	MSD 280-43752-b-1	1.000	NPOC:54.04mg/L	7/18/2013 8:16:37 PM	10
11	NPOC	280-43753-b-1	1.000	NPOC:2.271mg/L	7/18/2013 8:33:23 PM	11
12	NPOC	280-43753-b-2	1.000	NPOC:0.4093mg/	7/18/2013 8:48:04 PM	12
13	NPOC	280-43998-b-1	1.000	NPOC:1.368mg/L	7/18/2013 9:02:45 PM	13
14	NPOC	280-44231-d-1	1.000	NPOC:7.001mg/L	7/18/2013 9:17:26 PM	14
15	NPOC	280-44231-d-2	1.000	NPOC:7.006mg/L	7/18/2013 9:32:08 PM	15
16	NPOC	CCV	1.000	NPOC:25.76mg/L	7/18/2013 9:46:50 PM	16
17	NPOC	CCB	1.000	NPOC:0.1630mg/	7/18/2013 10:01:31 PM	17
18	NPOC	280-44275-e-1	1.000	NPOC:4.627mg/L	7/18/2013 10:16:12 PM	18
19	NPOC	280-44275-d-2	1.000	NPOC:0.5445mg/	7/18/2013 10:30:53 PM	19
20	NPOC	280-44283-d-2	1.000	NPOC:0.5658mg/	7/18/2013 10:45:34 PM	20
21	NPOC	280-44176-b-2	1.000	NPOC:0.5144mg/	7/18/2013 11:00:15 PM	21
22	NPOC	280-44176-b-3	1.000	NPOC:0.8945mg/	7/18/2013 11:14:57 PM	22
23	NPOC	280-44176-b-4	1.000	NPOC:5.427mg/L	7/18/2013 11:31:41 PM	23
24	NPOC	280-44176-d-5	1.000	NPOC:2.494mg/L	7/18/2013 11:46:21 PM	24
25	NPOC	MS 280-44176-d-5	1.000	NPOC:28.18mg/L	7/19/2013 10:14:57 AM	25
26	NPOC	MSD 280-44176-d-5	1.000	NPOC:28.21mg/L	7/19/2013 10:29:38 AM	26
27	NPOC	280-44176-d-6	1.000	NPOC:1.345mg/L	7/19/2013 10:44:19 AM	27
28	NPOC	CCV	1.000	NPOC:25.30mg/L	7/19/2013 10:59:01 AM	28
29	NPOC	CCB	1.000	NPOC:0.2832mg/	7/19/2013 11:13:42 AM	29
30	NPOC	280-44300-b-2	1.000	NPOC:0.5804mg/	7/19/2013 11:28:23 AM	30
31	NPOC	280-44300-b-3	1.000	NPOC:15.69mg/L	7/19/2013 11:43:03 AM	31
32	NPOC	280-44300-b-4	1.000	NPOC:36.20mg/L	7/19/2013 11:57:46 AM	32
33	NPOC	280-44300-b-5	1.000	NPOC:2.234mg/L	7/19/2013 12:12:27 PM	33
34	NPOC	280-44300-b-6	1.000	NPOC:4.092mg/L	7/19/2013 12:27:08 PM	34
35	NPOC	CCV	1.000	NPOC:25.81mg/L	7/19/2013 12:41:52 PM	35
36	NPOC	CCB	1.000	NPOC:0.2683mg/	7/19/2013 12:56:34 PM	36



## Instr.Information

System TOC-VPCN  
 Detector Combustion  
 Catalyst High Sensitivity  
 Cell Length long

## Sample

Sample Name: ICV  
 Sample ID:  
 Origin: TOC 2012A.met  
 Status Completed  
 Chk. Result

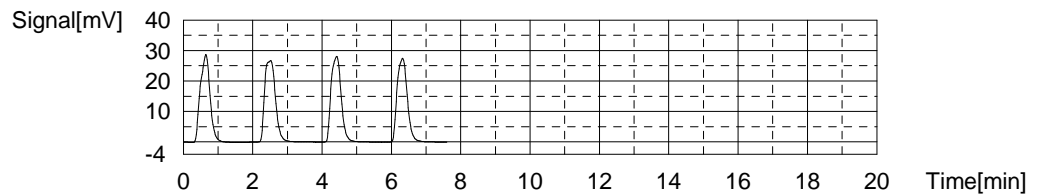
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:20.13mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.61	20.15mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 5:58:00 PM	
2	58.45	20.45mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 6:00:03 PM	
3	57.26	20.03mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 6:02:07 PM	
4	56.89	19.90mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 6:04:10 PM	

Mean Area 57.55  
 Mean Conc. 20.13mg/L



## Sample

Sample Name: ICB  
 Sample ID:  
 Origin: TOC 2012A.met  
 Status Completed  
 Chk. Result

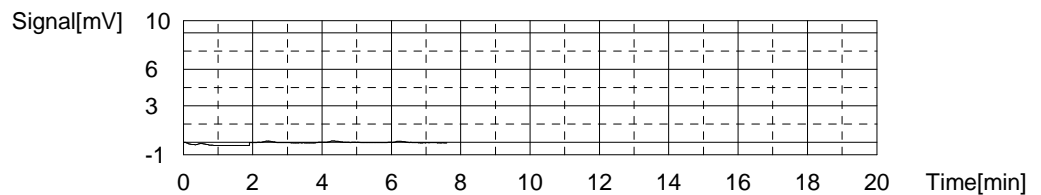
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.1068mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1255	0.09309mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 6:12:42 PM	
2	0.1922	0.1164mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 6:14:45 PM	
3	0.1695	0.1084mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 6:16:49 PM	
4	0.1715	0.1091mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 6:18:52 PM	

Mean Area 0.1647  
 Mean Conc. 0.1068mg/L



## Sample

Sample Name: LCS  
 Sample ID:  
 Origin: TOC 2012A.met  
 Status: Completed  
 Chk. Result

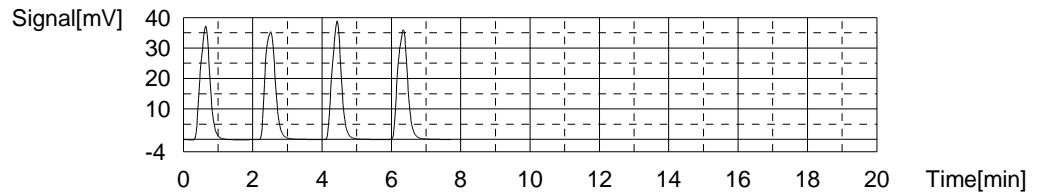
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.46mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.87	25.48mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_5	7/18/2013 6:27:24 PM
2	73.07	25.55mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_5	7/18/2013 6:29:27 PM
3	72.32	25.29mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_5	7/18/2013 6:31:30 PM
4	72.98	25.52mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_5	7/18/2013 6:33:41 PM

Mean Area 72.81  
 Mean Conc. 25.46mg/L



## Sample

Sample Name: LCSD  
 Sample ID:  
 Origin: TOC 2012A.met  
 Status: Completed  
 Chk. Result

