Technical Memorandum
Groundwater Quality Sampling, July 2012 Event

Date: 13 November 2012

To: Amy Blain
City of Longview

From: Steve Misner
Kennedy/Jenks Consultants

Subject: City of Longview
Groundwater Quality Sampling Results, July 2012 Monitoring Event
K/J 0997003*01

This memorandum summarizes the results of the groundwater monitoring and sampling event conducted in July 2012 for the Mint Farm Industrial Park well field area (Mint Farm). The groundwater monitoring and sampling is conducted on a semiannual basis to establish background water quality in the well field area prior to initiation of full scale water production from the Mint Farm wellfield. Groundwater samples are collected from deep sentinel wells DW-1, DW-2, DW-5, DW-6, DW-7, and DW-9 during each pre-operating semiannual sampling event. These wells were selected based on their locations relative to the industrial facilities in the vicinity of the Mint Farm and their ability to detect potential contaminant migration from those industries. Groundwater monitoring will continue during full-scale water production, most likely on a semiannual basis.

ACTIVITIES CONDUCTED DURING THE JULY 2012 MONITORING EVENT

Activities completed during this groundwater monitoring event were conducted in general accordance with *Technical Memorandum 2, Water Quality Sampling Protocol* (Kennedy/Jenks, 28 April 2009). Activities included:

- Collect groundwater samples from deep sentinel wells DW-1, DW-2, DW-5, DW-6, DW-7 and DW-9 on 24 through 27 July 2012. The groundwater samples were collected following well purging to stabilize pH, temperature, conductivity, and dissolved oxygen levels.
- Submit the groundwater samples to ALS Environmental (ALS), a certified laboratory for analysis for constituents identified based on drinking water regulations, historical activities in the area, unregulated contaminants of emerging concern, and local industrial activity.
- Download water level data from the pressure transducers in all of the sentinel wells except DW-5, which is not currently equipped with a pressure transducer.
- Process the downloaded transducer data, developing shallow and deep groundwater elevation contour maps for 8 March 2012, and generating hydrographs for the wells for summer 2009 through early summer 2012.
- Prepare this summary technical memorandum.

RESULTS OF GROUNDWATER MONITORING

Groundwater Elevation Contour Maps and Hydrographs

Water level data is continuously collected in each sentinel well using pressure transducers. Although water level data was most recently downloaded from the transducers in July 2012, the data must be evaluated and corrected to account for the tidal influence. March 2012 was chosen as a representative data set for the purpose of reporting dampened conditions for the reporting period because the water levels were relatively stable at that time. Figures 1 and 2, respectively, are shallow aquifer and deep aquifer groundwater elevation contour maps representing a snapshot of conditions on 8 March 2012. The method for deriving the groundwater elevations is described in detail in the *Preliminary Design Report (PDR Part 2) for the City of Longview (City) Mint Farm Regional Water Treatment Plant and Well Field, Part 2A: Hydrogeologic Characterization of the Mint Farm Area* (Kennedy/Jenks, March 2010).

An evaluation of the groundwater elevation contours derived from measurements obtained on 8 March 2012 shows that groundwater in the shallow system primarily flows radially toward the CDID drainage ditches around the Mint Farm area. An evaluation of the deep aquifer groundwater elevation contours for the 8 March 2012 period indicates that the gradient in the vicinity of the wellfield is relatively low, with a predominant flow direction toward the east. However, in the south-central portion of the Mint Farm area a slight mounding is inferred by groundwater levels which cause localized variations in flow direction.

The groundwater hydrographs for all of the shallow sentinel wells are presented in Figure 3 and the hydrographs for all of the deep sentinel wells are presented in Figure 4.

Groundwater Sampling Results

The laboratory analytical reports for the groundwater samples collected during the July 2012 sampling event are included on compact disc in Attachment A.

Iron and manganese were detected in the groundwater samples at levels that exceed the Washington Department of Health (DOH) secondary water quality standard for these constituents. Although these constituents are not regulated as a health concern, DOH regulates them in drinking water due to their aesthetic character. No other analytes were detected in groundwater samples at concentrations above their respective screening levels.

DATA QUALITY

Based on a review of the laboratory reports, it is our opinion that the analytical data are of acceptable quality for their intended use. A laboratory case narrative prepared by ALS is included as part of the lab reports in Attachment A.

FUTURE SAMPLING ACTIVITIES

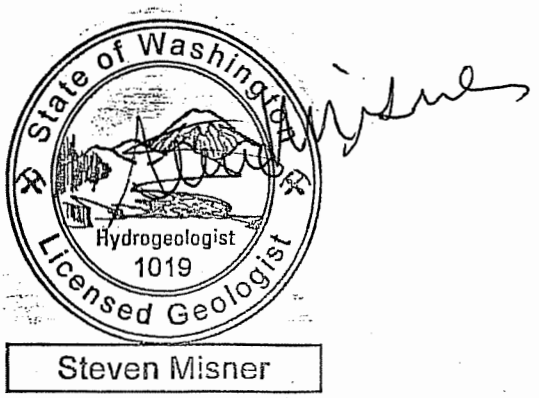
To establish baseline water quality prior to full scale production from the Mint Farm wellfield, groundwater monitoring will be conducted in late November, 2012 before commissioning the Mint Farm Regional Water Treatment Plant. After the Mint Farm Regional Water Treatment Plant is placed into

service, ongoing groundwater monitoring will continue on a semiannual basis to confirm consistent raw water quality. Pressure transducer data will be downloaded periodically to evaluate any change in groundwater flow patterns.

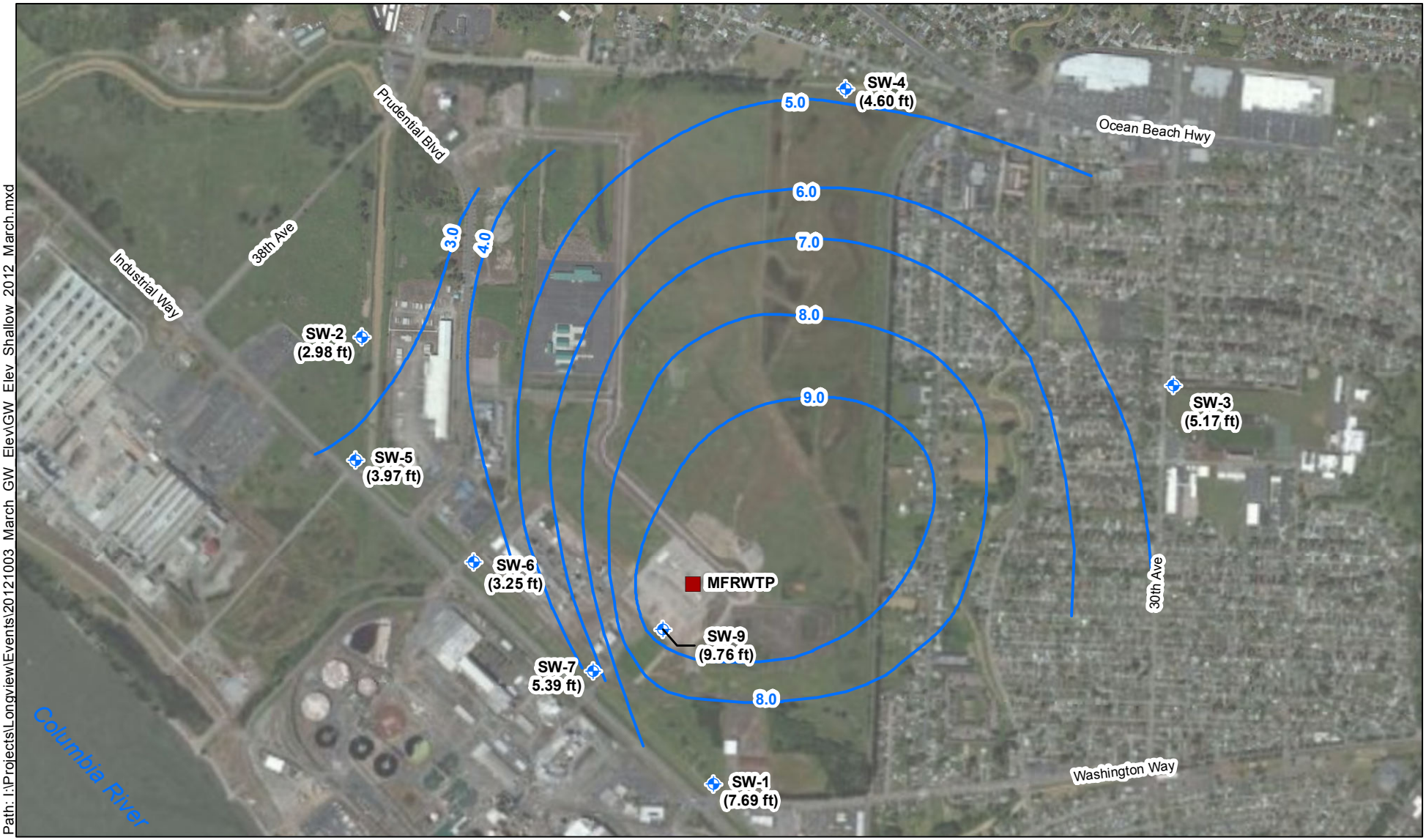
REFERENCES

Kennedy/Jenks Consultants, 2009. *Technical Memorandum 2, Water Quality Sampling Protocol.* Kennedy/Jenks Consultants, 28 April 2009.

Kennedy/Jenks Consultants, 2010. *Preliminary Design Report (PDR Part 2) for the City of Longview (City) Mint Farm Regional Water Treatment Plant and Well Field, Part 2A: Hydrogeologic Characterization of the Mint Farm Area.* Kennedy/Jenks Consultants, March 2010.



Figures



Path: I:\Projects\Longview\Events\20121003_March_GW_Elev\GW_Elev_Shallow_2012_March.mxd

Aerial Source: (c)2009 Microsoft Corporation

Legend

- Monitoring Well (Groundwater Elevation)
- Groundwater Contours (Dashed Where Approximate)

Note: Contours shown on this map represent the water level elevation for 03/08/2012.

N

0 600 1,200

Scale: Feet

Contour Interval: 1.0 Foot

Kennedy/Jenks Consultants

Mint Farm RWTP
Longview, Washington

Shallow Aquifer Groundwater Map
March 8, 2012 Groundwater Elevations

KJ 0997003*01

Figure 1

Path: I:\Projects\Longview\Events\20121003_March_GW_Elev\GW_Elev_Deep_2012_March.mxd

Aerial Source: (c)2009 Microsoft Corporation

Legend

- Monitoring Well (Groundwater Elevation)
- Groundwater Contours

Note: Contours shown on this map represent the water level elevations for 03/08/2012.

N

0 600 1,200

Scale: Feet

Contour Interval: 0.2 Foot

Kennedy/Jenks Consultants

Mint Farm RWTP
Longview, Washington

Deep Aquifer Groundwater Map
March 8, 2012 Groundwater Elevations

KJ 0997003*01

Figure 2

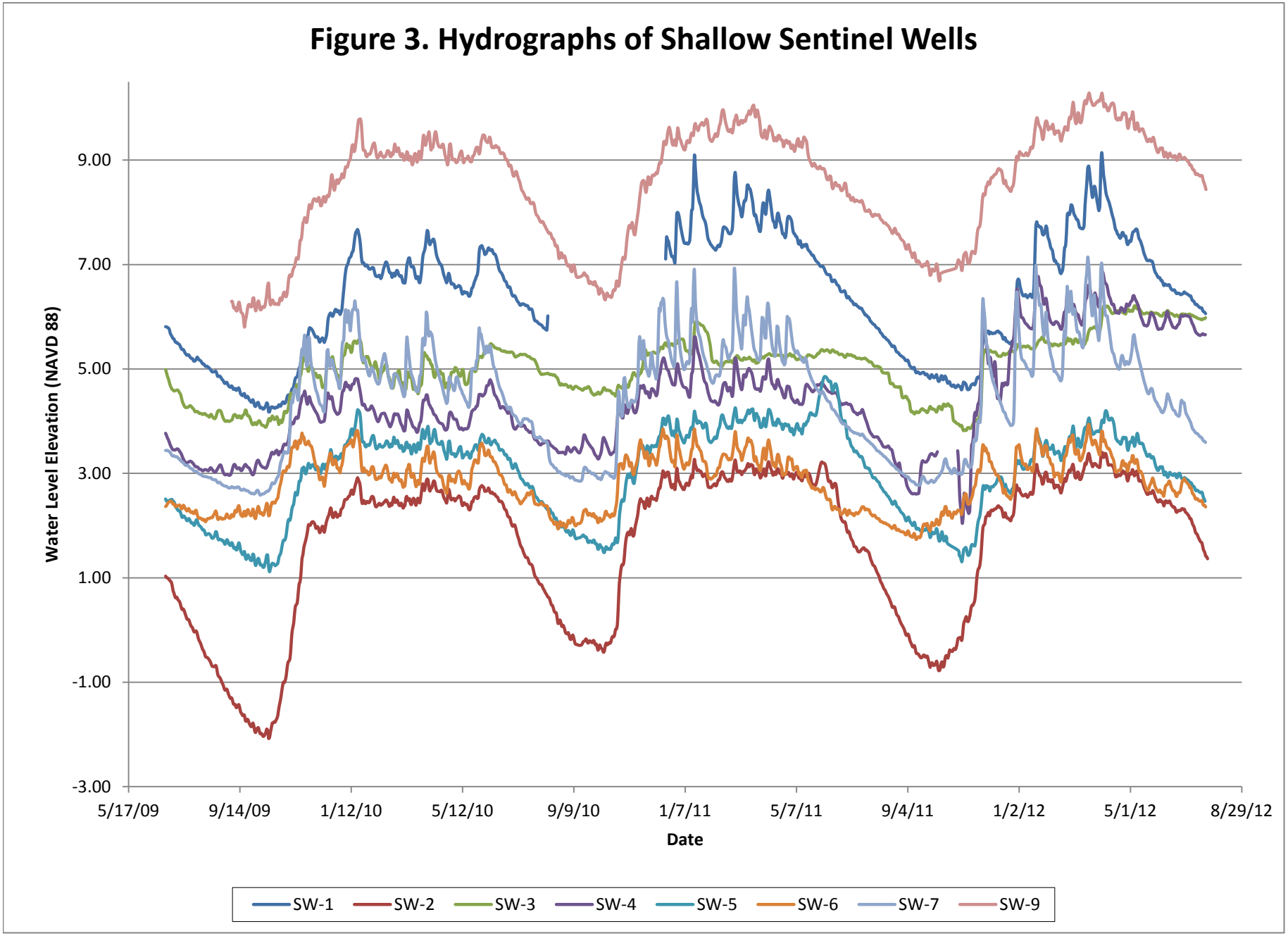


Figure 3. Hydrographs of Shallow Sentinel Wells
Water Level Elevation (NAVD 88)
9.00
7.00
5.00
3.00
1.00
-1.00
-3.00
5/17/09
9/14/09
1/12/10
5/12/10
9/9/10
1/7/11
5/7/11
9/4/11
1/2/12
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8/29/12
Date
SW-1
SW-2
SW-3
SW-4
SW-5
SW-6
SW-7
SW-9

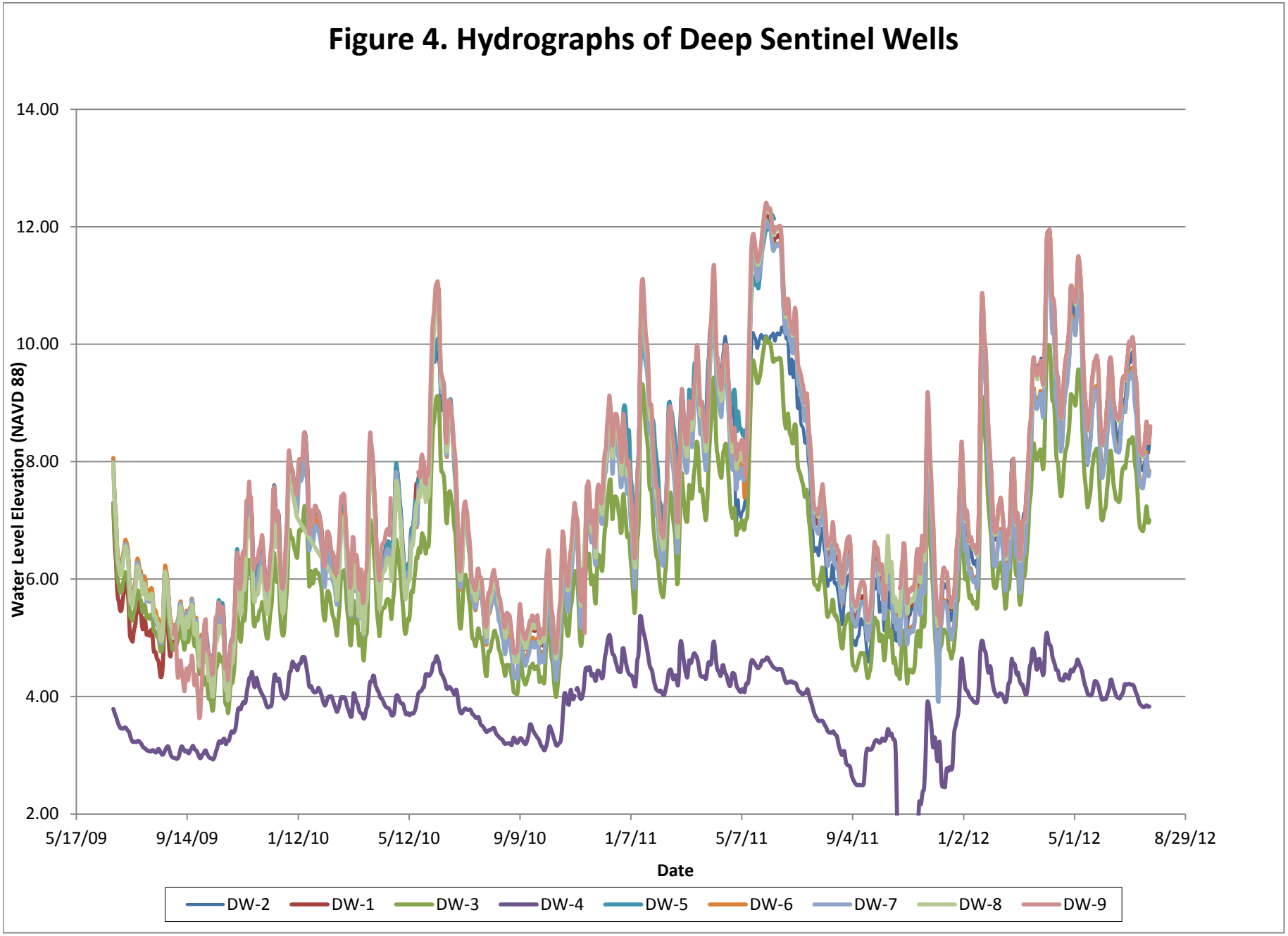
Figure 4. Hydrographs of Deep Sentinel Wells
14.00
12.00
10.00
8.00
6.00
4.00
2.00
Water Level Elevation (NAVD 88)
5/17/09
9/14/09
1/12/10
5/12/10
9/9/10
1/7/11
5/7/11
9/4/11
1/2/12
5/1/12
8/29/12
Date
DW-2
DW-1
DW-3
DW-4
DW-5
DW-6
DW-7
DW-8
DW-9

Attachment A

Laboratory Analytical Reports

August 29, 2012 Analytical Report for Service Request No: K1207165

Steven Misner
Kennedy/Jenks Consultants, Incorporated
200 SW Market St., Suite 500
Portland, OR 97201-5715

RE: Mint Farm

Dear Steven:

Enclosed are the results of the samples submitted to our laboratory on July 24, 2012. For your reference, these analyses have been assigned our service request number K1207165.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3363. You may also contact me via Email at Lisa.Domenighini@alsglobal.com.

Respectfully submitted,

Columbia Analytical Services, Inc. dba ALS Environmental

Lisa Domenighini
Project Manager

LD/lg

Columbia Analytical Services
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Columbia Analytical Services, Inc.
Part of the ALS Group A Campbell Brothers Limited Company

Environmental www.caslab.com ▪ www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2286
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L12-28
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Georgia DNR	http://www.gaepd.org/Documents/techguide_pcb.html#cel	881
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
Indiana DOH	http://www.in.gov/isdh/24859.htm	C-WA-01
ISO 17025	http://www.pjlabs.com/	L12-27
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	3016
Louisiana DHH	Not available	LA110003
Maine DHS	Not available	WA0035
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-368
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA35
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
New Mexico ED	http://www.nmenv.state.nm.us/dwb/Index.htm	-
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA200001
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	4704427-08-TX
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C1203
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.caslab.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.caslab.com or at the accreditation bodies web site

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

ALS ENVIRONMENTAL

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request No.:**	K1207165
Project:	Mint Farm	**Date Received:**	07/24/12-07/27/12
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Matrix/Duplicate Matrix Spike (MS/DMS), and Laboratory/Duplicate Laboratory Control Sample (LCS/DLCS).

Sample Receipt

Seven water samples and four trip blank samples were received for analysis at ALS Environmental on 07/24/12-07/27/12. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

General Chemistry Parameters

Chloride and Sulfate by EPA Method 300.0:
The control criteria for matrix spike recoveries of Chloride and Sulfate for sample Batch QC were not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

Fluoride by EPA Method 300.0:
The control criteria for matrix spike recoveries of Fluoride for sample DW-1 were not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

Total Cyanide by EPA Method 335.4:
The matrix spike recovery of Total Cyanide for sample Batch QC was outside control criteria because of suspected matrix interference. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicated the analytical batch was in control. No further corrective action was taken.

Dissolved Organic Carbon by Standard Method 5310 C:
The Relative Percent Difference (RPD) criterion for the replicate analysis of Dissolved Organic Carbon in sample DW-9 was not applicable because the analyte concentration was not significantly greater than the Method Reporting Limit (MRL). Analytical values derived from measurements close to the detection limit are not subject to the same accuracy and precision criteria as results derived from measurements higher on the calibration range for the method.

Fecal Coliform by Standard Method 9221 E:
In accordance with the 2007 EPA Methods Update Rule published in the Federal Register, the holding time for Fecal Coliform is 6 hours from sample collection. Samples DW-9 and DW-1 were analyzed as soon as possible after receipt by the laboratory.

No other anomalies associated with the analysis of these samples were observed.

Approved by_____

Total Metals

Matrix Spike Recovery Exceptions:
The control criteria for matrix spike recovery of Copper for the Batch QC1 sample were not applicable. The analyzed concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

No other anomalies associated with the analysis of these samples were observed.

EDB and DBCP by EPA Method 504.1

No anomalies associated with the analysis of these samples were observed.

Pesticides and Polychlorinated Biphenyls by EPA Method 508.1

Calibration Verification Exceptions:
The analysis of Chlorinated Pesticides by EPA 508.1 requires the use of dual column confirmation. When the Continuing Calibration Verification (CCV) criterion is met for both columns, the lower of the two sample results is generally reported. The primary evaluation criteria were not met on the confirmation column for Endrin. The results were reported from the column with an acceptable CCV. The data quality was not affected. No further corrective action was necessary.

Lab Control Sample Exceptions:
The upper control criterion was exceeded for Endrin in Laboratory Control Sample (LCS) KWG1208716-3. The analyte in question was not detected in the associated field samples. The error associated with elevated recovery indicated a high bias. The sample data was not significantly affected. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Chlorinated Acides by EPA Method 515.4

No anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 524.2

No anomalies associated with the analysis of these samples were observed.

Semivolatile Organic Compounds by EPA Method 525.2

Sample Notes and Discussion:
The upper control criterion was exceeded for Bis(2-ethylhexyl) phthalate in the MRL-level laboratory fortified blank. The advisory criterion is 50-150%. Recovery in the Laboratory Control Sample (LCS) was acceptable. The sample data were not significantly affected. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Carbamates and Carbamoyloximes by EPA Method 531.1

No anomalies associated with the analysis of these samples were observed.

Approved by_____

Glyphosate by EPA Method 547

No anomalies associated with the analysis of these samples were observed.

Endothall by EPA Method 548.1

No anomalies associated with the analysis of these samples were observed.

Diquat by High Performance Liquid Chromatography

No anomalies associated with the analysis of these samples were observed.

Dioxins and Furans by EPA Method 1613B

Dioxin and Furan analysis by EPA Method 1613B was performed at ALS Environmental laboratory in Houston, TX. The narrative for this analysis can be found in the corresponding section of this data package.

Hydrogen Sulfide

Hydrogen sulfide analysis was performed at ALS Environmental laboratory in Simi Valley, CA. The narrative for this analysis can be found in the corresponding section of this data package.

Radiochemistry

Radiochemistry analysis was performed at ACZ Laboratory. The narrative for this analysis can be found in the corresponding section of this data package.

Asbestos

Asbestos analysis was performed at LabCor. The narrative for this analysis can be found in the corresponding section of this data package.

Approved by_____

CHAIN OF CUSTODY

Columbia Analytical Services, Inc. 1317 S. 13th Ave.
Kelso, WA 98626 (360) 577-7222 **Service Request #** K1207165

Company: Kennedy/Jenks Consultants	PWS ID:
Address: 200 SW Market Street, Suite 500	PWS NAME: City of Longview
City: Portland State: Ore Zip: 97201	P.O./Project Name: Mint Farm
Tel: 503-295-4911 Fax: 503-295-4901 E-mail:stevenmisner@kennedyjenks.com	Project Manager: Janet Snedecor
Sampler(s) Name & Signature: Steve Misner Jeff Hart Aaron Lawler	Samples Chlorinated: Yes____ No__X__
	Compliance Sample: Yes____ No __X___ Report to State: Yes____ No__X___

Sample I.D.	Source Type (see table below)	Date sampled	Time Sampled	Number of Containers	Primary IOCs: (Check) or (All) □As □Ba □Be □Cd □Cr □Ag,Hg □Ni □Se □Na □Cyanide □Fluoride □Nitrate □Nitrite xSb xHg xTi	Primary IOCs: Lead/Copper	Secondary IOCs: (Check) □XAl □XFe □XMn □XAg □XZn □XCa □XMg □xChloride □XColor □XSulfate □XTDS □XHardness □XFoaming Agents □XConductivity X□Silica □XOPhosphate □Other K Alkalinity	Disinfection By-Products: Haloacetic Acids (HAA) 552.2	Trihalomethanes (TTHM) 524.2	□XTOC□Bromide□Bromate□Chlorite	Synthetic Organic Chemicals: Semi-Volatiles 525.2 □ Regulated □ Unregulated	Pesticides/PCBs 508.1	Volatiles 524.2 □Reg. □UnReg.	EDB/DBCP/TCP 504.1	Chlorinated Acids 515.4	Carbamates 531.1	□Glyphosate 547□Endothall 548.1	Diquat/Paraquat 549.2	Other Analysis (Specify)	Remarks:
DW-1	DW	7/26/12	1130		All X	X	All X		X	X	X	X	X	X	X	X	X	X	X	Please see below for other extra tests:
~~DW-2~~	~~DW~~				~~All X~~	~~X~~	~~All X~~		~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~Arsenic speciation needed~~
~~DW-5~~	~~DW~~				~~All X~~	~~X~~	~~All X~~		~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~Fecal coliform and E coli~~
~~DW-6~~	~~DW~~				~~All X~~	~~X~~	~~All X~~		~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~UV 254~~
DW-7	DW	7/26/12	1300		All X	X	All X		X	X	X	X	X	X	X	X	X	X	X	Alkalinity
~~DW-9~~	~~DW~~				~~All X~~	~~X~~	~~All X~~		~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	
Dup-1	DW	7/26/12	1200		All X	X	All X		X	X	X	X	X	X	X	X	X	X	X	

FH 7/26/12

Source Type
DW- Drinking Water
SW - Surface Water
RW - Raw Water
GW - Ground Water
TW - Treated Water

Relinquished by: [signature] Date/Time: 7/26/12	Received by: [signature] Date/Time: 7/26/12 1435
Relinquished by:_____ Date/Time:_____	Received by:_____ Date/Time:_____
Relinquished by:_____ Date/Time:_____	Received by:_____ Date/Time:_____

Special Instructions/Comments:

X Other Analysis:Dioxin needed, Radiochemistry to ACZ, Liquid Sulfur to CAS Tucson, Asbestos to LabCor

PC Lisa

Cooler Receipt and Preservation Form

Client / Project: Kennedy / Jenks Service Request *K12* 07165

Received: 7/26/12 Opened: 7/26/12 By: SMW Unloaded: 7/26/12 By: SMW

1. Samples were received via? *Mail* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Cooler Temp °C	Temp Blank °C	Thermometer ID	Cooler/COC ID NA	Tracking Number NA	Filed
8.9	9.6	376			
10.6	15.3	249			
11.0	20.1	287			
11.8	—	300			
13.7	16.3	276			

7. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
9. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA Y N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
11. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
12. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
13. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
14. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
15. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:
none	DW-1	process of elimination

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

SHORT HOLD TIME

Notes, Discrepancies, & Resolutions:

9 Trip Blanks, not on COC. (3 $Na_2S_2O_3$; 6 HCl/AAC)

PC Lisa

Cooler Receipt and Preservation Form

Client / Project: Kennedy / Jenks Service Request *K12* 07165

Received: 7/26/12 Opened: 7/26/12 By: SMW Unloaded: 7/26/12 By: SMW

1. Samples were received via? *Mail* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Cooler Temp °C	Temp Blank °C	Thermometer ID	Cooler/COC ID	NA	Tracking Number	NA	Filed
0.3	11.5	312					

7. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
9. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA Y N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
11. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
12. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
13. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
14. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
15. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/24/2012
Sample Matrix:	Water	**Date Received:**	7/24/2012

Coliform, Total

Prep Method:	NONE	Units:	MPN/100ml
Analysis Method:	SM 9223 B	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Time Test Started		Result	Result Notes
DW-9	K1207165-001	1.0	1	7/25/2012	09:54	hrs	ND	
DW-2	K1207165-003	1.0	1	7/25/2012	17:08	hrs	ND	
DW-5	K1207165-004	1.0	1	7/25/2012	17:08	hrs	ND	
DW-1	K1207165-006	1.0	1	7/26/2012	16:30	hrs	ND	
DW-7	K1207165-007	1.0	1	7/26/2012	16:30	hrs	ND	
Dup-1	K1207165-008	1.0	1	7/26/2012	16:30	hrs	ND	
DW-6	K1207165-010	1.0	1	7/26/2012	13:30	hrs	ND	

SM *Standard Methods for the Examination of Water and Wastewater* , 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	180.1	**Units:**	NTU
		Basis:	NA

Turbidity

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**1.70**	0.20	1	07/25/12 10:50	
DW-2	K1207165-003	**1.20**	0.20	1	07/25/12 17:00	
DW-5	K1207165-004	**0.74**	0.20	1	07/25/12 17:00	
DW-1	K1207165-006	**1.55**	0.20	1	07/26/12 16:18	
DW-7	K1207165-007	**1.66**	0.20	1	07/26/12 16:18	
Dup-1	K1207165-008	**2.22**	0.20	1	07/26/12 16:20	
DW-6	K1207165-010	**0.98**	0.20	1	07/27/12 13:15	
Method Blank	K1207165-MB1	ND	0.20	1	07/25/12 10:45	U
Method Blank	K1207165-MB2	ND	0.20	1	07/26/12 10:15	U
Method Blank	K1207165-MB3	ND	0.20	1	07/27/12 11:15	U

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	180.1	**Units:**	NTU
		Basis:	NA

Duplicate Sample Summary
Turbidity

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
DW-9	K1207165-001DUP5	0.20	1.70	1.67	1.69	2	20	07/25/12
DW-6	K1207165-010DUP11	0.20	0.98	1.00	0.991	2	20	07/27/12

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/25/12

Lab Control Sample Summary
Turbidity

Analysis Method: 180.1

Units: NTU
Basis: NA
Analysis Lot: 301862

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	3.59	3.97	90	82-101

COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/26/12

Lab Control Sample Summary
Turbidity

Analysis Method: 180.1

Units: NTU
Basis: NA
Analysis Lot: 301956

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS4	3.61	3.97	91	82-101

COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	07/27/12
Sample Matrix:	Water		

Lab Control Sample Summary
Turbidity

Analysis Method: 180.1

Units: NTU
Basis: NA
Analysis Lot: 302245

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS5	3.59	3.97	90	82-101

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Chloride

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**8.39**	0.40	2	07/25/12 02:36	
DW-2	K1207165-003	**15.7**	0.40	2	07/26/12 00:03	
DW-5	K1207165-004	**44.2**	2.0	10	07/26/12 09:32	
DW-1	K1207165-006	**4.63**	0.40	2	07/26/12 15:58	
DW-7	K1207165-007	**16.6**	0.40	2	07/26/12 16:11	
Dup-1	K1207165-008	**16.8**	0.40	2	07/26/12 16:24	
DW-6	K1207165-010	**48.3**	4.0	20	07/27/12 17:40	
Method Blank	K1207165-MB1	ND	0.20	1	07/24/12 07:08	U
Method Blank	K1207165-MB2	ND	0.20	1	07/24/12 18:23	U
Method Blank	K1207165-MB3	ND	0.20	1	07/25/12 06:42	U
Method Blank	K1207165-MB4	ND	0.20	1	07/25/12 15:51	U
Method Blank	K1207165-MB5	ND	0.20	1	07/26/12 07:07	U
Method Blank	K1207165-MB6	ND	0.20	1	07/27/12 07:51	U

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Duplicate Sample Summary
Chloride

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1207045-014DUP1	0.40	ND	ND	NC	NC	20	07/24/12
Batch QC	K1207121-001DUP3	0.40	1.66	1.66	1.66	<1	20	07/24/12
Batch QC	K1207148-001DUP4	0.40	ND	ND	NC	NC	20	07/24/12
Batch QC	K1207183-002DUP12	0.40	0.56	0.58	0.569	2	20	07/25/12
Batch QC	K1207183-014DUP13	0.40	1.80	1.77	1.79	2	20	07/25/12
Batch QC	K1207188-001DUP14	0.40	1.62	1.61	1.62	<1	20	07/26/12
Batch QC	K1207207-001DUP17	0.40	4.19	4.13	4.16	1	20	07/26/12
Batch QC	K1207278-001DUP25	2.0	56.0	55.2	55.6	1	20	07/27/12
Batch QC	KQ1208473-35DUP33	0.40	2.59	2.60	2.59	<1	20	07/24/12
Batch QC	KQ1208526-33DUP34	0.40	0.97	0.94	0.957	3	20	07/25/12

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207045-014	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207045-014MS1			Duplicate Matrix Spike K1207045-014DMS1					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	ND	3.59	4.00	90	3.61	4.00	90	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/24/12

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207121-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207121-001MS3			Duplicate Matrix Spike K1207121-001DMS3					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	1.66	5.57	4.00	98	5.55	4.00	97	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/24/12

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207148-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207148-001MS4			Duplicate Matrix Spike K1207148-001DMS4					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	ND	3.59	4.00	90	3.63	4.00	91	90-110	1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207183-002	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207183-002MS10			Duplicate Matrix Spike K1207183-002DMS10					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	0.56	4.22	4.00	92	4.23	4.00	92	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207183-014	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207183-014MS11			Duplicate Matrix Spike K1207183-014DMS11					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	1.80	10.8	10.0	90	10.8	10.0	90	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/26/12

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207188-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207188-001MS13			Duplicate Matrix Spike K1207188-001DMS13					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	1.62	5.60	4.00	100	5.60	4.00	100	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/26/12

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207207-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207207-001MS14			**Duplicate Matrix Spike** K1207207-001DMS14					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	4.19	8.62	4.00	111 *	8.62	4.00	111 *	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/27/12

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207278-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207278-001MS17			Duplicate Matrix Spike K1207278-001DMS17					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	56.0	78.8	20.0	114 *	79.4	20.0	117 *	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/24/12

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	KQ1208473-35	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike KQ1208473-35MS20			**Duplicate Matrix Spike** KQ1208473-35DMS20					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	2.59	6.70	4.00	103	6.70	4.00	103	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Chloride

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	KQ1208526-33	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike KQ1208526-33MS21			**Duplicate Matrix Spike** KQ1208526-33DMS21					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	0.97	4.75	4.00	94	4.72	4.00	94	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/24/12

Lab Control Sample Summary
Chloride

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301548

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	4.72	5.00	94	90-110
Lab Control Sample	K1207165-LCS4	4.60	5.00	92	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/25/12

Lab Control Sample Summary
Chloride

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301760

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS5	4.67	5.00	93	90-110
Lab Control Sample	K1207165-LCS6	4.64	5.00	93	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/26/12

Lab Control Sample Summary
Chloride

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301938

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS7	4.65	5.00	93	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/27/12

Lab Control Sample Summary
Chloride

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 302184

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS8	4.67	5.00	93	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Fluoride

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	ND U	0.40	2	07/25/12 02:36	
DW-2	K1207165-003	ND U	0.40	2	07/26/12 00:03	
DW-5	K1207165-004	ND U	0.40	2	07/26/12 00:16	
DW-1	K1207165-006	ND U	0.40	2	07/26/12 15:58	
DW-7	K1207165-007	ND U	0.40	2	07/26/12 16:11	
Dup-1	K1207165-008	ND U	0.40	2	07/26/12 16:24	
DW-6	K1207165-010	ND U	0.40	2	07/27/12 13:19	
Method Blank	K1207165-MB1	ND U	0.20	1	07/24/12 07:08	
Method Blank	K1207165-MB2	ND U	0.20	1	07/24/12 18:23	
Method Blank	K1207165-MB3	ND U	0.20	1	07/25/12 06:42	
Method Blank	K1207165-MB4	ND U	0.20	1	07/25/12 15:51	
Method Blank	K1207165-MB5	ND U	0.20	1	07/26/12 07:07	
Method Blank	K1207165-MB6	ND U	0.20	1	07/27/12 07:51	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/25/12
Sample Matrix:	Water	**Date Received:**	07/25/12
		Date Analyzed:	07/26/12

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	DW-1	**Units:**	mg/L
Lab Code:	K1207165-006	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K1207165-006DUP8 Result	Average	RPD	RPD Limit
Fluoride	300.0	0.40	ND	ND	NC	NC	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/12
Sample Matrix:	Water	**Date Received:**	07/25/12
		Date Analyzed:	07/26/12

Duplicate Matrix Spike Summary
Fluoride

Sample Name:	DW-1	**Units:**	mg/L
Lab Code:	K1207165-006	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207165-006MS8			Duplicate Matrix Spike K1207165-006DMS8					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Fluoride	ND	4.73	4.00	118 *	4.74	4.00	118 *	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	07/24/12
Sample Matrix:	Water		

Lab Control Sample Summary
Fluoride

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301548

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	17.2	17.2	100	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/25/12

Lab Control Sample Summary
Fluoride

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301760

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS4	17.1	17.2	100	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	07/26/12
Sample Matrix:	Water		

Lab Control Sample Summary
Fluoride

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301938

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS5	17.0	17.2	99	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	07/27/12
Sample Matrix:	Water		

Lab Control Sample Summary
Fluoride

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 302184

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS6	17.2	17.2	100	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Nitrite as Nitrogen

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	ND U	0.10	2	07/25/12 02:36	
DW-2	K1207165-003	ND U	0.10	2	07/26/12 00:03	
DW-5	K1207165-004	ND U	0.10	2	07/26/12 00:16	
DW-1	K1207165-006	ND U	0.10	2	07/26/12 15:58	
DW-7	K1207165-007	ND U	0.10	2	07/26/12 16:11	
Dup-1	K1207165-008	ND U	0.10	2	07/26/12 16:24	
DW-6	K1207165-010	ND U	0.10	2	07/27/12 13:19	
Method Blank	K1207165-MB1	ND U	0.050	1	07/24/12 07:08	
Method Blank	K1207165-MB2	ND U	0.050	1	07/24/12 18:23	
Method Blank	K1207165-MB3	ND U	0.050	1	07/25/12 06:42	
Method Blank	K1207165-MB4	ND U	0.050	1	07/25/12 15:51	
Method Blank	K1207165-MB5	ND U	0.050	1	07/26/12 07:07	
Method Blank	K1207165-MB6	ND U	0.050	1	07/27/12 07:51	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/25/12
Sample Matrix:	Water	**Date Received:**	07/25/12
		Date Analyzed:	07/26/12

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	DW-1	**Units:**	mg/L
Lab Code:	K1207165-006	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K1207165-006DUP8 Result	Average	RPD	RPD Limit
Nitrite as Nitrogen	300.0	0.10	ND	ND	NC	NC	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/12
Sample Matrix:	Water	**Date Received:**	07/25/12
		Date Analyzed:	07/26/12

Duplicate Matrix Spike Summary
Nitrite as Nitrogen

Sample Name:	DW-1	**Units:**	mg/L
Lab Code:	K1207165-006	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207165-006MS8			Duplicate Matrix Spike K1207165-006DMS8					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrite as Nitrogen	ND	4.39	4.00	110	4.38	4.00	109	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/24/12

Lab Control Sample Summary
Nitrite as Nitrogen

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301548

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	105	100	105	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/25/12

Lab Control Sample Summary
Nitrite as Nitrogen

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301760

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS4	106	100	106	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/26/12

Lab Control Sample Summary
Nitrite as Nitrogen

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301938

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS5	107	100	107	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/27/12

Lab Control Sample Summary
Nitrite as Nitrogen

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 302184

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS6	107	100	107	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Nitrate as Nitrogen