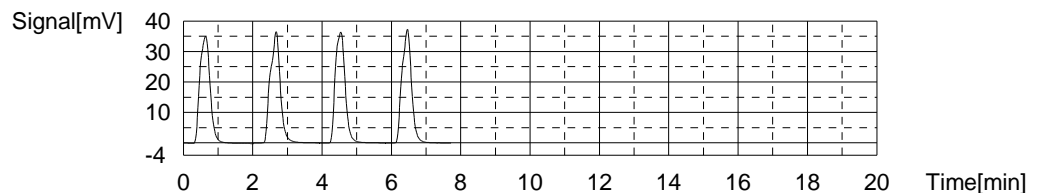
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.51mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.43	25.67mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_5	7/18/2013 6:42:20 PM
2	73.56	25.72mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_5	7/18/2013 6:44:23 PM
3	72.56	25.37mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_5	7/18/2013 6:46:26 PM
4	72.34	25.29mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_5	7/18/2013 6:48:30 PM

Mean Area 72.97  
 Mean Conc. 25.51mg/L



## Sample

Sample Name: MB  
 Sample ID:  
 Origin: TOC 2012A.met  
 Status: Completed  
 Chk. Result

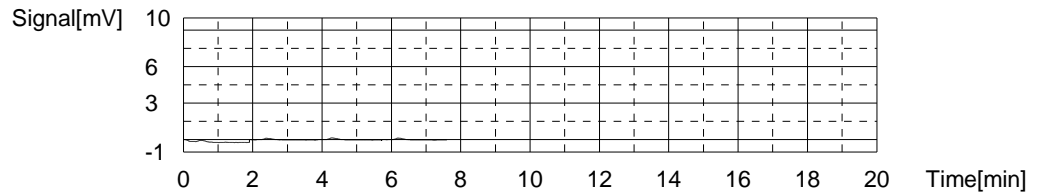
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.09292mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.04930mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 6:57:01 PM	
2	0.1505	0.1018mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 6:59:04 PM	
3	0.1945	0.1172mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 7:01:07 PM	
4	0.1551	0.1034mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 7:03:11 PM	

Mean Area 0.1250  
 Mean Conc. 0.09292mg/L



Sample

Sample Name: INORG CARB REM CK  
 Sample ID:  
 Origin: TOC 2012A.met  
 Status: Completed  
 Chk. Result

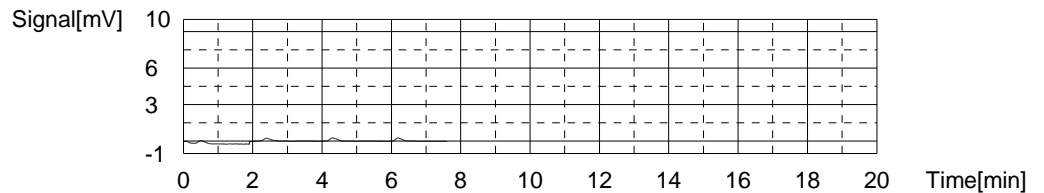
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.1650mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2908	0.1508mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 7:11:42 PM	
2	0.3190	0.1606mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 7:13:45 PM	
3	0.3768	0.1808mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 7:15:48 PM	
4	0.3399	0.1679mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57/18/2013 7:17:51 PM	

Mean Area 0.3316  
 Mean Conc. 0.1650mg/L



Sample

Sample Name: 280-43751-c-3  
 Sample ID:  
 Origin: TOC 2012A.met  
 Status: Completed  
 Chk. Result

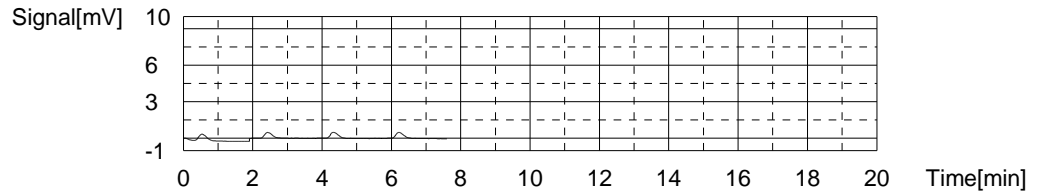
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.3129mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8059	0.3305mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 7:26:23 PM
2	0.7128	0.2980mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 7:28:26 PM
3	0.7563	0.3132mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 7:30:29 PM
4	0.7466	0.3098mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 7:32:32 PM

Mean Area 0.7554  
Mean Conc. 0.3129mg/L



Sample

Sample Name: 280-43752-b-1  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

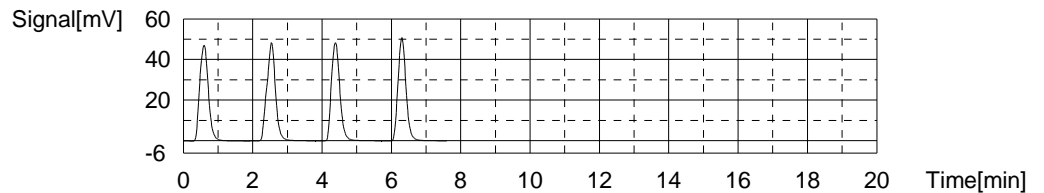
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:29.10mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.29	29.11mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 7:41:04 PM
2	84.42	29.51mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 7:43:07 PM
3	82.53	28.85mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 7:45:10 PM
4	82.73	28.92mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 7:47:13 PM

Mean Area 83.24  
Mean Conc. 29.10mg/L



Sample

Sample Name: MS 280-43752-b-1  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

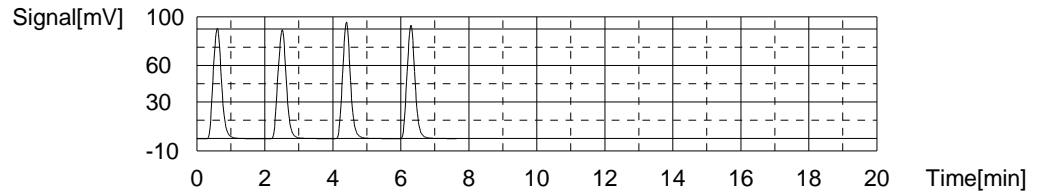
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:54.01mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	155.7	54.38mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 7:55:45 PM
2	155.3	54.24mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 7:57:48 PM
3	153.9	53.75mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 7:59:51 PM
4	153.6	53.65mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:01:56 PM

Mean Area 154.6  
Mean Conc. 54.01mg/L



Sample

Sample Name: MSD 280-43752-b-1  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

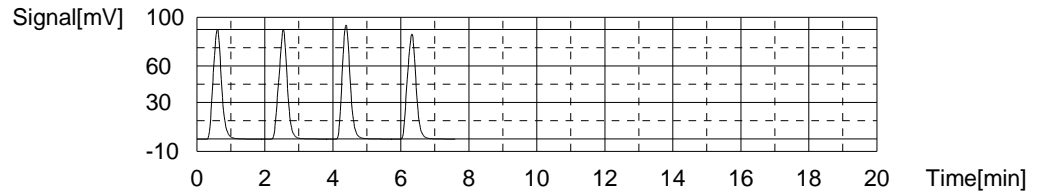
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:54.04mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	155.3	54.24mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:10:28 PM
2	155.8	54.42mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:12:31 PM
3	153.9	53.75mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:14:34 PM
4	153.9	53.75mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:16:37 PM

Mean Area 154.7  
Mean Conc. 54.04mg/L



Sample

Sample Name: 280-43753-b-1  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

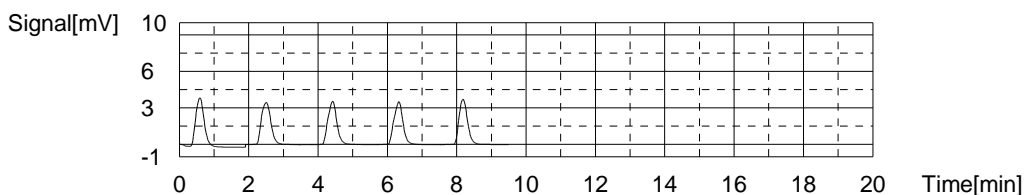
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.271mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.780	2.415mg/L	50uL	1	E	0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:25:09 PM
2	6.534	2.329mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:27:12 PM
3	6.333	2.259mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:29:16 PM
4	6.304	2.249mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:31:19 PM
5	6.302	2.248mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:33:23 PM

Mean Area 6.368  
Mean Conc. 2.271mg/L



## Sample

Sample Name: 280-43753-b-2  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

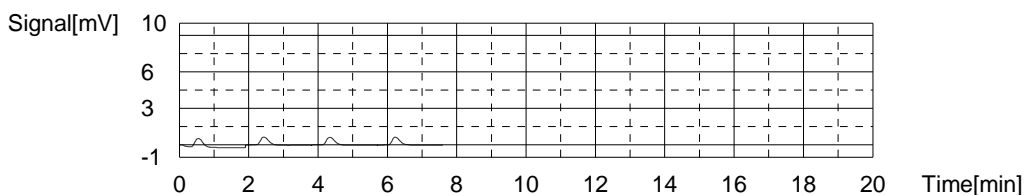
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.4093mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.083	0.4272mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:41:53 PM
2	1.050	0.4157mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:43:56 PM
3	0.9979	0.3975mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:46:00 PM
4	0.9956	0.3967mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:48:04 PM

Mean Area 1.032  
Mean Conc. 0.4093mg/L



## Sample

Sample Name: 280-43998-b-1  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

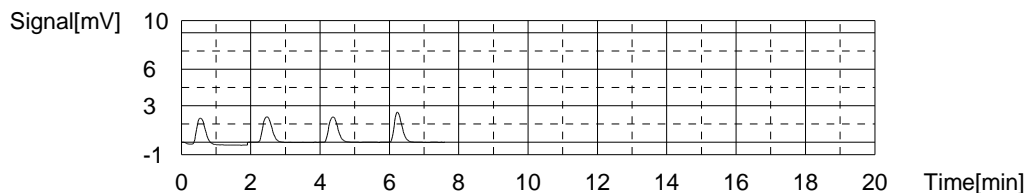
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.368mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.758	1.361mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:56:36 PM
2	3.807	1.378mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 8:58:39 PM
3	3.752	1.359mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:00:42 PM
4	3.794	1.373mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:02:45 PM

Mean Area 3.778  
Mean Conc. 1.368mg/L



## Sample

Sample Name: 280-44231-d-1  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

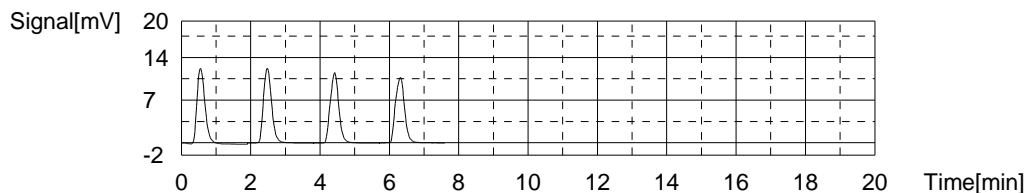
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:7.001mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.06	7.049mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:11:17 PM
2	20.14	7.077mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:13:20 PM
3	19.80	6.958mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:15:23 PM
4	19.69	6.920mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:17:26 PM

Mean Area 19.92  
Mean Conc. 7.001mg/L



## Sample

Sample Name: 280-44231-d-2  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

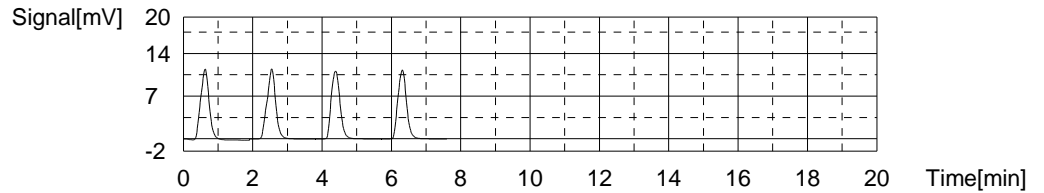
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:7.006mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.17	7.088mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:25:58 PM
2	20.06	7.049mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:28:01 PM
3	19.72	6.931mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:30:05 PM
4	19.79	6.955mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:32:08 PM

Mean Area 19.94  
Mean Conc. 7.006mg/L



## Sample

Sample Name: CCV  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

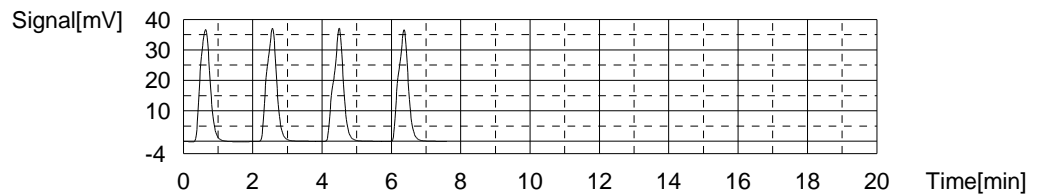
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.76mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.97	25.86mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:40:40 PM
2	74.41	26.01mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:42:43 PM
3	73.35	25.64mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:44:46 PM
4	72.99	25.52mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:46:50 PM

Mean Area 73.68  
Mean Conc. 25.76mg/L



## Sample

Sample Name: CCB  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.1630mg/L

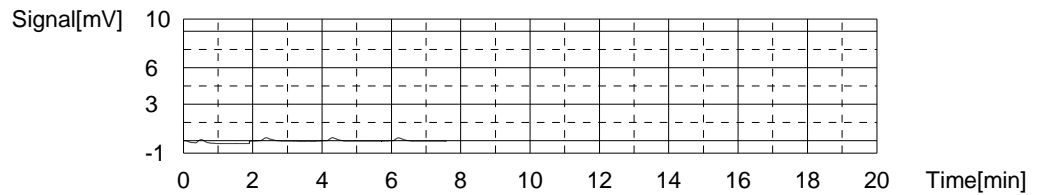
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3078	0.1567mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:55:21 PM
2	0.3482	0.1708mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:57:24 PM
3	0.3364	0.1667mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 9:59:27 PM
4	0.3105	0.1576mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:01:31 PM



Mean Area 0.3257  
Mean Conc. 0.1630mg/L



## Sample

Sample Name: 280-44275-e-1  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

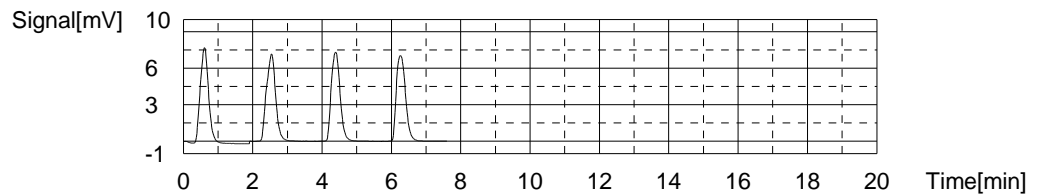
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.627mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.15	4.638mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:10:02 PM
2	13.23	4.666mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:12:05 PM
3	13.01	4.589mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:14:08 PM
4	13.08	4.614mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:16:12 PM

Mean Area 13.12  
Mean Conc. 4.627mg/L



## Sample

Sample Name: 280-44275-d-2  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