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	ND U	0.10	2	07/25/12 02:36	
DW-2	K1207165-003	ND U	0.10	2	07/26/12 00:03	
DW-5	K1207165-004	ND U	0.10	2	07/26/12 00:16	
DW-1	K1207165-006	ND U	0.10	2	07/26/12 15:58	
DW-7	K1207165-007	ND U	0.10	2	07/26/12 16:11	
Dup-1	K1207165-008	ND U	0.10	2	07/26/12 16:24	
DW-6	K1207165-010	ND U	0.10	2	07/27/12 13:19	
Method Blank	K1207165-MB1	ND U	0.050	1	07/24/12 07:08	
Method Blank	K1207165-MB2	ND U	0.050	1	07/24/12 18:23	
Method Blank	K1207165-MB3	ND U	0.050	1	07/25/12 06:42	
Method Blank	K1207165-MB4	ND U	0.050	1	07/25/12 15:51	
Method Blank	K1207165-MB5	ND U	0.050	1	07/26/12 07:07	
Method Blank	K1207165-MB6	ND U	0.050	1	07/27/12 07:51	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Duplicate Sample Summary

Nitrate as Nitrogen

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1207183-002DUP12	0.10	ND	ND	NC	NC	20	07/25/12
Batch QC	K1207183-014DUP13	0.10	ND	ND	NC	NC	20	07/25/12
Batch QC	K1207188-001DUP14	0.10	ND	ND	NC	NC	20	07/26/12
Batch QC	K1207207-001DUP17	0.10	0.97	0.96	0.966	<1	20	07/26/12
Batch QC	K1207278-001DUP25	0.10	3.59	3.55	3.57	1	20	07/27/12
Batch QC	KQ1208473-35DUP33	0.10	ND	ND	NC	NC	20	07/24/12
Batch QC	KQ1208526-33DUP34	0.10	ND	ND	NC	NC	20	07/25/12

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Nitrate as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207183-002	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207183-002MS10			Duplicate Matrix Spike K1207183-002DMS10					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	ND	3.78	4.00	94	3.78	4.00	94	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Nitrate as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207183-014	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207183-014MS11			Duplicate Matrix Spike K1207183-014DMS11					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	ND	9.38	10.0	94	9.33	10.0	93	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/26/12

Duplicate Matrix Spike Summary
Nitrate as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207188-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207188-001MS13			Duplicate Matrix Spike K1207188-001DMS13					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	ND	3.94	4.00	98	3.95	4.00	99	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/26/12

Duplicate Matrix Spike Summary
Nitrate as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207207-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207207-001MS14			Duplicate Matrix Spike K1207207-001DMS14					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	0.97	5.33	4.00	109	5.26	4.00	107	90-110	1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/27/12

Duplicate Matrix Spike Summary
Nitrate as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207278-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207278-001MS17			Duplicate Matrix Spike K1207278-001DMS17					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	3.59	24.1	20.0	103	24.3	20.0	103	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/24/12

Duplicate Matrix Spike Summary
Nitrate as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	KQ1208473-35	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike KQ1208473-35MS20			Duplicate Matrix Spike KQ1208473-35DMS20					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	ND	3.78	4.00	95	3.80	4.00	95	90-110	<1	20

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Nitrate as Nitrogen

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	KQ1208526-33	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike KQ1208526-33MS21			Duplicate Matrix Spike KQ1208526-33DMS21					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	ND	3.79	4.00	95	3.81	4.00	95	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/24/12

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301548

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	17.9	17.7	101	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/25/12

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301760

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS4	17.7	17.7	100	90-110
Lab Control Sample	K1207165-LCS5	17.7	17.7	100	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	07/26/12
Sample Matrix:	Water		

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301938

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS6	18.0	17.7	102	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/27/12

Lab Control Sample Summary
Nitrate as Nitrogen

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 302184

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS7	17.7	17.7	100	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Sulfate

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**0.22**	0.20	2	07/25/12 02:36	
DW-2	K1207165-003	ND U	0.20	2	07/26/12 00:03	
DW-5	K1207165-004	ND U	0.20	2	07/26/12 00:16	
DW-1	K1207165-006	**1.07**	0.20	2	07/26/12 15:58	
DW-7	K1207165-007	**1.91**	0.20	2	07/26/12 16:11	
Dup-1	K1207165-008	**1.91**	0.20	2	07/26/12 16:24	
DW-6	K1207165-010	**0.30**	0.20	2	07/27/12 13:19	
Method Blank	K1207165-MB1	ND U	0.10	1	07/24/12 07:08	
Method Blank	K1207165-MB2	ND U	0.10	1	07/24/12 18:23	
Method Blank	K1207165-MB3	ND U	0.10	1	07/25/12 06:42	
Method Blank	K1207165-MB4	ND U	0.10	1	07/25/12 15:51	
Method Blank	K1207165-MB5	ND U	0.10	1	07/26/12 07:07	
Method Blank	K1207165-MB6	ND U	0.10	1	07/27/12 07:51	

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Duplicate Sample Summary

Sulfate

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1207045-014DUP1	0.20	1.02	1.07	1.05	5	20	07/24/12
Batch QC	K1207121-001DUP3	0.20	2.19	2.14	2.17	2	20	07/24/12
Batch QC	K1207148-001DUP4	0.20	0.76	0.78	0.773	3	20	07/24/12
Batch QC	K1207183-002DUP12	0.20	3.83	3.85	3.84	<1	20	07/25/12
Batch QC	K1207183-014DUP13	10	374	369	372	1	20	07/25/12
Batch QC	K1207188-001DUP14	0.20	0.93	0.93	0.932	<1	20	07/26/12
Batch QC	K1207207-001DUP17	0.20	4.32	4.25	4.28	2	20	07/26/12
Batch QC	K1207278-001DUP25	1.0	37.3	37.5	37.4	<1	20	07/27/12
Batch QC	KQ1208473-35DUP33	0.20	3.35	3.34	3.34	<1	20	07/24/12
Batch QC	KQ1208526-33DUP34	0.20	1.57	1.60	1.59	2	20	07/25/12

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207045-014	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207045-014MS1			Duplicate Matrix Spike K1207045-014DMS1					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	1.02	4.82	4.00	95	4.78	4.00	94	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/24/12

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207121-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207121-001MS3			Duplicate Matrix Spike K1207121-001DMS3					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	2.19	6.12	4.00	98	6.14	4.00	99	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/24/12

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207148-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207148-001MS4			Duplicate Matrix Spike K1207148-001DMS4					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	0.76	4.62	4.00	96	4.58	4.00	95	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207183-002	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207183-002MS10			Duplicate Matrix Spike K1207183-002DMS10					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	3.83	8.06	4.00	106	7.97	4.00	103	90-110	1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207183-014	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207183-014MS11			Duplicate Matrix Spike K1207183-014DMS11					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	374	584	200	105	584	200	105	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/26/12

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207188-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207188-001MS13			Duplicate Matrix Spike K1207188-001DMS13					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	0.93	4.82	4.00	97	4.87	4.00	98	90-110	1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/26/12

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207207-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207207-001MS14			Duplicate Matrix Spike K1207207-001DMS14					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	4.32	8.65	4.00	108	8.57	4.00	106	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/27/12

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207278-001	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike K1207278-001MS17			Duplicate Matrix Spike K1207278-001DMS17					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	37.3	59.6	20.0	111 *	59.9	20.0	113 *	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/24/12

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	KQ1208473-35	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike KQ1208473-35MS20			Duplicate Matrix Spike KQ1208473-35DMS20					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	3.35	7.42	4.00	102	7.39	4.00	101	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	KQ1208526-33	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike KQ1208526-33MS21			Duplicate Matrix Spike KQ1208526-33DMS21					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	1.57	5.58	4.00	100	5.59	4.00	100	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/24/12

Lab Control Sample Summary
Sulfate

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301548

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	4.58	5.00	92	90-110
Lab Control Sample	K1207165-LCS4	4.53	5.00	91	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/25/12

Lab Control Sample Summary
Sulfate

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301760

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS5	4.59	5.00	92	90-110
Lab Control Sample	K1207165-LCS6	4.54	5.00	91	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/26/12

Lab Control Sample Summary
Sulfate

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 301938

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS7	4.53	5.00	91	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/27/12

Lab Control Sample Summary
Sulfate

Analysis Method: 300.0

Units: mg/L
Basis: NA
Analysis Lot: 302184

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS8	4.56	5.00	91	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	335.4	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA

Cyanide, Total

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
DW-9	K1207165-001	ND U	0.010	1	07/25/12 15:12	7/25/12	
DW-2	K1207165-003	ND U	0.010	1	08/03/12 14:24	8/3/12	
DW-5	K1207165-004	ND U	0.010	1	08/03/12 14:24	8/3/12	
DW-1	K1207165-006	ND U	0.010	1	08/03/12 14:24	8/3/12	
DW-7	K1207165-007	ND U	0.010	1	08/03/12 14:24	8/3/12	
Dup-1	K1207165-008	ND U	0.010	1	08/03/12 14:24	8/3/12	
DW-6	K1207165-010	ND U	0.010	1	08/03/12 14:24	8/3/12	
Method Blank	K1207165-MB1	ND U	0.010	1	07/25/12 15:12	7/25/12	
Method Blank	K1207165-MB2	ND U	0.010	1	08/03/12 14:24	8/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Analysis Method:	335.4	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA

Duplicate Sample Summary
Cyanide, Total

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	KQ1208432-16DUP32	0.010	ND	ND	NC	NC	20	07/25/12
Batch QC	KQ1208887-14DUP36	0.010	ND	ND	NC	NC	20	08/03/12

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/25/12
		Date Extracted:	07/25/12

Duplicate Matrix Spike Summary
Cyanide, Total

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	KQ1208432-16	**Basis:**	NA
Analysis Method:	335.4		
Prep Method:	Method		

		Matrix Spike KQ1208432-16MS19			**Duplicate Matrix Spike** KQ1208432-16DMS19					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Cyanide, Total	ND	0.091	0.100	91	0.103	0.100	103	90-110	13	20

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	08/3/12
		Date Extracted:	08/3/12

Duplicate Matrix Spike Summary
Cyanide, Total

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	KQ1208887-14	**Basis:**	NA
Analysis Method:	335.4		
Prep Method:	Method		

		Matrix Spike KQ1208887-14MS23			Duplicate Matrix Spike KQ1208887-14DMS23					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Cyanide, Total	ND	0.089	0.100	89 *	0.090	0.100	90	90-110	1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	07/25/12
Sample Matrix:	Water	**Date Extracted:**	07/25/12

Lab Control Sample Summary
Cyanide, Total

Analysis Method:	335.4	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	301857

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	1.53	1.46	105	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	08/03/12
Sample Matrix:	Water	**Date Extracted:**	08/03/12

Lab Control Sample Summary
Cyanide, Total

Analysis Method:	335.4	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	303430

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS4	1.48	1.46	101	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	350.1	**Units:**	mg/L
		Basis:	NA

Ammonia as Nitrogen

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**0.125**	0.050	1	07/30/12 08:28	
DW-2	K1207165-003	ND U	0.050	1	07/30/12 08:28	
DW-5	K1207165-004	ND U	0.050	1	07/30/12 08:28	
DW-1	K1207165-006	**0.322**	0.050	1	07/30/12 08:28	
DW-7	K1207165-007	**0.231**	0.050	1	07/30/12 08:28	
Dup-1	K1207165-008	**0.229**	0.050	1	07/30/12 08:28	
DW-6	K1207165-010	**0.079**	0.050	1	07/30/12 08:28	
Method Blank	K1207165-MB1	ND U	0.050	1	07/30/12 08:28	
Method Blank	K1207165-MB2	ND U	0.050	1	07/30/12 08:28	

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/24/12
Sample Matrix:	Water	**Date Received:**	07/24/12
		Date Analyzed:	07/30/12

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	DW-9	**Units:**	mg/L
Lab Code:	K1207165-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K1207165-001DUP5 Result	Average	RPD	RPD Limit
Ammonia as Nitrogen	350.1	0.050	0.125	0.122	0.123	2	20

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12
Sample Matrix:	Water	**Date Received:**	07/24/12
		Date Analyzed:	07/30/12

Duplicate Matrix Spike Summary
Ammonia as Nitrogen

Sample Name:	DW-9	**Units:**	mg/L
Lab Code:	K1207165-001	**Basis:**	NA
Analysis Method:	350.1		

		Matrix Spike K1207165-001MS5			Duplicate Matrix Spike K1207165-001DMS5					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Ammonia as Nitrogen	0.125	2.15	2.00	101	2.15	2.00	101	90-110	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/30/12

Lab Control Sample Summary
Ammonia as Nitrogen

Analysis Method: 350.1

Units: mg/L
Basis: NA
Analysis Lot: 302425

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	13.4	13.9	96	90-110
Lab Control Sample	K1207165-LCS4	13.3	13.9	96	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	365.3	**Units:**	mg/L
		Basis:	NA

Orthophosphate as Phosphorus

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**0.569**	0.010	1	07/25/12 10:30	
DW-2	K1207165-003	**0.475**	0.010	1	07/26/12 09:15	
DW-5	K1207165-004	**0.461**	0.010	1	07/26/12 09:15	
DW-1	K1207165-006	**0.546**	0.010	1	07/26/12 09:15	
DW-7	K1207165-007	**0.494**	0.010	1	07/26/12 09:15	
Dup-1	K1207165-008	**0.496**	0.010	1	07/26/12 09:15	
DW-6	K1207165-010	**0.453**	0.010	1	07/27/12 13:35	
Method Blank	K1207165-MB1	ND	0.010	1	07/25/12 10:30	U
Method Blank	K1207165-MB2	ND	0.010	1	07/26/12 09:15	U
Method Blank	K1207165-MB3	ND	0.010	1	07/27/12 13:35	U

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	365.3	**Units:**	mg/L
		Basis:	NA

Duplicate Sample Summary

Orthophosphate as Phosphorus

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
DW-9	K1207165-001DUP5	0.010	0.569	0.567	0.568	<1	20	07/25/12
DW-2	K1207165-003DUP6	0.010	0.475	0.472	0.474	<1	20	07/26/12
DW-6	K1207165-010DUP11	0.010	0.453	0.457	0.455	<1	20	07/27/12

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12
Sample Matrix:	Water	**Date Received:**	07/24/12
		Date Analyzed:	07/25/12

Duplicate Matrix Spike Summary
Orthophosphate as Phosphorus

Sample Name:	DW-9	**Units:**	mg/L
Lab Code:	K1207165-001	**Basis:**	NA
Analysis Method:	365.3		

		Matrix Spike K1207165-001MS5			Duplicate Matrix Spike K1207165-001DMS5					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Orthophosphate as Phosphorus	0.569	0.764	0.200	98	0.970	0.400	100	60-130	2	20

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/12
Sample Matrix:	Water	**Date Received:**	07/25/12
		Date Analyzed:	07/26/12

Duplicate Matrix Spike Summary
Orthophosphate as Phosphorus

Sample Name:	DW-2	**Units:**	mg/L
Lab Code:	K1207165-003	**Basis:**	NA
Analysis Method:	365.3		

		Matrix Spike K1207165-003MS7			Duplicate Matrix Spike K1207165-003DMS7					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Orthophosphate as Phosphorus	0.475	0.670	0.200	98	0.879	0.400	101	60-130	3	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/12
Sample Matrix:	Water	**Date Received:**	07/27/12
		Date Analyzed:	07/27/12

Duplicate Matrix Spike Summary
Orthophosphate as Phosphorus

Sample Name:	DW-6	**Units:**	mg/L
Lab Code:	K1207165-010	**Basis:**	NA
Analysis Method:	365.3		

		Matrix Spike K1207165-010MS9			Duplicate Matrix Spike K1207165-010DMS9					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Orthophosphate as Phosphorus	0.453	0.644	0.200	96	0.848	0.400	99	60-130	3	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	07/25/12
Sample Matrix:	Water		

Lab Control Sample Summary
Orthophosphate as Phosphorus

Analysis Method: 365.3

Units: mg/L
Basis: NA
Analysis Lot: 302067

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	2.78	2.83	98	85-115

COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/26/12

Lab Control Sample Summary
Orthophosphate as Phosphorus

Analysis Method: 365.3

Units: mg/L
Basis: NA
Analysis Lot: 301778

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS4	2.78	2.83	98	85-115

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/27/12

Lab Control Sample Summary
Orthophosphate as Phosphorus

Analysis Method: 365.3

Units: mg/L
Basis: NA
Analysis Lot: 302279

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS5	2.73	2.83	97	85-115

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	365.3	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA

Phosphorus, Total

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
DW-9	K1207165-001	**0.598**	0.010	1	07/31/12 11:50	7/30/12	
DW-2	K1207165-003	**0.507**	0.010	1	07/31/12 11:50	7/30/12	
DW-5	K1207165-004	**0.474**	0.010	1	07/31/12 11:50	7/30/12	
DW-1	K1207165-006	**0.548**	0.010	1	07/31/12 11:50	7/30/12	
DW-7	K1207165-007	**0.505**	0.010	1	07/31/12 11:50	7/30/12	
Dup-1	K1207165-008	**0.499**	0.010	1	07/31/12 11:50	7/30/12	
DW-6	K1207165-010	**0.458**	0.010	1	07/31/12 11:50	7/30/12	
Method Blank	K1207165-MB1	ND	0.010	1	07/31/12 11:50	7/30/12	U

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	07/31/12

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207183-014	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K1207183-014DUP13 Result	Average	RPD	RPD Limit
Phosphorus, Total	365.3	0.010	0.029	0.030	0.0295	1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/31/12
		Date Extracted:	07/30/12

Duplicate Matrix Spike Summary
Phosphorus, Total

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207183-014	**Basis:**	NA
Analysis Method:	365.3		
Prep Method:	Method		

		Matrix Spike K1207183-014MS11				**Duplicate Matrix Spike** K1207183-014DMS11				
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Phosphorus, Total	0.029	0.559	0.500	106	1.11	1.00	108	60-135	2	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	07/31/12
Sample Matrix:	Water	**Date Extracted:**	07/30/12

Lab Control Sample Summary
Phosphorus, Total

Analysis Method:	365.3	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	302809

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	3.34	3.41	98	85-115

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 2120 B	**Units:**	ColorUnits
		Basis:	NA

Color

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**10.0**	5.0	1	07/25/12 09:30	
DW-2	K1207165-003	**15.0**	5.0	1	07/25/12 09:30	
DW-5	K1207165-004	**10.0**	5.0	1	07/25/12 09:30	
DW-1	K1207165-006	**10.0**	5.0	1	07/27/12 10:45	
DW-7	K1207165-007	**5.0**	5.0	1	07/27/12 10:45	
Dup-1	K1207165-008	**5.0**	5.0	1	07/27/12 10:45	
DW-6	K1207165-010	**10.0**	5.0	1	07/27/12 01:27	
Method Blank	K1207165-MB1	ND	5.0	1	07/25/12 09:30	U
Method Blank	K1207165-MB2	ND	5.0	1	07/26/12 01:45	U

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/24/12
Sample Matrix:	Water	**Date Received:**	07/24/12
		Date Analyzed:	07/25/12

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	DW-9	**Units:**	ColorUnits
Lab Code:	K1207165-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K1207165-001DUP5 Result	Average	RPD	RPD Limit
Color	SM 2120 B	5.0	10.0	10.0	10.0	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/25/12

Lab Control Sample Summary
Color

Analysis Method: SM 2120 B

Units: ColorUnits
Basis: NA
Analysis Lot: 301735

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	25.0	25.0	100	85-115

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/26/12

Lab Control Sample Summary
Color

Analysis Method: SM 2120 B

Units: ColorUnits
Basis: NA
Analysis Lot: 302025

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS4	25.0	25.0	100	85-115

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 2320 B	**Units:**	mg/L
		Basis:	NA

Alkalinity as CaCO3, Total

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**104**	9.0	1	08/06/12 15:29	
DW-2	K1207165-003	**139**	9.0	1	08/06/12 15:29	
DW-5	K1207165-004	**106**	9.0	1	08/06/12 15:29	
DW-1	K1207165-006	**88.4**	9.0	1	08/06/12 15:29	
DW-7	K1207165-007	**88.7**	9.0	1	08/06/12 15:29	
Dup-1	K1207165-008	**90.4**	9.0	1	08/06/12 15:29	
DW-6	K1207165-010	**94.2**	9.0	1	08/06/12 15:29	
Method Blank	K1207165-MB1	ND	9.0	1	08/06/12 15:29	U
Method Blank	K1207165-MB2	ND	9.0	1	08/06/12 15:29	U

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/25/12
Sample Matrix:	Water	**Date Received:**	07/25/12
		Date Analyzed:	08/06/12

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	DW-5	**Units:**	mg/L
Lab Code:	K1207165-004	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K1207165-004DUP7 Result	Average	RPD	RPD Limit
Alkalinity as CaCO3, Total	SM 2320 B	9.0	106	107	106	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 08/06/12

Lab Control Sample Summary
Alkalinity as CaCO3, Total

Analysis Method: SM 2320 B

Units: mg/L
Basis: NA
Analysis Lot: 303677

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	115	114	101	90-110
Lab Control Sample	K1207165-LCS4	114	114	100	90-110

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 2510 B	**Units:**	uMHOS/cm
		Basis:	NA

Conductivity at 25 Degrees Celsius

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**222**	2.0	1	08/02/12 10:00	
DW-2	K1207165-003	**305**	2.0	1	08/02/12 10:00	
DW-5	K1207165-004	**349**	2.0	1	08/02/12 10:00	
DW-1	K1207165-006	**179**	2.0	1	08/02/12 10:00	
DW-7	K1207165-007	**228**	2.0	1	08/02/12 10:00	
Dup-1	K1207165-008	**229**	2.0	1	08/02/12 10:00	
DW-6	K1207165-010	**352**	2.0	1	08/02/12 10:00	
Method Blank	K1207165-MB1	**2.3**	2.0	1	08/02/12 10:00	
Method Blank	K1207165-MB2	**2.5**	2.0	1	08/02/12 10:00	
Method Blank	K1207165-MB3	**2.4**	2.0	1	08/02/12 10:00	

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/27/12
Sample Matrix:	Water	**Date Received:**	07/27/12
		Date Analyzed:	08/02/12

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	DW-6	**Units:**	uMHOS/cm
Lab Code:	K1207165-010	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K1207165-010DUP11 Result	Average	RPD	RPD Limit
Conductivity at 25 Degrees Celsius	SM 2510 B	2.0	352	348	350	1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 08/02/12

Lab Control Sample Summary
Conductivity at 25 Degrees Celsius

Analysis Method: SM 2510 B

Units: uMHOS/cm
Basis: NA
Analysis Lot: 302990

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	319	330	97	86-113
Lab Control Sample	K1207165-LCS4	317	330	96	86-113

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 2540 C	**Units:**	mg/L
		Basis:	NA

Solids, Total Dissolved

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**169**	10	1	07/31/12 00:00	
DW-2	K1207165-003	**171**	10	1	07/31/12 00:00	
DW-5	K1207165-004	**218**	10	1	07/31/12 00:00	
DW-1	K1207165-006	**148**	10	1	07/31/12 00:00	
DW-7	K1207165-007	**151**	10	1	07/31/12 00:00	
Dup-1	K1207165-008	**172**	10	1	07/31/12 00:00	
DW-6	K1207165-010	**237**	10	1	07/31/12 00:00	
Method Blank	K1207165-MB1	ND U	5.0	1	07/31/12 00:00	
Method Blank	K1207165-MB2	ND U	5.0	1	07/31/12 00:00	
Method Blank	K1207165-MB3	ND U	5.0	1	07/31/12 00:00	
Method Blank	K1207165-MB4	ND U	5.0	1	07/31/12 00:00	

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/24/12 - 07/25/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/25/12
Analysis Method:	SM 2540 C	**Units:**	mg/L
		Basis:	NA

Duplicate Sample Summary

Solids, Total Dissolved

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
DW-9	K1207165-001DUP5	10	169	184	177	8	10	07/31/12
DW-2	K1207165-003DUP6	10	171	177	174	3	10	07/31/12

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/31/12

Lab Control Sample Summary
Solids, Total Dissolved

Analysis Method: SM 2540 C

Units: mg/L
Basis: NA
Analysis Lot: 302695

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	1240	1240	100	90-108
Lab Control Sample	K1207165-LCS4	1210	1240	98	90-108

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 4500-H+ B	**Units:**	pH Units
		Basis:	NA

pH

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**7.82**	-	1	07/25/12 10:15	H
DW-2	K1207165-003	**7.88**	-	1	07/25/12 17:19	H
DW-5	K1207165-004	**7.83**	-	1	07/25/12 17:20	H
DW-1	K1207165-006	**7.33**	-	1	07/26/12 04:49	H
DW-7	K1207165-007	**7.45**	-	1	07/26/12 04:50	
Dup-1	K1207165-008	**7.73**	-	1	07/26/12 04:53	
DW-6	K1207165-010	**7.59**	-	1	07/27/12 16:21	H

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/24/12 - 07/25/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/25/12
Analysis Method:	SM 4500-H+ B	**Units:**	pH Units
		Basis:	NA

Duplicate Sample Summary

pH

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
DW-9	K1207165-001DUP5	-	7.82	7.84	7.83	<1	20	07/25/12
DW-5	K1207165-004DUP7	-	7.83	7.88	7.86	<1	20	07/25/12

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/25/12

Lab Control Sample Summary
pH

Analysis Method: SM 4500-H+ B

Units: pH Units
Basis: NA
Analysis Lot: 301806

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	6.12	6.10	100	85-115
Lab Control Sample	K1207165-LCS4	6.14	6.10	101	85-115

COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/26/12

Lab Control Sample Summary
pH

Analysis Method: SM 4500-H+ B

Units: pH Units
Basis: NA
Analysis Lot: 302057

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS5	6.13	6.10	100	85-115

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 07/27/12

Lab Control Sample Summary
pH

Analysis Method: SM 4500-H+ B

Units: pH Units
Basis: NA
Analysis Lot: 302265

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS6	6.11	6.10	100	85-115

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 4500-SiO2 C	**Units:**	mg/L
		Basis:	NA

Silica, Dissolved as SiO2

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**54.2**	1.3	25	07/31/12 15:15	
DW-2	K1207165-003	**70.1**	1.3	25	07/31/12 15:15	
DW-5	K1207165-004	**67.4**	1.3	25	07/31/12 15:15	
DW-1	K1207165-006	**66.5**	1.3	25	07/31/12 15:15	
DW-7	K1207165-007	**70.9**	1.3	25	07/31/12 15:15	
Dup-1	K1207165-008	**69.5**	1.3	25	07/31/12 15:15	
DW-6	K1207165-010	**63.0**	1.3	25	07/31/12 15:15	
Method Blank	K1207165-MB1	ND	0.050	1	07/31/12 15:15	U

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	07/31/12

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207064-006	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample K1207064-006DUP2 Result	Average	RPD	RPD Limit
Silica, Dissolved as SiO2	SM 4500-SiO2 C	0.050	0.084	0.084	0.0844	<1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	07/31/12

Duplicate Matrix Spike Summary
Silica, Dissolved as SiO2

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207064-006	**Basis:**	NA
Analysis Method:	SM 4500-SiO2 C		

		Matrix Spike K1207064-006MS2				**Duplicate Matrix Spike** K1207064-006DMS2					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Silica, Dissolved as SiO2	0.084	1.10	0.996	102		1.11	0.996	103	73-130	1	20

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	07/31/12
Sample Matrix:	Water		

Lab Control Sample Summary
Silica, Dissolved as SiO2

Analysis Method: SM 4500-SiO2 C

Units: mg/L
Basis: NA
Analysis Lot: 302817

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	2.01	1.99	101	85-117

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 5310 C	**Units:**	mg/L
		Basis:	NA

Carbon, Dissolved Organic (DOC)

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**0.87**	0.50	1	08/01/12 23:53	
DW-2	K1207165-003	**1.37**	0.50	1	08/01/12 23:53	
DW-5	K1207165-004	**1.00**	0.50	1	08/01/12 23:53	
DW-1	K1207165-006	**0.89**	0.50	1	08/01/12 23:53	
DW-7	K1207165-007	**0.91**	0.50	1	08/01/12 23:53	
Dup-1	K1207165-008	**0.95**	0.50	1	08/01/12 23:53	
DW-6	K1207165-010	**0.87**	0.50	1	08/01/12 23:53	
Method Blank	K1207165-MB1	ND	0.50	1	08/01/12 23:53	U

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 5310 C	**Units:**	mg/L
		Basis:	NA

Duplicate Sample Summary
Carbon, Dissolved Organic (DOC)

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
DW-9	K1207165-001DUP5	0.50	0.87	1.09	0.981	23 *	10	08/01/12
DW-2	K1207165-003DUP6	0.50	1.37	1.35	1.36	2	10	08/01/12
DW-5	K1207165-004DUP7	0.50	1.00	1.02	1.01	2	10	08/01/12
DW-1	K1207165-006DUP8	0.50	0.89	0.87	0.883	3	10	08/01/12
DW-7	K1207165-007DUP9	0.50	0.91	0.89	0.899	1	10	08/01/12
Dup-1	K1207165-008DUP10	0.50	0.95	0.95	0.951	<1	10	08/01/12
DW-6	K1207165-010DUP11	0.50	0.87	0.88	0.875	<1	10	08/01/12

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12
Sample Matrix:	Water	**Date Received:**	07/24/12
		Date Analyzed:	08/1/12

Matrix Spike Summary
Carbon, Dissolved Organic (DOC)

Sample Name:	DW-9	**Units:**	mg/L
Lab Code:	K1207165-001	**Basis:**	NA
Analysis Method:	SM 5310 C		

Matrix Spike
K1207165-001MS6

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Dissolved Organic (DOC)	0.87	27.5	25.0	107	83-117

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 08/01/12

Lab Control Sample Summary
Carbon, Dissolved Organic (DOC)

Analysis Method: SM 5310 C

Units: mg/L
Basis: NA
Analysis Lot: 302941

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	23.9	22.7	105	83-117

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 5310 C	**Units:**	mg/L
		Basis:	NA

Carbon, Total Organic

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**1.10**	0.50	1	08/01/12 23:53	
DW-2	K1207165-003	**1.42**	0.50	1	08/01/12 23:53	
DW-5	K1207165-004	**1.01**	0.50	1	08/01/12 23:53	
DW-1	K1207165-006	**1.03**	0.50	1	08/01/12 23:53	
DW-7	K1207165-007	**0.94**	0.50	1	08/01/12 23:53	
Dup-1	K1207165-008	**0.99**	0.50	1	08/01/12 23:53	
DW-6	K1207165-010	**0.88**	0.50	1	08/01/12 23:53	
Method Blank	K1207165-MB1	ND	0.50	1	08/01/12 23:53	U

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 5310 C	**Units:**	mg/L
		Basis:	NA

Duplicate Sample Summary
Carbon, Total Organic

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
DW-9	K1207165-001DUP5	0.50	1.10	1.08	1.09	2	10	08/01/12
DW-2	K1207165-003DUP6	0.50	1.42	1.40	1.41	1	10	08/01/12
DW-5	K1207165-004DUP7	0.50	1.01	1.01	1.01	<1	10	08/01/12
DW-1	K1207165-006DUP8	0.50	1.03	0.97	0.999	5	10	08/01/12
DW-7	K1207165-007DUP9	0.50	0.94	0.97	0.953	3	10	08/01/12
Dup-1	K1207165-008DUP10	0.50	0.99	0.97	0.979	3	10	08/01/12
DW-6	K1207165-010DUP11	0.50	0.88	0.95	0.916	7	10	08/01/12

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	08/1/12

Matrix Spike Summary
Carbon, Total Organic

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207259-016	**Basis:**	NA
Analysis Method:	SM 5310 C		

Matrix Spike
K1207259-016MS15

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Total Organic	ND	26.6	25.0	107	83-117

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	08/1/12

Matrix Spike Summary
Carbon, Total Organic

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207275-001	**Basis:**	NA
Analysis Method:	SM 5310 C		

Matrix Spike
K1207275-001MS16

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Total Organic	1.06	26.8	25.0	103	83-117

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COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	N/A
Sample Matrix:	Water	**Date Received:**	N/A
		Date Analyzed:	08/1/12

Matrix Spike Summary
Carbon, Total Organic

Sample Name:	Batch QC	**Units:**	mg/L
Lab Code:	K1207316-001	**Basis:**	NA
Analysis Method:	SM 5310 C		

Matrix Spike
K1207316-001MS18

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Total Organic	9.65	36.6	25.0	108	83-117

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated
Project: Mint Farm
Sample Matrix: Water

Service Request: K1207165
Date Analyzed: 08/01/12

Lab Control Sample Summary
Carbon, Total Organic

Analysis Method: SM 5310 C

Units: mg/L
Basis: NA
Analysis Lot: 302942

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1207165-LCS3	23.6	22.7	104	83-117

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 5540 C	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA

Methylene Blue Active Substances

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
DW-9	K1207165-001	ND U	0.050	1	07/25/12 15:42	7/25/12	
DW-2	K1207165-003	ND U	0.050	1	07/25/12 15:42	7/25/12	
DW-5	K1207165-004	**0.112**	0.050	1	07/25/12 15:42	7/25/12	
DW-1	K1207165-006	ND U	0.050	1	07/26/12 15:30	7/25/12	
DW-7	K1207165-007	ND U	0.050	1	07/26/12 15:30	7/25/12	
Dup-1	K1207165-008	ND U	0.050	1	07/26/12 15:30	7/25/12	
DW-6	K1207165-010	ND U	0.050	1	07/27/12 14:20	7/27/12	
Method Blank	K1207165-MB1	ND U	0.050	1	07/25/12 15:42	7/25/12	
Method Blank	K1207165-MB2	ND U	0.050	1	07/27/12 14:20	7/27/12	

COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	07/25/12
Sample Matrix:	Water	**Date Extracted:**	07/25/12

Duplicate Lab Control Sample Summary
General Chemistry Parameters

Analysis Method:	SM 5540 C	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	302062

	Lab Control Sample K1207165-LCS1			Duplicate Lab Control Sample K1207165-DLCS1					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Methylene Blue Active Substances	0.390	0.40	98	0.350	0.40	88	70-130	11	20

COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	07/27/12
Sample Matrix:	Water	**Date Extracted:**	07/27/12

Duplicate Lab Control Sample Summary
General Chemistry Parameters

Analysis Method:	SM 5540 C	**Units:**	mg/L
Prep Method:	Method	**Basis:**	NA
		Analysis Lot:	302266

	Lab Control Sample K1207165-LCS2			Duplicate Lab Control Sample K1207165-DLCS2					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Methylene Blue Active Substances	0.340	0.40	85	0.340	0.40	85	70-130	<1	20

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 5910 B	**Units:**	cm-1
		Basis:	NA

UV254

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	**0.033**	-	1	07/26/12 06:45	
DW-2	K1207165-003	**0.047**	-	1	07/26/12 06:45	
DW-5	K1207165-004	**0.034**	-	1	07/26/12 06:45	
DW-1	K1207165-006	**0.052**	-	1	07/27/12 11:05	
DW-7	K1207165-007	**0.032**	-	1	07/27/12 11:05	
Dup-1	K1207165-008	**0.032**	-	1	07/27/12 11:05	
DW-6	K1207165-010	**0.049**	-	1	07/27/12 11:05	
Method Blank	K1207165-MB1	**0.000**	-	1	07/26/12 06:45	
Method Blank	K1207165-MB2	**0.000**	-	1	07/27/12 11:05	
Method Blank	K1207165-MB3	**0.000**	-	1	07/27/12 11:05	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 5910 B	**Units:**	cm-1
		Basis:	NA

Duplicate Sample Summary

UV254

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
DW-9	K1207165-001DUP5	-	0.033	0.033	0.0330	<1	20	07/26/12
DW-1	K1207165-006DUP8	-	0.052	0.052	0.0520	<1	20	07/27/12
DW-6	K1207165-010DUP11	-	0.049	0.050	0.0495	2	20	07/27/12

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12 - 07/27/12
Sample Matrix:	Water	**Date Received:**	07/24/12 - 07/27/12
Analysis Method:	SM 9221 E	**Units:**	MPN/100mL
		Basis:	NA

Coliform, Fecal

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
DW-9	K1207165-001	ND U	1.8	1	07/25/12 08:58	*
DW-2	K1207165-003	ND U	1.8	1	07/25/12 16:49	
DW-5	K1207165-004	ND U	1.8	1	07/25/12 16:49	
DW-1	K1207165-006	ND U	1.8	1	07/26/12 16:00	*
DW-7	K1207165-007	ND U	1.8	1	07/26/12 16:00	
Dup-1	K1207165-008	ND U	1.8	1	07/26/12 16:00	
DW-6	K1207165-010	ND U	1.8	1	07/27/12 13:25	

COLUMBIA ANALYTICAL SERVICES, INC.
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- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Kennedy/Jenks Consultants, Incorporated
Project Name: Mint Farm
Project No.:

Service Request: K1207165

Sample Name:	Lab Code:
DW-9	K1207165-001
DW-9D	K1207165-001D
DW-9S	K1207165-001S
DW-2	K1207165-003
DW-5	K1207165-004
DW-1	K1207165-006
DW-7	K1207165-007
Dup-1	K1207165-008
DW-6	K1207165-010
Method Blank	K1207165-MB
Method Blank 2	K1207165-MB2
Batch QC1D	K1207261-001D
Batch QC1S	K1207261-001S
Batch QC2D	K1207305-001D
Batch QC2S	K1207305-001S

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Kennedy/Jenks Consultants, Incor	**Service Request:**	K1207165
Project No.:	NA	**Date Collected:**	07/24/12
Project Name:	Mint Farm	**Date Received:**	07/24/12
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: **DW-9** **Lab Code:** **K1207165-001**

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	3.0	1.0	07/27/12	08/02/12	3.7		
Antimony	200.8	0.05	1.0	07/30/12	08/06/12	0.05	U	
Arsenic	200.8	0.5	1.0	07/30/12	08/06/12	4.9		
Barium	200.8	0.05	1.0	07/30/12	08/06/12	11.8		
Beryllium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Cadmium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Calcium	200.7	50.0	1.0	07/27/12	08/02/12	26100		
Chromium	200.8	0.2	1.0	07/30/12	08/06/12	0.2		
Copper	200.8	0.1	1.0	07/30/12	08/06/12	3.3		
Iron	200.7	10.0	1.0	07/27/12	08/02/12	705		
Lead	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Magnesium	200.7	20.0	1.0	07/27/12	08/02/12	6130		
Manganese	200.7	0.6	1.0	07/27/12	08/02/12	598		
Mercury	245.1	0.2	1.0	07/27/12	07/27/12	0.2	U	
Nickel	200.8	0.2	1.0	07/30/12	08/06/12	3.3		
Potassium	200.7	100	1.0	07/27/12	08/02/12	3550		
Selenium	200.8	1.0	1.0	07/30/12	08/06/12	1.0	U	
Silicon	200.7	50.0	1.0	07/27/12	08/02/12	26100		
Silver	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Sodium	200.7	200	1.0	07/27/12	08/02/12	10200		
Thallium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Uranium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Zinc	200.7	2.0	1.0	07/27/12	08/02/12	2.0	U	

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Kennedy/Jenks Consultants, Incor
Service Request: K1207165
Project No.: NA
Date Collected: 07/25/12
Project Name: Mint Farm
Date Received: 07/25/12
Matrix: WATER
Units: ug/L
Basis: NA

Sample Name: DW-2
Lab Code: K1207165-003

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	3.0	1.0	07/27/12	08/02/12	6.6		
Antimony	200.8	0.05	1.0	07/30/12	08/06/12	0.05	U	
Arsenic	200.8	0.5	1.0	07/30/12	08/06/12	9.8		
Barium	200.8	0.05	1.0	07/30/12	08/06/12	22.4		
Beryllium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Cadmium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Calcium	200.7	50.0	1.0	07/27/12	08/02/12	31700		
Chromium	200.8	0.2	1.0	07/30/12	08/06/12	0.4		
Copper	200.8	0.1	1.0	07/30/12	08/06/12	0.1	U	
Iron	200.7	10.0	1.0	07/27/12	08/02/12	499		
Lead	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Magnesium	200.7	20.0	1.0	07/27/12	08/02/12	10300		
Manganese	200.7	0.6	1.0	07/27/12	08/02/12	288		
Mercury	245.1	0.2	1.0	07/27/12	07/27/12	0.2	U	
Nickel	200.8	0.2	1.0	07/30/12	08/06/12	0.7		
Potassium	200.7	100	1.0	07/27/12	08/02/12	5610		
Selenium	200.8	1.0	1.0	07/30/12	08/06/12	1.0	U	
Silicon	200.7	50.0	1.0	07/27/12	08/02/12	21800		
Silver	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Sodium	200.7	200	1.0	07/27/12	08/02/12	15200		
Thallium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Uranium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Zinc	200.7	2.0	1.0	07/27/12	08/02/12	2.0	U	

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Kennedy/Jenks Consultants, Incor	**Service Request:**	K1207165
Project No.:	NA	**Date Collected:**	07/25/12
Project Name:	Mint Farm	**Date Received:**	07/25/12
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: **DW-5** **Lab Code:** **K1207165-004**

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	3.0	1.0	07/27/12	08/02/12	4.5		
Antimony	200.8	0.05	1.0	07/30/12	08/06/12	0.05	U	
Arsenic	200.8	0.5	1.0	07/30/12	08/06/12	6.7		
Barium	200.8	0.05	1.0	07/30/12	08/06/12	15.1		
Beryllium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Cadmium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Calcium	200.7	50.0	1.0	07/27/12	08/02/12	35200		
Chromium	200.8	0.2	1.0	07/30/12	08/06/12	0.2	U	
Copper	200.8	0.1	1.0	07/30/12	08/06/12	0.1	U	
Iron	200.7	10.0	1.0	07/27/12	08/02/12	343		
Lead	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Magnesium	200.7	20.0	1.0	07/27/12	08/02/12	10900		
Manganese	200.7	0.6	1.0	07/27/12	08/02/12	309		
Mercury	245.1	0.2	1.0	07/27/12	07/27/12	0.2	U	
Nickel	200.8	0.2	1.0	07/30/12	08/06/12	0.7		
Potassium	200.7	100	1.0	07/27/12	08/02/12	4630		
Selenium	200.8	1.0	1.0	07/30/12	08/06/12	1.0	U	
Silicon	200.7	50.0	1.0	07/27/12	08/02/12	23400		
Silver	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Sodium	200.7	200	1.0	07/27/12	08/02/12	13300		
Thallium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Uranium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Zinc	200.7	2.0	1.0	07/27/12	08/02/12	3.5		

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Kennedy/Jenks Consultants, Incor	**Service Request:**	K1207165
Project No.:	NA	**Date Collected:**	07/25/12
Project Name:	Mint Farm	**Date Received:**	07/25/12
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: **DW-1** **Lab Code:** **K1207165-006**

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	3.0	1.0	07/27/12	08/02/12	4.6		
Antimony	200.8	0.05	1.0	07/30/12	08/06/12	0.05	U	
Arsenic	200.8	0.5	1.0	07/30/12	08/06/12	4.1		
Barium	200.8	0.05	1.0	07/30/12	08/06/12	10.7		
Beryllium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Cadmium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Calcium	200.7	50.0	1.0	07/27/12	08/02/12	21000		
Chromium	200.8	0.2	1.0	07/30/12	08/06/12	0.2	U	
Copper	200.8	0.1	1.0	07/30/12	08/06/12	0.1	U	
Iron	200.7	10.0	1.0	07/27/12	08/02/12	2310		
Lead	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Magnesium	200.7	20.0	1.0	07/27/12	08/02/12	4970		
Manganese	200.7	0.6	1.0	07/27/12	08/02/12	559		
Mercury	245.1	0.2	1.0	07/30/12	07/31/12	0.2	U	
Nickel	200.8	0.2	1.0	07/30/12	08/06/12	0.4		
Potassium	200.7	100	1.0	07/27/12	08/02/12	2730		
Selenium	200.8	1.0	1.0	07/30/12	08/06/12	1.0	U	
Silicon	200.7	50.0	1.0	07/27/12	08/02/12	25700		
Silver	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Sodium	200.7	200	1.0	07/27/12	08/02/12	9150		
Thallium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Uranium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Zinc	200.7	2.0	1.0	07/27/12	08/02/12	2.0	U	

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Kennedy/Jenks Consultants, Incor	**Service Request:**	K1207165
Project No.:	NA	**Date Collected:**	07/26/12
Project Name:	Mint Farm	**Date Received:**	07/26/12
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: **DW-7** **Lab Code:** **K1207165-007**

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	3.0	1.0	07/27/12	08/02/12	5.7		
Antimony	200.8	0.05	1.0	07/30/12	08/06/12	0.05	U	
Arsenic	200.8	0.5	1.0	07/30/12	08/06/12	4.7		
Barium	200.8	0.05	1.0	07/30/12	08/06/12	12.3		
Beryllium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Cadmium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Calcium	200.7	50.0	1.0	07/27/12	08/02/12	25800		
Chromium	200.8	0.2	1.0	07/30/12	08/06/12	0.2	U	
Copper	200.8	0.1	1.0	07/30/12	08/06/12	0.1	U	
Iron	200.7	10.0	1.0	07/27/12	08/02/12	1400		
Lead	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Magnesium	200.7	20.0	1.0	07/27/12	08/02/12	6180		
Manganese	200.7	0.6	1.0	07/27/12	08/02/12	774		
Mercury	245.1	0.2	1.0	07/30/12	07/31/12	0.2	U	
Nickel	200.8	0.2	1.0	07/30/12	08/06/12	0.5		
Potassium	200.7	100	1.0	07/27/12	08/02/12	3340		
Selenium	200.8	1.0	1.0	07/30/12	08/06/12	1.0	U	
Silicon	200.7	50.0	1.0	07/27/12	08/02/12	25400		
Silver	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Sodium	200.7	200	1.0	07/27/12	08/02/12	9970		
Thallium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Uranium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Zinc	200.7	2.0	1.0	07/27/12	08/02/12	2.0	U	

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Kennedy/Jenks Consultants, Incor	**Service Request:**	K1207165
Project No.:	NA	**Date Collected:**	07/26/12
Project Name:	Mint Farm	**Date Received:**	07/26/12
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: **Dup-1** **Lab Code:** **K1207165-008**

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	3.0	1.0	07/27/12	08/02/12	6.1		
Antimony	200.8	0.05	1.0	07/30/12	08/06/12	0.05	U	
Arsenic	200.8	0.5	1.0	07/30/12	08/06/12	4.7		
Barium	200.8	0.05	1.0	07/30/12	08/06/12	12.1		
Beryllium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Cadmium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Calcium	200.7	50.0	1.0	07/27/12	08/02/12	25800		
Chromium	200.8	0.2	1.0	07/30/12	08/06/12	0.2	U	
Copper	200.8	0.1	1.0	07/30/12	08/06/12	0.1	U	
Iron	200.7	10.0	1.0	07/27/12	08/02/12	1400		
Lead	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Magnesium	200.7	20.0	1.0	07/27/12	08/02/12	6220		
Manganese	200.7	0.6	1.0	07/27/12	08/02/12	777		
Mercury	245.1	0.2	1.0	07/30/12	07/31/12	0.2	U	
Nickel	200.8	0.2	1.0	07/30/12	08/06/12	0.5		
Potassium	200.7	100	1.0	07/27/12	08/02/12	3370		
Selenium	200.8	1.0	1.0	07/30/12	08/06/12	1.0	U	
Silicon	200.7	50.0	1.0	07/27/12	08/02/12	25400		
Silver	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Sodium	200.7	200	1.0	07/27/12	08/02/12	9980		
Thallium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Uranium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Zinc	200.7	2.0	1.0	07/27/12	08/02/12	2.0	U	

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Kennedy/Jenks Consultants, Incor
Service Request: K1207165
Project No.: NA
Date Collected: 07/27/12
Project Name: Mint Farm
Date Received: 07/27/12
Matrix: WATER
Units: ug/L
Basis: NA

Sample Name: DW-6
Lab Code: K1207165-010

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	3.0	1.0	07/27/12	08/02/12	3.5		
Antimony	200.8	0.05	1.0	07/30/12	08/06/12	0.05	U	
Arsenic	200.8	0.5	1.0	07/30/12	08/06/12	5.0		
Barium	200.8	0.05	1.0	07/30/12	08/06/12	17.9		
Beryllium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Cadmium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Calcium	200.7	50.0	1.0	07/27/12	08/02/12	38700		
Chromium	200.8	0.2	1.0	07/30/12	08/06/12	0.2		
Copper	200.8	0.1	1.0	07/30/12	08/06/12	0.1	U	
Iron	200.7	10.0	1.0	07/27/12	08/02/12	669		
Lead	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Magnesium	200.7	20.0	1.0	07/27/12	08/02/12	10400		
Manganese	200.7	0.6	1.0	07/27/12	08/02/12	583		
Mercury	245.1	0.2	1.0	07/30/12	07/31/12	0.2	U	
Nickel	200.8	0.2	1.0	07/30/12	08/06/12	0.8		
Potassium	200.7	100	1.0	07/27/12	08/02/12	4620		
Selenium	200.8	1.0	1.0	07/30/12	08/06/12	1.0	U	
Silicon	200.7	50.0	1.0	07/27/12	08/02/12	24700		
Silver	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Sodium	200.7	200	1.0	07/27/12	08/02/12	12700		
Thallium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Uranium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Zinc	200.7	2.0	1.0	07/27/12	08/02/12	2.0	U	

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Kennedy/Jenks Consultants, Incor
Service Request: K1207165
Project No.: NA
Date Collected:
Project Name: Mint Farm
Date Received:
Matrix: WATER
Units: ug/L
Basis: NA

Sample Name: Method Blank
Lab Code: K1207165-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	3.0	1.0	07/27/12	08/03/12	3.0	U	
Antimony	200.8	0.05	1.0	07/30/12	08/06/12	0.05	U	
Arsenic	200.8	0.5	1.0	07/30/12	08/06/12	0.5	U	
Barium	200.8	0.05	1.0	07/30/12	08/06/12	0.05	U	
Beryllium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Cadmium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Calcium	200.7	50.0	1.0	07/27/12	08/02/12	50.0	U	
Chromium	200.8	0.2	1.0	07/30/12	08/06/12	0.2	U	
Copper	200.8	0.1	1.0	07/30/12	08/06/12	0.1	U	
Iron	200.7	10.0	1.0	07/27/12	08/02/12	10.0	U	
Lead	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Magnesium	200.7	2.0	1.0	07/27/12	08/02/12	2.0	U	
Manganese	200.7	0.6	1.0	07/27/12	08/02/12	0.6	U	
Mercury	245.1	0.2	1.0	07/27/12	07/27/12	0.2	U	
Nickel	200.8	0.2	1.0	07/30/12	08/06/12	0.2	U	
Potassium	200.7	100	1.0	07/27/12	08/02/12	100	U	
Selenium	200.8	1.0	1.0	07/30/12	08/06/12	1.0	U	
Silicon	200.7	50.0	1.0	07/27/12	08/02/12	50.0	U	
Silver	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Sodium	200.7	200	1.0	07/27/12	08/02/12	200	U	
Thallium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Uranium	200.8	0.02	1.0	07/30/12	08/06/12	0.02	U	
Zinc	200.7	2.0	1.0	07/27/12	08/02/12	2.0	U	

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Kennedy/Jenks Consultants, Incor	**Service Request:**	K1207165
Project No.:	NA	**Date Collected:**	
Project Name:	Mint Farm	**Date Received:**	
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: **Method Blank 2** **Lab Code:** **K1207165-MB2**

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Mercury	245.1	0.2	1.0	07/30/12	07/31/12	0.2	U	

Comments:

Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: Kennedy/Jenks Consultants, Incor **Service Request:** K1207165

Project No.: NA **Units:** UG/L

Project Name: Mint Farm **Basis:** NA

Matrix: WATER

Sample Name: DW-9S **Lab Code:** K1207165-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	70 - 130	1950		3.7		2000.00	97.3		200.7
Calcium	70 - 130	36300		26100		10000.00	102.0		200.7
Iron	70 - 130	1720		705		1000.00	101.5		200.7
Magnesium	70 - 130	16000		6130		10000.00	98.7		200.7
Manganese	70 - 130	1080		598		500.00	96.4		200.7
Mercury	70 - 130	1.03		0.2	U	1.00	103.0		245.1
Potassium	70 - 130	13700		3550		10000.00	101.5		200.7
Silicon	70 - 130	36200		26100		10000.00	101.0		200.7
Sodium	70 - 130	20900		10200		10000.00	107.0		200.7
Zinc	70 - 130	531		2.0	U	500.00	106.2		200.7

An empty field in the Control Limit column indicates the control limit is not applicable

COLUMBIA ANALYTICAL SERVICES, INC.
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Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: Kennedy/Jenks Consultants, Incor **Service Request:** K1207165

Project No.: NA **Units:** UG/L

Project Name: Mint Farm **Basis:** NA

Matrix: WATER

Sample Name: Batch QC1S **Lab Code:** K1207261-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	70 - 130	50.3		0.05	U	50.00	100.6		200.8
Arsenic	70 - 130	54.2		0.7		50.00	107.0		200.8
Barium	70 - 130	166		63.2		100.00	102.8		200.8
Beryllium	70 - 130	2.35		0.02	U	2.50	94.0		200.8
Cadmium	70 - 130	26.0		0.02	U	25.00	104.0		200.8
Chromium	70 - 130	10.4		0.4		10.00	100.0		200.8
Copper		113		99.5		12.50	108.0		200.8
Lead	70 - 130	55.9		0.85		50.00	110.1		200.8
Nickel	70 - 130	25.7		1.4		25.00	97.2		200.8
Selenium	70 - 130	53.0		1.3		50.00	103.4		200.8
Silver	70 - 130	12.2		0.02	U	12.50	97.6		200.8
Thallium	70 - 130	52.1		0.02	U	50.00	104.2		200.8
Uranium	70 - 130	26.9		3.4		20.00	117.5		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

COLUMBIA ANALYTICAL SERVICES, INC.
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Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: Kennedy/Jenks Consultants, Incor **Service Request:** K1207165

Project No.: NA **Units:** UG/L

Project Name: Mint Farm **Basis:** NA

Matrix: WATER

Sample Name: Batch QC2S **Lab Code:** K1207305-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Mercury	70 - 130	1.04		0.2	U	1.00	104.0		245.1

An empty field in the Control Limit column indicates the control limit is not applicable

Metals

- 6 -

DUPLICATES

Client: Kennedy/Jenks Consultants, Incor **Service Request:** K1207165

Project No.: NA **Units:** UG/L

Project Name: Mint Farm **Basis:** NA

Matrix: WATER

Sample Name: DW-9D **Lab Code:** K1207165-001D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		3.7		4.9		27.9		200.7
Calcium	20	26100		25800		1.2		200.7
Iron	20	705		696		1.3		200.7
Magnesium	20	6130		6100		0.5		200.7
Manganese	20	598		586		2.0		200.7
Mercury		0.2	U	0.2	U			245.1
Potassium	20	3550		3490		1.7		200.7
Silicon	20	26100		26100		0.0		200.7
Sodium	20	10200		10200		0.0		200.7
Zinc		2.0	U	2.0	U			200.7

An empty field in the Control Limit column indicates the control limit is not applicable.

Metals

- 6 -

DUPLICATES

Client: Kennedy/Jenks Consultants, Incor **Service Request:** K1207165

Project No.: NA **Units:** UG/L

Project Name: Mint Farm **Basis:** NA

Matrix: WATER

Sample Name: Batch QC1D **Lab Code:** K1207261-001D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony		0.05	U	0.05	U			200.8
Arsenic		0.7		0.7		0.0		200.8
Barium	20	63.2		61.6		2.6		200.8
Beryllium		0.02	U	0.02	U			200.8
Cadmium		0.02	U	0.02	U			200.8
Chromium		0.4		0.4		0.0		200.8
Copper	20	99.5		98.1		1.4		200.8
Lead	20	0.85		0.86		1.2		200.8
Nickel	20	1.4		1.4		0.0		200.8
Selenium		1.3		1.2		8.0		200.8
Silver		0.02	U	0.02	U			200.8
Thallium		0.02	U	0.02	U			200.8
Uranium	20	3.4		3.3		3.0		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

Metals

- 6 -

DUPLICATES

Client: Kennedy/Jenks Consultants, Incor **Service Request:** K1207165

Project No.: NA **Units:** UG/L

Project Name: Mint Farm **Basis:** NA

Matrix: WATER

Sample Name: Batch QC2D **Lab Code:** K1207305-001D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury		0.2	U	0.2	U			245.1

An empty field in the Control Limit column indicates the control limit is not applicable.

Metals

- 7 -

LABORATORY CONTROL SAMPLE

Client: Kennedy/Jenks Consultants, Incor **Service Request:** K1207165

Project No.: NA

Project Name: Mint Farm

Aqueous LCS Source: CAS MIXED **Solid LCS Source:**

Analyte	Aqueous (ug/L) True	Aqueous (ug/L) Found	Aqueous (ug/L) %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits	Solid (mg/kg) %R
Aluminum	5000	4840	96.8					
Antimony	50	47.9	95.8					
Arsenic	50	49.7	99.4					
Barium	100	98.5	98.5					
Beryllium	2.5	2.37	94.8					
Cadmium	25	25.7	102.8					
Calcium	12500	12800	102.4					
Chromium	10	9.6	96.0					
Copper	12.5	12.2	97.6					
Iron	2500	2510	100.4					
Lead	50	54.0	108.0					
Magnesium	12500	12200	97.6					
Manganese	1250	1260	100.8					
Mercury	5	5.25	105.0					
Nickel	25	24.2	96.8					
Potassium	12500	12200	97.6					
Selenium	50	50.4	100.8					
Silicon	10000	10000	100.0					
Silver	12.5	12.2	97.6					
Sodium	12500	12700	101.6					
Thallium	50	50.7	101.4					
Uranium	20	20.8	104.0					
Zinc	1250	1320	105.6					

Metals

- 7 -

LABORATORY CONTROL SAMPLE

Client: Kennedy/Jenks Consultants, Incor **Service Request:** K1207165

Project No.: NA

Project Name: Mint Farm

Aqueous LCS Source: CAS MIXED **Solid LCS Source:**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits	%R
Mercury	5	5.33	106.6					

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/24/2012
Sample Matrix:	Water	**Date Received:**	7/24/2012

Total Metals

Sample Name:	DW-9	Units:	ug/L (ppb)
Lab Code:	K1207165-001	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic (III)	None	1632 Rev. A	0.5	25	NA	7/30/2012	5.1	
Arsenic (V)	None	1632 Rev. A	0.5	25	NA	7/31/2012	0.9	
Inorganic Arsenic	None	1632 Rev. A	0.5	25	NA	7/31/2012	6.0	

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/25/2012
Sample Matrix:	Water	**Date Received:**	7/25/2012

Total Metals

Sample Name:	DW-2	Units:	ug/L (ppb)
Lab Code:	K1207165-003	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic (III)	None	1632 Rev. A	1.0	50	NA	7/30/2012	9.0	
Arsenic (V)	None	1632 Rev. A	1.0	50	NA	7/31/2012	1.5	
Inorganic Arsenic	None	1632 Rev. A	1.0	50	NA	7/31/2012	10.5	

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/25/2012
Sample Matrix:	Water	**Date Received:**	7/25/2012

Total Metals

Sample Name:	DW-5	Units:	ug/L (ppb)
Lab Code:	K1207165-004	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic (III)	None	1632 Rev. A	0.5	25	NA	7/30/2012	6.8	
Arsenic (V)	None	1632 Rev. A	0.5	25	NA	7/31/2012	0.6	
Inorganic Arsenic	None	1632 Rev. A	0.5	25	NA	7/31/2012	7.4	

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/25/2012
Sample Matrix:	Water	**Date Received:**	7/25/2012

Total Metals

Sample Name:	DW-1	Units:	ug/L (ppb)
Lab Code:	K1207165-006	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic (III)	None	1632 Rev. A	0.5	25	NA	7/30/2012	4.5	
Arsenic (V)	None	1632 Rev. A	0.5	25	NA	7/31/2012	ND	
Inorganic Arsenic	None	1632 Rev. A	0.5	25	NA	7/31/2012	4.4	

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/26/2012
Sample Matrix:	Water	**Date Received:**	7/26/2012

Total Metals

Sample Name:	DW-7	Units:	ug/L (ppb)
Lab Code:	K1207165-007	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic (III)	None	1632 Rev. A	0.5	25	NA	7/30/2012	4.4	
Arsenic (V)	None	1632 Rev. A	0.5	25	NA	7/31/2012	1.3	
Inorganic Arsenic	None	1632 Rev. A	0.5	25	NA	7/31/2012	5.7	

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/26/2012
Sample Matrix:	Water	**Date Received:**	7/26/2012

Total Metals

Sample Name:	Dup-1	Units:	ug/L (ppb)
Lab Code:	K1207165-008	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic (III)	None	1632 Rev. A	0.5	25	NA	7/30/2012	4.7	
Arsenic (V)	None	1632 Rev. A	0.5	25	NA	7/31/2012	0.7	
Inorganic Arsenic	None	1632 Rev. A	0.5	25	NA	7/31/2012	5.4	

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/26/2012
Sample Matrix:	Water	**Date Received:**	7/26/2012

Total Metals

Sample Name:	DW-6	Units:	ug/L (ppb)
Lab Code:	K1207165-010	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic (III)	None	1632 Rev. A	0.5	25	NA	7/30/2012	4.7	
Arsenic (V)	None	1632 Rev. A	0.5	25	NA	7/31/2012	1.2	
Inorganic Arsenic	None	1632 Rev. A	0.5	25	NA	7/31/2012	5.9	

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Total Metals

Sample Name:	Method Blank 1	Units:	ug/L (ppb)
Lab Code:	K1207165-MB1	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic (III)	None	1632 Rev. A	0.02	1	NA	7/30/2012	ND	
Arsenic (V)	None	1632 Rev. A	0.02	1	NA	7/31/2012	ND	
Inorganic Arsenic	None	1632 Rev. A	0.02	1	NA	7/31/2012	ND	

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Total Metals

Sample Name:	Method Blank 2	Units:	ug/L (ppb)
Lab Code:	K1207165-MB2	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic (III)	None	1632 Rev. A	0.02	1	NA	7/30/2012	ND	
Arsenic (V)	None	1632 Rev. A	0.02	1	NA	7/31/2012	ND	
Inorganic Arsenic	None	1632 Rev. A	0.02	1	NA	7/31/2012	ND	

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Total Metals

Sample Name:	Method Blank 3	Units:	ug/L (ppb)
Lab Code:	K1207165-MB3	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic (III)	None	1632 Rev. A	0.02	1	NA	7/30/2012	ND	
Arsenic (V)	None	1632 Rev. A	0.02	1	NA	7/31/2012	ND	
Inorganic Arsenic	None	1632 Rev. A	0.02	1	NA	7/31/2012	ND	

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Total Metals

Sample Name:	Method Blank 4	Units:	ug/L (ppb)
Lab Code:	K1207165-MB4	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Arsenic (III)	None	1632 Rev. A	0.02	1	NA	7/30/2012	ND	
Arsenic (V)	None	1632 Rev. A	0.02	1	NA	7/31/2012	ND	
Inorganic Arsenic	None	1632 Rev. A	0.02	1	NA	7/31/2012	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	7/31/2012

Matrix Spike/Duplicate Matrix Spike Summary

Total Metals

Sample Name:	Batch QC	Units:	ug/L (ppb)
Lab Code:	K1207279-001MS, K1207279-001MSD	Basis:	NA
Test Notes:			

									Percent Recovery				
				Spike Level		Sample	Spike Result				Method	Relative	
Analyte	**Prep Method**	**Analysis Method**	**MRL**	**MS**	**DMS**	**Result**	**MS**	**DMS**	**MS**	**DMS**	**Acceptance Limits**	**Percent Difference**	**Result Notes**
Arsenic (III)	None	1632 Rev. A	0.02	0.2	0.2	0.07	0.30	0.24	115	85	30-170	22	
Inorganic Arsenic	None	1632 Rev. A	0.40	4	4	5.1	9.0	9.2	98	103	50-150	2	

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	7/31/2012

Calibration Verification (CALVER) Sample Summary

Total Metals

Sample Name: CALVER 1

Units: ug/L (ppb)

Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Arsenic (III)	None	1632 Rev. A	0.20	0.22	110	70-130	
Inorganic Arsenic	None	1632 Rev. A	0.20	0.20	100	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	7/31/2012

Calibration Verification (CALVER) Sample Summary

Total Metals

Sample Name: CALVER 2

Units: ug/L (ppb)

Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Arsenic (III)	None	1632 Rev. A	0.20	0.22	110	70-130	
Inorganic Arsenic	None	1632 Rev. A	0.20	0.20	100	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	7/31/2012

Calibration Verification (CALVER) Sample Summary

Total Metals

Sample Name: CALVER 3

Units: ug/L (ppb)

Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Arsenic (III)	None	1632 Rev. A	0.20	0.23	115	70-130	
Inorganic Arsenic	None	1632 Rev. A	0.20	0.21	105	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24-27/12
Sample Matrix:	Water	**Date Received:**	07/24/12

Hardness as CaCO3

Prep Method:	CLAA	Units:	mg/L (ppm)
Analysis Method:	200.7/SM 2340B	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
DW-9	K1207165-001	0.4	1	07/27/12	08/02/12	90.4	
DW-2	K1207165-003	0.4	1	07/27/12	08/02/12	122	
DW-5	K1207165-004	0.4	1	07/27/12	08/02/12	133	
DW-1	K1207165-006	0.4	1	07/27/12	08/02/12	72.8	
DW-7	K1207165-007	0.4	1	07/27/12	08/02/12	89.9	
Dup-1	K1207165-008	0.4	1	07/27/12	08/02/12	90.1	
DW-6	K1207165-010	0.4	1	07/27/12	08/02/12	140	
Method Blank	K1207165-MB	0.4	1	07/27/12	08/02/12	ND	

COLUMBIA ANALYTICAL SERVICES, INC.
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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/12
Sample Matrix:	Water	**Date Received:**	07/24/12
		Date Extracted:	07/27/12
		Date Analyzed:	08/02/12

Duplicate Summary
Metals

Sample Name:	DW-9	Units:	mg/L (ppm)
Lab Code:	K1207165-001D	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Hardness as CaCO3	CLAA	200.7/SM 2340B	0.4	90.4	89.7	90.1	<1	

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/2012
Sample Matrix:	Water	**Date Received:**	07/24/2012

EPA Method 504.1

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0097	1	08/01/12	08/01/12	KWG1208606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0097	1	08/01/12	08/01/12	KWG1208606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

EPA Method 504.1

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0095	1	08/01/12	08/01/12	KWG1208606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0095	1	08/01/12	08/01/12	KWG1208606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

EPA Method 504.1

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0096	1	08/01/12	08/01/12	KWG1208606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0096	1	08/01/12	08/01/12	KWG1208606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

EPA Method 504.1

Sample Name:	DW-1	**Units:**	ug/L
Lab Code:	K1207165-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0095	1	08/01/12	08/02/12	KWG1208606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0095	1	08/01/12	08/02/12	KWG1208606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

EPA Method 504.1

Sample Name:	DW-7	**Units:**	ug/L
Lab Code:	K1207165-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0098	1	08/01/12	08/02/12	KWG1208606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0098	1	08/01/12	08/02/12	KWG1208606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

EPA Method 504.1

Sample Name:	Dup-1	**Units:**	ug/L
Lab Code:	K1207165-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0095	1	08/01/12	08/02/12	KWG1208606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0095	1	08/01/12	08/02/12	KWG1208606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/2012
Sample Matrix:	Water	**Date Received:**	07/27/2012

EPA Method 504.1

Sample Name:	DW-6	**Units:**	ug/L
Lab Code:	K1207165-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0096	1	08/01/12	08/02/12	KWG1208606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0096	1	08/01/12	08/02/12	KWG1208606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

EPA Method 504.1

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208606-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.010	1	08/01/12	08/01/12	KWG1208606	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.010	1	08/01/12	08/01/12	KWG1208606	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/01/2012
Sample Matrix:	Water	**Date Analyzed:**	08/01/2012

Matrix Spike Summary
EPA Method 504.1

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG1208606

		DW-9MS KWG1208606-1 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	ND	0.224	0.241	93	65-135
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.203	0.241	84	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/01/2012
Sample Matrix:	Water	**Date Analyzed:**	08/01/2012

Lab Control Spike Summary
EPA Method 504.1

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	504.1	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208606

	Lab Control Sample KWG1208606-2 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	0.263	0.250	105	70-130
1,2-Dibromo-3-chloropropane (DBCP)	0.246	0.250	98	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/01/2012
Sample Matrix:	Water	**Date Analyzed:**	08/01/2012

Lab Control Spike Summary
EPA Method 504.1

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	504.1	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208606

	Lab Control Sample KWG1208606-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	0.265	0.250	106	70-130
1,2-Dibromo-3-chloropropane (DBCP)	0.258	0.250	103	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/2012
Sample Matrix:	Water	**Date Received:**	07/24/2012

Pesticides/PCBs by EPA method 508.1

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Heptachlor	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Heptachlor Epoxide	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Endrin	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	*
Methoxychlor	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Toxaphene	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Chlordane	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1016	ND	U	0.049	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1221	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1232	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1242	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1248	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1254	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1260	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	100	70-130	08/07/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Pesticides/PCBs by EPA method 508.1

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Heptachlor	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Heptachlor Epoxide	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Endrin	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	*
Methoxychlor	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Toxaphene	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Chlordane	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1016	ND	U	0.049	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1221	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1232	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1242	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1248	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1254	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1260	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	95	70-130	08/07/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Pesticides/PCBs by EPA method 508.1

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Heptachlor	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Heptachlor Epoxide	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Endrin	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	*
Methoxychlor	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Toxaphene	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Chlordane	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1016	ND	U	0.049	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1221	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1232	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1242	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1248	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1254	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1260	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	96	70-130	08/07/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Pesticides/PCBs by EPA method 508.1

Sample Name:	DW-1	**Units:**	ug/L
Lab Code:	K1207165-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.010	1	08/03/12	08/07/12	KWG1208716	
Heptachlor	ND	U	0.010	1	08/03/12	08/07/12	KWG1208716	
Heptachlor Epoxide	ND	U	0.010	1	08/03/12	08/07/12	KWG1208716	
Endrin	ND	U	0.010	1	08/03/12	08/07/12	KWG1208716	*
Methoxychlor	ND	U	0.010	1	08/03/12	08/07/12	KWG1208716	
Toxaphene	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Chlordane	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1016	ND	U	0.050	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1221	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1232	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1242	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1248	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1254	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1260	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	102	70-130	08/07/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Pesticides/PCBs by EPA method 508.1

Sample Name:	DW-7	**Units:**	ug/L
Lab Code:	K1207165-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0099	1	08/03/12	08/07/12	KWG1208716	
Heptachlor	ND	U	0.0099	1	08/03/12	08/07/12	KWG1208716	
Heptachlor Epoxide	ND	U	0.0099	1	08/03/12	08/07/12	KWG1208716	
Endrin	ND	U	0.0099	1	08/03/12	08/07/12	KWG1208716	*
Methoxychlor	ND	U	0.0099	1	08/03/12	08/07/12	KWG1208716	
Toxaphene	ND	U	0.099	1	08/03/12	08/07/12	KWG1208716	
Chlordane	ND	U	0.099	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1016	ND	U	0.050	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1221	ND	U	0.099	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1232	ND	U	0.099	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1242	ND	U	0.099	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1248	ND	U	0.099	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1254	ND	U	0.099	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1260	ND	U	0.099	1	08/03/12	08/07/12	KWG1208716	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	97	70-130	08/07/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Pesticides/PCBs by EPA method 508.1

Sample Name:	Dup-1	**Units:**	ug/L
Lab Code:	K1207165-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Heptachlor	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Heptachlor Epoxide	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Endrin	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	*
Methoxychlor	ND	U	0.0098	1	08/03/12	08/07/12	KWG1208716	
Toxaphene	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Chlordane	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1016	ND	U	0.049	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1221	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1232	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1242	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1248	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1254	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1260	ND	U	0.098	1	08/03/12	08/07/12	KWG1208716	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	99	70-130	08/07/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/2012
Sample Matrix:	Water	**Date Received:**	07/27/2012

Pesticides/PCBs by EPA method 508.1

Sample Name:	DW-6	**Units:**	ug/L
Lab Code:	K1207165-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0097	1	08/03/12	08/07/12	KWG1208716	
Heptachlor	ND	U	0.0097	1	08/03/12	08/07/12	KWG1208716	
Heptachlor Epoxide	ND	U	0.0097	1	08/03/12	08/07/12	KWG1208716	
Endrin	ND	U	0.0097	1	08/03/12	08/07/12	KWG1208716	*
Methoxychlor	ND	U	0.0097	1	08/03/12	08/07/12	KWG1208716	
Toxaphene	ND	U	0.097	1	08/03/12	08/07/12	KWG1208716	
Chlordane	ND	U	0.097	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1016	ND	U	0.049	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1221	ND	U	0.097	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1232	ND	U	0.097	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1242	ND	U	0.097	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1248	ND	U	0.097	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1254	ND	U	0.097	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1260	ND	U	0.097	1	08/03/12	08/07/12	KWG1208716	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	97	70-130	08/07/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Pesticides/PCBs by EPA method 508.1

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208716-5	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.010	1	08/03/12	08/07/12	KWG1208716	
Heptachlor	ND	U	0.010	1	08/03/12	08/07/12	KWG1208716	
Heptachlor Epoxide	ND	U	0.010	1	08/03/12	08/07/12	KWG1208716	
Endrin	ND	U	0.010	1	08/03/12	08/07/12	KWG1208716	*
Methoxychlor	ND	U	0.010	1	08/03/12	08/07/12	KWG1208716	
Toxaphene	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Chlordane	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1016	ND	U	0.050	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1221	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1232	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1242	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1248	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1254	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	
Aroclor 1260	ND	U	0.10	1	08/03/12	08/07/12	KWG1208716	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	100	70-130	08/07/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated **Service Request:** K1207165
Project: Mint Farm
Sample Matrix: Water

Surrogate Recovery Summary
Pesticides/PCBs by EPA method 508.1

Extraction Method: METHOD **Units:** ug/L
Analysis Method: 508.1 **Level:** Low

Sample Name	Lab Code	Sur1
DW-9	K1207165-001	100
DW-2	K1207165-003	95
DW-5	K1207165-004	96
DW-1	K1207165-006	102
DW-7	K1207165-007	97
Dup-1	K1207165-008	99
DW-6	K1207165-010	97
Method Blank	KWG1208716-5	100
DW-2MS	KWG1208716-1	97
DW-5MS	KWG1208716-2	109
Lab Control Sample	KWG1208716-3	102

Surrogate Recovery Control Limits (%)

Sur1 = 4,4'-Dibromooctafluorobiphenyl 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/03/2012
Sample Matrix:	Water	**Date Analyzed:**	08/07/2012

Matrix Spike Summary
Pesticides/PCBs by EPA method 508.1

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1	**Extraction Lot:**	KWG1208716

		DW-2MS KWG1208716-1 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
gamma-BHC (Lindane)	ND	0.109	0.0971	112	65-135
Heptachlor	ND	0.0963	0.0971	99	65-135
Heptachlor Epoxide	ND	0.103	0.0971	106	65-135
Endrin	ND	0.0912	0.0971	94	65-135
Methoxychlor	ND	0.119	0.0971	123	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/03/2012
Sample Matrix:	Water	**Date Analyzed:**	08/07/2012

Matrix Spike Summary
Pesticides/PCBs by EPA method 508.1

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1	**Extraction Lot:**	KWG1208716

		DW-5MS KWG1208716-2 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Aroclor 1242	ND	0.498	0.485	103	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/03/2012
Sample Matrix:	Water	**Date Analyzed:**	08/07/2012

Lab Control Spike Summary
Pesticides/PCBs by EPA method 508.1

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	508.1	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208716

	Lab Control Sample KWG1208716-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
gamma-BHC (Lindane)	0.119	0.100	119	70-130
Heptachlor	0.117	0.100	117	70-130
Heptachlor Epoxide	0.128	0.100	128	70-130
Endrin	0.143	0.100	143 *	70-130
Methoxychlor	0.128	0.100	128	70-130
Aroclor 1242	0.529	0.500	106	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/2012
Sample Matrix:	Water	**Date Received:**	07/24/2012

Chlorinated Acids by EPA Method 515.4

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	Method	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	1	08/02/12	08/03/12	KWG1208667	
2,4-D	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	
Pentachlorophenol	ND	U	0.040	1	08/02/12	08/03/12	KWG1208667	
2,4,5-TP (Silvex)	ND	U	0.050	1	08/02/12	08/03/12	KWG1208667	
Dinoseb	ND	U	0.20	1	08/02/12	08/03/12	KWG1208667	
Picloram	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	103	70-130	08/03/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Chlorinated Acids by EPA Method 515.4

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA
Extraction Method:	Method	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	1	08/02/12	08/03/12	KWG1208667	
2,4-D	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	
Pentachlorophenol	ND	U	0.040	1	08/02/12	08/03/12	KWG1208667	
2,4,5-TP (Silvex)	ND	U	0.050	1	08/02/12	08/03/12	KWG1208667	
Dinoseb	ND	U	0.20	1	08/02/12	08/03/12	KWG1208667	
Picloram	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	95	70-130	08/03/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Chlorinated Acids by EPA Method 515.4

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA
Extraction Method:	Method	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	1	08/02/12	08/03/12	KWG1208667	
2,4-D	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	
Pentachlorophenol	ND	U	0.040	1	08/02/12	08/03/12	KWG1208667	
2,4,5-TP (Silvex)	ND	U	0.050	1	08/02/12	08/03/12	KWG1208667	
Dinoseb	ND	U	0.20	1	08/02/12	08/03/12	KWG1208667	
Picloram	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	101	70-130	08/03/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Chlorinated Acids by EPA Method 515.4

Sample Name:	DW-1	**Units:**	ug/L
Lab Code:	K1207165-006	**Basis:**	NA
Extraction Method:	Method	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	1	08/02/12	08/03/12	KWG1208667	
2,4-D	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	
Pentachlorophenol	ND	U	0.040	1	08/02/12	08/03/12	KWG1208667	
2,4,5-TP (Silvex)	ND	U	0.050	1	08/02/12	08/03/12	KWG1208667	
Dinoseb	ND	U	0.20	1	08/02/12	08/03/12	KWG1208667	
Picloram	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	102	70-130	08/03/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Chlorinated Acids by EPA Method 515.4

Sample Name:	DW-7	**Units:**	ug/L
Lab Code:	K1207165-007	**Basis:**	NA
Extraction Method:	Method	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	1	08/02/12	08/03/12	KWG1208667	
2,4-D	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	
Pentachlorophenol	ND	U	0.040	1	08/02/12	08/03/12	KWG1208667	
2,4,5-TP (Silvex)	ND	U	0.050	1	08/02/12	08/03/12	KWG1208667	
Dinoseb	ND	U	0.20	1	08/02/12	08/03/12	KWG1208667	
Picloram	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	95	70-130	08/03/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Chlorinated Acids by EPA Method 515.4

Sample Name:	Dup-1	**Units:**	ug/L
Lab Code:	K1207165-008	**Basis:**	NA
Extraction Method:	Method	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	1	08/02/12	08/03/12	KWG1208667	
2,4-D	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	
Pentachlorophenol	ND	U	0.040	1	08/02/12	08/03/12	KWG1208667	
2,4,5-TP (Silvex)	ND	U	0.050	1	08/02/12	08/03/12	KWG1208667	
Dinoseb	ND	U	0.20	1	08/02/12	08/03/12	KWG1208667	
Picloram	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	83	70-130	08/03/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/2012
Sample Matrix:	Water	**Date Received:**	07/27/2012

Chlorinated Acids by EPA Method 515.4

Sample Name:	DW-6	**Units:**	ug/L
Lab Code:	K1207165-010	**Basis:**	NA
Extraction Method:	Method	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	1	08/02/12	08/03/12	KWG1208667	
2,4-D	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	
Pentachlorophenol	ND	U	0.040	1	08/02/12	08/03/12	KWG1208667	
2,4,5-TP (Silvex)	ND	U	0.050	1	08/02/12	08/03/12	KWG1208667	
Dinoseb	ND	U	0.20	1	08/02/12	08/03/12	KWG1208667	
Picloram	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	98	70-130	08/03/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Drinking water	**Date Received:**	NA

Chlorinated Acids by EPA Method 515.4

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208667-4	**Basis:**	NA
Extraction Method:	Method	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	1	08/02/12	08/03/12	KWG1208667	
2,4-D	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	
Pentachlorophenol	ND	U	0.040	1	08/02/12	08/03/12	KWG1208667	
2,4,5-TP (Silvex)	ND	U	0.050	1	08/02/12	08/03/12	KWG1208667	
Dinoseb	ND	U	0.20	1	08/02/12	08/03/12	KWG1208667	
Picloram	ND	U	0.10	1	08/02/12	08/03/12	KWG1208667	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	88	70-130	08/03/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated **Service Request:** K1207165
Project: Mint Farm
Sample Matrix: Water

Surrogate Recovery Summary
Chlorinated Acids by EPA Method 515.4

Extraction Method: Method **Units:** ug/L
Analysis Method: 515.4 **Level:** Low

Sample Name	Lab Code	Sur1
DW-9	K1207165-001	103
DW-2	K1207165-003	95
DW-5	K1207165-004	101
DW-1	K1207165-006	102
DW-7	K1207165-007	95
Dup-1	K1207165-008	83
DW-6	K1207165-010	98
Method Blank	KWG1208667-4	88
DW-9MS	KWG1208667-1	98
DW-9DMS	KWG1208667-2	92
Lab Control Sample	KWG1208667-3	92

Surrogate Recovery Control Limits (%)

Sur1 = 2,4-Dichlorophenylacetic Acid 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/02/2012
Sample Matrix:	Water	**Date Analyzed:**	08/03/2012

Matrix Spike/Duplicate Matrix Spike Summary
Chlorinated Acids by EPA Method 515.4

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	Method	**Level:**	Low
Analysis Method:	515.4	**Extraction Lot:**	KWG1208667