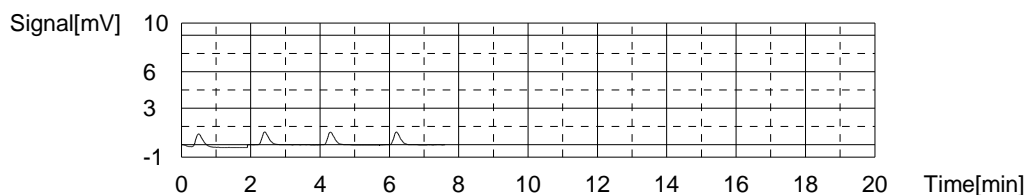
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.5445mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.528	0.5825mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:24:43 PM
2	1.426	0.5469mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:26:46 PM
3	1.362	0.5246mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:28:49 PM
4	1.360	0.5239mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:30:53 PM

Mean Area 1.419  
Mean Conc. 0.5445mg/L



## Sample

Sample Name: 280-44283-d-2  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

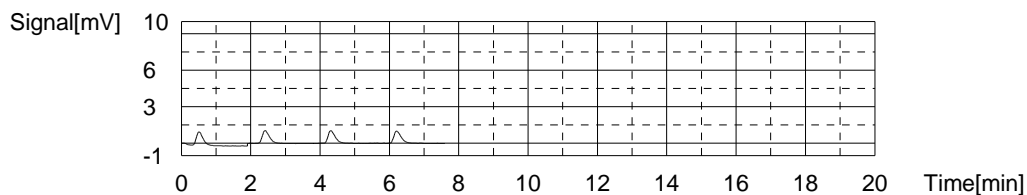
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.5658mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.463	0.5598mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:39:24 PM
2	1.513	0.5773mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:41:27 PM
3	1.475	0.5640mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:43:30 PM
4	1.470	0.5622mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:45:34 PM

Mean Area 1.480  
Mean Conc. 0.5658mg/L



## Sample

Sample Name: 280-44176-b-2  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

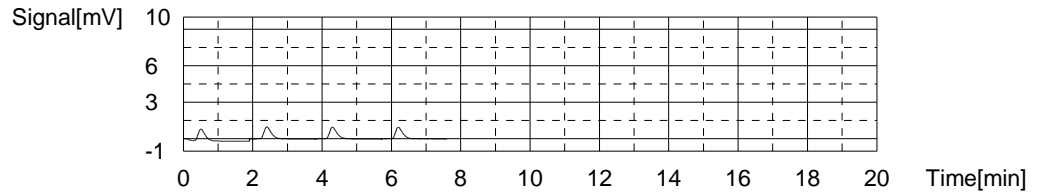
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.5144mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.280	0.4959mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:54:05 PM
2	1.406	0.5399mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:56:08 PM
3	1.366	0.5260mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 10:58:11 PM
4	1.280	0.4959mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 11:00:15 PM

Mean Area 1.333  
Mean Conc. 0.5144mg/L



## Sample

Sample Name: 280-44176-b-3  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

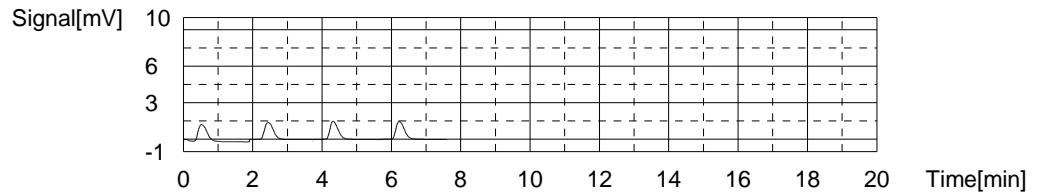
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.8945mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.400	0.8868mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57/18/2013 11:08:47 PM	
2	2.454	0.9056mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57/18/2013 11:10:50 PM	
3	2.381	0.8801mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57/18/2013 11:12:53 PM	
4	2.454	0.9056mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57/18/2013 11:14:57 PM	

Mean Area 2.422  
Mean Conc. 0.8945mg/L



## Sample

Sample Name: 280-44176-b-4  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

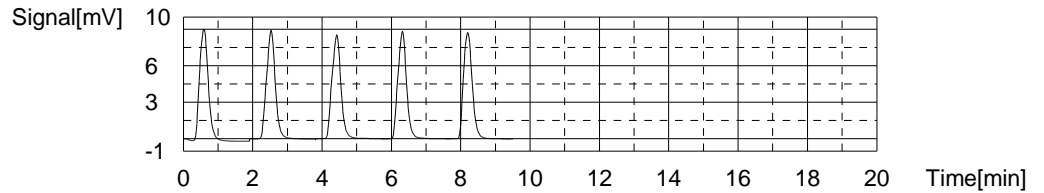
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:5.427mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.18	5.695mg/L	50uL	1	E	0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57/18/2013 11:23:28 PM	
2	15.64	5.507mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57/18/2013 11:25:31 PM	
3	15.25	5.371mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57/18/2013 11:27:34 PM	
4	15.40	5.423mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57/18/2013 11:29:38 PM	
5	15.36	5.409mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57/18/2013 11:31:41 PM	

Mean Area 15.41  
Mean Conc. 5.427mg/L



## Sample

Sample Name: 280-44176-d-5  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

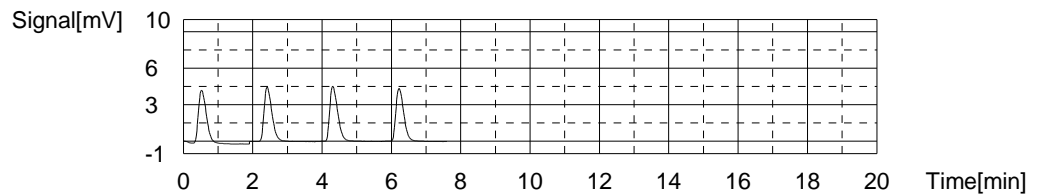
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.494mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.991	2.489mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 11:40:11 PM
2	7.003	2.493mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 11:42:14 PM
3	7.176	2.553mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 11:44:17 PM
4	6.850	2.440mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/18/2013 11:46:21 PM

Mean Area 7.005  
Mean Conc. 2.494mg/L



## Sample

Sample Name: MS 280-44176-d-5  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

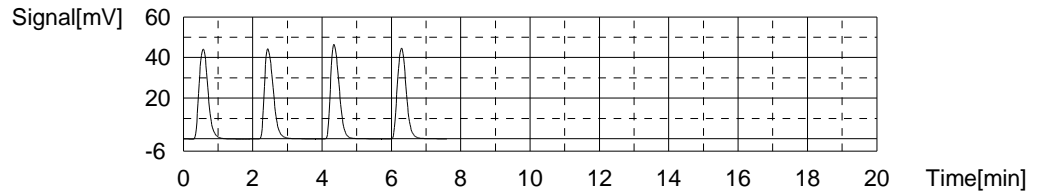
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:28.18mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.24	28.40mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:08:46 AM
2	79.47	27.78mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:10:50 AM
3	80.81	28.25mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:12:53 AM
4	80.92	28.29mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:14:57 AM

Mean Area 80.61  
Mean Conc. 28.18mg/L



## Sample

Sample Name: MSD 280-44176-d-5  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