		DW-9MS KWG1208667-1 Matrix Spike			DW-9DMS KWG1208667-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dalapon	ND	5.01	4.98	101	4.91	4.96	99	70-130	2	30
2,4-D	ND	4.78	4.98	96	4.50	4.96	91	70-130	6	30
Pentachlorophenol	ND	5.45	4.98	109	5.28	4.96	106	70-130	3	30
2,4,5-TP (Silvex)	ND	4.68	4.98	94	4.44	4.96	89	70-130	5	30
Dinoseb	ND	4.92	4.98	99	4.71	4.96	95	70-130	4	30
Picloram	ND	5.54	4.98	111	5.18	4.96	104	70-130	7	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/02/2012
Sample Matrix:	Drinking water	**Date Analyzed:**	08/03/2012

Lab Control Spike Summary
Chlorinated Acids by EPA Method 515.4

Extraction Method:	Method	**Units:**	ug/L
Analysis Method:	515.4	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208667

	Lab Control Sample KWG1208667-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dalapon	4.73	5.00	95	70-130
2,4-D	4.66	5.00	93	70-130
Pentachlorophenol	4.81	5.00	96	70-130
2,4,5-TP (Silvex)	4.57	5.00	91	70-130
Dinoseb	4.78	5.00	96	70-130
Picloram	5.14	5.00	103	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/2012
Sample Matrix:	Water	**Date Received:**	07/24/2012

Volatile Organic Compounds

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Vinyl Chloride	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromomethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Trichlorofluoromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Methylene Chloride	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1-Dichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chloroform	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromochloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Carbon Tetrachloride	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Benzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Trichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromodichloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Dibromomethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1-Dichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Toluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Tetrachloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
2,2-Dichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,3-Dichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Dibromochloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dibromoethane (EDB)	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Ethylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Styrene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
m,p-Xylenes	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/2012
Sample Matrix:	Water	**Date Received:**	07/24/2012

Volatile Organic Compounds

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
o-Xylene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,1-Trichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromoform	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Isopropylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1-Dichloropropene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
n-Propylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,3,5-Trimethylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
2-Chlorotoluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
4-Chlorotoluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
tert-Butylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,4-Trimethylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
sec-Butylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
p-Isopropyltoluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,3-Dichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,4-Dichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
n-Butylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,4-Trichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Hexachlorobutadiene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Naphthalene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,2-Trichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,3-Trichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,3-Trichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/2012
Sample Matrix:	Water	**Date Received:**	07/24/2012

Volatile Organic Compounds

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	94	70-130	07/31/12	Acceptable
Dibromofluoromethane	103	82-124	07/31/12	Acceptable
Toluene-d8	107	82-124	07/31/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Volatile Organic Compounds

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Vinyl Chloride	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromomethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Trichlorofluoromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Methylene Chloride	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1-Dichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chloroform	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromochloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Carbon Tetrachloride	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Benzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Trichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromodichloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Dibromomethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1-Dichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Toluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Tetrachloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
2,2-Dichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,3-Dichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Dibromochloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dibromoethane (EDB)	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Ethylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Styrene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
m,p-Xylenes	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Volatile Organic Compounds

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
o-Xylene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,1-Trichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromoform	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Isopropylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1-Dichloropropene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
n-Propylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,3,5-Trimethylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
2-Chlorotoluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
4-Chlorotoluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
tert-Butylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,4-Trimethylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
sec-Butylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
p-Isopropyltoluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,3-Dichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,4-Dichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
n-Butylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,4-Trichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Hexachlorobutadiene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Naphthalene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,2-Trichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,3-Trichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,3-Trichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Volatile Organic Compounds

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	94	70-130	07/31/12	Acceptable
Dibromofluoromethane	104	82-124	07/31/12	Acceptable
Toluene-d8	106	82-124	07/31/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Volatile Organic Compounds

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Vinyl Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichlorofluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methylene Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methyl tert-Butyl Ether	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Carbon Tetrachloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Benzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromodichloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Toluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Tetrachloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromoethane (EDB)	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Ethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Styrene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
m,p-Xylenes	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Volatile Organic Compounds

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
o-Xylene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromoform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Isopropylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Propylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3,5-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
4-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
tert-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
sec-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
p-Isopropyltoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,4-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Hexachlorobutadiene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Naphthalene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Volatile Organic Compounds

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	94	70-130	08/01/12	Acceptable
Dibromofluoromethane	105	82-124	08/01/12	Acceptable
Toluene-d8	107	82-124	08/01/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Volatile Organic Compounds

Sample Name:	DW-1	**Units:**	ug/L
Lab Code:	K1207165-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Vinyl Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichlorofluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methylene Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methyl tert-Butyl Ether	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Carbon Tetrachloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Benzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromodichloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Toluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Tetrachloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromoethane (EDB)	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Ethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Styrene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
m,p-Xylenes	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Volatile Organic Compounds

Sample Name:	DW-1	**Units:**	ug/L
Lab Code:	K1207165-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
o-Xylene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromoform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Isopropylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Propylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3,5-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
4-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
tert-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
sec-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
p-Isopropyltoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,4-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Hexachlorobutadiene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Naphthalene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Volatile Organic Compounds

Sample Name:	DW-1	**Units:**	ug/L
Lab Code:	K1207165-006	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	93	70-130	08/01/12	Acceptable
Dibromofluoromethane	105	82-124	08/01/12	Acceptable
Toluene-d8	107	82-124	08/01/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Volatile Organic Compounds

Sample Name:	DW-7	**Units:**	ug/L
Lab Code:	K1207165-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Vinyl Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichlorofluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methylene Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methyl tert-Butyl Ether	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Carbon Tetrachloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Benzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromodichloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Toluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Tetrachloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromoethane (EDB)	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Ethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Styrene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
m,p-Xylenes	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Volatile Organic Compounds

Sample Name:	DW-7	**Units:**	ug/L
Lab Code:	K1207165-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
o-Xylene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromoform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Isopropylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Propylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3,5-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
4-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
tert-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
sec-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
p-Isopropyltoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,4-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Hexachlorobutadiene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Naphthalene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Volatile Organic Compounds

Sample Name:	DW-7	**Units:**	ug/L
Lab Code:	K1207165-007	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	94	70-130	08/01/12	Acceptable
Dibromofluoromethane	105	82-124	08/01/12	Acceptable
Toluene-d8	107	82-124	08/01/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Volatile Organic Compounds

Sample Name:	Dup-1	**Units:**	ug/L
Lab Code:	K1207165-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Vinyl Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichlorofluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methylene Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methyl tert-Butyl Ether	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Carbon Tetrachloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Benzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromodichloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Toluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Tetrachloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromoethane (EDB)	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Ethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Styrene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
m,p-Xylenes	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Volatile Organic Compounds

Sample Name:	Dup-1	**Units:**	ug/L
Lab Code:	K1207165-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
o-Xylene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromoform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Isopropylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Propylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3,5-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
4-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
tert-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
sec-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
p-Isopropyltoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,4-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Hexachlorobutadiene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Naphthalene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Volatile Organic Compounds

Sample Name:	Dup-1	**Units:**	ug/L
Lab Code:	K1207165-008	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	92	70-130	08/01/12	Acceptable
Dibromofluoromethane	106	82-124	08/01/12	Acceptable
Toluene-d8	107	82-124	08/01/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/2012
Sample Matrix:	Water	**Date Received:**	07/27/2012

Volatile Organic Compounds

Sample Name:	DW-6	**Units:**	ug/L
Lab Code:	K1207165-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Vinyl Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichlorofluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methylene Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methyl tert-Butyl Ether	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Carbon Tetrachloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Benzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromodichloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Toluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Tetrachloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromoethane (EDB)	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Ethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Styrene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
m,p-Xylenes	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/2012
Sample Matrix:	Water	**Date Received:**	07/27/2012

Volatile Organic Compounds

Sample Name:	DW-6	**Units:**	ug/L
Lab Code:	K1207165-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
o-Xylene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromoform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Isopropylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Propylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3,5-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
4-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
tert-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
sec-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
p-Isopropyltoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,4-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Hexachlorobutadiene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Naphthalene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/2012
Sample Matrix:	Water	**Date Received:**	07/27/2012

Volatile Organic Compounds

Sample Name:	DW-6	**Units:**	ug/L
Lab Code:	K1207165-010	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	93	70-130	08/01/12	Acceptable
Dibromofluoromethane	105	82-124	08/01/12	Acceptable
Toluene-d8	106	82-124	08/01/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208527-2	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Vinyl Chloride	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromomethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Trichlorofluoromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Methylene Chloride	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1-Dichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chloroform	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromochloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Carbon Tetrachloride	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Benzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Trichloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromodichloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Dibromomethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1-Dichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Toluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Tetrachloroethene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
2,2-Dichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,3-Dichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Dibromochloromethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dibromoethane (EDB)	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Chlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Ethylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Styrene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
m,p-Xylenes	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208527-2	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
o-Xylene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,1-Trichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromoform	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Isopropylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1-Dichloropropene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Bromobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
n-Propylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,3,5-Trimethylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
2-Chlorotoluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
4-Chlorotoluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
tert-Butylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,4-Trimethylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
sec-Butylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
p-Isopropyltoluene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,3-Dichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,4-Dichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
n-Butylbenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,4-Trichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Hexachlorobutadiene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
Naphthalene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,2-Trichloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,3-Trichloropropane	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	
1,2,3-Trichlorobenzene	ND	U	0.50	1	07/31/12	07/31/12	KWG1208527	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208527-2	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	95	70-130	07/31/12	Acceptable
Dibromofluoromethane	101	82-124	07/31/12	Acceptable
Toluene-d8	106	82-124	07/31/12	Acceptable

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208591-2	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Vinyl Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichlorofluoromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methylene Chloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,2-Dichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Methyl tert-Butyl Ether	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chloroform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Carbon Tetrachloride	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Benzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Trichloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromodichloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromomethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
cis-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Toluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
trans-1,3-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Tetrachloroethene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2,2-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Dibromochloromethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromoethane (EDB)	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Chlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Ethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Styrene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
m,p-Xylenes	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208591-2	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	524.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
o-Xylene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromoform	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Isopropylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1-Dichloropropene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Bromobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Propylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3,5-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
2-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
4-Chlorotoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
tert-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trimethylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
sec-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
p-Isopropyltoluene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,3-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,4-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
n-Butylbenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,4-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Hexachlorobutadiene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
Naphthalene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,2-Trichloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichloropropane	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	
1,2,3-Trichlorobenzene	ND	U	0.50	1	08/01/12	08/01/12	KWG1208591	

Comments:

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208591-2	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	93	70-130	08/01/12	Acceptable
Dibromofluoromethane	103	82-124	08/01/12	Acceptable
Toluene-d8	106	82-124	08/01/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated **Service Request:** K1207165
Project: Mint Farm
Sample Matrix: Water

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: METHOD **Units:** PERCENT
Analysis Method: 524.2 **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
DW-9	K1207165-001	94	103	107
DW-2	K1207165-003	94	104	106
DW-5	K1207165-004	94	105	107
DW-1	K1207165-006	93	105	107
DW-7	K1207165-007	94	105	107
Dup-1	K1207165-008	92	106	107
DW-6	K1207165-010	93	105	106
Method Blank	KWG1208527-2	95	101	106
Method Blank	KWG1208591-2	93	103	106
Lab Control Sample	KWG1208527-1	100	100	108
Lab Control Sample	KWG1208591-1	102	106	114

Surrogate Recovery Control Limits (%)

Sur1	=	4-Bromofluorobenzene	70-130
Sur2	=	Dibromofluoromethane	82-124
Sur3	=	Toluene-d8	82-124

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	07/31/2012
Sample Matrix:	Water	**Date Analyzed:**	07/31/2012

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	524.2	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208527

	Lab Control Sample KWG1208527-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	5.34	5.00	107	70-130
Chloromethane	5.22	5.00	104	70-130
Vinyl Chloride	5.24	5.00	105	70-130
Bromomethane	5.55	5.00	111	70-130
Chloroethane	5.23	5.00	105	70-130
Trichlorofluoromethane	5.07	5.00	101	70-130
Methylene Chloride	5.33	5.00	107	70-130
trans-1,2-Dichloroethene	5.24	5.00	105	70-130
1,1-Dichloroethene	5.14	5.00	103	70-130
cis-1,2-Dichloroethene	5.64	5.00	113	70-130
Methyl tert-Butyl Ether	10.8	10.0	108	70-130
Chloroform	5.63	5.00	113	70-130
Bromochloromethane	5.54	5.00	111	70-130
Carbon Tetrachloride	4.95	5.00	99	70-130
Benzene	5.32	5.00	106	70-130
1,2-Dichloroethane	5.56	5.00	111	70-130
Trichloroethene	5.14	5.00	103	70-130
1,2-Dichloropropane	5.42	5.00	108	70-130
Bromodichloromethane	5.50	5.00	110	70-130
Dibromomethane	5.40	5.00	108	70-130
cis-1,3-Dichloropropene	5.20	5.00	104	70-130
Toluene	5.36	5.00	107	70-130
1,1-Dichloroethane	5.36	5.00	107	70-130
trans-1,3-Dichloropropene	5.05	5.00	101	70-130
Tetrachloroethene	5.01	5.00	100	70-130
1,3-Dichloropropane	5.56	5.00	111	70-130
2,2-Dichloropropane	4.87	5.00	97	70-130
Dibromochloromethane	5.23	5.00	105	70-130
1,2-Dibromoethane (EDB)	5.50	5.00	110	70-130
Chlorobenzene	5.24	5.00	105	70-130
Ethylbenzene	5.36	5.00	107	70-130
Styrene	5.36	5.00	107	70-130
m,p-Xylenes	11.0	10.0	110	70-130
o-Xylene	5.39	5.00	108	70-130
Bromoform	4.99	5.00	100	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	07/31/2012
Sample Matrix:	Water	**Date Analyzed:**	07/31/2012

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	524.2	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208527

	Lab Control Sample KWG1208527-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,1,2,2-Tetrachloroethane	5.37	5.00	107	70-130
1,1,1-Trichloroethane	4.94	5.00	99	70-130
Isopropylbenzene	5.21	5.00	104	70-130
1,1-Dichloropropene	5.05	5.00	101	70-130
Bromobenzene	5.48	5.00	110	70-130
n-Propylbenzene	5.61	5.00	112	70-130
1,3,5-Trimethylbenzene	5.51	5.00	110	70-130
2-Chlorotoluene	5.58	5.00	112	70-130
4-Chlorotoluene	5.57	5.00	111	70-130
tert-Butylbenzene	5.32	5.00	106	70-130
1,2,4-Trimethylbenzene	5.48	5.00	110	70-130
sec-Butylbenzene	5.42	5.00	108	70-130
p-Isopropyltoluene	5.36	5.00	107	70-130
1,3-Dichlorobenzene	5.41	5.00	108	70-130
1,4-Dichlorobenzene	5.34	5.00	107	70-130
n-Butylbenzene	5.41	5.00	108	70-130
1,2-Dichlorobenzene	5.55	5.00	111	70-130
1,2-Dibromo-3-chloropropane (DBCP)	5.72	5.00	114	70-130
1,2,4-Trichlorobenzene	5.52	5.00	110	70-130
Hexachlorobutadiene	5.32	5.00	106	70-130
Naphthalene	5.47	5.00	109	70-130
1,1,2-Trichloroethane	5.42	5.00	108	70-130
1,1,1,2-Tetrachloroethane	5.09	5.00	102	70-130
1,2,3-Trichloropropane	5.45	5.00	109	70-130
1,2,3-Trichlorobenzene	5.63	5.00	113	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/01/2012
Sample Matrix:	Water	**Date Analyzed:**	08/01/2012

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	524.2	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208591

	Lab Control Sample KWG1208591-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	5.19	5.00	104	70-130
Chloromethane	5.29	5.00	106	70-130
Vinyl Chloride	5.17	5.00	103	70-130
Bromomethane	5.08	5.00	102	70-130
Chloroethane	5.13	5.00	103	70-130
Trichlorofluoromethane	4.93	5.00	99	70-130
Methylene Chloride	5.00	5.00	100	70-130
trans-1,2-Dichloroethene	4.95	5.00	99	70-130
1,1-Dichloroethene	4.73	5.00	95	70-130
cis-1,2-Dichloroethene	5.24	5.00	105	70-130
Methyl tert-Butyl Ether	9.87	10.0	99	70-130
Chloroform	5.36	5.00	107	70-130
Bromochloromethane	5.21	5.00	104	70-130
Carbon Tetrachloride	4.71	5.00	94	70-130
Benzene	4.96	5.00	99	70-130
1,2-Dichloroethane	5.33	5.00	107	70-130
Trichloroethene	4.75	5.00	95	70-130
1,2-Dichloropropane	5.09	5.00	102	70-130
Bromodichloromethane	5.22	5.00	104	70-130
Dibromomethane	5.11	5.00	102	70-130
cis-1,3-Dichloropropene	4.56	5.00	91	70-130
Toluene	4.94	5.00	99	70-130
1,1-Dichloroethane	5.24	5.00	105	70-130
trans-1,3-Dichloropropene	4.40	5.00	88	70-130
Tetrachloroethene	4.50	5.00	90	70-130
1,3-Dichloropropane	5.07	5.00	101	70-130
2,2-Dichloropropane	4.46	5.00	89	70-130
Dibromochloromethane	4.70	5.00	94	70-130
1,2-Dibromoethane (EDB)	4.82	5.00	96	70-130
Chlorobenzene	4.82	5.00	96	70-130
Ethylbenzene	4.79	5.00	96	70-130
Styrene	4.95	5.00	99	70-130
m,p-Xylenes	10.0	10.0	100	70-130
o-Xylene	4.79	5.00	96	70-130
1,1,1-Trichloroethane	4.60	5.00	92	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/01/2012
Sample Matrix:	Water	**Date Analyzed:**	08/01/2012

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	524.2	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208591

	Lab Control Sample KWG1208591-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Bromoform	4.60	5.00	92	70-130
1,1,2,2-Tetrachloroethane	5.12	5.00	102	70-130
Isopropylbenzene	4.68	5.00	94	70-130
1,1-Dichloropropene	4.70	5.00	94	70-130
Bromobenzene	5.16	5.00	103	70-130
n-Propylbenzene	5.33	5.00	107	70-130
1,3,5-Trimethylbenzene	5.24	5.00	105	70-130
2-Chlorotoluene	5.27	5.00	105	70-130
4-Chlorotoluene	5.43	5.00	109	70-130
tert-Butylbenzene	5.02	5.00	100	70-130
1,2,4-Trimethylbenzene	5.21	5.00	104	70-130
sec-Butylbenzene	5.05	5.00	101	70-130
p-Isopropyltoluene	4.96	5.00	99	70-130
1,3-Dichlorobenzene	5.16	5.00	103	70-130
1,4-Dichlorobenzene	5.09	5.00	102	70-130
n-Butylbenzene	5.10	5.00	102	70-130
1,2-Dichlorobenzene	5.10	5.00	102	70-130
1,2-Dibromo-3-chloropropane (DBCP)	5.23	5.00	105	70-130
1,2,4-Trichlorobenzene	4.93	5.00	99	70-130
Hexachlorobutadiene	4.80	5.00	96	70-130
Naphthalene	4.83	5.00	97	70-130
1,1,2-Trichloroethane	4.96	5.00	99	70-130
1,1,1,2-Tetrachloroethane	4.66	5.00	93	70-130
1,2,3-Trichloropropane	5.20	5.00	104	70-130
1,2,3-Trichlorobenzene	5.21	5.00	104	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/2012
Sample Matrix:	Water	**Date Received:**	07/24/2012

Semivolatile Organics by EPA method 525.2

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Hexachlorobenzene	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Simazine	ND	U	0.049	1	08/03/12	08/08/12	KWG1208713	
Atrazine	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Alachlor	ND	U	0.070	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Adipate	ND	U	0.59	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Phthalate	ND	U	0.59	1	08/03/12	08/08/12	KWG1208713	
Benzo(a)pyrene	ND	U	0.020	1	08/03/12	08/08/12	KWG1208713	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	108	70-130	08/08/12	Acceptable
Triphenyl Phosphate	88	70-130	08/08/12	Acceptable
Perylene-d12	76	70-130	08/08/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Semivolatile Organics by EPA method 525.2

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Hexachlorobenzene	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Simazine	ND	U	0.049	1	08/03/12	08/08/12	KWG1208713	
Atrazine	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Alachlor	ND	U	0.070	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Adipate	ND	U	0.59	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Phthalate	ND	U	0.59	1	08/03/12	08/08/12	KWG1208713	
Benzo(a)pyrene	ND	U	0.020	1	08/03/12	08/08/12	KWG1208713	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	104	70-130	08/08/12	Acceptable
Triphenyl Phosphate	88	70-130	08/08/12	Acceptable
Perylene-d12	96	70-130	08/08/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Semivolatile Organics by EPA method 525.2

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Hexachlorobenzene	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Simazine	ND	U	0.049	1	08/03/12	08/08/12	KWG1208713	
Atrazine	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Alachlor	ND	U	0.070	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Adipate	ND	U	0.59	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Phthalate	ND	U	0.59	1	08/03/12	08/08/12	KWG1208713	
Benzo(a)pyrene	ND	U	0.020	1	08/03/12	08/08/12	KWG1208713	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	107	70-130	08/08/12	Acceptable
Triphenyl Phosphate	92	70-130	08/08/12	Acceptable
Perylene-d12	98	70-130	08/08/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Semivolatile Organics by EPA method 525.2

Sample Name:	DW-1	**Units:**	ug/L
Lab Code:	K1207165-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.10	1	08/03/12	08/08/12	KWG1208713	
Hexachlorobenzene	ND	U	0.10	1	08/03/12	08/08/12	KWG1208713	
Simazine	ND	U	0.050	1	08/03/12	08/08/12	KWG1208713	
Atrazine	ND	U	0.10	1	08/03/12	08/08/12	KWG1208713	
Alachlor	ND	U	0.072	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Adipate	ND	U	0.60	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Phthalate	ND	U	0.60	1	08/03/12	08/08/12	KWG1208713	
Benzo(a)pyrene	ND	U	0.020	1	08/03/12	08/08/12	KWG1208713	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	107	70-130	08/08/12	Acceptable
Triphenyl Phosphate	91	70-130	08/08/12	Acceptable
Perylene-d12	99	70-130	08/08/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Semivolatile Organics by EPA method 525.2

Sample Name:	DW-7	**Units:**	ug/L
Lab Code:	K1207165-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.099	1	08/03/12	08/08/12	KWG1208713	
Hexachlorobenzene	ND	U	0.099	1	08/03/12	08/08/12	KWG1208713	
Simazine	ND	U	0.050	1	08/03/12	08/08/12	KWG1208713	
Atrazine	ND	U	0.099	1	08/03/12	08/08/12	KWG1208713	
Alachlor	ND	U	0.071	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Adipate	ND	U	0.59	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Phthalate	ND	U	0.59	1	08/03/12	08/08/12	KWG1208713	
Benzo(a)pyrene	ND	U	0.020	1	08/03/12	08/08/12	KWG1208713	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	108	70-130	08/08/12	Acceptable
Triphenyl Phosphate	96	70-130	08/08/12	Acceptable
Perylene-d12	94	70-130	08/08/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Semivolatile Organics by EPA method 525.2

Sample Name:	Dup-1	**Units:**	ug/L
Lab Code:	K1207165-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Hexachlorobenzene	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Simazine	ND	U	0.049	1	08/03/12	08/08/12	KWG1208713	
Atrazine	ND	U	0.098	1	08/03/12	08/08/12	KWG1208713	
Alachlor	ND	U	0.070	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Adipate	ND	U	0.59	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Phthalate	ND	U	0.59	1	08/03/12	08/08/12	KWG1208713	
Benzo(a)pyrene	ND	U	0.020	1	08/03/12	08/08/12	KWG1208713	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	111	70-130	08/08/12	Acceptable
Triphenyl Phosphate	92	70-130	08/08/12	Acceptable
Perylene-d12	75	70-130	08/08/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/2012
Sample Matrix:	Water	**Date Received:**	07/27/2012

Semivolatile Organics by EPA method 525.2

Sample Name:	DW-6	**Units:**	ug/L
Lab Code:	K1207165-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.097	1	08/03/12	08/08/12	KWG1208713	
Hexachlorobenzene	ND	U	0.097	1	08/03/12	08/08/12	KWG1208713	
Simazine	ND	U	0.049	1	08/03/12	08/08/12	KWG1208713	
Atrazine	ND	U	0.097	1	08/03/12	08/08/12	KWG1208713	
Alachlor	ND	U	0.070	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Adipate	ND	U	0.58	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Phthalate	ND	U	0.58	1	08/03/12	08/08/12	KWG1208713	
Benzo(a)pyrene	ND	U	0.020	1	08/03/12	08/08/12	KWG1208713	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	114	70-130	08/08/12	Acceptable
Triphenyl Phosphate	92	70-130	08/08/12	Acceptable
Perylene-d12	77	70-130	08/08/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Drinking water	**Date Received:**	NA

Semivolatile Organics by EPA method 525.2

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208713-3	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.10	1	08/03/12	08/08/12	KWG1208713	
Hexachlorobenzene	ND	U	0.10	1	08/03/12	08/08/12	KWG1208713	
Simazine	ND	U	0.050	1	08/03/12	08/08/12	KWG1208713	
Atrazine	ND	U	0.10	1	08/03/12	08/08/12	KWG1208713	
Alachlor	ND	U	0.072	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Adipate	ND	U	0.60	1	08/03/12	08/08/12	KWG1208713	
Bis(2-ethylhexyl) Phthalate	ND	U	0.60	1	08/03/12	08/08/12	KWG1208713	
Benzo(a)pyrene	ND	U	0.020	1	08/03/12	08/08/12	KWG1208713	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	108	70-130	08/08/12	Acceptable
Triphenyl Phosphate	86	70-130	08/08/12	Acceptable
Perylene-d12	96	70-130	08/08/12	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client: Kennedy/Jenks Consultants, Incorporated **Service Request:** K1207165
Project: Mint Farm
Sample Matrix: Water

Surrogate Recovery Summary
Semivolatile Organics by EPA method 525.2

Extraction Method: METHOD **Units:** PERCENT
Analysis Method: 525.2 **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
DW-9	K1207165-001	108	88	76
DW-2	K1207165-003	104	88	96
DW-5	K1207165-004	107	92	98
DW-1	K1207165-006	107	91	99
DW-7	K1207165-007	108	96	94
Dup-1	K1207165-008	111	92	75
DW-6	K1207165-010	114	92	77
Method Blank	KWG1208713-3	108	86	96
DW-9MS	KWG1208713-2	100	85	98
Lab Control Sample	KWG1208713-1	99	94	100

Surrogate Recovery Control Limits (%)

Sur1	=	1,3-Dimethyl-2-nitrobenzene	70-130
Sur2	=	Triphenyl Phosphate	70-130
Sur3	=	Perylene-d12	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/03/2012
Sample Matrix:	Water	**Date Analyzed:**	08/08/2012

Matrix Spike Summary
Semivolatile Organics by EPA method 525.2

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2	**Extraction Lot:**	KWG1208713

		DW-9MS KWG1208713-2 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Hexachlorocyclopentadiene	ND	0.845	0.971	87	70-130
Hexachlorobenzene	ND	0.916	0.971	94	70-130
Simazine	ND	0.863	0.971	89	70-130
Atrazine	ND	0.892	0.971	92	70-130
Alachlor	ND	0.867	0.971	89	70-130
Bis(2-ethylhexyl) Adipate	ND	0.804	0.971	83	70-130
Bis(2-ethylhexyl) Phthalate	ND	0.876	0.971	90	70-130
Benzo(a)pyrene	ND	0.934	0.971	96	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/03/2012
Sample Matrix:	Drinking water	**Date Analyzed:**	08/08/2012

Lab Control Spike Summary
Semivolatile Organics by EPA method 525.2

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	525.2	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208713

	Lab Control Sample KWG1208713-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Hexachlorocyclopentadiene	0.944	1.00	94	70-130
Hexachlorobenzene	0.978	1.00	98	70-130
Simazine	1.00	1.00	100	70-130
Atrazine	1.06	1.00	106	70-130
Alachlor	1.00	1.00	100	70-130
Bis(2-ethylhexyl) Adipate	0.832	1.00	83	70-130
Bis(2-ethylhexyl) Phthalate	0.935	1.00	94	70-130
Benzo(a)pyrene	1.00	1.00	100	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/2012
Sample Matrix:	Water	**Date Received:**	07/24/2012

Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	531.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aldicarb Sulfoxide	ND	U	1.00	1	08/16/12	08/16/12	KWG1209250	
Aldicarb Sulfone	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Oxamyl	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Aldicarb	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Carbofuran	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	531.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aldicarb Sulfoxide	ND	U	1.00	1	08/16/12	08/16/12	KWG1209250	
Aldicarb Sulfone	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Oxamyl	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Aldicarb	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Carbofuran	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	531.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aldicarb Sulfoxide	ND	U	1.00	1	08/16/12	08/16/12	KWG1209250	
Aldicarb Sulfone	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Oxamyl	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Aldicarb	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Carbofuran	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name:	DW-1	**Units:**	ug/L
Lab Code:	K1207165-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	531.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aldicarb Sulfoxide	ND	U	1.00	1	08/16/12	08/16/12	KWG1209250	
Aldicarb Sulfone	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Oxamyl	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Aldicarb	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Carbofuran	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name:	DW-7	**Units:**	ug/L
Lab Code:	K1207165-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	531.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aldicarb Sulfoxide	ND	U	1.00	1	08/16/12	08/16/12	KWG1209250	
Aldicarb Sulfone	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Oxamyl	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Aldicarb	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Carbofuran	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name:	Dup-1	**Units:**	ug/L
Lab Code:	K1207165-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	531.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aldicarb Sulfoxide	ND	U	1.00	1	08/16/12	08/16/12	KWG1209250	
Aldicarb Sulfone	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Oxamyl	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Aldicarb	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Carbofuran	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/2012
Sample Matrix:	Water	**Date Received:**	07/27/2012

Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name:	DW-6	**Units:**	ug/L
Lab Code:	K1207165-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	531.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aldicarb Sulfoxide	ND	U	1.00	1	08/16/12	08/16/12	KWG1209250	
Aldicarb Sulfone	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Oxamyl	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Aldicarb	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Carbofuran	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1209250-1	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	531.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aldicarb Sulfoxide	ND	U	1.00	1	08/16/12	08/16/12	KWG1209250	
Aldicarb Sulfone	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Oxamyl	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Aldicarb	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	
Carbofuran	ND	U	0.500	1	08/16/12	08/16/12	KWG1209250	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/16/2012
Sample Matrix:	Water	**Date Analyzed:**	08/16/2012

Matrix Spike Summary
Carbamates and Carbamoyloximes by EPA Method 531.1

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	531.1	**Extraction Lot:**	KWG1209250

Analyte Name	Sample Result	DW-9MS KWG1209250-4 Matrix Spike Result	Expected	%Rec	%Rec Limits
Aldicarb Sulfoxide	ND	5.28	5.00	106	65-135
Aldicarb Sulfone	ND	5.85	5.00	117	65-135
Oxamyl	ND	5.49	5.00	110	65-135
Aldicarb	ND	4.51	5.00	90	65-135
Carbofuran	ND	6.36	5.00	127	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	08/16/2012
Sample Matrix:	Water	**Date Analyzed:**	08/16/2012

Lab Control Spike Summary
Carbamates and Carbamoyloximes by EPA Method 531.1

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	531.1	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1209250

	Lab Control Sample KWG1209250-2 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Aldicarb Sulfoxide	4.24	5.00	85	80-120
Aldicarb Sulfone	4.69	5.00	94	80-120
Oxamyl	4.85	5.00	97	80-120
Aldicarb	4.01	5.00	80	80-120
Carbofuran	4.86	5.00	97	80-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/2012
Sample Matrix:	Water	**Date Received:**	07/24/2012

Glyphosate by EPA Method 547

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	547		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Glyphosate	ND	U	6.0	1	07/31/12	07/31/12	KWG1208526	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Glyphosate by EPA Method 547

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	547		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Glyphosate	ND	U	6.0	1	07/31/12	07/31/12	KWG1208526	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Glyphosate by EPA Method 547

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	547		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Glyphosate	ND	U	6.0	1	07/31/12	07/31/12	KWG1208526	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Glyphosate by EPA Method 547

Sample Name:	DW-1	**Units:**	ug/L
Lab Code:	K1207165-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	547		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Glyphosate	ND	U	6.0	1	07/31/12	07/31/12	KWG1208526	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Glyphosate by EPA Method 547

Sample Name:	DW-7	**Units:**	ug/L
Lab Code:	K1207165-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	547		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Glyphosate	ND	U	6.0	1	07/31/12	07/31/12	KWG1208526	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Glyphosate by EPA Method 547

Sample Name:	Dup-1	**Units:**	ug/L
Lab Code:	K1207165-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	547		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Glyphosate	ND	U	6.0	1	07/31/12	07/31/12	KWG1208526	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/2012
Sample Matrix:	Water	**Date Received:**	07/27/2012

Glyphosate by EPA Method 547

Sample Name:	DW-6	**Units:**	ug/L
Lab Code:	K1207165-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	547		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Glyphosate	ND	U	6.0	1	07/31/12	07/31/12	KWG1208526	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Glyphosate by EPA Method 547

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208526-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	547		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Glyphosate	ND	U	6.0	1	07/31/12	07/31/12	KWG1208526	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	07/31/2012
Sample Matrix:	Drinking water	**Date Analyzed:**	07/31/2012

Matrix Spike Summary
Glyphosate by EPA Method 547

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1207326-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	547	**Extraction Lot:**	KWG1208526

		Batch QCMS KWG1208526-1 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Glyphosate	ND	42.2	50.0	84	56-131

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	07/31/2012
Sample Matrix:	Drinking water	**Date Analyzed:**	07/31/2012

Lab Control Spike Summary
Glyphosate by EPA Method 547

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	547	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208526

	Lab Control Sample KWG1208526-2 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Glyphosate	43.8	50.0	88	56-131

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/2012
Sample Matrix:	Water	**Date Received:**	07/24/2012

Endothall by EPA Method 548.1

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	548.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endothall	ND	U	5.0	1	07/30/12	07/30/12	KWG1208498	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Endothall by EPA Method 548.1

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	548.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endothall	ND	U	5.0	1	07/30/12	07/30/12	KWG1208498	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Endothall by EPA Method 548.1

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	548.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endothall	ND	U	5.0	1	07/30/12	07/30/12	KWG1208498	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Endothall by EPA Method 548.1

Sample Name:	DW-1	**Units:**	ug/L
Lab Code:	K1207165-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	548.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endothall	ND	U	5.0	1	07/30/12	07/30/12	KWG1208498	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Endothall by EPA Method 548.1

Sample Name:	DW-7	**Units:**	ug/L
Lab Code:	K1207165-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	548.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endothall	ND	U	5.0	1	07/30/12	07/30/12	KWG1208498	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Endothall by EPA Method 548.1

Sample Name:	Dup-1	**Units:**	ug/L
Lab Code:	K1207165-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	548.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endothall	ND	U	5.0	1	07/30/12	07/30/12	KWG1208498	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/2012
Sample Matrix:	Water	**Date Received:**	07/27/2012

Endothall by EPA Method 548.1

Sample Name:	DW-6	**Units:**	ug/L
Lab Code:	K1207165-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	548.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endothall	ND	U	5.0	1	07/30/12	07/30/12	KWG1208498	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Endothall by EPA Method 548.1

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208498-3	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	548.1		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endothall	ND	U	5.0	1	07/30/12	07/30/12	KWG1208498	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	07/30/2012
Sample Matrix:	Water	**Date Analyzed:**	07/30/2012

Matrix Spike Summary
Endothall by EPA Method 548.1

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	548.1	**Extraction Lot:**	KWG1208498

		DW-9MS KWG1208498-2 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Endothall	ND	125	100	125	30-142

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	07/30/2012
Sample Matrix:	Water	**Date Analyzed:**	07/30/2012

Lab Control Spike Summary
Endothall by EPA Method 548.1

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	548.1	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208498

	Lab Control Sample KWG1208498-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Endothall	123	100	123	30-142

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/24/2012
Sample Matrix:	Water	**Date Received:**	07/24/2012

Diquat by High Performance Liquid Chromatography

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	549.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diquat	ND	U	0.40	1	07/27/12	08/03/12	KWG1208395	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Diquat by High Performance Liquid Chromatography

Sample Name:	DW-2	**Units:**	ug/L
Lab Code:	K1207165-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	549.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diquat	ND	U	0.40	1	07/27/12	08/03/12	KWG1208395	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Diquat by High Performance Liquid Chromatography

Sample Name:	DW-5	**Units:**	ug/L
Lab Code:	K1207165-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	549.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diquat	ND	U	0.40	1	07/27/12	08/03/12	KWG1208395	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/25/2012
Sample Matrix:	Water	**Date Received:**	07/25/2012

Diquat by High Performance Liquid Chromatography

Sample Name:	DW-1	**Units:**	ug/L
Lab Code:	K1207165-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	549.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diquat	ND	U	0.40	1	07/27/12	08/03/12	KWG1208395	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Diquat by High Performance Liquid Chromatography

Sample Name:	DW-7	**Units:**	ug/L
Lab Code:	K1207165-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	549.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diquat	ND	U	0.40	1	07/27/12	08/03/12	KWG1208395	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/26/2012
Sample Matrix:	Water	**Date Received:**	07/26/2012

Diquat by High Performance Liquid Chromatography

Sample Name:	Dup-1	**Units:**	ug/L
Lab Code:	K1207165-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	549.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diquat	ND	U	0.40	1	07/27/12	08/03/12	KWG1208395	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	07/27/2012
Sample Matrix:	Water	**Date Received:**	07/27/2012

Diquat by High Performance Liquid Chromatography

Sample Name:	DW-6	**Units:**	ug/L
Lab Code:	K1207165-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	549.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diquat	**0.56**		0.40	1	07/27/12	08/03/12	KWG1208395	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diquat by High Performance Liquid Chromatography

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1208395-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	549.2		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diquat	ND	U	0.40	1	07/27/12	08/03/12	KWG1208395	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	07/27/2012
Sample Matrix:	Water	**Date Analyzed:**	08/03/2012

Matrix Spike Summary
Diquat by High Performance Liquid Chromatography

Sample Name:	DW-9	**Units:**	ug/L
Lab Code:	K1207165-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	549.2	**Extraction Lot:**	KWG1208395

		DW-9MS KWG1208395-1 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Diquat	ND	11.6	12.0	97	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

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COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Extracted:**	07/27/2012
Sample Matrix:	Water	**Date Analyzed:**	08/03/2012

Lab Control Spike Summary
Diquat by High Performance Liquid Chromatography

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	549.2	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1208395

	Lab Control Sample KWG1208395-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Diquat	8.85	12.0	74	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

August 28, 2012 Service Request No: K1207165

Lisa Domenighini.

Columbia Analytical Services Inc
1317 South 13th Avenue
Kelso, WA 98626

Laboratory Results for: Kennedy/Jenks Consultants, Incorporated.

Dear Lisa:

Enclosed are the results of the sample(s) submitted to our laboratory on July 27, 2012. For your reference, these analyses have been assigned our service request number : **K1207165.** Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided.
All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My direct number is 281-994-2959.

Respectfully submitted,

Columbia Analytical Services, Inc.

Arthi Kodur
Project Manager

For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com.

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Columbia Analytical Services, Inc.
Part of the ALS Group A Campbell Brothers Limited Company

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COLUMBIA ANALYTICAL SERVICES, INC
dba ALS Environmental

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request No.:**	K1207165
Project:	Mint Farm	**Date Received:**	7/26-7/31
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Seven waterr samples were received for analysis at Columbia Analytical Services between 7/26/-7/31.

Please note the reporting forms are currently referencing the date CAS-Rochester received the samples (7/24/-727) and not the date CAS-Houston received the samples (7/26-7/31).

The samples were received at 0-2°C in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

MS/MSD

EQ1200450: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of an MS/MSD for this extraction batch. The batch quality control criteria were met.

EQ1200465: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of an MS/MSD for this extraction batch. The batch quality control criteria were met.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

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

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

Client: Kennedy/Jenks Consultants, Incorporated **Service Request:** K1207165
Project: Mint Farm

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K1207165-001	DW-9	7/24/12	13:45
K1207165-002	Trip Blank 7/24	7/24/12	00:00
K1207165-003	DW-2	7/25/12	11:30
K1207165-004	DW-5	7/25/12	11:30
K1207165-005	Trip Blank 7/25	7/25/12	00:00
K1207165-006	DW-1	7/25/12	11:30
K1207165-007	DW-7	7/26/12	13:00
K1207165-008	Dup-1	7/26/12	12:00
K1207165-009	Trip Blank 7/26	7/26/12	00:00
K1207165-010	DW-6	7/27/12	10:30
K1207165-011	Trip Blank 7/26	7/26/12	00:00

Laboratory Certifications
2012-2013

STATE/PROGRAM	AGENCY	CERT#	EXP DATE	CERTIFIED?
DoD ELAP	A2LA	2897.01	11/30/12	Yes
ISO 17025	A2LA	2897.01	11/30/12	Yes
Arizona	AZ-DHS	AZ0725	05/27/13	Yes
arkansas	ADEQ	10-035-0	06/16/13	Yes
California	CA-ELAP	2452	02/28/13	Yes
Florida/NELAP	FL-DOHS	E87611	06/30/13	Yes
Hawaii	HI-DOH	N/A	06/30/13	Yes
Illinois/NELAP	IL-EPA	002611	10/26/12	Yes
Louisiana/NELAP	LELAP	03048	06/30/13	Yes
Louisiana/NELAP	LDHH	LA100032	12/31/12	Yes
Maine	ME-DOHS	2010041	06/05/13	Yes
Michigan	MIDEQ	9971	06/30/13	Yes
Minnesota	MDH	048-999-427	12/31/12	Yes
Nevada	NDEP	TX014112010A	09/30/12	Yes (Extension)
New Jersey	NJDEP	TX008	06/30/13	Yes
New Mexico	NMED-DWB	N/A	06/30/13	Yes
New York/NELAP	NY-DOH	11707	04/1/13	Yes
Oklahoma	OKDEQ	2010-022	08/31/13	Yes
Oregon/NELAP	ORELAP	TX200002-006	03/24/13	Yes
Pennsylvania/NELAP	PLAP	002	06/30/13	Yes
Tennessee	TNDEC	04016	06/30/13	Yes
Texas/NELAP	TCEQ	T104704216-10-1	06/30/13	Yes
UTAH/NELAP	UTELCP	COLU2	06/30/13	Yes
Soil Import Permit	USDA	P330-12-00002	01/13/15	Yes
Washington/NELAP	WA-Ecology	C819-10	11/14/12	Yes
West Virginia	WVDEP	347	06/30/12	Yes

Abbreviations, Acronyms & Definitions

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
MRL	Method Reporting Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent Recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
RRT	Relative Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-Noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

Data Qualifier Flags – Dioxin/Furans

- **B** Indicates the associated analyte is found in the method blank, as well as in the sample.

- **C** Confirmation of the TCDF compound: When 2378-TCDF is detected on the DB-5 column, confirmation analyses are performed on a second column (DB-225). The results from both the DB-5 column and the DB-225 column are included in this data package. The results from the DB-225 analyses should be used to evaluate the 2378-TCDF in the samples. The confirmed result should be used in determining the TEQ value for TCDF.

- **E** Indicates an estimated value – used when the analyte concentration exceeds the upper end of the linear calibration range.

- **J** Indicates an estimated value – used when the analyte concentration is below the method reporting limit (MRL) and above the estimated detection limit (EDL).

- **K** EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

- **U** Indicates the compound was analyzed and not detected.

- **Y** Samples that had recoveries of labeled standards outside the acceptance limits are flagged with 'Y'. In all cases, the signal-to-noise ratios are greater than 10:1, making these data acceptable.

- **ND** Indicates concentration is reported as 'Not Detected.'

- **S** Peak is saturated; data not reportable.

- **P** Indicates chlorodiphenyl ether interference present at the retention time of the target compound.

- **Q** Lock-mass interference by chlorodiphenyl ether compounds.

COLUMBIA ANALYTICAL SERVICES, INC. – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID K1207165 (DB-5) DB-225 SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date: 08/25/12 Analyst: JC Samples: 001, 003, 004

Second Level - Data Review – to be filled by person doing peer review

Date: 08/28/12 Analyst: [illegible] Samples: 001, 003, 004

COLUMBIA ANALYTICAL SERVICES, INC. – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID K1207165 (DB-5) DB-225 SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date: 08/25/12 Analyst: Gc Samples: 010

Second Level - Data Review – to be filled by person doing peer review

Date: 08/28/12 Analyst: OA Samples: 010

COLUMBIA ANALYTICAL SERVICES, INC. – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID K1207165 DB-5 DB-225 SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date: 08/24/12 Analyst: gc Samples: 006, 007, 008

Second Level - Data Review – to be filled by person doing peer review

Date: 08/25/12 Analyst: [illegible] Samples: 006, 007, 008

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/24/12 1345
Sample Matrix:	Water	**Date Received:**	7/24/12
Sample Name:	DW-9	**Units:**	pg/L
Lab Code:	K1207165-001	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/22/12 1331
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/9/12
Sample Amount:	1040mL	**Instrument Name:**	E-HRMS-03
		GC Column:	DB-5
Data File Name:	P159478	**Blank File Name:**	P159511
ICAL Date:	04/23/12	**Cal Ver. File Name:**	P159472

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	2.38	9.62			1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	718.836	36		31-137	0.76	1.008
37Cl-2,3,7,8-TCDD	800	530.506	66		42-164	NA	1.009

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/25/12 1130
Sample Matrix:	Water	**Date Received:**	7/25/12
Sample Name:	DW-2	**Units:**	pg/L
Lab Code:	K1207165-003	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/22/12 1418
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/9/12
Sample Amount:	1040mL	**Instrument Name:**	E-HRMS-03
		GC Column:	DB-5
Data File Name:	P159479	**Blank File Name:**	P159511
ICAL Date:	04/23/12	**Cal Ver. File Name:**	P159472

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	3.70	9.62			1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	688.195	34		31-137	0.78	1.009
37Cl-2,3,7,8-TCDD	800	457.948	57		42-164	NA	1.009

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/25/12 1130
Sample Matrix:	Water	**Date Received:**	7/25/12
Sample Name:	DW-5	**Units:**	pg/L
Lab Code:	K1207165-004	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/22/12 1506
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/9/12
Sample Amount:	1040mL	**Instrument Name:**	E-HRMS-03
		GC Column:	DB-5
Data File Name:	P159480	**Blank File Name:**	P159511
ICAL Date:	04/23/12	**Cal Ver. File Name:**	P159472

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	4.24	9.62			1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	665.732	33		31-137	0.79	1.008
37Cl-2,3,7,8-TCDD	800	470.931	59		42-164	NA	1.009

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/25/12 1130
Sample Matrix:	Water	**Date Received:**	7/25/12
Sample Name:	DW-1	**Units:**	pg/L
Lab Code:	K1207165-006	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/22/12 2053
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/9/12
Sample Amount:	1000mL	**Instrument Name:**	E-HRMS-03
		GC Column:	DB-5
Data File Name:	P159487	**Blank File Name:**	P159511
ICAL Date:	04/23/12	**Cal Ver. File Name:**	P159481

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	3.15	10.0			1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	630.501	32		31-137	0.78	1.009
37Cl-2,3,7,8-TCDD	800	524.675	66		42-164	NA	1.009

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/26/12 1300
Sample Matrix:	Water	**Date Received:**	7/26/12
Sample Name:	DW-7	**Units:**	pg/L
Lab Code:	K1207165-007	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/22/12 2141
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/9/12
Sample Amount:	1020mL	**Instrument Name:**	E-HRMS-03
		GC Column:	DB-5
Data File Name:	P159488	**Blank File Name:**	P159511
ICAL Date:	04/23/12	**Cal Ver. File Name:**	P159481

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	2.57	9.80			1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	796.670	40		31-137	0.79	1.009
37Cl-2,3,7,8-TCDD	800	519.840	65		42-164	NA	1.009

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/26/12 1200
Sample Matrix:	Water	**Date Received:**	7/26/12
Sample Name:	Dup-1	**Units:**	pg/L
Lab Code:	K1207165-008	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/22/12 1830
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/9/12
Sample Amount:	1040mL	**Instrument Name:**	E-HRMS-03
		GC Column:	DB-5
Data File Name:	P159484	**Blank File Name:**	P159511
ICAL Date:	04/23/12	**Cal Ver. File Name:**	P159481

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	2.93	9.62			1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	672.705	34		31-137	0.76	1.009
37Cl-2,3,7,8-TCDD	800	503.436	63		42-164	NA	1.009

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	7/27/12 1030
Sample Matrix:	Water	**Date Received:**	7/27/12
Sample Name:	DW-6	**Units:**	pg/L
Lab Code:	K1207165-010	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/23/12 1337
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/17/12
Sample Amount:	1040mL	**Instrument Name:**	E-HRMS-03
		GC Column:	DB-5
Data File Name:	P159505	**Blank File Name:**	P219029
ICAL Date:	04/23/12	**Cal Ver. File Name:**	P159496

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	1.95	9.62			1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	929.512	46		31-137	0.79	1.009
37Cl-2,3,7,8-TCDD	800	621.374	78		42-164	NA	1.009

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	pg/L
Lab Code:	EQ1200450-01	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/23/12 1950
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/9/12
Sample Amount:	1000mL	**Instrument Name:**	E-HRMS-03
		GC Column:	db5
Data File Name:	P159511	**Blank File Name:**	P159511
ICAL Date:	04/23/12	**Cal Ver. File Name:**	P159508

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	1.21	10.0			1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	911.458	46		31-137	0.78	1.009
37Cl-2,3,7,8-TCDD	800	584.945	73		42-164	NA	1.009

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	pg/L
Lab Code:	EQ1200465-01	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/24/12 0941
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/17/12
Sample Amount:	1000mL	**Instrument Name:**	E-HRMS-04
		GC Column:	DB-5
Data File Name:	P219029	**Blank File Name:**	P219029
ICAL Date:	05/03/12	**Cal Ver. File Name:**	P219026

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.878	10.0			1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	841.751	42		31-137	0.78	1.007
37Cl-2,3,7,8-TCDD	800	535.563	67		42-164	NA	1.008

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	8/23/12 - 8/24/12
Sample Matrix:	Water		

Lab Control Sample Summary
Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Units:**	pg/L
Prep Method:	Method Sep Funnel/Jar	**Basis:**	NA
		Extraction Lot:	164395

	Lab Control Sample EQ1200450-02			Duplicate Lab Control Sample EQ1200450-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
2,3,7,8-TCDD	183	200	92	214	200	107	73 - 146	15	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Analyzed:**	8/24/12
Sample Matrix:	Water		

Lab Control Sample Summary
Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Units:**	pg/L
Prep Method:	Method Sep Funnel/Jar	**Basis:**	NA
		Extraction Lot:	164936

	Lab Control Sample EQ1200465-02			Duplicate Lab Control Sample EQ1200465-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
2,3,7,8-TCDD	226	200	113	173	200	86	73 - 146	27	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	pg/L
Lab Code:	EQ1200450-02	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/23/12 2348
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/9/12
Sample Amount:	1000mL	**Instrument Name:**	E-HRMS-03
		GC Column:	db5
Data File Name:	P159516	**Blank File Name:**	P159511
ICAL Date:	04/23/12	**Cal Ver. File Name:**	P159508

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	**183**		1.22	10.0	0.80	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	974.732	49		25-141	0.78	1.009
37Cl-2,3,7,8-TCDD	800	528.119	66		37-158	NA	1.009

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	pg/L
Lab Code:	EQ1200450-03	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/24/12 0036
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/9/12
Sample Amount:	1000mL	**Instrument Name:**	E-HRMS-03
		GC Column:	db5
Data File Name:	P159517	**Blank File Name:**	P159511
ICAL Date:	04/23/12	**Cal Ver. File Name:**	P159508

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	**214**		2.85	10.0	0.74	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	608.652	30		25-141	0.81	1.009
37Cl-2,3,7,8-TCDD	800	558.771	70		37-158	NA	1.009

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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	pg/L
Lab Code:	EQ1200465-02	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/24/12 0305
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/17/12
Sample Amount:	1000mL	**Instrument Name:**	E-HRMS-04
		GC Column:	DB-5
Data File Name:	P219023	**Blank File Name:**	P219029
ICAL Date:	05/03/12	**Cal Ver. File Name:**	P219010

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	**226**		0.838	10.0	0.78	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1040.559	52		25-141	0.78	1.007
37Cl-2,3,7,8-TCDD	800	579.221	72		37-158	NA	1.009

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Report

Client:	Kennedy/Jenks Consultants, Incorporated	**Service Request:**	K1207165
Project:	Mint Farm	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	pg/L
Lab Code:	EQ1200465-03	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	1613B	**Date Analyzed:**	8/24/12 1520
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	8/17/12
Sample Amount:	1000mL	**Instrument Name:**	E-HRMS-03
		GC Column:	DB-5
Data File Name:	P159531	**Blank File Name:**	P219029
ICAL Date:	04/23/12	**Cal Ver. File Name:**	P159524

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	**173**		1.67	10.0	0.83	1.001	1

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	746.841	37		25-141	0.80	1.008
37Cl-2,3,7,8-TCDD	800	616.087	77		37-158	NA	1.009

Columbia Analytical Services

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Chain of Custody

19408 Park Row, Suite 320, Houston, TX 77084
Phone (713)266-1599 Fax (713)266-0130
www.caslab.com

An Employee Owned Company

Intra-Network Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

Project Name: Mint Farm
Project Number:
Project Manager: Steven Misner
Company: Kennedy/Jenks Consultants, Incorporated

Lab Code	Client Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Date Received	Send To	Dioxins Furans 1613B
K1207165-001	DW-9	2	Water	7/24/12	1345	7/24/12	HOUSTON	V

Test Comments

Dioxins Furans - 1613B K1207165-001 2,3,7,8-TCDD

Drinking Water - WA State

Folder Comments:

Use Baseline for Performance Testing Samples

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
Please provide the electronic (PDF and EDD) report to the following e-mail address: kelso_data@caslab.com	____ **RUSH** (Surcharges Apply) **PLEASE CIRCLE WORK DAYS** 1 2 3 4 5 X **STANDARD** Requested FAX Date: _____ Requested Report Date: ~~08/10/12~~ 08/16/12	____ I. Results Only X II. Results + QC Summaries ____ III. Results + QC and Calibration Summaries ____ IV. Data Validation Report with Raw Data PQL/MDL/J N EDD Y	PO# K1207165 Bill to

1026
08
S/N: 12915976

Relinquished By: [signature] ALS 7/25/12 1240 Received By: [signature] 7/26/12 0955 Airbill Number: 1Z9736590164314666

Intra-Network Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

Project Name: Mint Farm
Project Number:
Project Manager: Steven Misner
Company: Kennedy/Jenks Consultants, Incorporated

Lab Code	Client Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Date Received	Send To	Dioxins Furans 1613B
K1207165-001	~~DW-9~~	~~2~~	Water	7/24/12	1345	7/24/12	HOUSTON	V
K1207165-003	DW-2	2	Water	7/25/12	1130	7/25/12	HOUSTON	V
K1207165-004	DW-5	2	Water	7/25/12	1410	7/25/12	HOUSTON	V

Test Comments

Dioxins Furans - 1613B K1207165-001,3,4 2,3,7,8-TCDD

WAD Water
7/26/12

Folder Comments:

Use Baseline for Performance Testing Samples

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
Please provide the electronic(PDF and EDD) report to the following e-mail address: kelso_data@caslab.com 956 2e S/N: 1019159776	_____**RUSH** (Surcharges Apply) **PLEASE CIRCLE WORK DAYS** 1 2 3 4 5 ____ **STANDARD** Requested FAX Date: _____ Requested Report Date: ~~08/10/12~~ Standard	____ I. Results Only X II. Results + QC Summaries ____ III. Results + QC and Calibration Summaries ____ IV. Data Validation Report with Raw Data PQL/MDL/J N EDD Y	PO# K1207165 Bill to

Relinquished By: [signature] ALS 7/26/12 1130 Received By: [signature] 7/27/12 950 Airbill Number: 1Z973659016589906 0

Intra-Network Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

Project Name: Mint Farm
Project Number:
Project Manager: Steven Misner
Company: Kennedy/Jenks Consultants, Incorporated

Lab Code	Client Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Date Received	Send To	Dioxins Furans 1613B
K1207165-001	DW-9	Ø	Water	7/24/12	1345	7/24/12	HOUSTON	V
K1207165-003	DW-2	Ø	Water	7/25/12	1130	7/25/12	HOUSTON	V
K1207165-004	DW-5	Ø	Water	7/25/12	1130	7/25/12	HOUSTON	V
K1207165-006	DW-1	2	Water	7/25/12	1130	7/25/12	HOUSTON	V
K1207165-007	DW-7	2	Water	7/26/12	1300	7/26/12	HOUSTON	V
K1207165-008	Dup-1	2	Water	7/26/12	1200	7/26/12	HOUSTON	V

Test Comments

Dioxins Furans - 1613B K1207165-001,3,4,6,7,8 2,3,7,8-TCDD

Folder Comments:

Use Baseline for Performance Testing Samples

Special Instructions/Comments

Please provide the electronic(PDF and EDD) report to the following e-mail address:
kelso_data@caslab.com

1013
0°c
S/N: 101915976

Turnaround Requirements

____**RUSH** (Surcharges Apply)

PLEASE CIRCLE WORK DAYS
1 2 3 4 5

____**STANDARD**

Requested FAX Date: _____

Requested Report Date: 08/10/12

Report Requirements

____ I. Results Only

____ II. Results + QC Summaries

____ III. Results + QC and Calibration Summaries

____ IV. Data Validation Report with Raw Data

PQL/MDL/J N
EDD Y

Invoice Information

PO# K1207165

Bill to

Relinquished By: AHull ALS 7/26/12 1530 Received By: 950 7/27/12 Airbill Number: 1Z9736590160566387

Page

Intra-Network Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

Project Name: Mint Farm
Project Number:
Project Manager: Steven Misner
Company: Kennedy/Jenks Consultants, Incorporated

Lab Code	Client Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Date Received	Send To	Dioxins Furans 1613B
K1207165-010	DW-6	2	Water	7/27/12	1030	7/27/12	HOUSTON	V

Test Comments
Dioxins Furans - 1613B K1207165-001,3,4,6,7,8,10 2,3,7,8-TCDD

Drinking H2O

Lisa D 7/27/12

Folder Comments:
Use Baseline for Performance Testing Samples

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
~~Please provide the electronic (PDF and EDD) report to the following e-mail address:~~ kelso_data@caslab.com 956 2°C S/N: 109159976	____RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 X STANDARD Requested FAX Date: ____ Requested Report Date: 08/10/12	____ I. Results Only X II. Results + QC Summaries ____ III. Results + QC and Calibration Summaries ____ IV. Data Validation Report with Raw Data PQL/MDL/J N EDD Y	PO# K1207165 Bill to

Relinquished By: Kaila Smith 7/30/12 1156 Received By: [illegible] 7/31/12 950 Airbill Number: 1Z9736590166720042

Pag

Columbia Analytical Services
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Cooler Receipt Form

Project Chemist: AK

Client/Project: Kennedy/Jenks Consultants Inc; Mint Farm

Service Request: K1207165

Date/Time Received: 07/26/12 09:50:00

Date/Time Logged in: 07/26/12 13:18:00

Technician: AL

Technician: AL

1. Method of delivery: ○ US Mail ○ Fed Ex ● UPS ○ DHL ○ Courier ○ Client

2. Samples received in: ● Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ● Yes ○ No ○ N/A

Were they intact? ● Yes ○ No ○ N/A

Were they signed and dated? ● Yes ○ No ○ N/A

If yes, how many and where?

4. Method of delivery: ○ Inserts ○ Baggies ☑ Bubble Wrap ☑ Gel Packs ○ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ● No

Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?	Filed
1Z9736501634314666		Jul 26, 2012	1026	AL	0/0	☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ● Yes ○ No ○ N/A

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ● Yes ○ No ○ N/A

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ● Yes ○ No ○ N/A

9. Were appropriate bottles/containers and volumes received for the requested tests? ● Yes ○ No ○ N/A

10. Did sample labels and tags agree with custody documents? ● Yes ○ No ○ N/A

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Out of Temp	Broken	Date	Technician
			☐	☐		
			☐	☐		
			☐	☐		
			☐	☐		

Notes, Discrepancies, & Resolutions:

received

Print Form

Reset Form

Columbia Analytical Services
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Cooler Receipt Form

Project Chemist: AK

Client/Project: Kennedy/Jenks Consultants Inc; Mint Farm

Service Request: K1207165

Date/Time Received: 07/27/12 09:50:00

Date/Time Logged in: 07/27/12 15:25:00

Technician: AL

Technician: AL

1. Method of delivery: ○ US Mail ○ Fed Ex ● UPS ○ DHL ○ Courier ○ Client

2. Samples received in: ● Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ● Yes ○ No ○ N/A

Were they intact? ● Yes ○ No ○ N/A

Were they signed and dated? ● Yes ○ No ○ N/A

If yes, how many and where?

4. Method of delivery: ☑ Inserts ☑ Baggies ☑ Bubble Wrap ○ Gel Packs ☑ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ● No

Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?	Filed
1Z9736590166566387		Jul 27, 2012	1013	AL	0/0	☐	☐
1Z9736590165899060		Jul 27, 2012	0956	AL	2/2	☐	☐
						☐	☐
						☐	☐
						☐	☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ● Yes ○ No ○ N/A

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ● Yes ○ No ○ N/A

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ● Yes ○ No ○ N/A

9. Were appropriate bottles/containers and volumes received for the requested tests? ● Yes ○ No ○ N/A

10. Did sample labels and tags agree with custody documents? ● Yes ○ No ○ N/A

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Out of Temp	Broken	Date	Technician
			☐	☐		
			☐	☐		
			☐	☐		
			☐	☐		

Notes, Discrepancies, & Resolutions:

received

Print Form

Reset Form

Columbia Analytical Services
Now part of the ALS Group

Cooler Receipt Form

Project Chemist: AK

Client/Project: Kennedy/Jenks Consultants Inc; Mint Farm

Service Request: K1207165

Date/Time Received: 07/31/12 09:50:00

Date/Time Logged in: 07/31/12 11:01:00

Technician: AL

Technician: AL

1. Method of delivery: ○ US Mail ○ Fed Ex ● UPS ○ DHL ○ Courier ○ Client

2. Samples received in: ● Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ● Yes ○ No ○ N/A

Were they intact? ● Yes ○ No ○ N/A

Were they signed and dated? ● Yes ○ No ○ N/A

If yes, how many and where?

4. Method of delivery: ○ Inserts ○ Baggies ☑ Bubble Wrap ☑ Gel Packs ○ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ● No

Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?	Filed
1Z9736590166720642		Jul 31, 2012	0956	AL	2/2	☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ● Yes ○ No ○ N/A

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ● Yes ○ No ○ N/A

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ● Yes ○ No ○ N/A

9. Were appropriate bottles/containers and volumes received for the requested tests? ● Yes ○ No ○ N/A

10. Did sample labels and tags agree with custody documents? ● Yes ○ No ○ N/A

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Out of Temp	Broken	Date	Technician
			☐	☐		
			☐	☐		
			☐	☐		
			☐	☐		

Notes, Discrepancies, & Resolutions:

Print Form

Reset Form

Columbia Analytical Services INC

Sample Acceptance Policy

This policy outlines the criteria samples must meet to be accepted by CAS/ Houston.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sample
- ✓ The COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, CAS/Houston will complete a COC, which must be approved by the client, in writing, prior to proceeding with the analysis.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6°C.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10°C.
- ✓ Air samples can be shipped and stored at ambient temperature, ~23°C.
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder.

Service Request Summary

Folder #: **K1207165**
Client Name: Kennedy/Jenks Consultants, Incorporated
Project Name: Mint Farm
Project Number:

Report To: Steven Misner
Kennedy/Jenks Consultants, Incorporated
200 SW Market St., Suite 500
Portland, OR 97201-5715
Phone Number: 503-423-4004
Cell Number:
Fax Number: 503-295-4901
E-mail: stevenmisner@kennedyjenks.com

Project Chemist: Arthi Kodur
Originating Lab: KELSO
Logged By: FADAIR
Date Received: 7/24 - 7/27/12
Internal Due Date: 8/10/12
QAP: LAB QAP, Tetras Only
Qualifier Set: CAS Standard
Formset: CAS Standard
Merged?: N,Y
Report to MDL?: N,Y
P.O. Number:
EDD: EQuIS Kennedy Jenks Mint Farm

37 - 1000 ml-Glass Bottle NM AMBER Teflon Liner Unpreserved
35 - 40 mL-Glass Vial DW VOA CLEAR Tef/Silicone Septa AAc/HCl
35 - 1000 mL-Plastic Bottle NM CLEAR HNO3
23 - 40 mL-Glass Vial VOA CLEAR Tef/Silicone Septa Na2S2O3
21 - 1000 mL-Plastic Bottle NM CLEAR Unpreserved
14 - 100 ml-Plastic Cup Sterile Na2S2O3
14 - 40 mL-Glass Vial VOA CLEAR Tef/Silicone Septa Unpreserved
14 - 1000 mL-Glass Bottle NM AMBER Na2SO3, HCL
14 - 40 mL-Glass Vial DW VOA AMBER Tef/Silicone Septa Na2S2O3
7 - 125 mL-Glass Bottle NM AMBER Na2S2O3
7 - 250 mL-Glass Bottle NM AMBER Na2SO3
7 - 500 mL-Plastic Bottle NM CLEAR Unpreserved
7 - 1000 mL-Plastic Bottle NM AMBER Na2S2O3
7 - 250 mL-Plastic Bottle NM CLEAR H2SO4
7 - 500 mL-Plastic Bottle NM CLEAR H2SO4
7 - 500 mL-Plastic Bottle NM CLEAR HNO3
7 - 500 mL-Plastic Bottle NM CLEAR NaOH
7 - 250 mL-Plastic Bottle Natural HCl Cleaned WM HCL

Location: SUBBED, K-HERK-C2, In Lab, K-Delilah-101, E-WIC01-D9, E-Disposed, K-HERK-A2, K-MISTY, K-Disposed, K-AUTOCLAVE, K-COLIBIN, P-Disposed, P-39-55, P-39-57

					KELSO										
CAS Samp No	**Client Samp No.**	**Matrix**	**Collected**		180.1/ Turbidity	300.0/ Chloride	300.0/ F	300.0/ NO2	300.0/ NO3	300.0/ SO4	335.4/ CN T	350.1/ Ammonia T	365.3/ O Phos T	365.3/ Phos T	Filter Gen/ Filter Gen
K1207165-001	DW-9	Water	7/24/12	1345	V	V	V	V	V	V	V	V	V	V	V
K1207165-002	Trip Blank 7/24	Water	7/24/12	0000											
K1207165-003	DW-2	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-004	DW-5	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-005	Trip Blank 7/25	Water	7/25/12	0000											
K1207165-006	DW-1	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-007	DW-7	Water	7/26/12	1300	V	V	V	V	V	V	V	V	V	V	V
K1207165-008	Dup-1	Water	7/26/12	1200	V	V	V	V	V	V	V	V	V	V	V
K1207165-009	Trip Blank 7/26	Water	7/26/12	0000											
K1207165-010	DW-6	Water	7/27/12	1030	V	V	V	V	V	V	V	V	V	V	V
K1207165-011	Trip Blank 7/26	Water	7/26/12	0000											

CAS Samp No.	Client Samp No.	Matrix	Collected		KELSO										
					SM 2120 B/ Color	SM 2320 B/ Alkalinity Titr	SM 2510 B/ Conductivity	SM 2540 C/ TDS	SM 4500-H+ B/ pH	SM 4500-SiO2 C/ SiO2 D	SM 5310 C/ TOC D	SM 5310 C/ TOC T	SM 5540 C/ MBAS	SM 5910 B/ UV 254	SM 9221 E/ Fec Coli MT
K1207165-001	DW-9	Water	7/24/12	1345	V	V	V	V	V	V	V	V	V	V	V
K1207165-002	Trip Blank 7/24	Water	7/24/12	0000											
K1207165-003	DW-2	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-004	DW-5	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-005	Trip Blank 7/25	Water	7/25/12	0000											
K1207165-006	DW-1	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-007	DW-7	Water	7/26/12	1300	V	V	V	V	V	V	V	V	V	V	V
K1207165-008	Dup-1	Water	7/26/12	1200	V	V	V	V	V	V	V	V	V	V	V
K1207165-009	Trip Blank 7/26	Water	7/26/12	0000											
K1207165-010	DW-6	Water	7/27/12	1030	V	V	V	V	V	V	V	V	V	V	V
K1207165-011	Trip Blank 7/26	Water	7/26/12	0000											

					KELSO	KELSO							KELSO		
					SM 9223 B/ Qntray Tot NC	1632/ As Inorg T	1632/ As3	1632/ As5 Calc	200.7 LL/ Metals T	200.8/ Metals T	245.1/ Hg T	SM 2340 B/ Hardness Calc	531.1/ CARBAM	547/ GLYPH	549.2/ DIQ_PARAQ
K1207165-001	DW-9	Water	7/24/12	1345	V	V	V	V	V	V	V	V	V	V	V
K1207165-002	Trip Blank 7/24	Water	7/24/12	0000											
K1207165-003	DW-2	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-004	DW-5	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-005	Trip Blank 7/25	Water	7/25/12	0000											
K1207165-006	DW-1	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-007	DW-7	Water	7/26/12	1300	V	V	V	V	V	V	V	V	V	V	V
K1207165-008	Dup-1	Water	7/26/12	1200	V	V	V	V	V	V	V	V	V	V	V
K1207165-009	Trip Blank 7/26	Water	7/26/12	0000											
K1207165-010	DW-6	Water	7/27/12	1030	V	V	V	V	V	V	V	V	V	V	V
K1207165-011	Trip Blank 7/26	Water	7/26/12	0000											

					KELSO					KELSO	SVM	SIMIVALLEY	ACZ		
					504.1/ EDB DBCP 123TCP	508.1/ PEST_CL	515.4/ CL_ACID_HER B	525.2/ SVO	548.1/ ENDO	524.2/ VOC	1613B/ Dioxins Furans	Sulfur Liq/ Sulfur	900.0/ Radioact	903.1/ Radium 226	904.0/ Radium 228
K1207165-001	DW-9	Water	7/24/12	1345	V	V	V	V	V	V	V	V	V	V	V
K1207165-002	Trip Blank 7/24	Water	7/24/12	0000	V(H)					V(H)					
K1207165-003	DW-2	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-004	DW-5	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-005	Trip Blank 7/25	Water	7/25/12	0000	V(H)					V(H)					
K1207165-006	DW-1	Water	7/25/12	1130	V	V	V	V	V	V	V	V	V	V	V
K1207165-007	DW-7	Water	7/26/12	1300	V	V	V	V	V	V	V	V	V	V	V
K1207165-008	Dup-1	Water	7/26/12	1200	V	V	V	V	V	V	V	V	V	V	V
K1207165-009	Trip Blank 7/26	Water	7/26/12	0000	V(H)					V(H)					
K1207165-010	DW-6	Water	7/27/12	1030	V	V	V	V	V	V	V	V	V	V	V
K1207165-011	Trip Blank 7/26	Water	7/26/12	0000	V(H)					V(H)					

					LabCOR
					100.1/ Asbestos
K1207165-001	DW-9	Water	7/24/12	1345	V
K1207165-002	Trip Blank 7/24	Water	7/24/12	0000	
K1207165-003	DW-2	Water	7/25/12	1130	V
K1207165-004	DW-5	Water	7/25/12	1130	V
K1207165-005	Trip Blank 7/25	Water	7/25/12	0000	
K1207165-006	DW-1	Water	7/25/12	1130	V
K1207165-007	DW-7	Water	7/26/12	1300	V
K1207165-008	Dup-1	Water	7/26/12	1200	V
K1207165-009	Trip Blank 7/26	Water	7/26/12	0000	
K1207165-010	DW-6	Water	7/27/12	1030	V
K1207165-011	Trip Blank 7/26	Water	7/26/12	0000	

Service Request Summary

Folder #:	**K1207165**
Client Name:	Kennedy/Jenks Consultants, Incorporated
Project Name:	Mint Farm
Project Number:	
Report To:	Steven Misner Kennedy/Jenks Consultants, Incorporated 200 SW Market St., Suite 500 Portland, OR 97201-5715
Phone Number:	503-423-4004
Cell Number:	
Fax Number:	503-295-4901
E-mail:	stevenmisner@kennedyjenks.com

Project Chemist:	Arthi Kodur
Originating Lab:	KELSO
Logged By:	FADAIR
Date Received:	7/24 - 7/27/12
Internal Due Date:	8/10/12
QAP:	LAB QAP, Tetras Only
Qualifier Set:	CAS Standard
Formset:	CAS Standard
Merged?:	N,Y
Report to MDL?:	N,Y
P.O. Number:	
EDD:	EQuIS Kennedy Jenks Mint Farm

37	- 1000 ml-Glass Bottle NM AMBER Teflon Liner Unpreserved
35	- 40 mL-Glass Vial DW VOA CLEAR Tef/Silicone Septa AAc/HCl
35	- 1000 mL-Plastic Bottle NM CLEAR HNO3
23	- 40 mL-Glass Vial VOA CLEAR Tef/Silicone Septa Na2S2O3
21	- 1000 mL-Plastic Bottle NM CLEAR Unpreserved
14	- 100 ml-Plastic Cup Sterile Na2S2O3
14	- 40 mL-Glass Vial VOA CLEAR Tef/Silicone Septa Unpreserved
14	- 1000 mL-Glass Bottle NM AMBER Na2SO3, HCL
14	- 40 mL-Glass Vial DW VOA AMBER Tef/Silicone Septa Na2S2O3
7	- 125 mL-Glass Bottle NM AMBER Na2S2O3
7	- 250 mL-Glass Bottle NM AMBER Na2SO3
7	- 500 mL-Plastic Bottle NM CLEAR Unpreserved
7	- 1000 mL-Plastic Bottle NM AMBER Na2S2O3
7	- 250 mL-Plastic Bottle NM CLEAR H2SO4
7	- 500 mL-Plastic Bottle NM CLEAR H2SO4
7	- 500 mL-Plastic Bottle NM CLEAR HNO3
7	- 500 mL-Plastic Bottle NM CLEAR NaOH
7	- 250 mL-Plastic Bottle Natural HCl Cleaned WM HCL

Location: SUBBED, K-HERK-C2, In Lab, K-Delilah-101, E-WIC01-D9, E-Disposed, K-HERK-A2, K-MISTY, K-Disposed, K-AUTOCLAVE, K-COLIBIN, P-Disposed, P-39-55, P-39-57

Folder Comments:

Use Baseline for Performance Testing Samples

Test Comments:

Group	Test/Method	Samples	Comments
GenChem	Filter Gen/Filter Gen	1, 3-4, 6-8, 10	filter at lab for DOC
Metals	Metals T/200.7 LL	1, 3-4, 6-8, 10	Al,Ca,Fe,Mg,K,Mn,Si,Na,Zn
Metals	Metals T/200.8	1, 3-4, 6-8, 10	Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Ag,Tl,U.
Organic LC	CARBAM/531.1	1, 3-4, 6-8, 10	Include all the aldicarb compounds
Semivoa GCMS	Dioxins Furans/1613B	1, 3-4, 6-8, 10	2,3,7,8-TCDD
SubLab	Asbestos/100.1	1, 3-4, 6-8, 10	Asbestos in drinking water (not chlorinated)
			EPA 100.2
SubLab	Radioact/900.0	1, 3-4, 6-8, 10	Gross Alpha,Beta,Radium 226 and 228
VOA GC AIR	Sulfur/Sulfur Liq	1, 3-4, 6-8, 10	Hydrogen Sulfide
VOA GCMS	VOC/524.2	1, 3-4, 6-8, 10	Full list 524.2

Preparation Information Benchsheet

Prep Run#: 164395 **Prep WorkFlow:** OrgExtAq(365) **Status:** Prepped
Team: Semivoa GCMS/SMORE **Prep Method:** Method Sep Funnel/Jar **Prep Date/Time:** 8/9/12 08:53 AM

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Sample Description
1	EQ1200450-01	MB		1613B/Dioxins Furans	5	Liquid	1000mL	
2	EQ1200450-02	LCS		1613B/Dioxins Furans	5	Liquid	1000mL	
3	EQ1200450-03	DLCS		1613B/Dioxins Furans	5	Liquid	1000mL	
4	J1203394-001RE	Mill Discharge Eff-1	.02	1613B/Dioxins Furans	8	Water	980mL	opaque brown liquid
5	K1206809-001	BP Sewer 1	.02	1613B/Dioxins Furans	3	Water	1030mL	Clear orange liquid
6	K1206809-002	BP Sewer 2	.01	1613B/Dioxins Furans	10	Water	1050mL	PH adjusted to 5 / Clear orange liquid
7	K1207165-001	DW-9	.35	1613B/Dioxins Furans	7	Water	1040mL	Clear colorless liquid
8	K1207165-003	DW-2	.06	1613B/Dioxins Furans	7	Water	1040mL	Clear colorless liquid
9	K1207165-004	DW-5	.06	1613B/Dioxins Furans	7	Water	1040mL	Clear colorless liquid
10	K1207165-006	DW-1	.06	1613B/Dioxins Furans	7	Water	1000mL	Clear colorless liquid
11	K1207165-007	DW-7	.06	1613B/Dioxins Furans	7	Water	1020mL	Clear colorless liquid
12	K1207165-008	Dup-1	.06	1613B/Dioxins Furans	7	Water	1040mL	Clear colorless liquid

Spiking Solutions

Name: 1613B Matrix Working Standard Inventory ID 47785 Logbook Ref: D13-46-5 (47785) Expires On: 08/04/2013

EQ1200450-02	100.00µL	EQ1200450-03	100.00µL

Name: 1613B Labeled Working Standard Inventory ID 47969 Logbook Ref: D13-48-1 (47969) Expires On: 08/09/2013

EQ1200450-01	1,000.00µL	EQ1200450-02	1,000.00µL	EQ1200450-03	1,000.00µL	J1203394-001	1,000.00µL	K1206809-001	1,000.00µL	K1206809-002	1,000.00µL
K1207165-001	1,000.00µL	K1207165-003	1,000.00µL	K1207165-004	1,000.00µL	K1207165-006	1,000.00µL	K1207165-007	1,000.00µL	K1207165-008	1,000.00µL

Name: 8290/1613B Cleanup Working Standard Inventory ID 48075 Logbook Ref: D13-48-5 (48075) Expires On: 08/10/2013

EQ1200450-01	100.00µL	EQ1200450-02	100.00µL	EQ1200450-03	100.00µL	J1203394-001	100.00µL	K1206809-001	100.00µL	K1206809-002	100.00µL
K1207165-001	100.00µL	K1207165-003	100.00µL	K1207165-004	100.00µL	K1207165-006	100.00µL	K1207165-007	100.00µL	K1207165-008	100.00µL

Preparation Materials

Sensafe Free Chlorine WTR CHK	C2-76-6 (45846)	Acetone 99.5% Minimum	C2-73-2 (52034) (44840)	Carbon, High Purity	C2-78-5 (3291002) (48048)
Ethyl Acetate 99.9% Minimum EtOAc	C2-79-2 (52060) (48043)	Glass Wool	C2-78-2 (K93168686) (46898)	Sulfuric Acid Reagent Grade H2SO4	C2-59-7 (33893)
Dichloromethane (Methylene Chloride) 99.9% MeCl2	C2-79-4 (52089) (48042)	Sodium Thiosulfate Anhydrous Reagent Grade NaS2O3	C2-69-2 (MKBH7658V) (40798)	Sodium Chloride Reagent Grade NaCl	C2-65-5 (38670)
Sodium Hydroxide Reagent Grade NaOH	C2-63-6 (37033)	Sodium Sulfate Anhydrous Reagent Grade Na2SO4	C2-74-1 (06010505) (44838)	Tridecane (n-Tridecane)	C2-77-1 (MKBJ3173V) (46168)
Hexane (n-Hexane) 98.5% Minimum	C2-79-5 (48044)	pH Paper 0-14	(1008)	Silica Gel Reagent Grade	C2-80-6 (48144)
Toluene 99.9% Minimum	C2-79-1 (51287) (48040)				

Preparation Information Benchsheet

Prep Run#: 164395 **Prep WorkFlow:** OrgExtAq(365) **Status:** Prepped
Team: Semivoa GCMS/SMORE **Prep Method:** Method Sep Funnel/Jar **Prep Date/Time:** 8/9/12 08:53 AM

Preparation Steps

Step:	Extraction	Step:	Acid Clean	Step:	Silica Gel Clean	Step:	Final Volume
Started:	8/9/12 14:00	Started:	8/13/12 09:40	Started:	8/15/12 06:20	Started:	8/16/12 11:30
Finished:	8/9/12 18:00	Finished:	8/13/12 09:55	Finished:	8/15/12 08:10	Finished:	8/16/12 14:05
By:	888 NBROWN	By:	RPIERROT	By:	RPIERROT	By:	RPIERROT
Comments		Comments		Comments		Comments	

Comments: _____

Reviewed By: RP Date: 8/23/2012

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

332

Preparation Information Benchsheet

Prep Run#: 164936 **Prep WorkFlow:** OrgExtAq(365) **Status:** Prepped
Team: Semivoa GCMS/AKODUR **Prep Method:** Method Sep Funnel/Jar **Prep Date/Time:** 8/17/12 10:00 AM

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Sample Description
1	E1200910-001RE	BP Acid Sewer	.01	1613B/Dioxins Furans	4	Water	1020mL	opaque yellow liquid
2	E1200910-002RE	BP Alkaline Sewer	.01	1613B/Dioxins Furans	7	Water	1000mL	clear brown liquid
3	E1201042-001	Chip Composite 2012-07-26-I	.01	1613B/Dioxins Furans	4	Water	980mL	light orange liquid
4	E1201042-002	SD. Composite 2012-07-26-K	.01	1613B/Dioxins Furans	7	Water	1000mL	dark orange liquid
5	E1201043-001	Marrero Eff	.01	1613B/Dioxins Furans	6	Water	920mL	pale yellow liquid
6	E1201055-001	1207B56-001A	.01	1613B/Dioxins Furans	8	Drinking Water	980mL	clear liquid
7	E1201056-001	1207B54-001A - HAL110106	.01	1613B/Dioxins Furans	8	Drinking Water	980mL	clear liquid
8	E1201057-001	1207A56-001M - Sample 1	.01	1613B/Dioxins Furans	8	Water	780mL	light yellow liquid
9	E1201059-001	Well 12-026934	.01	1613B/Dioxins Furans	8	Water	900mL	clear liquid
10	E1201077-001	12-02693 Well 17	.01	1613B/Dioxins Furans	8	Water	1000mL	clear liquid
11	E1201083-001	WWT01	.01	1613B/Dioxins Furans	8	Water	980mL	light yellow liquid
12	E1201084-001	East Bank EFF 69861-S	.01	1613B/Dioxins Furans	8	Water	880mL	light yellow liquid
13	E1201097-001	Harvey Eff	.01	1613B/Dioxins Furans	8	Water	940mL	pale yellow liquid
14	E1201101-001	2080005-01	.01	1613B/Dioxins Furans	6	Water	1040mL	clear liquid
15	E1201107-001	9980913001-K	.01	1613B/Dioxins Furans	8	Drinking Water	1060mL	clear liquid
16	E1201108-001	9981059001	.01	1613B/Dioxins Furans	8	Drinking Water	1040mL	clear liquid
17	EQ1200465-01	MB		1613B/Dioxins Furans		Liquid	1000mL	
18	EQ1200465-02	LCS		1613B/Dioxins Furans		Liquid	1000mL	
19	EQ1200465-03	DLCS		1613B/Dioxins Furans		Liquid	1000mL	
20	K1207165-010	DW-6	.06	1613B/Dioxins Furans	5	Water	1040mL	clear liquid
21	K1207740-003	Bleach Plant Composite	.01	1613B/Dioxins Furans	10	Water	1000mL	dark orange liquid
22	R1204740-002	Flogard MS6206	.01	1613B/Dioxins Furans	12	Water	300mL	clear liquid

Preparation Information Benchsheet

Prep Run#: 164936 **Prep WorkFlow:** OrgExtAq(365) **Status:** Prepped
Team: Semivoa GCMS/AKODUR **Prep Method:** Method Sep Funnel/Jar **Prep Date/Time:** 8/17/12 10:00 AM

Spiking Solutions

Name:	1613B Matrix Working Standard	Inventory ID	47785	Logbook Ref:	D13-46-5 (47785)	Expires On:	08/04/2013

EQ1200465-02	100.00µL	EQ1200465-03	100.00µL

Name:	1613B Labeled Working Standard	Inventory ID	48193	Logbook Ref:	D13-50-2 (48193)	Expires On:	08/16/2013

E1200910-001	1,000.00µL	E1200910-002	1,000.00µL	E1201042-001	1,000.00µL	E1201042-002	1,000.00µL	E1201042-002.R	1,000.00µL	E1201043-001	1,000.00µL
E1201055-001	1,000.00µL	E1201056-001	1,000.00µL	E1201057-001	1,000.00µL	E1201059-001	1,000.00µL	E1201077-001	1,000.00µL	E1201083-001	1,000.00µL
E1201084-001	1,000.00µL	E1201097-001	1,000.00µL	E1201101-001	1,000.00µL	E1201107-001	1,000.00µL	E1201108-001	1,000.00µL	EQ1200465-01	1,000.00µL
EQ1200465-02	1,000.00µL	EQ1200465-03	1,000.00µL	K1207165-010	1,000.00µL	K1207740-003	1,000.00µL	R1204740-002	1,000.00µL		

Name:	8290/1613B Cleanup Working Standard	Inventory ID	48289	Logbook Ref:	D13-49-5 (48289)	Expires On:	08/17/2013

E1200910-001	100.00µL	E1200910-002	100.00µL	E1201042-001	100.00µL	E1201042-002	100.00µL	E1201042-002.R	100.00µL	E1201043-001	100.00µL
E1201055-001	100.00µL	E1201056-001	100.00µL	E1201057-001	100.00µL	E1201059-001	100.00µL	E1201077-001	100.00µL	E1201083-001	100.00µL
E1201084-001	100.00µL	E1201097-001	100.00µL	E1201101-001	100.00µL	E1201107-001	100.00µL	E1201108-001	100.00µL	EQ1200465-01	100.00µL
EQ1200465-02	100.00µL	EQ1200465-03	100.00µL	K1207165-010	100.00µL	K1207740-003	100.00µL	R1204740-002	100.00µL		

Preparation Steps

Step:	Extraction	Step:	Acid Clean	Step:	Silica Gel Clean	Step:	Final Volume
Started:	8/17/12 10:00	Started:	8/20/12 12:00pm	Started:	8/21/12 14:20pm	Started:	8/22/12 8:50 am
Finished:	8/18/12 07:45	Finished:	8/20/12 14:00pm	Finished:	8/21/12 15:40opm	Finished:	8/22/12 11:40 am
By:	AKODUR	By:	AKODUR	By:	AKODUR	By:	AKODUR
Comments		Comments		Comments		Comments	

Comments: _____

Reviewed By: ak Date: 8/27/12

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

LABORATORY REPORT

August 14, 2012

Steven Misner
Kennedy/Jenks Consultants, Incorporated
200 SW Market St., Suite 500
Portland, OR 97201-5715

RE: Mint Farm

Dear Steven:

Enclosed are the results of the sample submitted to our laboratory on July 24-27, 2012. For your reference, this analysis has been assigned our service request number K1207165.