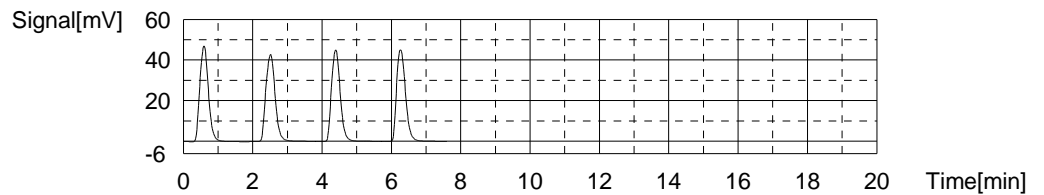
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:28.21mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.31	28.77mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:23:28 AM
2	80.00	27.96mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:25:31 AM
3	79.23	27.70mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:27:34 AM
4	81.32	28.43mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:29:38 AM

Mean Area 80.72  
Mean Conc. 28.21mg/L



## Sample

Sample Name: 280-44176-d-6  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

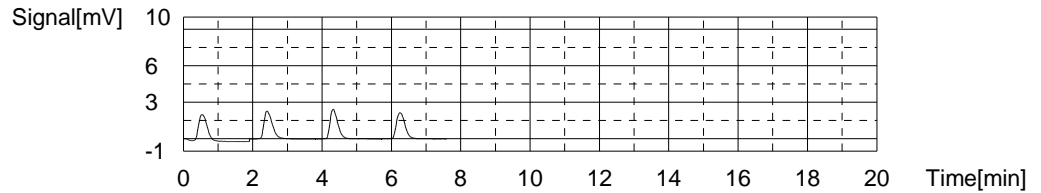
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.345mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.690	1.337mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:38:09 AM
2	3.804	1.377mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:40:12 AM
3	3.709	1.344mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:42:15 AM
4	3.649	1.323mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:44:19 AM

Mean Area 3.713  
Mean Conc. 1.345mg/L



## Sample

Sample Name: CCV  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

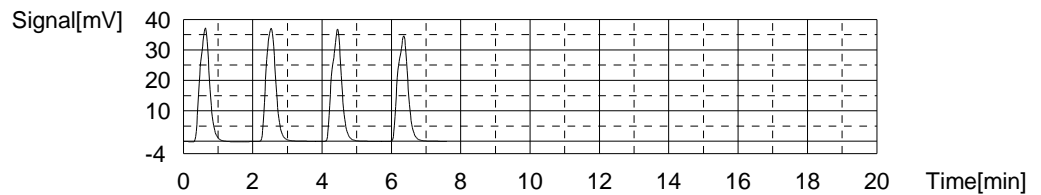
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.30mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.55	25.37mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:52:50 AM
2	73.07	25.55mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:54:54 AM
3	71.98	25.17mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:56:57 AM
4	71.87	25.13mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 10:59:01 AM

Mean Area 72.37  
Mean Conc. 25.30mg/L



## Sample

Sample Name: CCB  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

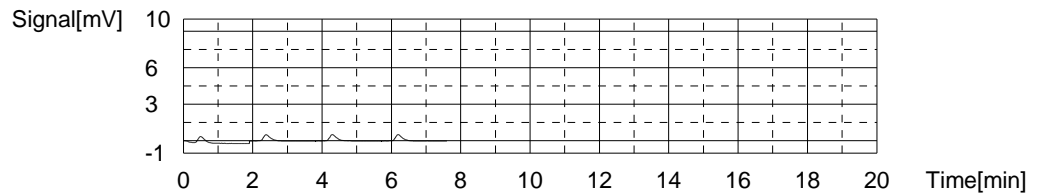
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2832mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6322	0.2699mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:07:32 AM
2	0.6853	0.2884mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:09:35 AM
3	0.6844	0.2881mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:11:38 AM
4	0.6788	0.2862mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:13:42 AM

Mean Area 0.6702  
Mean Conc. 0.2832mg/L



## Sample

Sample Name: 280-44300-b-2  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

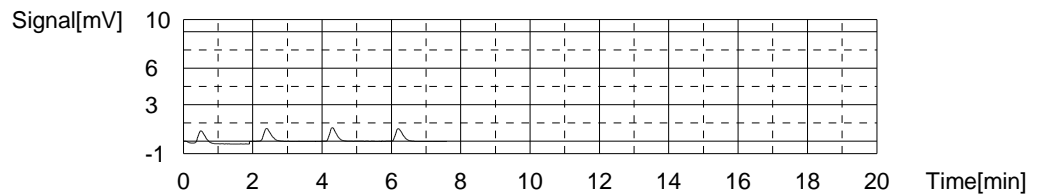
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.5804mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.458	0.5581mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:22:13 AM
2	1.547	0.5891mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:24:16 AM
3	1.536	0.5853mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:26:20 AM
4	1.547	0.5891mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:28:23 AM

Mean Area 1.522  
Mean Conc. 0.5804mg/L



## Sample

Sample Name: 280-44300-b-3  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

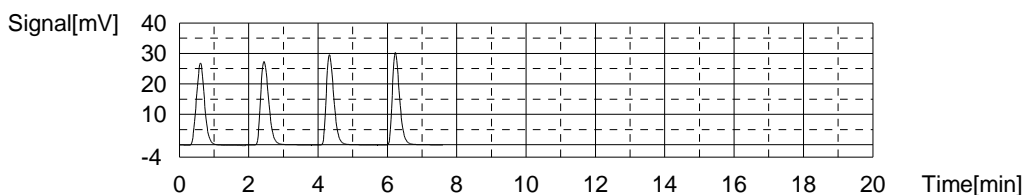
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:15.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	44.81	15.69mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:36:54 AM
2	44.80	15.68mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:38:57 AM
3	45.05	15.77mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:41:00 AM
4	44.63	15.62mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:43:03 AM

Mean Area 44.82  
Mean Conc. 15.69mg/L



## Sample

Sample Name: 280-44300-b-4  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

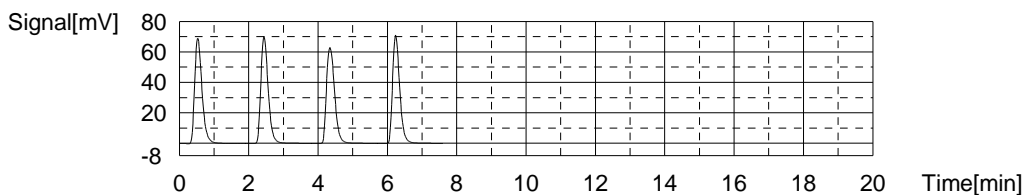
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:36.20mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	103.4	36.13mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:51:36 AM
2	104.6	36.55mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:53:39 AM
3	103.2	36.06mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:55:42 AM
4	103.2	36.06mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 11:57:46 AM

Mean Area 103.6  
Mean Conc. 36.20mg/L



## Sample

Sample Name: 280-44300-b-5  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.234mg/L

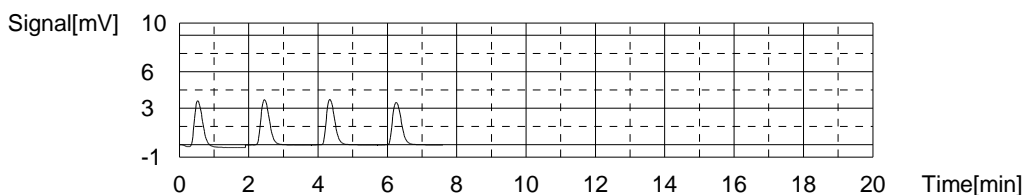
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.256	2.232mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:06:17 PM
2	6.346	2.264mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:08:20 PM
3	6.225	2.221mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:10:23 PM
4	6.217	2.219mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:12:27 PM



Mean Area 6.261  
Mean Conc. 2.234mg/L



Sample

Sample Name: 280-44300-b-6  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