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

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA200007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L11-203; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-12-3; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA01527Z012-Z; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

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

Respectfully submitted,

ALS | Environmental

Kate Aguilera

By Kate Aguilera at 11:28 am, Aug 14, 2012

Kate Aguilera
Project Manager

Client: Kennedy/Jenks Consultants, Incorporated Service Request No: K1207165
Project: Mint Farm

CASE NARRATIVE

The sample was received intact under chain of custody on July 24-27, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Hydrogen Sulfide Analysis

The sample was analyzed for hydrogen sulfide using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD).

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

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

Intra-Network Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

Project Name: Mint Farm
Project Number:
Project Manager: Steven Misner
Company: Kennedy/Jenks Consultants, Incorporated

Lab Code	Client Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Date Received	Send To	Sulfur Sulfur Liq
K1207165-010	DW-6	2	Water	7/27/12	1030	7/27/12	SIMIVALLEY	V

LisaD
7/27/12
DW atem

337

Test Comments
Sulfur - Sulfur Liq K1207165-001,3,4,6,7,8,10 Hydrogen Sulfide

Folder Comments:
Use Baseline for Performance Testing Samples

Special Instructions/Comments
Please provide the electronic (PDF and EDD) report to the following e-mail address:
kelso_data@caslab.com

Turnaround Requirements
_____ **RUSH** (Surcharges Apply)
PLEASE CIRCLE WORK DAYS
1 2 3 4 5
X **STANDARD**
Requested FAX Date: _____
Requested Report Date: 08/10/12

Report Requirements
X I. Results Only
____ II. Results + QC Summaries
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
PQL/MDL/J N
EDD Y

Invoice Information
CSOK
3°C
PO# K1207165
Bill to

Relinquished By: Kala Smith 7/30/12 0800 Received By: [illegible] 7/31/12 1000 Airbill Number:

Columbia Analytical Services
Now part of the ALS Group
2655 Park Center Drive, Suite A, Simi Valley, CA 93065 | 805.526.7161 | www.caslab.com

Sample Acceptance Check Form

Client: Kennedy/Jenks Consultants, Incorporated Work order: K1207165
Project: Mint Farm
Sample(s) received on: 7/26-27/2012 Date opened: 7/26-27/2012 by: MZAMORA

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

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☒	☐	☐
	Cooler Temperature: ° C Blank Temperature: 4° C **Gel Packs**			
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☒	☐	☐
	Location of seal(s)? Top of cooler, down the front. Sealing Lid?	☒	☐	☐
	Were signature and date included?	☒	☐	☐
	Were seals intact?	☒	☐	☐
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☒	☐	☐
	Is there a client indication that the submitted samples are **pH** preserved?	☒	☐	☐
	Were **VOA vials** checked for presence/absence of air bubbles?	☒	☐	☐
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☒	☐	☐
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
K1207165-001.14	40mL VOA NP		6	1	A	
K1207165-001.15	40mL VOA NP				A	
K1207165-003.14	40mL VOA NP		6	1	A	
K1207165-003.15	40mL VOA NP				A	
K1207165-004.14	40mL VOA NP		6	1	A	
K1207165-004.15	40mL VOA NP				A	
K1207165-006.14	40mL VOA NP		6	1	A	
K1207165-006.15	40mL VOA NP				A	

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

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

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Sample Acceptance Check Form

Client: Kennedy/Jenks Consultants, Incorporated Work order: K1207165

Project: Mint Farm

Sample(s) received on: 7/26-27/2012 Date opened: 7/26-27/2012 by: MZAMORA

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
K1207165-007.14	40mL VOA NP		6	1	A	
K1207165-007.15	40mL VOA NP				A	
K1207165-008.14	40mL VOA NP		6	1	A	
K1207165-008.15	40mL VOA NP				A	
K1207165-010.14	40mL VOA NP		6	1	A	
K1207165-010.15	40mL VOA NP				A	

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

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Client: **Kennedy/Jenks Consultants, Incorporated**
Client Project ID: **Mint Farm** CAS Project ID: K1207165

Hydrogen Sulfide

Test Code: GC/SCD Reduced Sulfur Analysis
Instrument ID: Agilent 6890A/GC13/SCD
Agilent 7890A/GC22/SCD
Analyst: Wade Henton
Matrix: Water
Test Notes:

Date(s) Collected: 7/24 - 7/27/12
Date Received: 7/24 - 7/27/12
Date Analyzed: 7/28 - 8/3/12

Client Sample ID	CAS Sample ID	Liquid Amount: Amount ml(s)	Purge Volume Liter(s)	Injection Volume ml(s)	**Result µg/L**	MRL µg/L	Data Qualifier
DW-9	K1207165-001	10.0	0.30	1.0	ND	0.84	
DW-2	K1207165-003	10.0	0.30	1.0	ND	0.84	
DW-5	K1207165-004	10.0	0.30	1.0	ND	0.84	
DW-1	K1207165-006	10.0	0.30	1.0	**6.3**	0.84	
DW-7	K1207165-007	10.0	0.30	1.0	**5.6**	0.84	
Dup-1	K1207165-008	10.0	0.30	1.0	**5.6**	0.84	
DW-6	K1207165-010	10.0	0.30	1.0	ND	0.84	
Method Blank	P120728-MB	10.0	0.30	1.0	ND	0.84	
Method Blank	P120803-MB	10.0	0.30	1.0	ND	0.84	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

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LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Kennedy/Jenks Consultants, Incorporated**
Client Sample ID: **Duplicate Lab Control Sample** CAS Project ID: K1207165
Client Project ID: **Mint Farm** CAS Sample ID: P120728-DLCS

Test Code: GC/SCD Reduced Sulfur Analysis
Instrument ID: Agilent 6890A/GC13/SCD
Analyst: Wade Henton
Matrix: Water
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 7/28/12
Liquid Amount: 10.0 ml(s)
Purge Volume: 0.30 Liter(s)
Injection Volume: 0.20 ml(s)

CAS #	Compound	Spike Amount LCS / DLCS ug/L	Result LCS ug/L	Result DLCS ug/L	% Recovery LCS	% Recovery DLCS	CAS Acceptance Limits	RPD	RPD Limit	Data Qualifier
7783-06-4	Hydrogen Sulfide	423	466	501	**110**	**118**	58-121	7	26	

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LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Kennedy/Jenks Consultants, Incorporated**
Client Sample ID: **Duplicate Lab Control Sample** CAS Project ID: K1207165
Client Project ID: **Mint Farm** CAS Sample ID: P120803-DLCS

Test Code: GC/SCD Reduced Sulfur Analysis
Instrument ID: Agilent 7890A/GC22/SCD
Analyst: Wade Henton
Matrix: Water
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 8/03/12
Liquid Amount: 10.0 ml(s)
Purge Volume: 0.30 Liter(s)
Injection Volume: 0.20 ml(s)

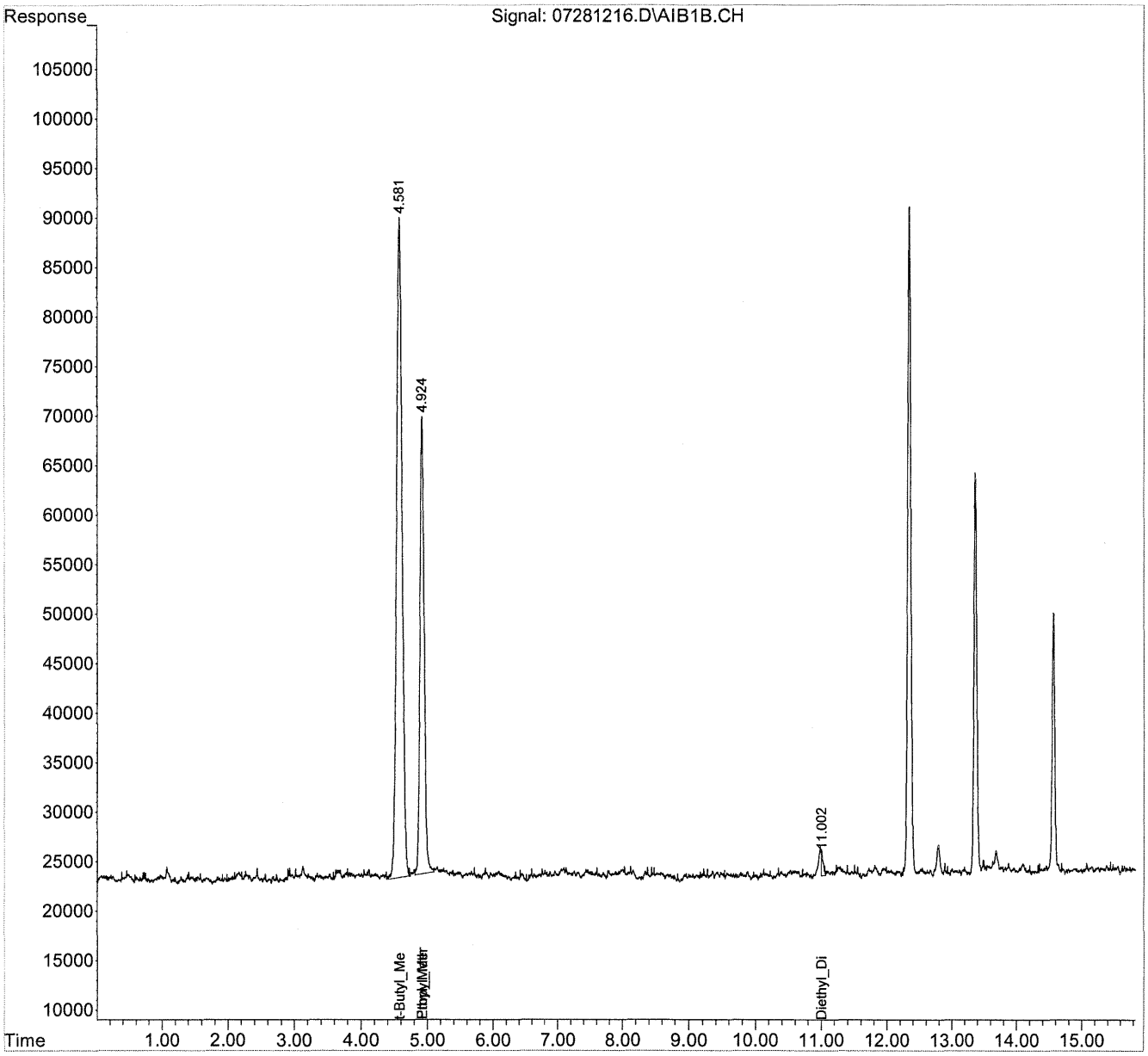
CAS #	Compound	Spike Amount LCS / DLCS ug/L	Result LCS ug/L	Result DLCS ug/L	% Recovery LCS	% Recovery DLCS	CAS Acceptance Limits	RPD	RPD Limit	Data Qualifier
7783-06-4	Hydrogen Sulfide	423	371	419	**88**	**99**	58-121	12	26	

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281216.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 15:15
Operator : WHH
Sample : 7165-001 1ml(10->300)
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 15:38:07 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281216.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 15:15
Operator : WHH
Sample : 7165-001 1ml(10->300)
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 15:38:07 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	0.000	0	N.D.	ppb
2)	W	Carbonyl_Sulfide	0.000	0	N.D.	ppb
3)	T	Methyl_Mercaptan	0.000	0	N.D.	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	4.581	3855119	366.462	ppb
9)	T	Propyl_Mercaptan	4.925	2050594	194.927	ppb
10)	T	Ethyl_Methyl_Sulfide	4.925	2050594	194.927	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	11.003	50471	2.399	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

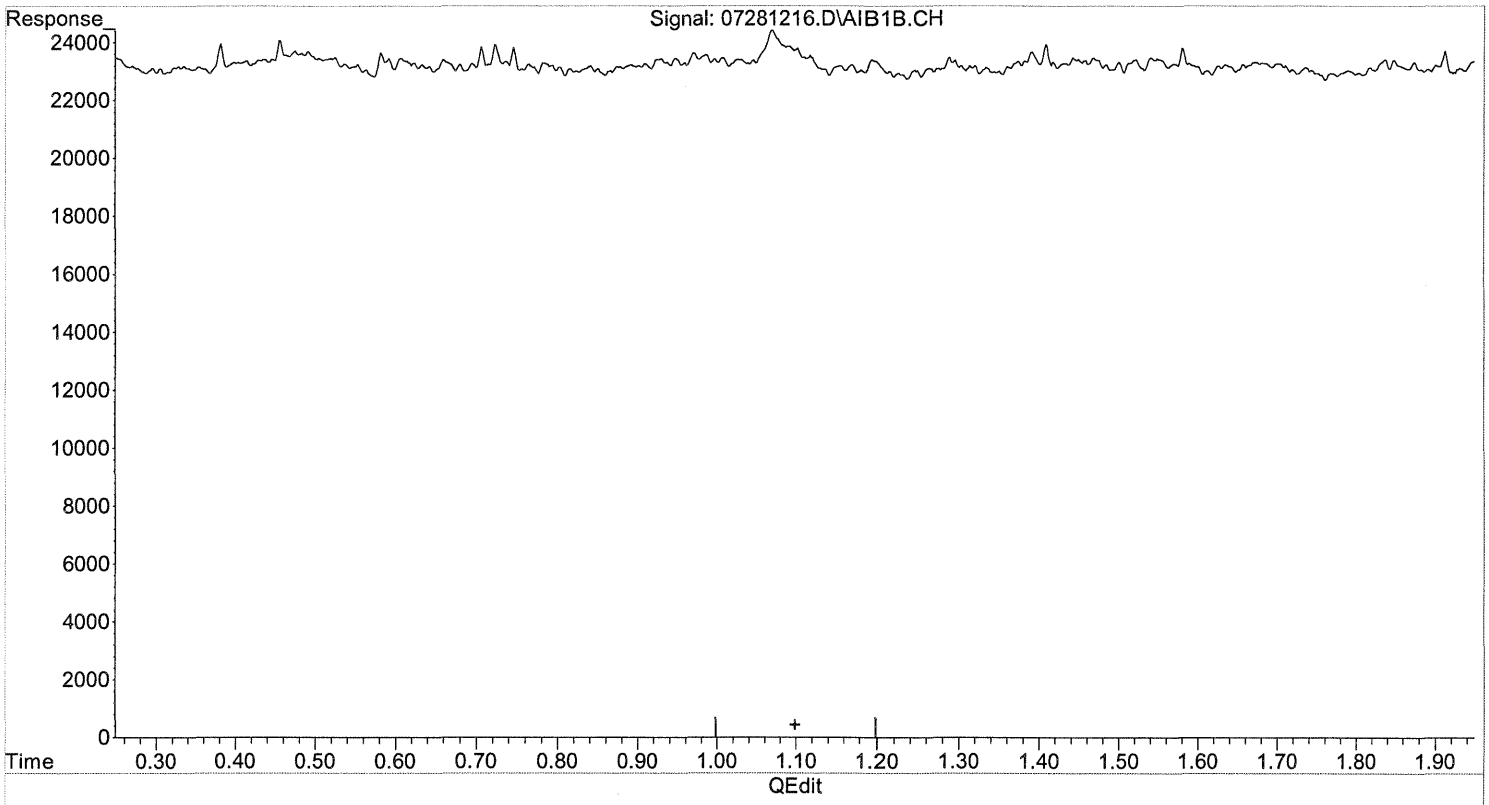
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Qedit)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281216.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 15:15
Operator : WHH
Sample : 7165-001 1ml(10->300)
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 15:38:07 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(1) Hydrogen_Sulfide (Z)
1.099min 0.000 ppb
response 0

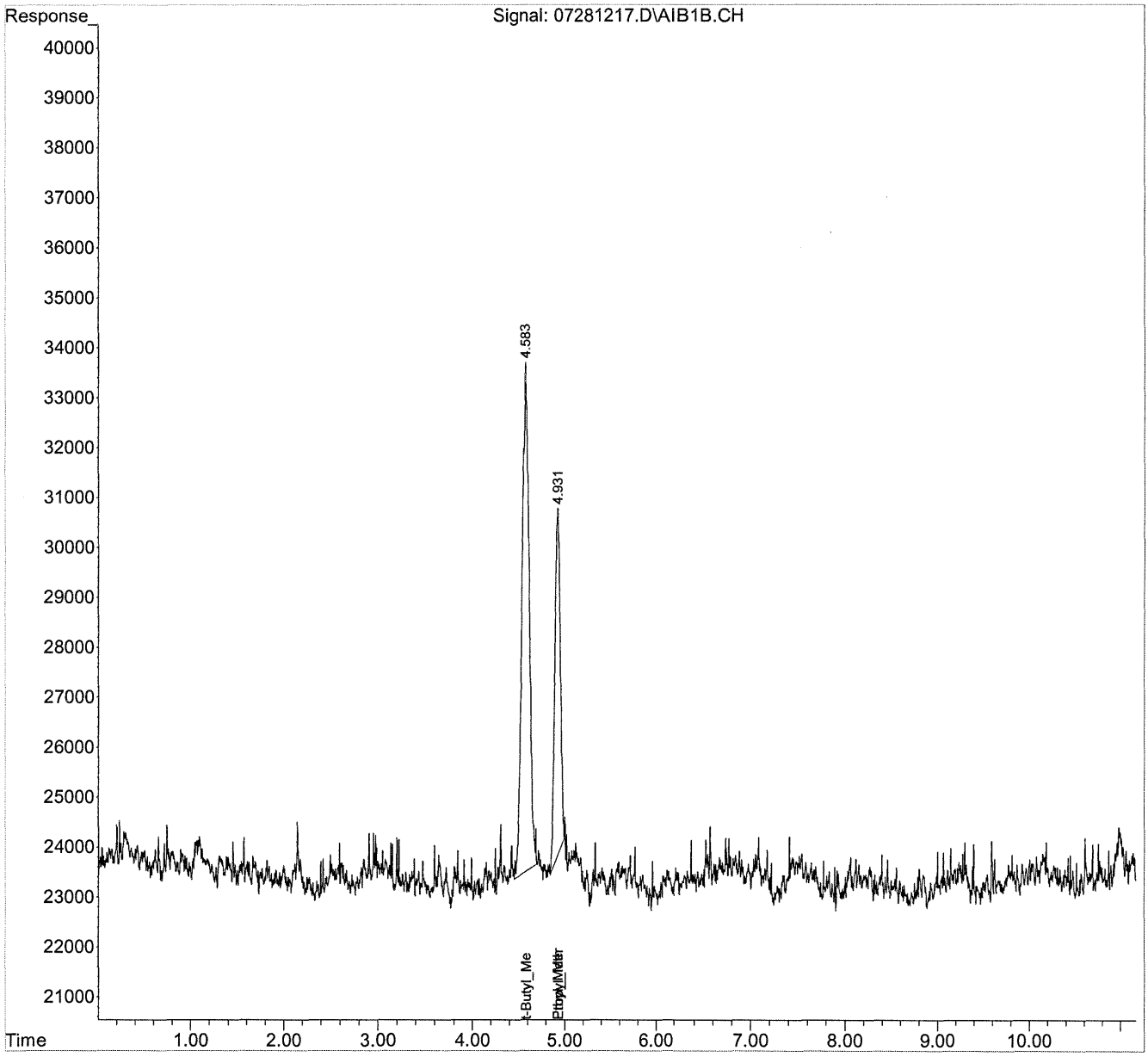
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281217.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 15:37
Operator : WHH
Sample : 7165-003 1ml(10->300)
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:07:28 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281217.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 15:37
Operator : WHH
Sample : 7165-003 1ml(10->300)
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:07:28 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	0.000	0	N.D.	ppb
2)	W	Carbonyl_Sulfide	0.000	0	N.D.	ppb
3)	T	Methyl_Mercaptan	0.000	0	N.D.	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	4.584	561672	53.392	ppb
9)	T	Propyl_Mercaptan	4.930	287408	27.321	ppb
10)	T	Ethyl_Methyl_Sulfide	4.930	287408	27.321	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

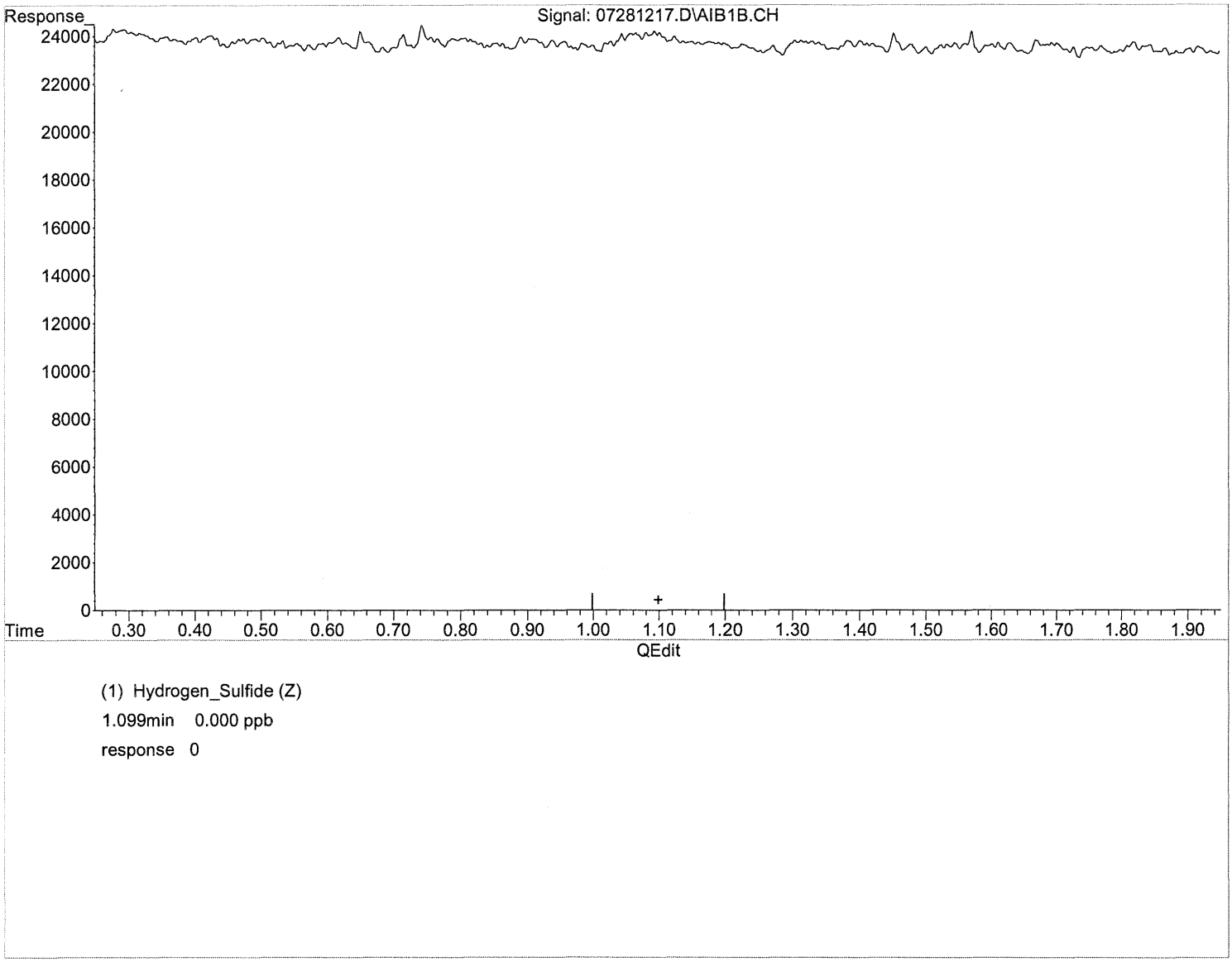
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Qedit)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281217.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 15:37
Operator : WHH
Sample : 7165-003 1ml(10->300)
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:07:28 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



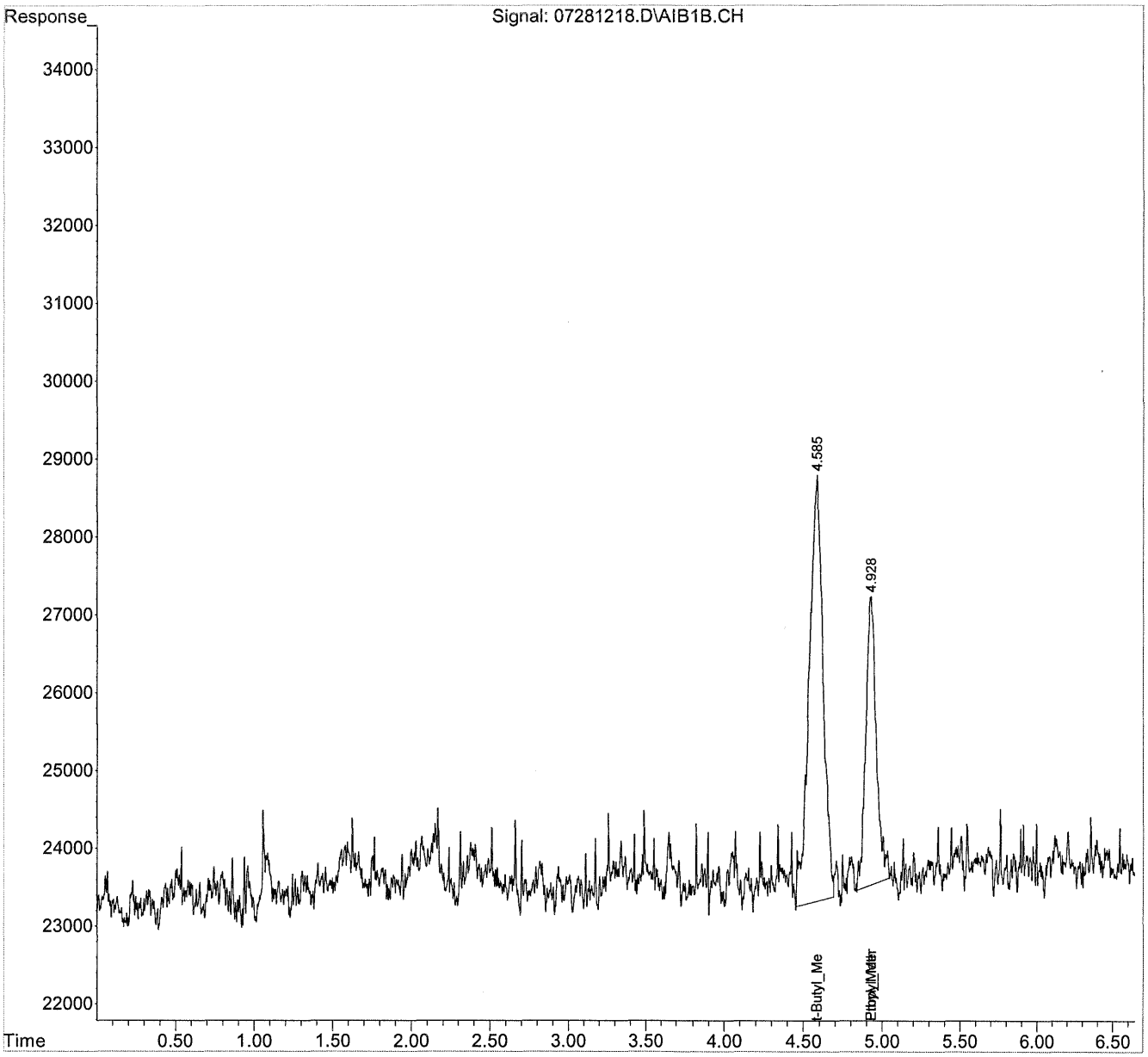
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281218.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 15:55
Operator : WHH
Sample : 7165-004 1ml(10->300)
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:08:40 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281218.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 15:55
Operator : WHH
Sample : 7165-004 1ml(10->300)
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:08:40 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	0.000	0	N.D.	ppb
2)	W	Carbonyl_Sulfide	0.000	0	N.D.	ppb
3)	T	Methyl_Mercaptan	0.000	0	N.D.	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	4.585	327857	31.166	ppb
9)	T	Propyl_Mercaptan	4.926	173876	16.528	ppb
10)	T	Ethyl_Methyl_Sulfide	4.926	173876	16.528	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

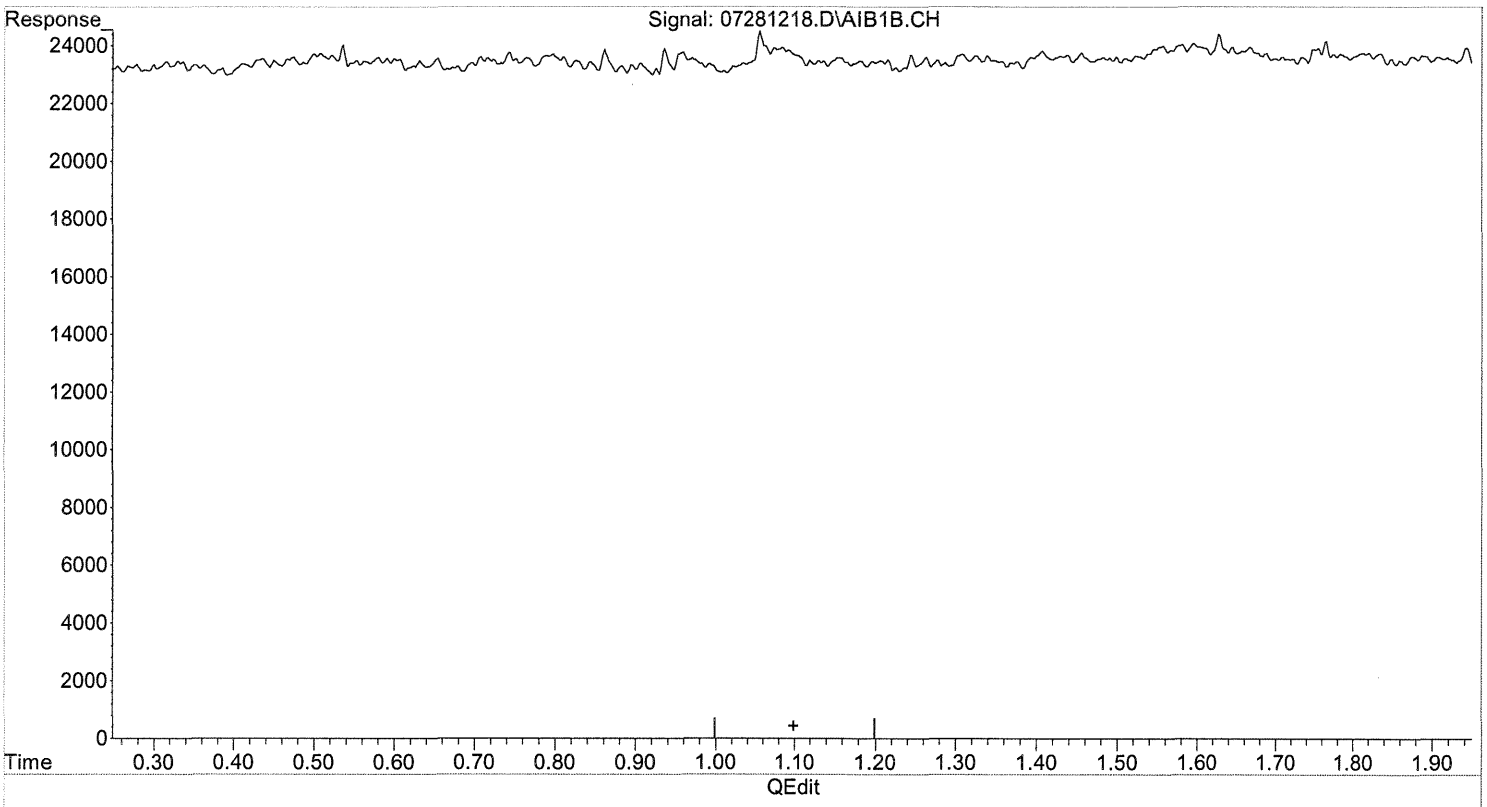
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Qedit)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281218.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 15:55
Operator : WHH
Sample : 7165-004 1ml(10->300)
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:08:40 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(1) Hydrogen_Sulfide (Z)
1.099min 0.000 ppb
response 0

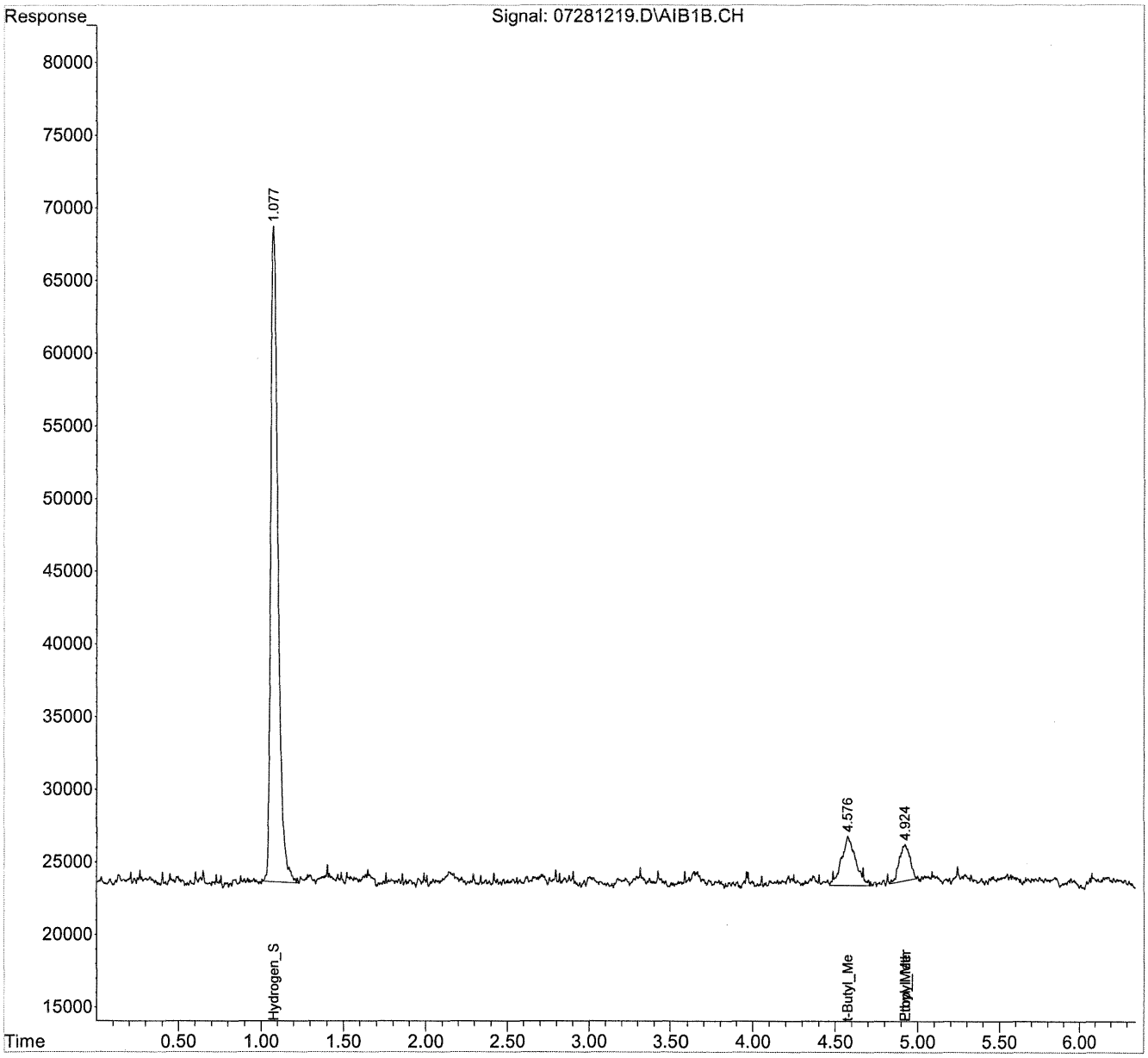
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281219.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 16:03
Operator : WHH
Sample : 7165-006 1ml(10->300)
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:10:23 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281219.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 16:03
Operator : WHH
Sample : 7165-006 1ml(10->300)
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:10:23 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.078	1383877	151.517	ppb
2)	W	Carbonyl_Sulfide	0.000	0	N.D.	ppb
3)	T	Methyl_Mercaptan	0.000	0	N.D.	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	4.577	209472	19.912	ppb
9)	T	Propyl_Mercaptan	4.925	112452	10.690	ppb
10)	T	Ethyl_Methyl_Sulfide	4.925	112452	10.690	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