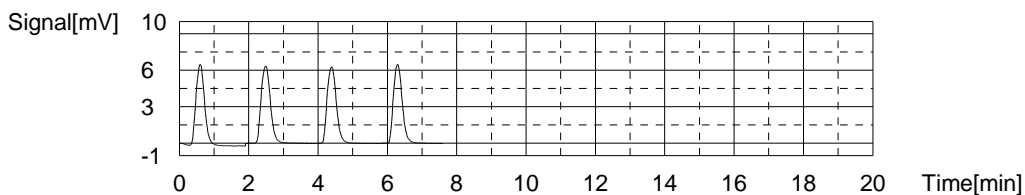
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.092mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.49	4.059mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:20:59 PM
2	11.74	4.146mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:23:02 PM
3	11.59	4.094mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:25:05 PM
4	11.52	4.069mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:27:08 PM

Mean Area 11.59  
Mean Conc. 4.092mg/L



Sample

Sample Name: CCV  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

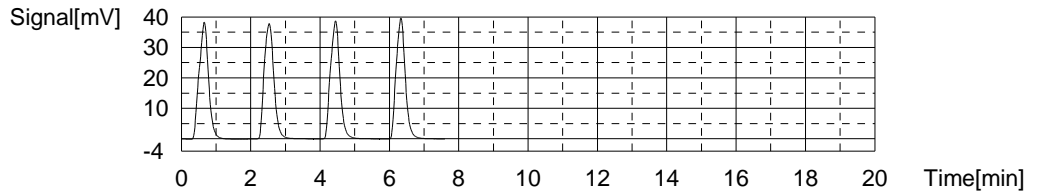
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:25.81mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.05	25.89mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:35:42 PM
2	74.02	25.88mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:37:45 PM
3	73.77	25.79mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:39:48 PM
4	73.50	25.70mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013_07_09_13_58_57	7/19/2013 12:41:52 PM

Mean Area 73.84  
Mean Conc. 25.81mg/L



Sample

Sample Name: CCB  
Sample ID:  
Origin: TOC 2012A.met  
Status: Completed  
Chk. Result

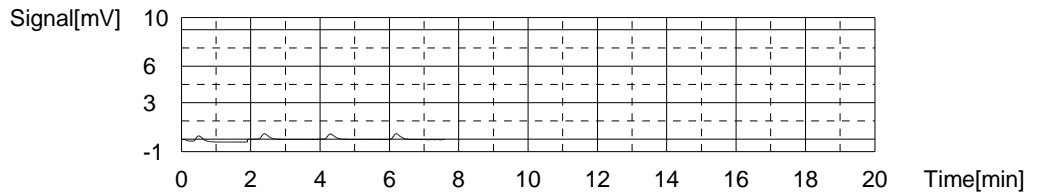
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2683mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5896	0.2550mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57	7/19/2013 12:50:24 PM
2	0.6256	0.2676mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57	7/19/2013 12:52:27 PM
3	0.6201	0.2657mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57	7/19/2013 12:54:30 PM
4	0.6747	0.2847mg/L	50uL	1		0 TO 50 CAL TOC 2012A.2013 07 09 13 58 57	7/19/2013 12:56:34 PM

Mean Area 0.6275  
Mean Conc. 0.2683mg/L



Date of Creation 7:39:21 AM 5/14/2012  
 User ELKIN  
 System TOC-VPCN

Cal. Curve

Sample Name: CAL  
 Sample ID:  
 Cal. Curve: 0 TO 50 CAL TOC 2012A.2013\_07\_09\_13\_58\_56.cal  
 Status Completed  
 Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000ppm

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.000	50uL	1	*****	E	7/9/2013 2:06:37 PM
2	0.1632	50uL	1	*****		7/9/2013 2:08:40 PM
3	0.1204	50uL	1	*****		7/9/2013 2:10:43 PM

Acid Add. 1.500%  
 Sp. Time 90.00sec  
 Mean Area 0.1418  
 SD Area 0.03026  
 CV Area 21.34%  
 Vial 88

Conc: 1.000ppm

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.926	50uL	1	*****		7/9/2013 2:19:19 PM
2	3.026	50uL	1	*****		7/9/2013 2:21:22 PM

Acid Add. 1.500%  
 Sp. Time 90.00sec  
 Mean Area 2.976  
 SD Area 0.07071  
 CV Area 2.38%  
 Vial 89

Conc: 5.000ppm

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	13.88	50uL	1	*****		7/9/2013 2:29:59 PM
2	14.18	50uL	1	*****		7/9/2013 2:32:02 PM

Acid Add. 1.500%  
 Sp. Time 90.00sec  
 Mean Area 14.03  
 SD Area 0.2121  
 CV Area 1.51%  
 Vial 90

Conc: 10.00ppm

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	27.89	50uL	1	*****		7/9/2013 2:40:39 PM
2	28.49	50uL	1	*****		7/9/2013 2:42:42 PM

Acid Add. 1.500%  
 Sp. Time 90.00sec  
 Mean Area 28.19  
 SD Area 0.4243  
 CV Area 1.51%  
 Vial 91

Conc: 25.00ppm

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	70.62	50uL	1	*****		7/9/2013 2:51:19 PM
2	71.88	50uL	1	*****		7/9/2013 2:53:22 PM

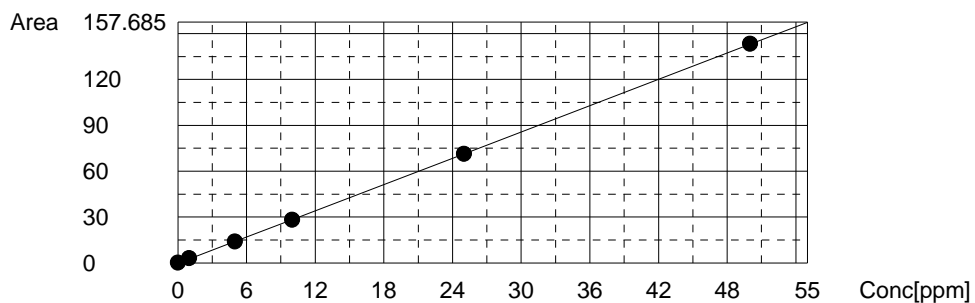
Acid Add. 1.500%  
 Sp. Time 90.00sec  
 Mean Area 71.25  
 SD Area 0.8910  
 CV Area 1.25%  
 Vial 92

Conc: 50.00ppm

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	141.9	50uL	1	*****		7/9/2013 3:01:59 PM
2	144.8	50uL	1	*****		7/9/2013 3:04:02 PM

Acid Add. 1.500%  
 Sp. Time 90.00sec  
 Mean Area 143.4  
 SD Area 2.051  
 CV Area 1.43%  
 Vial 93

Slope: 2.866  
 Intercept -0.1413  
 r<sup>2</sup> 0.999975  
 r 0.999988  
 Zero Shift No



TestAmerica Denver Wet Chemistry Data Review Checklist  
For Titration Methods

ANALYTE: Alkalinity ANALYST: MPS ANALYSIS DATE: 6/27/13 SOP: WC0025

Lot / Sample Numbers	Matrix	Prep Batch	Batch	Method	Special Inst
43753 #1-2	water	NA	180826	2320B	Q4
43749 #1-3					FF ✓
43767 #1					NA
43712 #1					FF ✓
43108 #3	✓	✓	✓	✓	HTV 6/25
43702 #7	✓	✓	✓	✓	POE

MPS 6/27/13

A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Was the normality of the titrant verified and found acceptable?	✓	by CoA		✓
B. Sample Results				
1. Are all sample dilutions appropriate and do associated RLs/MDLs reflect required dilutions or limited sample volume?			✓	✓
2. All reported results bracketed by in control CCV/CCB?	✓			
3. Sample analyses done within holding time?		✓	see NCM	
4. Initial pH check documented for all samples (if required)?			✓	
5. Preparation benchsheet completed and included in package (if applicable)?			✓	
6. Special client requirements checked?	✓			
7. Was data manually transcribed from instrument printouts into TALS verified 100% including significant figures? (If Applicable)			✓	
8. Do the prep and analysis dates in TALS reflect the actual dates?	✓			
9. STD/True Value information is updated and included?	✓			
10. Raw data copies prepared, scanned, and uploaded?	✓			
C. Preparation/Matrix QC				
1. Method blank < RL or all reported samples > 10x blank have NCM?	✓			
2. Method blank < 1/2 RL or NCM provided?	✓			
3. LCS/LCSD run for batch and within QC limits?	✓			
4. MS/MSD run at required frequency and within limits or NCM written?			✓	
5. DUP run at required frequency and RPD within 20% or NCM written?	✓			

Analyst: MPS Date: 6/27/13

Comments: HTV- req. l etc - 143705 - this sample was due the same day it was added with no rush designation.

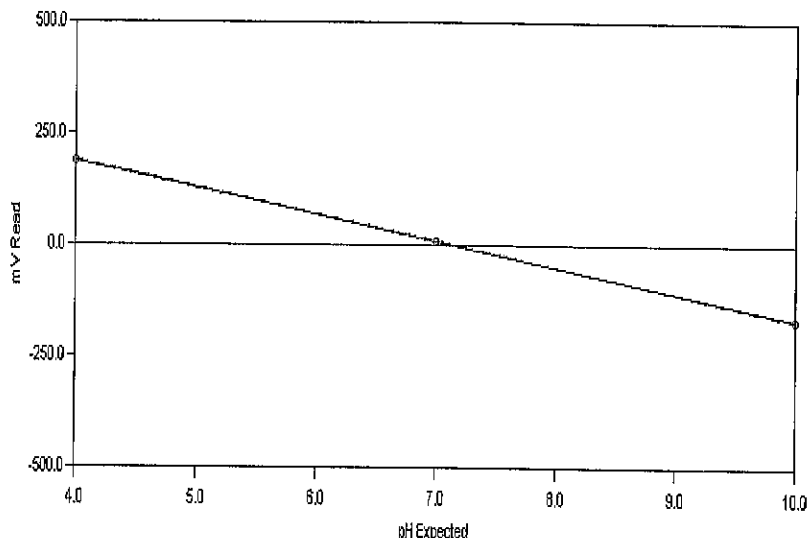
2nd Level Reviewer: [Signature] Date: 6/29/13

Comments: \_\_\_\_\_

6/25  
(7/8)

# PC-Titration PLUS Calibration Report

## Calibration Record # 416



**Calibration Settings**

Calibration ID	PH	Date	6/27/2013
Channel	1	Time	2:05 PM
Probe Type	pH	Temperature	296.95 K    23.80 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

**Calibration Results**

Slope	-59.670	CorrCoeff	1.0000
Intercept	8.870	Equation:	$Y = (-59.670) X + ( 8.870 )$

**Calibration Validity**    True

Operator

	Result	Minimum	Maximum
<b>Slope</b>	-59.670	-65.00	-53.00
<b>Intercept</b>	8.870	-100.00	100.00
<b>Correlation Coefficient</b>	1.0000	0.99	1.00

Note: "True" means the calibration was within the specified ranges  
 "False" means the calibration was NOT within the specified ranges

Calibration Data	Standard	Reading
	4.00	188.23
	7.00	8.17
	10.00	-169.79

**Test America**

**Water Analysis Report**

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	calc-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2 Conc (N)
Rinse	6/27/2013	2:18 PM	23.73	-1.00	6.58	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Buffer 7	6/27/2013	2:23 PM	23.60	-1.00	7.02	0.00	1,560.68	1,560.68	0.00	0.00	0.00	15.61	-1.00
Initial Check	6/27/2013	2:28 PM	23.56	-1.00	10.60	92.29	195.41	10.82	184.58	0.00	0.92	1.95	-1.00
LCS	6/27/2013	2:32 PM	23.52	-1.00	10.61	95.35	190.81	.12	190.69	0.00	0.95	1.91	-1.00
LCSD	6/27/2013	2:37 PM	23.64	-1.00	10.61	92.22	211.20	26.76	184.44	0.00	0.92	2.11	-1.00
MB	6/27/2013	2:41 PM	24.02	-1.00	7.07	0.00	1.24	1.24	0.00	0.00	0.00	0.03	0.05
280-43753-A-1	6/27/2013	2:45 PM	22.52	-1.00	7.55	0.00	243.28	243.28	0.00	0.00	0.00	2.43	-1.00
du 280-43753-A-1	6/27/2013	2:50 PM	22.22	-1.00	7.54	0.00	243.94	243.94	0.00	0.00	0.00	2.44	-1.00
280-43753-A-2	6/27/2013	2:53 PM	22.08	-1.00	6.25	0.00	.97	.97	0.00	0.00	0.00	.03	0.05
280-43749-A-1	6/27/2013	2:58 PM	22.83	-1.00	7.13	0.00	329.20	329.20	0.00	0.00	0.00	3.29	-1.00
280-43749-A-2	6/27/2013	3:03 PM	23.27	-1.00	7.46	0.00	433.93	433.93	0.00	0.00	0.00	4.34	-1.00
280-43749-A-3	6/27/2013	3:07 PM	23.52	-1.00	7.63	0.00	379.39	379.39	0.00	0.00	0.00	3.79	-1.00
280-43767-D-1	6/27/2013	3:12 PM	23.31	-1.00	8.49	9.63	500.07	480.81	19.26	0.00	0.10	5.00	-1.00
280-43712-A-1	6/27/2013	3:18 PM	23.01	-1.00	7.36	0.00	372.55	372.55	0.00	0.00	0.00	3.73	-1.00
280-43702-A-7	6/27/2013	3:23 PM	23.01	-1.00	6.95	0.00	639.36	639.36	0.00	0.00	0.00	6.39	-1.00
280-43108-E-3	6/27/2013	3:27 PM	23.33	-1.00	7.21	0.00	123.05	123.05	0.00	0.00	0.00	1.23	-1.00
CCV	6/27/2013	3:32 PM	23.76	-1.00	10.56	93.46	201.93	15.00	186.93	0.00	0.93	2.02	-1.00
CCB	6/27/2013	3:36 PM	24.22	-1.00	7.08	0.00	1.97	1.97	0.00	0.00	0.00	.04	0.06

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Batch Number: 180677 Batch Start Date: 06/26/13 10:29 Batch Analyst: Kudla, Ewa M

Batch Method: 9056A Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	IC CAL INT1 00217	IC daily cal 01137	IC ICV weekly 00210		
ICV 280-180677/1		9056A		5 mL			0.4 mL		
MRL 280-180677/3		9056A		5 mL	0.02 mL				
LCS 280-180677/4		9056A				5 mL			
LCSD 280-180677/5		9056A				5 mL			
CCV 280-180677/17		9056A				5 mL			
CCV 280-180677/29		9056A				5 mL			
CCV 280-180677/41		9056A				5 mL			

Batch Notes	
Eluent 1 Lot	m130307
Filter Lot #	kima6962-3106
Pipette ID	wc5000-ic, wc1000-u, wc100-c

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.



GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Batch Number: 180678 Batch Start Date: 06/26/13 10:29 Batch Analyst: Kudla, Ewa M

Batch Method: 9056A Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	CalcMsg	IC CAL INT1 00217	IC daily cal 01137	IC ICV weekly 00211	
ICV 280-180678/1		9056A		5 mL	Not Calculated. Perform Calculation left blank			0.4 mL	
ICB 280-180678/2		9056A			Not Calculated. Perform Calculation left blank				
MRL 280-180678/3		9056A		5 mL	Not Calculated. Perform Calculation left blank	0.02 mL			
LCS 280-180678/4		9056A			Not Calculated. Perform Calculation left blank		5 mL		
LCSD 280-180678/5		9056A			Not Calculated. Perform Calculation left blank		5 mL		
MB 280-180678/6		9056A			Not Calculated. Perform Calculation left blank				
280-43753-A-1	B035M0409LA	9056A	T		Not Calculated. Perform Calculation left blank				
280-43753-A-2	062513LE	9056A	T		Not Calculated. Perform Calculation left blank				
CCV 280-180678/17		9056A			Not Calculated. Perform Calculation left blank		5 mL		
CCB 280-180678/18		9056A			Not Calculated. Perform Calculation left blank				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Batch Number: 180678 Batch Start Date: 06/26/13 10:29 Batch Analyst: Kudla, Ewa M

Batch Method: 9056A Batch End Date: \_\_\_\_\_

Batch Notes	
Batch Comment	wc5000-ic, wc1000-u, wc100-c
Eluent 1 Lot	m130307
Filter Lot #	k1ma6962-3106

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Batch Number: 183453 Batch Start Date: 07/18/13 17:58 Batch Analyst: Bandy, Darlene F

Batch Method: 9060A Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	Initial pH	TOC ICV Std 00016	TOC LCS Std 00018		
ICV 280-183453/1		9060A		50 mL		1 mL			
LCS 280-183453/3		9060A		200 mL			5 mL		
LCSD 280-183453/4		9060A		200 mL			5 mL		
280-43753-B-1	B035M0409IA	9060A	T		<2 SU				
280-43753-B-2	062513LE	9060A	T		<2 SU				
CCV 280-183453/16		9060A		200 mL			5 mL		

Batch Notes	
Batch Comment	0.2% H2SO4_00107, H2SO4_00052
Pipette ID	WC-5000-B, WC-1000-H

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-43753-1

SDG No.: \_\_\_\_\_

Batch Number: 180826 Batch Start Date: 06/27/13 14:18 Batch Analyst: Smith, Matthew P

Batch Method: SM 2320B Batch End Date: 06/27/13 15:36

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00338			
LCS 280-180826/4		SM 2320B		InitialAmount is blank	10 mL			
LCSD 280-180826/5		SM 2320B		InitialAmount is blank	10 mL			
MB 280-180826/6		SM 2320B		InitialAmount is blank				
280-43753-A-1	B035M0409LA	SM 2320B	T	InitialAmount is blank				
280-43753-A-1 DU	B035M0409LA	SM 2320B	T	InitialAmount is blank				
280-43753-A-2	062513LE	SM 2320B	T	InitialAmount is blank				
CCV 280-180826/17		SM 2320B		InitialAmount is blank	10 mL			
CCB 280-180826/18		SM 2320B		InitialAmount is blank				

Batch Notes	
pH Buffer 1 ID	pH 4.0 Buffer_00094
pH Buffer 2 ID	pH 7.0 Buffer_00096
pH Buffer 3 ID	pH 10 Buffer_00074
pH Buffer 4 ID	pH 7.0 ICV_00051
First End time	15:36
Sulfuric Acid Lot Number	0.02 H2SO4_00108
Sulfuric Acid Vendor	Ricca
Nominal Amount Used	10.0 mL
Probe ID	PCE-86-PH1105
First Start time	14:18
Normality of first Titrant	0.0200 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Shipping and Receiving Documents



280-43753 Chain of Custody

0.7 SKIPS  
6/26/13

# AFCEC CHAIN OF CUSTODY RECORD

COC#: 1\_SDG#: 292 Cooler ID: A

Ship to: Elaine Walker Test America Laboratories, Inc. 4955 Yarrow Street Arvada, Colorado Tel: 303-736-0156 Carrier: Test America Inc. courier.	Project Name: Griffiss AFB B 35 LTM Sampler Name: Daniel Baldyga Send Results to: Daniel Baldyga FPM Remediations, Inc. 584 Phoenix Drive Rome, NY 13441 Phone: (315) 336-7721 Ext. 207
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### Analyses Requested

Field Sample ID	Location ID (LOCID)	Date	Time	MATRIX	SMCODE	SBD/SED	SACODE	Preservative	Filter/Unfilt.	No. of Containers	VOCs Note 1 40 mL vial (HCl)	Anions, note 2 500 mL poly	TOC note 3 250 mL amber (H <sub>2</sub> SO <sub>4</sub> )	Comments
B035M0409LA	B035MW04	6/25	1600	WG	LF	0/0	N	HCl	Unf.	6	3	1	2	
06 2513LE	FIELDQC	6/25	1615	WQ	LF	0/0	EB	HCl	Unf.	6	3	1	2	
062513LF	FIELDQC	6/25	1505	WQ	LF	0/0	AB	HCl	Unf.	3	3	-	-	
062513LR	FIELDQC	6/25	0855	WQ	LF	0/0	TB	HCl	Unf.	2	2	-	-	

ALL MONITORING WELLS GROUNDWATER ELEVATIONS SHOULD BE MEASURED.

Sample Condition Upon Receipt at Laboratory:  
 Special Instructions/Comments: Analyses to be conducted in compliance with AFCEE QAPP 4.0  
 Note 1: VOC: method SW 8260; Target COCs: PCE, TCE, DCE, Vinyl Chloride and Chloroform.  
 Note 2: Anions: SW9056 CHLORIDE, SULFATE AND NITRATE ONLY  
 Note 3: TOC: SW9060.  
 Note 4: Alkalinity: SM2320B.

#1 Released by: (Sig) Company Name:	Date: Time:	#2 Released by: (Sig) Company Name: FPM Remediations, Inc.	Date: 6/25/13 Time: 1630	#3 Released by: (Sig) Company Name: FPM Remediations, Inc.	Date: 6-25-13 Time: 1900
#1 Received by: (Sig) Company Name: FPM Remediations, Inc.	Date: Time:	#2 Received by: (Sig) Company Name: FPM Remediations, Inc.	Date: 6-25-13 Time: 1630	#3 Received by: (Sig) Company Name: FPM Remediations, Inc.	Date: 6/26/13 Time: 0915

### MATRIX

WG = Ground water  
 WQ = Water Quality Control Matrix  
 SO = Soil

### SMCODE

B = Bailor  
 G = Grab (only for EB).  
 NA = Not Applicable (only for AB/TB)  
 PP = Peristaltic Pump

### SACODE

N = Normal Sample  
 AB = Ambient Blank  
 TB = Trip Blank  
 EB = Equipment Blank

BP = Bladder Pump  
SP = Submersible Pump  
SS = Split spoon

FD = Field Duplicate  
MS = Matrix Spike  
SD = Matrix Spike Duplicate

## Login Sample Receipt Checklist

Client: FPM Remediations Inc

Job Number: 280-43753-1

**Login Number: 43753**  
**List Number: 1**  
**Creator: Bindel, Aaron M**

**List Source: TestAmerica Denver**

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	
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?	False	Field on COC is blank.
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	