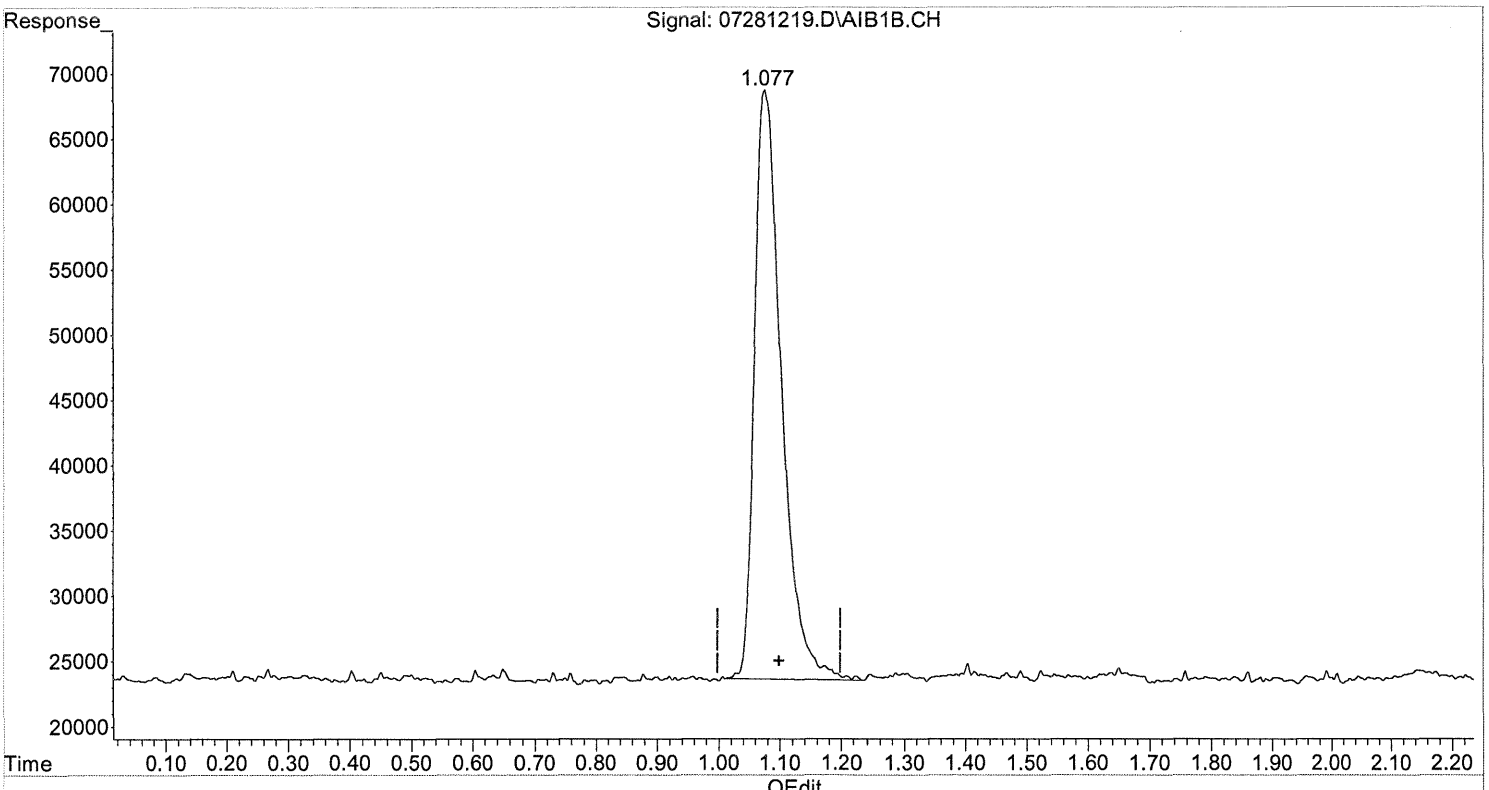
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Qedit)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281219.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 16:03
Operator : WHH
Sample : 7165-006 1ml(10->300)
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:10:23 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(1) Hydrogen_Sulfide (Z)
1.078min 151.517 ppb
response 1383877

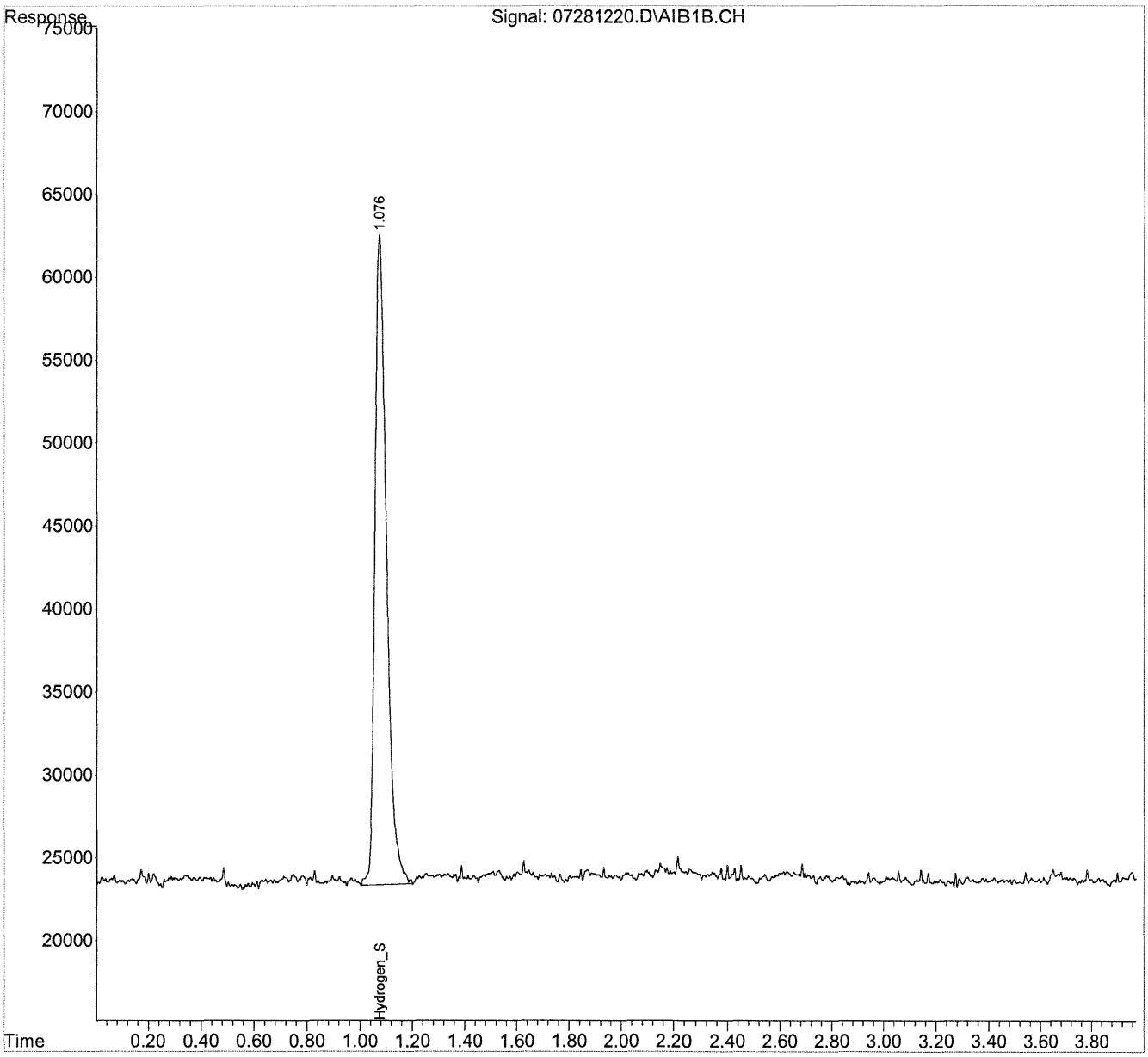
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281220.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 16:14
Operator : WHH
Sample : 7165-007 1ml(10->300)
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:18:21 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281220.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 16:14
Operator : WHH
Sample : 7165-007 1ml(10->300)
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:18:21 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.077	1218911	133.455	ppb
2)	W	Carbonyl_Sulfide	0.000	0	N.D.	ppb
3)	T	Methyl_Mercaptan	0.000	0	N.D.	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

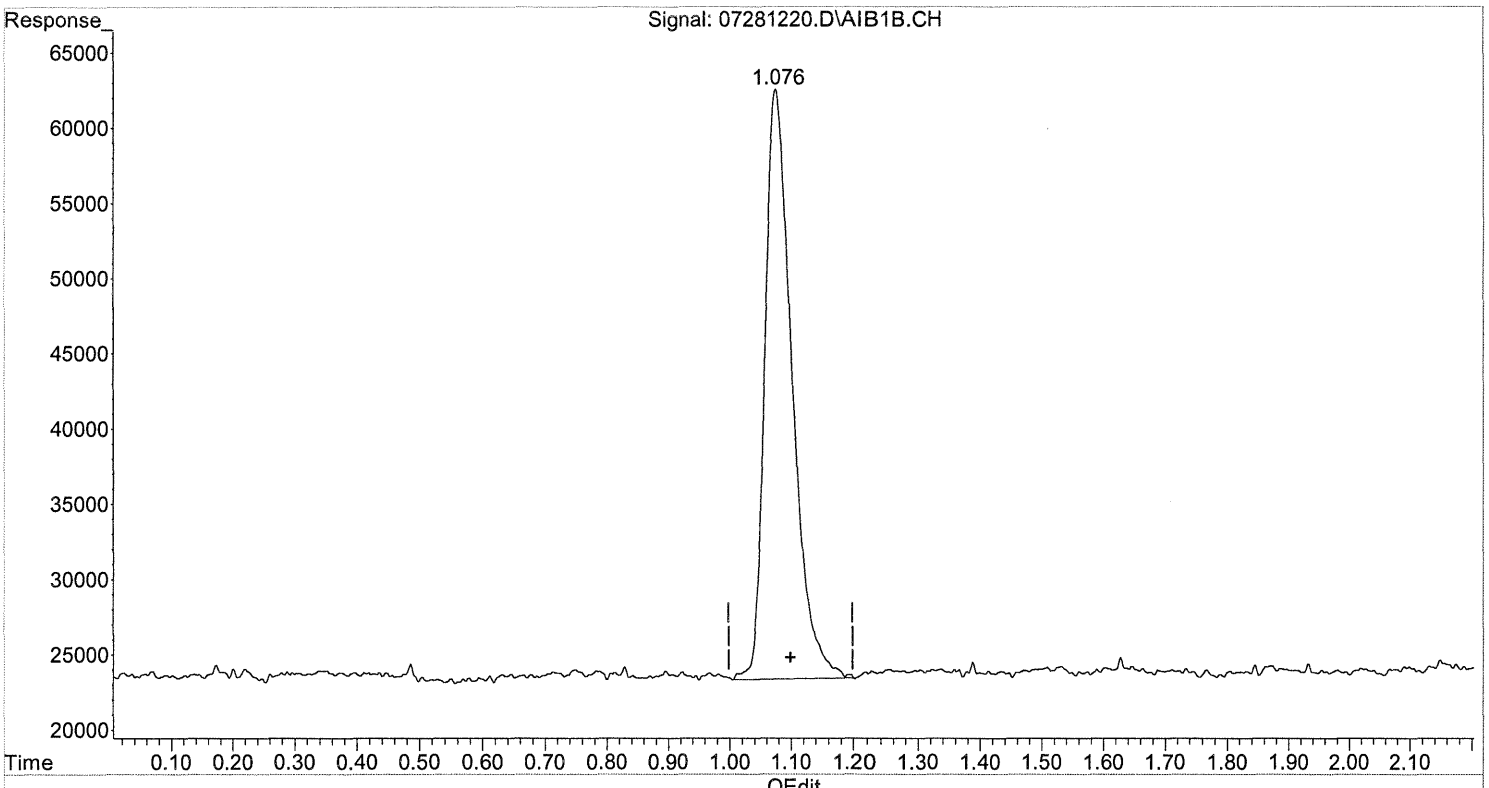
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Qedit)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281220.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 16:14
Operator : WHH
Sample : 7165-007 1ml(10->300)
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:18:21 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(1) Hydrogen_Sulfide (Z)
1.077min 133.455 ppb
response 1218911

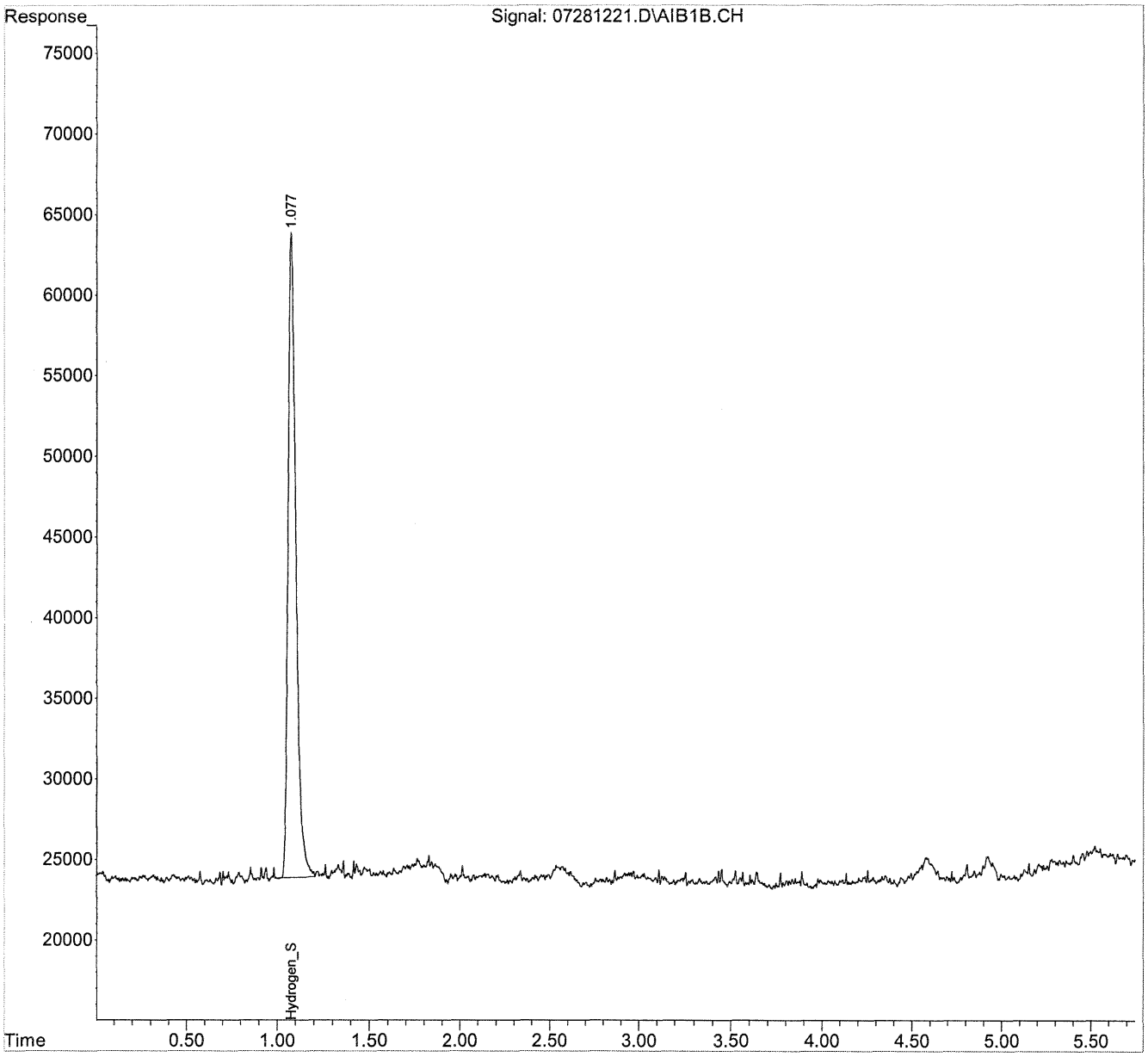
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281221.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 16:18
Operator : WHH
Sample : 7165-008 1ml(10->300)
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:32:16 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281221.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 16:18
Operator : WHH
Sample : 7165-008 1ml(10->300)
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:32:16 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.078	1226285	134.263	ppb
2)	W	Carbonyl_Sulfide	0.000	0	N.D.	ppb
3)	T	Methyl_Mercaptan	0.000	0	N.D.	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

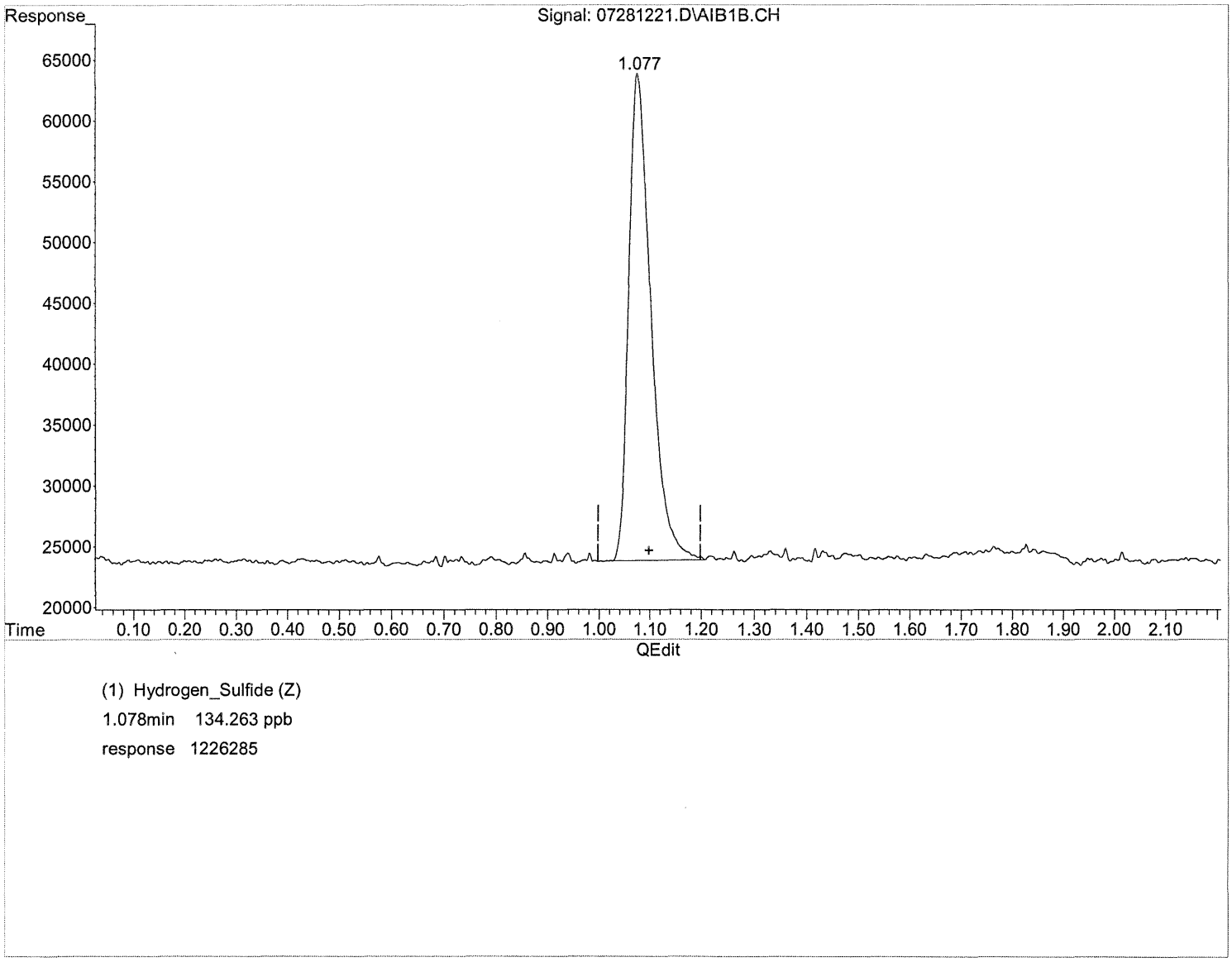
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Qedit)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281221.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 16:18
Operator : WHH
Sample : 7165-008 1ml(10->300)
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:32:16 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



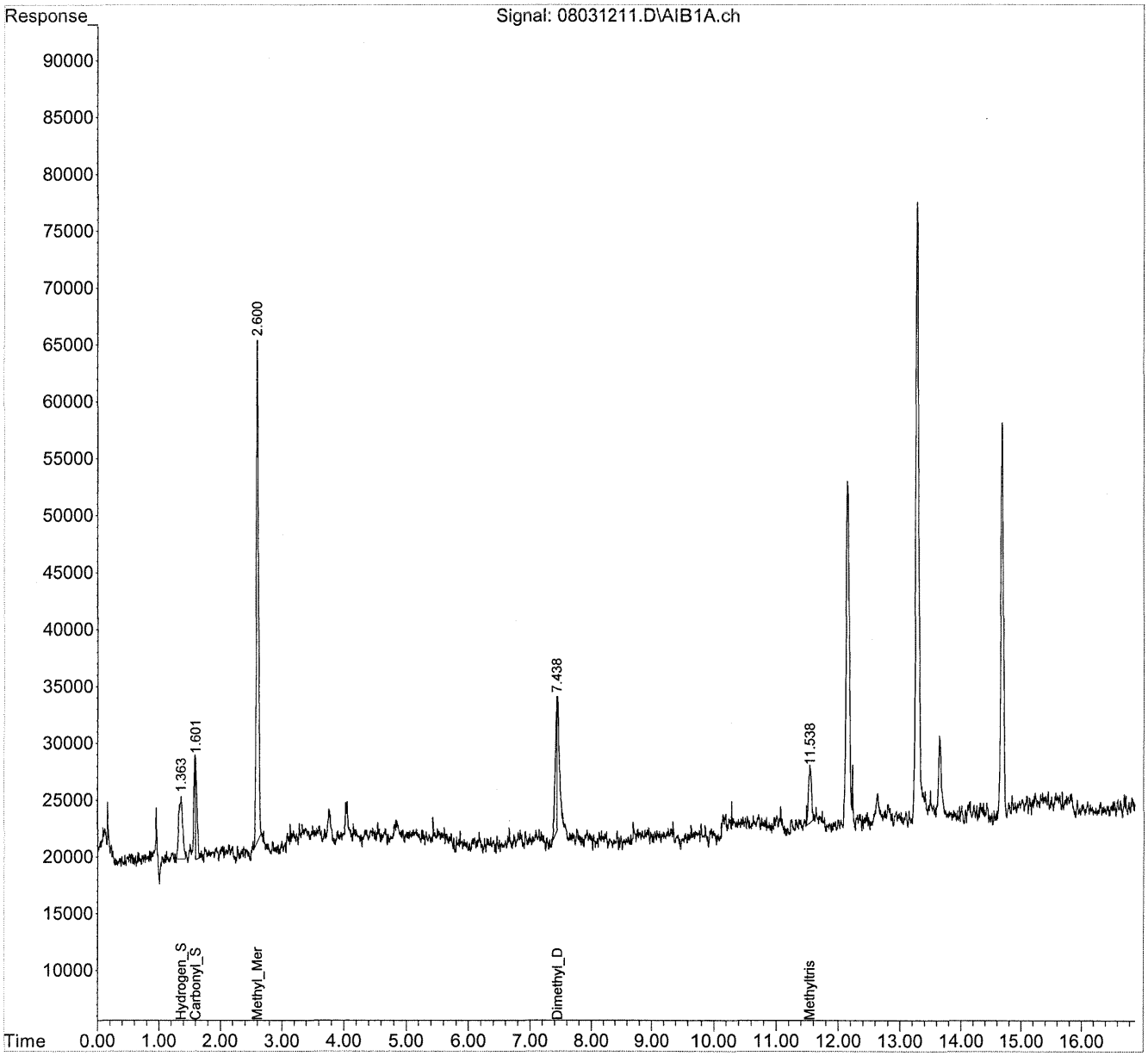
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031211.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 11:40
Operator : WHH
Sample : 7165-010 1ml(10->300)
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 12:50:15 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031211.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 11:40
Operator : WHH
Sample : 7165-010 1ml(10->300) purged
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 12:50:15 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units	
Target Compounds							
1)	Z	Hydrogen_Sulfide	1.363	240655	5.150	ppb	m
2)	W	Carbonyl_Sulfide	1.602	162787	2.874	ppb	
3)	T	Methyl_Mercaptan	2.601	1110248	22.344	ppb	
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb	
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb	
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb	
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb	
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb	
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb	
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb	
11)	T	Thiophene	0.000	0	N.D.	ppb	
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb	
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb	
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb	
15)	T	Dimethyl_Disulfide	7.439	242069	2.436	ppb	
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb	
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb	
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb	
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb	
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb	
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb	
22)	T	Methyltrisulfide	11.538	163608	1.098	ppb	

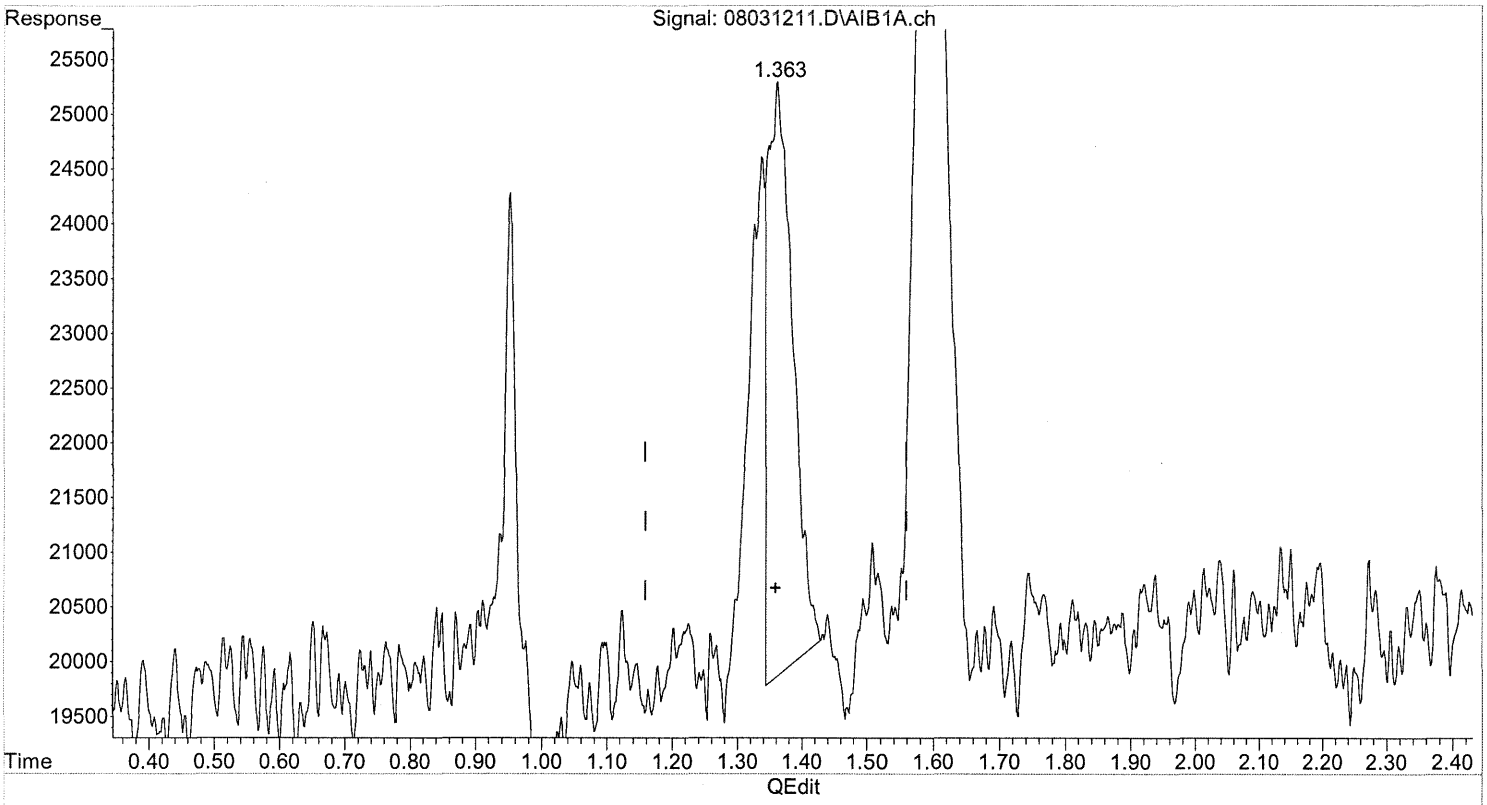
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Qedit)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031211.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 11:40
Operator : WHH
Sample : 7165-010 1ml(10->300) Purged
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 12:03:07 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



(1) Hydrogen_Sulfide (Z)
1.363min 3.135 ppb
response 146463

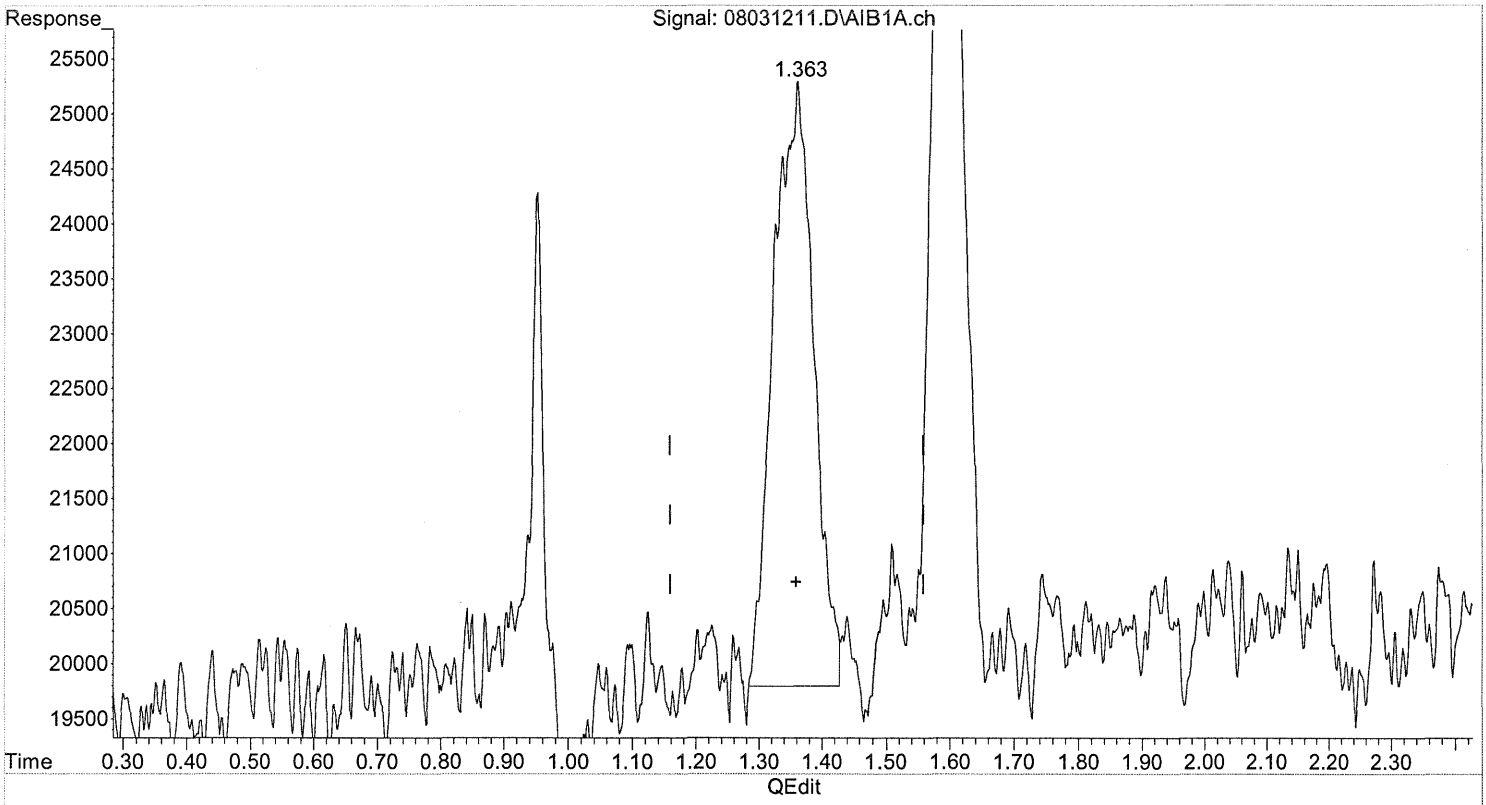
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031211.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 11:40
Operator : WHH
Sample : 7165-010 1ml(10->300)
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 12:03:07 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



(1) Hydrogen_Sulfide (Z)
1.363min 5.150 ppb m
response 240655

MR
8/3/12
BU

8/6/12

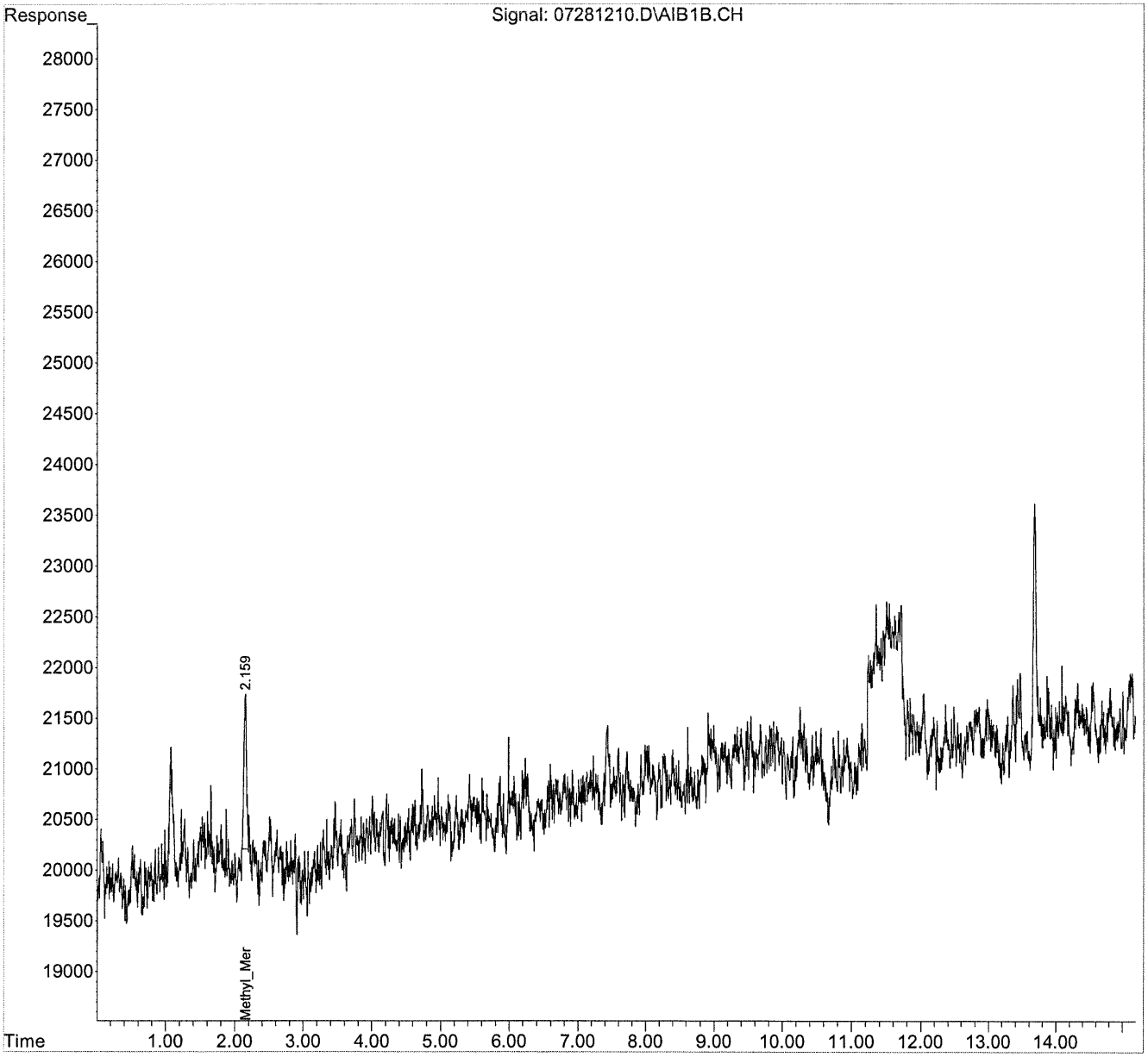
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281210.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 11:06
Operator : WHH
Sample : blank 1ml purged
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:06:22 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281210.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 11:06
Operator : WHH
Sample : blank 1ml purged
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:06:22 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units	
Target Compounds							
1)	Z	Hydrogen_Sulfide	0.000	0	N.D.	ppb	
2)	W	Carbonyl_Sulfide	0.000	0	N.D.	ppb	
3)	T	Methyl_Mercaptan	2.159	40985	3.896	ppb	m
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb	
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb	
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb	
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb	
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb	
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb	
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb	
11)	T	Thiophene	0.000	0	N.D.	ppb	
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb	
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb	
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb	
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb	
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb	
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb	
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb	
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb	
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb	
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb	
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb	

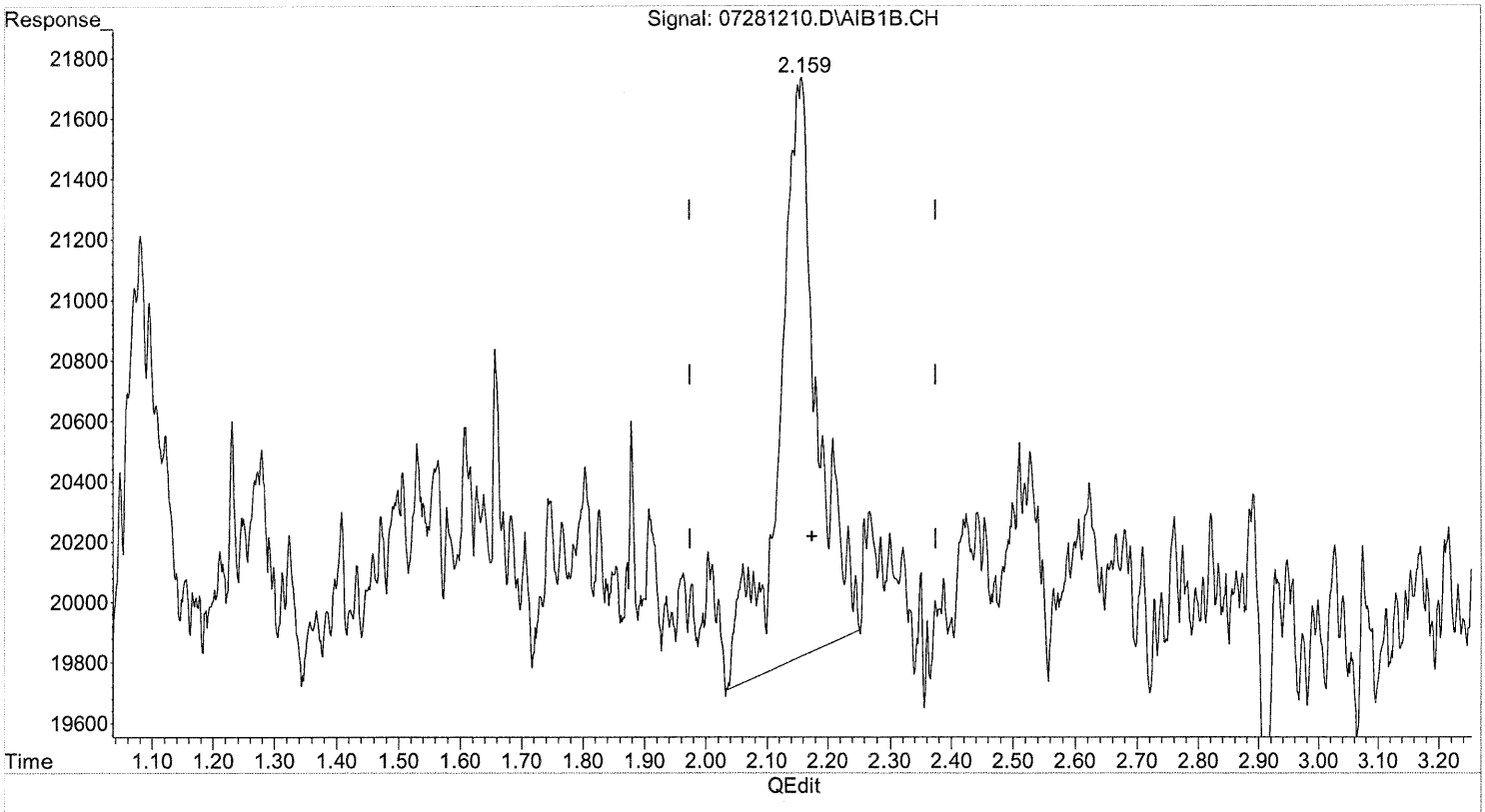
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Qedit)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281210.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 11:06
Operator : WHH
Sample : blank 1ml purged
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:06:11 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(3) Methyl_Mercaptan (T)
2.159min 7.956 ppb
response 83691

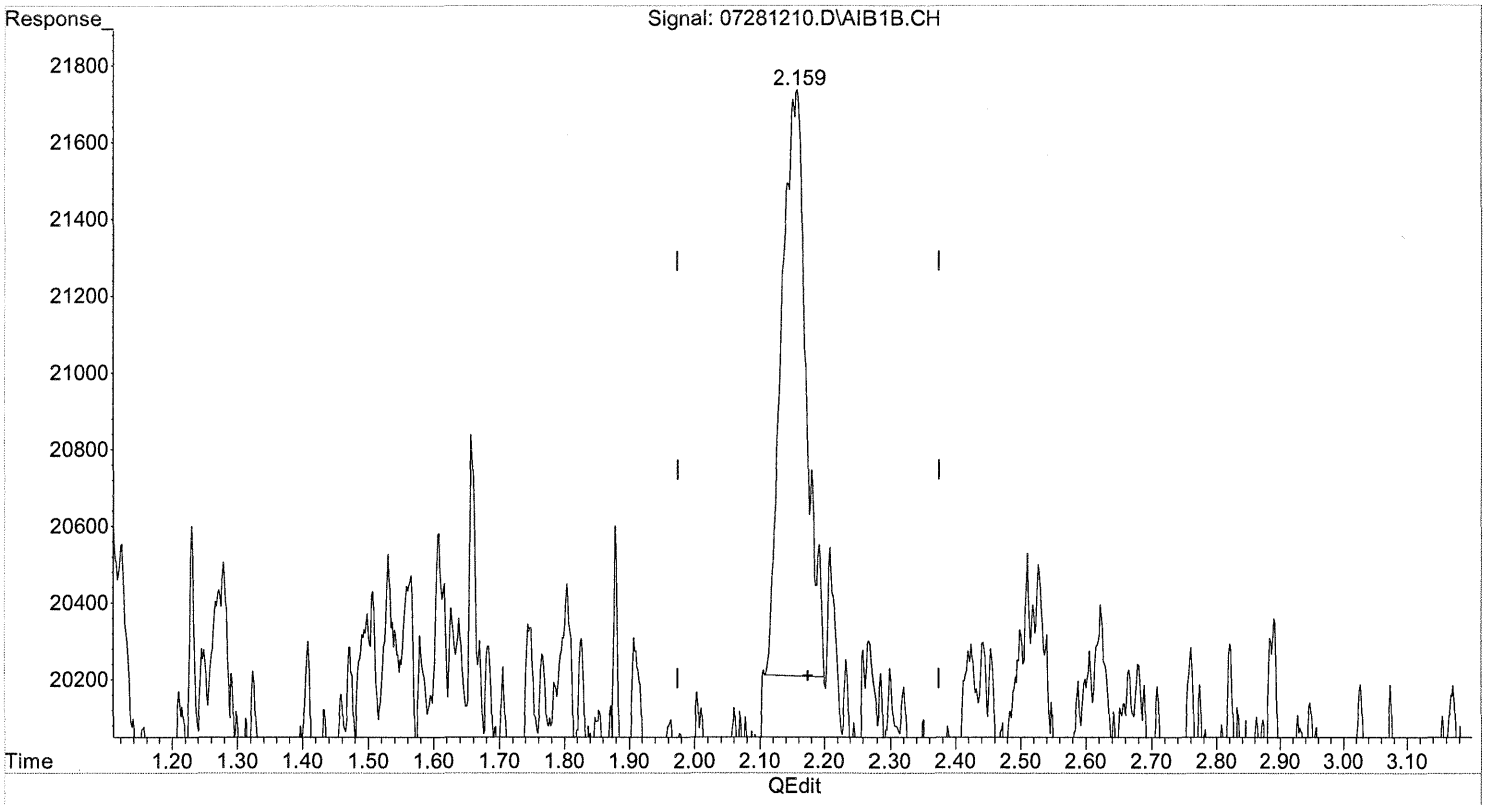
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281210.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 11:06
Operator : WHH
Sample : blank 1ml purged
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:06:11 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(3) Methyl_Mercaptan (T)
2.159min 3.896 ppb m
response 40985

ML
7/28/12
BLC

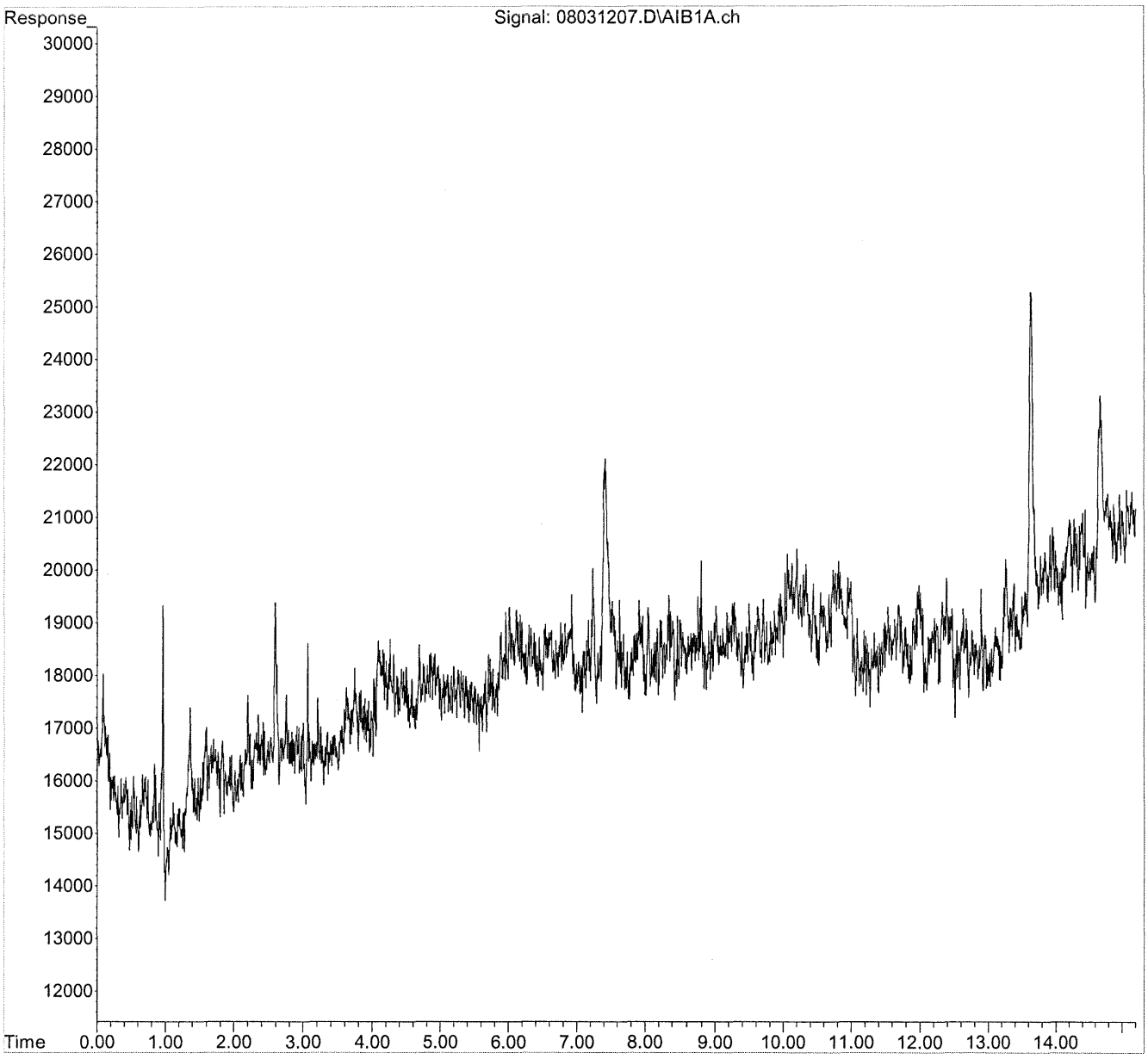
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031207.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 9:59
Operator : WHH
Sample : blank 1ml purged
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 10:16:18 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031207.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 9:59
Operator : WHH
Sample : blank 1ml purged
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 10:16:18 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	0.000	0	N.D.	ppb
2)	W	Carbonyl_Sulfide	0.000	0	N.D.	ppb
3)	T	Methyl_Mercaptan	0.000	0	N.D.	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Methyltrisulfide	0.000	0	N.D.	ppb

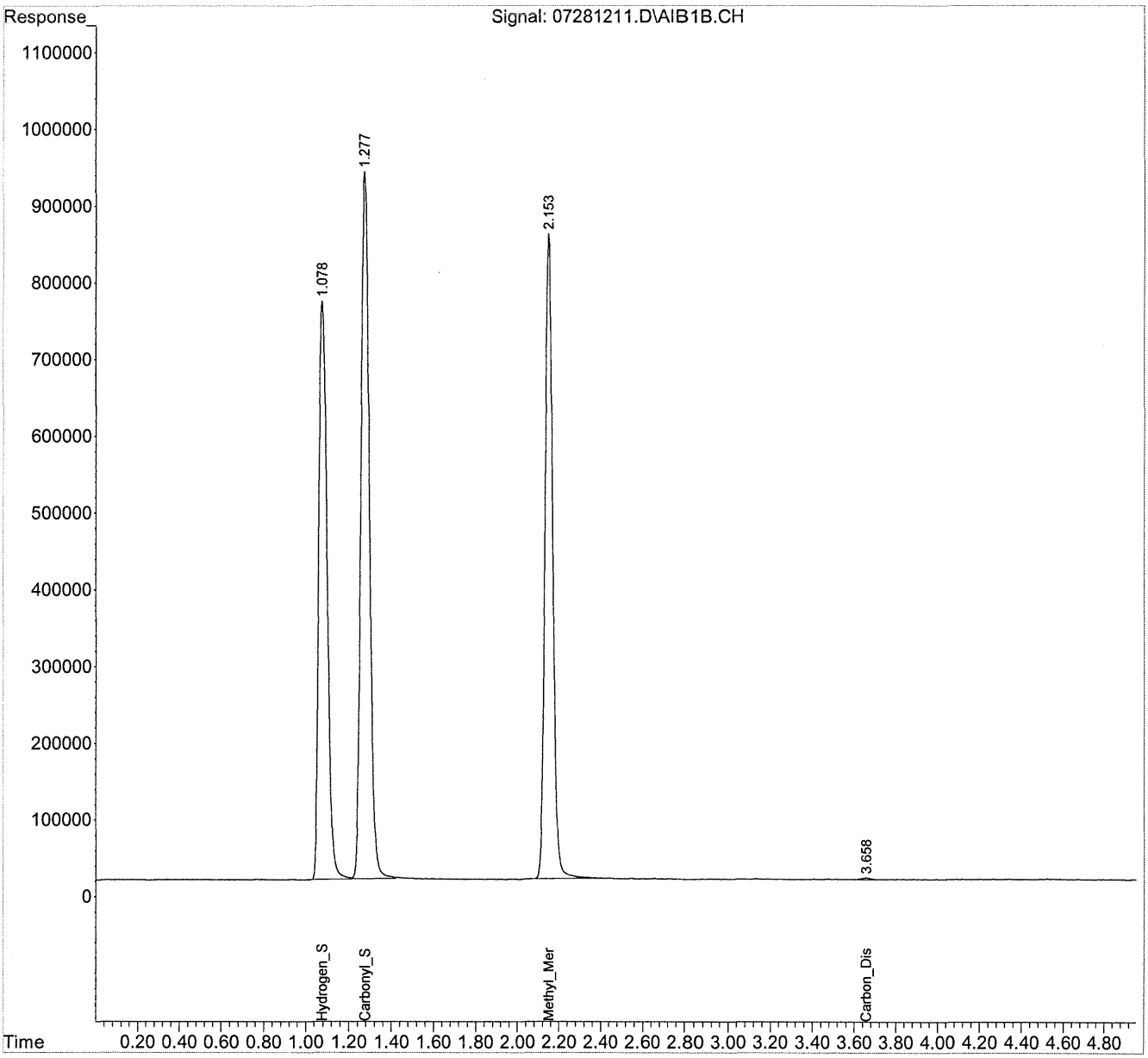
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281211.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 11:30
Operator : WHH
Sample : lcs 2000ppb s27-07281202 purged
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 11:35:32 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281211.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 11:30
Operator : WHH
Sample : lcs 2000ppb s27-07281202 purged
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 11:35:32 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.079	20342446	2227.238	ppb
2)	W	Carbonyl_Sulfide	1.277	25282750	2236.485	ppb
3)	T	Methyl_Mercaptan	2.153	22197631	2110.075	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	3.658	61348	2.916	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

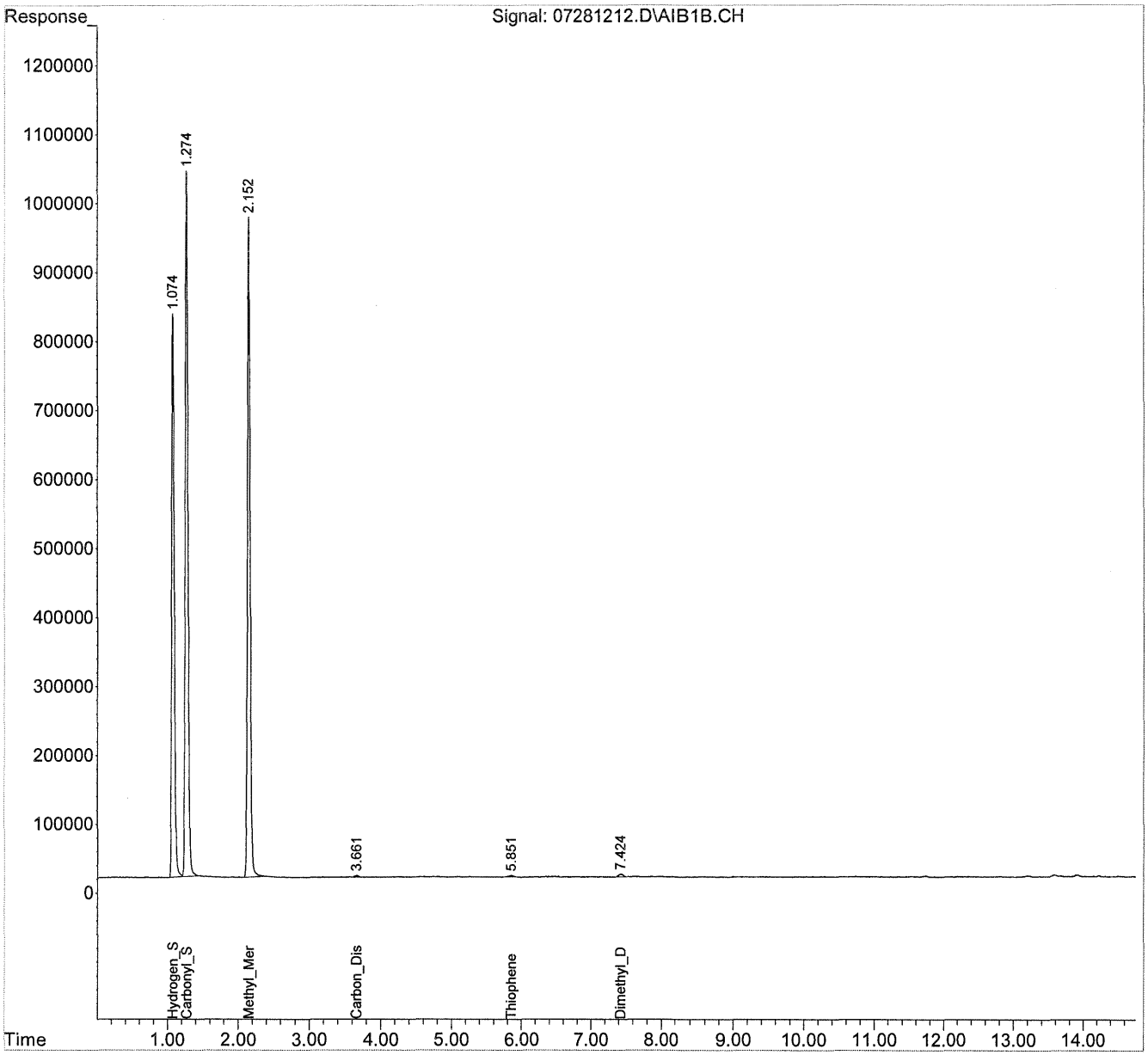
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281212.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 11:36
Operator : WHH
Sample : lcsD 2000ppb s27-07281203 purged
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 11:52:09 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281212.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 11:36
Operator : WHH
Sample : lcsD 2000ppb s27-07281203 purged
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 11:52:09 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.075	21911302	2399.008	ppb
2)	W	Carbonyl_Sulfide	1.275	28263341	2500.145	ppb
3)	T	Methyl_Mercaptan	2.153	25053478	2381.548	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	3.663	69762	3.316	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	5.852f	125981	11.976	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	7.426	206415	9.811	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

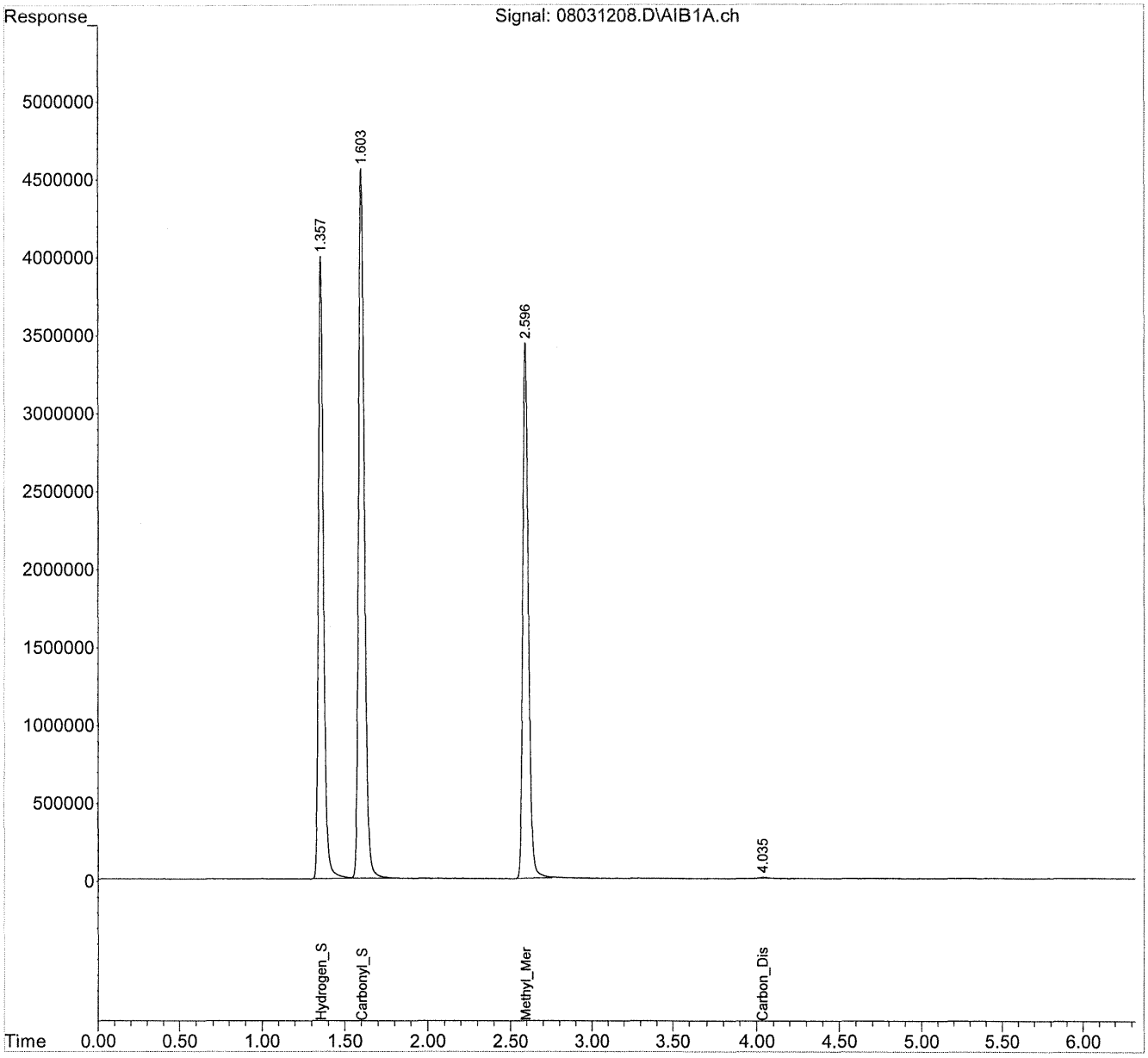
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031208.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 10:35
Operator : WHH
Sample : lcs 2000ppb s27-08031202
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 10:50:49 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031208.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 10:35
Operator : WHH
Sample : lcs 2000ppb s27-08031202 ppb
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 10:50:49 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.357	82977407	1775.838	ppb
2)	W	Carbonyl_Sulfide	1.604	110661506	1953.728	ppb
3)	T	Methyl_Mercaptan	2.596	83952431	1689.549	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	4.035	227718	2.291	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Methyltrisulfide	0.000	0	N.D.	ppb

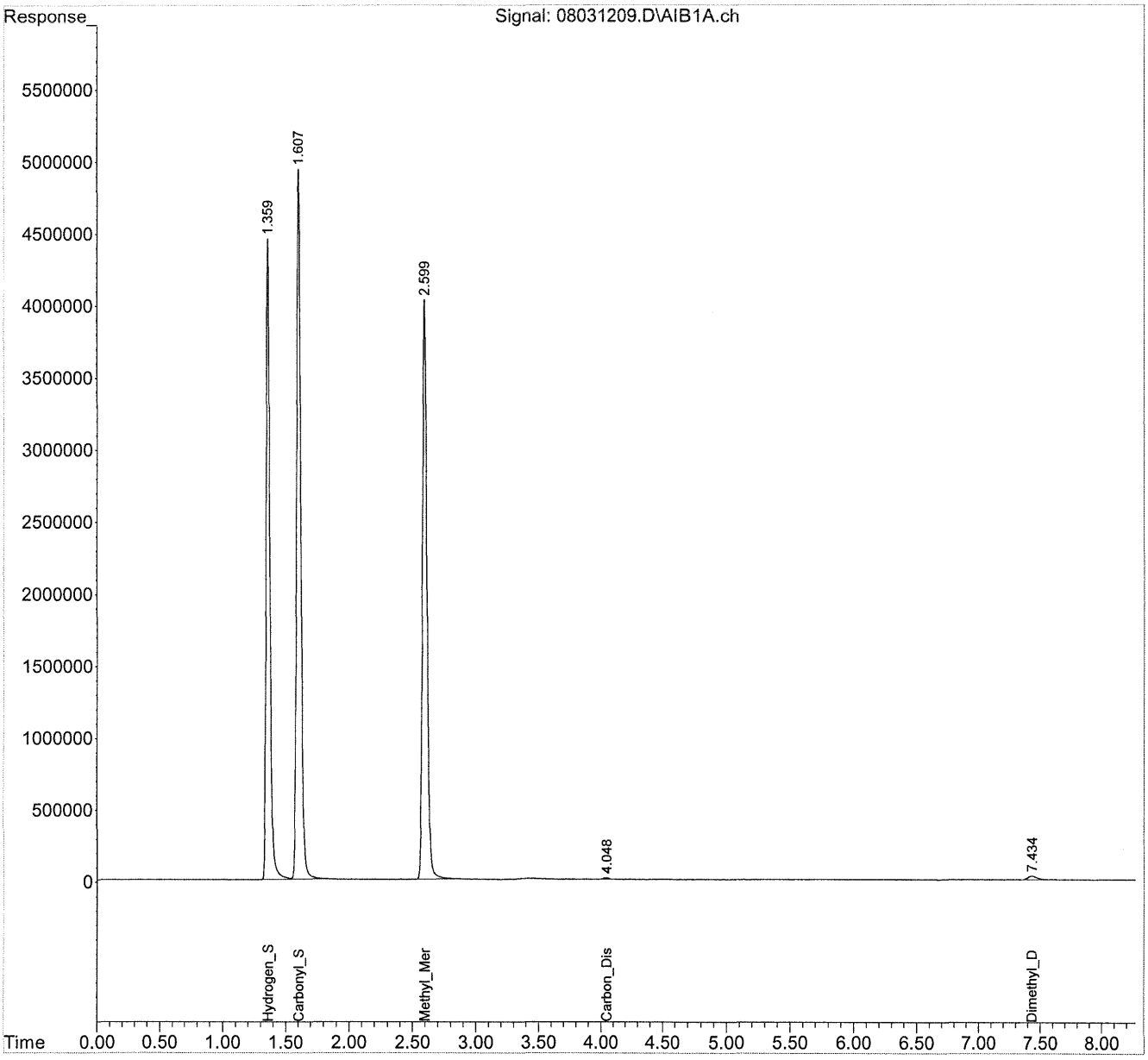
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031209.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 10:43
Operator : WHH
Sample : lcsd 2000ppb s27-08031203
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 10:52:22 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031209.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 10:43
Operator : WHH
Sample : lcsd 2000ppb s27-08031203 purge
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 10:52:22 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.360	93637051	2003.970	ppb
2)	W	Carbonyl_Sulfide	1.607	119989598	2118.416	ppb
3)	T	Methyl_Mercaptan	2.600	98743707	1987.224	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	4.048	299210	3.011	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	7.434	1300255	13.084	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Methyltrisulfide	0.000	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Method Path : J:\GC22\METHODS\
Method File : GC22091311.M
Title : 20 Sulfurs Initial Calibration
Last Update : Tue Sep 13 15:10:19 2011
Response Via : Initial Calibration

Calibration Files
1 =09131111.D 2 =09131112.D 3 =09131113.D
4 =09131114.D 5 =09131115.D 6 =09131116.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	Z	Hydrogen_Sulfide	4.962	3.961	4.485	5.340	4.850	4.437	4.673	E4	10.30
2)	W	Carbonyl_Sulfide	5.935	5.756	5.668	5.927	5.833	4.866	5.664	E4	7.14
3)	T	Methyl_Mercaptan	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
4)	T	Ethyl_Mercaptan	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
5)	T	Dimethyl_Sulfide	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
6)	T	Carbon_Disulfide	1.112	0.891	0.999	1.064	0.995	0.902	0.994	E5	8.75
7)	T	2-Propyl_Merc...	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
8)	T	t-Butyl_Merca...	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
9)	T	Propyl_Mercaptan	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
10)	T	Ethyl_Methyl_...	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
11)	T	Thiophene	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
12)	T	i-Butyl_Merca...	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
13)	T	Diethyl_Sulfide	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
14)	T	n-Butyl_Merca...	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
15)	T	Dimethyl_Disu...	1.112	0.891	0.999	1.064	0.995	0.902	0.994	E5	8.75
16)	T	2-Methylthiop...	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
17)	T	3-Methylthiop...	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
18)	T	Tetrahydrothi...	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
19)	T	2,5-Dimethylt...	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
20)	T	2-Ethylthiophene	5.558	4.456	4.997	5.319	4.974	4.509	4.969	E4	8.75
21)	T	Diethyl_Disul...	1.112	0.891	0.999	1.064	0.995	0.902	0.994	E5	8.75
22)	T	Methyltrisulfide	1.667	1.337	1.499	1.596	1.492	1.353	1.491	E5	8.75

(#) = Out of Range

GC22091311.M Tue Sep 13 15:10:24 2011

Method Path : J:\GC22\METHODS\
Method File : GC22091311.M
Title : 20 Sulfurs Initial Calibration
Last Update : Tue Sep 13 14:28:56 2011
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	2	0	J:\GC22\DATA\SCD\2011_09\13\09131111.D
2	2	18	0	J:\GC22\DATA\SCD\2011_09\13\09131112.D
3	3	178	0	J:\GC22\DATA\SCD\2011_09\13\09131113.D
4	4	710	0	J:\GC22\DATA\SCD\2011_09\13\09131114.D
5	5	3550	0	J:\GC22\DATA\SCD\2011_09\13\09131115.D
6	6	8875	0	J:\GC22\DATA\SCD\2011_09\13\09131116.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Sep 13 14:26 2011	Sep 13 14:25 2011	13 Sep 2011 12:38 pm
2	2	Sep 13 14:26 2011	Sep 13 14:25 2011	13 Sep 2011 12:44 pm
3	3	Sep 13 14:27 2011	Sep 13 14:27 2011	13 Sep 2011 1:08 pm
4	4	Sep 13 14:28 2011	Sep 13 13:33 2011	13 Sep 2011 1:26 pm
5	5	Sep 13 14:28 2011	Sep 13 14:09 2011	13 Sep 2011 1:40 pm
6	6	Sep 13 14:28 2011	Sep 13 14:19 2011	13 Sep 2011 2:14 pm

GC22091311.M Tue Sep 13 14:29:24 2011

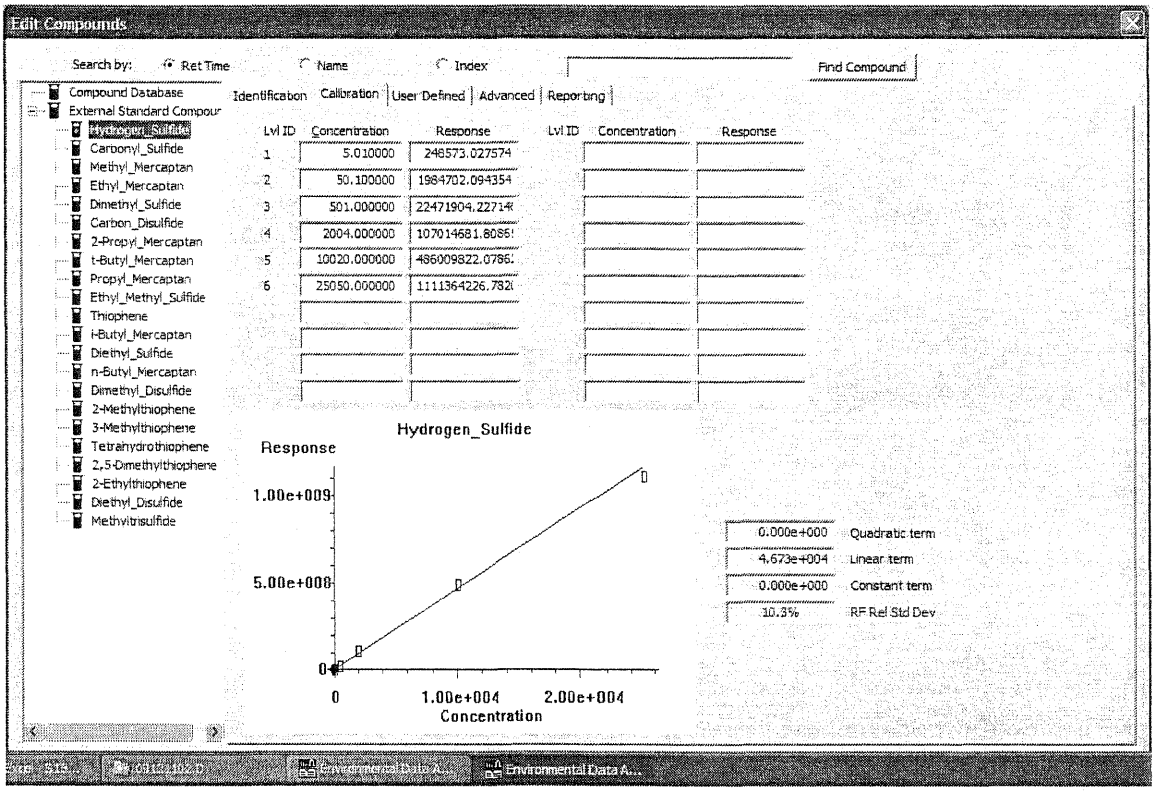
Analyst : LRK
Method name : 20 Sulfurs Initial Calibration

Printed : 9/19/11
Instrument : GC #22 / SCD#22
Date analyzed : 9/13/11

ICAL Retention Time Report

Compounds	Hydrogen Sulfide	Carbonyl Sulfide	Methyl Mercaptan
STD 5ppb S23-09131107	1.24	1.47	2.46
STD 50ppb S23-09131107	1.25	1.48	2.46
STD 500ppb S23-0909131103	1.23	1.47	2.46
STD 2000ppb S23-09131103	1.23	1.47	2.46
STD 10000ppb S23-09131103	1.24	1.48	2.46
STD 25000ppb S23-12061001	1.23	1.47	2.46
Mean RT	**1.24**	**1.47**	**2.46**
RT Window			
+0.06	1.297	1.534	2.519
-0.06	1.177	1.414	2.399

* Outside of ICAL Retention Time Window
! Outside of Generated Retention Time Window


Edit Compounds
Search by:
Ret Time
Name
Index
Find Compound
Compound Database
External Standard Compour
Hydrogen_Sulfide
Carbonyl_Sulfide
Methyl_Mercaptan
Ethyl_Mercaptan
Dimethyl_Sulfide
Carbon_Disulfide
2-Propyl_Mercaptan
t-Butyl_Mercaptan
Propyl_Mercaptan
Ethyl_Methyl_Sulfide
Thiophene
i-Butyl_Mercaptan
Diethyl_Sulfide
n-Butyl_Mercaptan
Dimethyl_Disulfide
2-Methylthiophene
3-Methylthiophene
Tetrahydrothiophene
2,5-Dimethylthiophene
2-Ethylthiophene
Diethyl_Disulfide
Methylthiosulfide
Identification
Calibration
User Defined
Advanced
Reporting
Lvl ID
Concentration
Response
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248573.027574
2
50.100000
1984702.094354
3
501.000000
22471904.22714
4
2004.000000
107014681.8085
5
10020.000000
486009822.0786
6
25050.000000
1111364226.782
Hydrogen_Sulfide
Response
1.00e+009
5.00e+008
0
0
1.00e+004
2.00e+004
Concentration
0.000e+000
Quadratic term
4.673e+004
Linear term
0.000e+000
Constant term
10.3%
RF Rel Std Dev
Environmental Data A...
Environmental Data A...

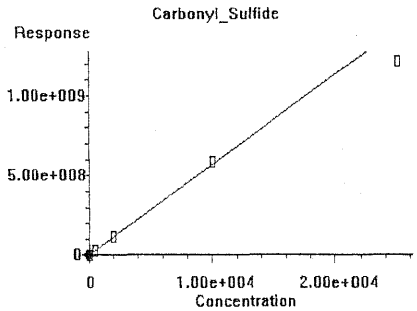
Edit Compounds

Search by: Ret Time | Name | Index | Find Compound

Compound Database
External Standard Compour
- Hydrogen_Sulfide
- Carbonyl_Sulfide
- Methyl_Mercaptan
- Ethyl_Mercaptan
- Dimethyl_Sulfide
- Carbon_Disulfide
- 2-Propyl_Mercaptan
- t-Butyl_Mercaptan
- Propyl_Mercaptan
- Ethyl_Methyl_Sulfide
- Thiophene
- i-Butyl_Mercaptan
- Diethyl_Sulfide
- n-Butyl_Mercaptan
- Dimethyl_Disulfide
- 2-Methylthiophene
- 3-Methylthiophene
- Tetrahydrothiophene
- 2,5-Dimethylthiophene
- 2-Ethylthiophene
- Diethyl_Disulfide
- Methyltrisulfide

Identification | Calibration | User Defined | Advanced | Reporting

Lvl ID	Concentration	Response	Lvl ID	Concentration	Response
1	4.990000	296139.777817			
2	49.900000	2872307.000000			
3	499.000000	28282525.14785			
4	1996.000000	118302229.2702			
5	9980.000000	582173467.4213			
6	24950.000000	1213996426.305			



0.000e+000	Quadratic term
5.664e+004	Linear term
0.000e+000	Constant term
7.1%	RF Rel Std Dev

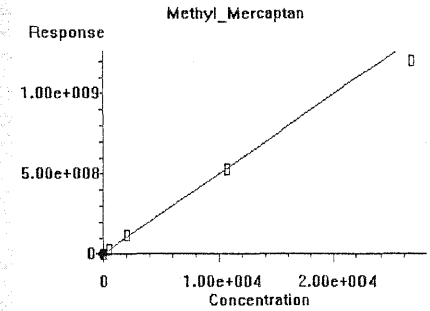
Edit Compounds

Search by: Ret Time | Name | Index | Find Compound

Compound Database
External Standard Compour
- Hydrogen_Sulfide
- Carbonyl_Sulfide
- Methyl_Mercaptan
- Ethyl_Mercaptan
- Dimethyl_Sulfide
- Carbon_Disulfide
- 2-Propyl_Mercaptan
- t-Butyl_Mercaptan
- Propyl_Mercaptan
- Ethyl_Methyl_Sulfide
- Thiophene
- i-Butyl_Mercaptan
- Diethyl_Sulfide
- n-Butyl_Mercaptan
- Dimethyl_Disulfide
- 2-Methylthiophene
- 3-Methylthiophene
- Tetrahydrothiophene
- 2,5-Dimethylthiophene
- 2-Ethylthiophene
- Diethyl_Disulfide
- Methyltrisulfide

Identification | Calibration | User Defined | Advanced | Reporting

Lvl ID	Concentration	Response	Lvl ID	Concentration	Response
1	5.325000	295969.690000			
2	53.250000	2372712.348000			
3	532.500000	26610244.50000			
4	2130.000000	113284390.0000			
5	10650.000000	529780911.5900			
6	26625.000000	1200636275.500			

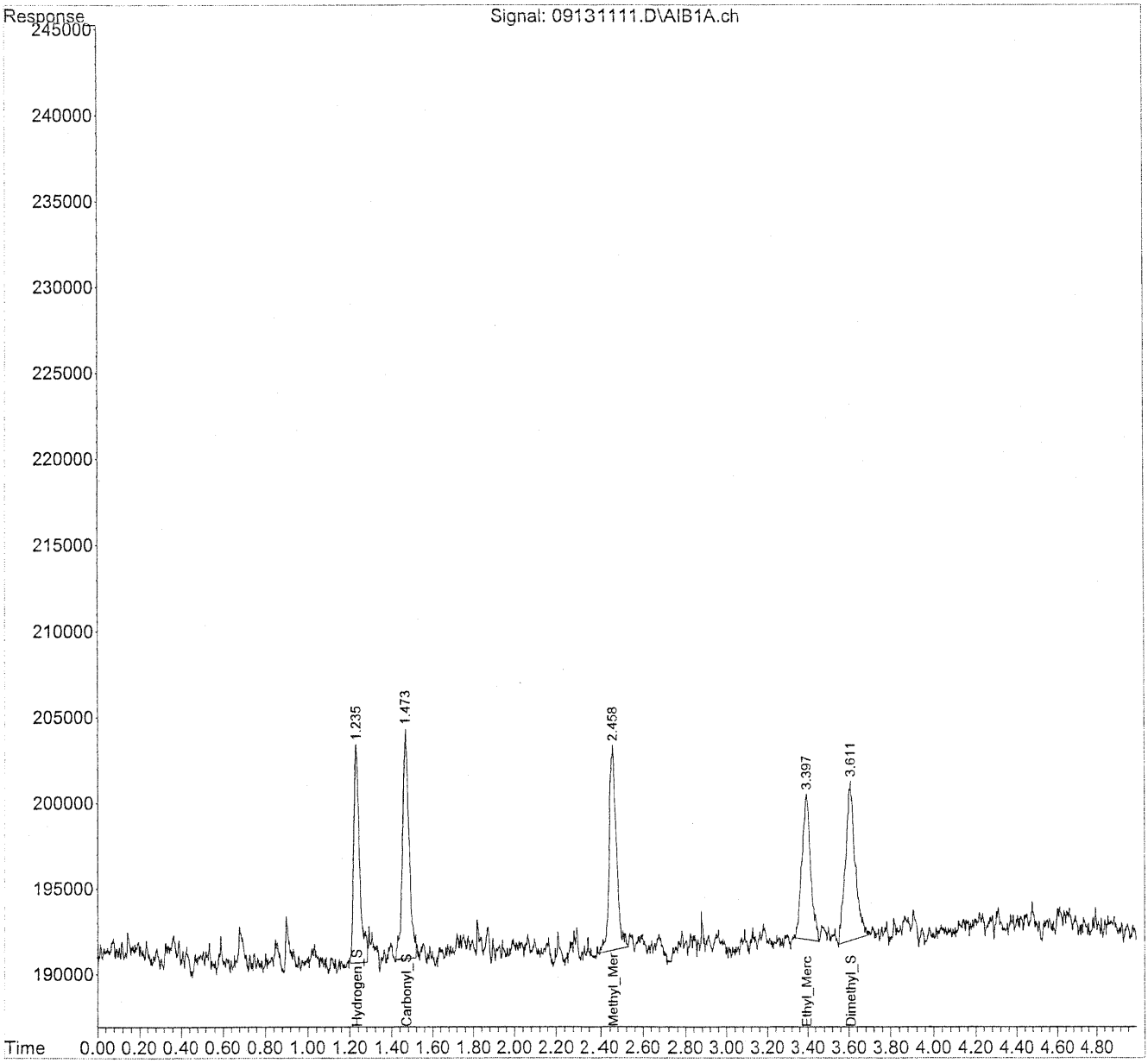


0.000e+000	Quadratic term
4.969e+004	Linear term
0.000e+000	Constant term
8.7%	RF Rel Std Dev

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131111.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 12:38 pm
Operator : LRK
Sample : std 5ppb s27-09131107
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:25:20 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:19:14 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131111.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 12:38 pm
Operator : LRK
Sample : std 5ppb s27-09131107
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:25:20 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:19:14 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

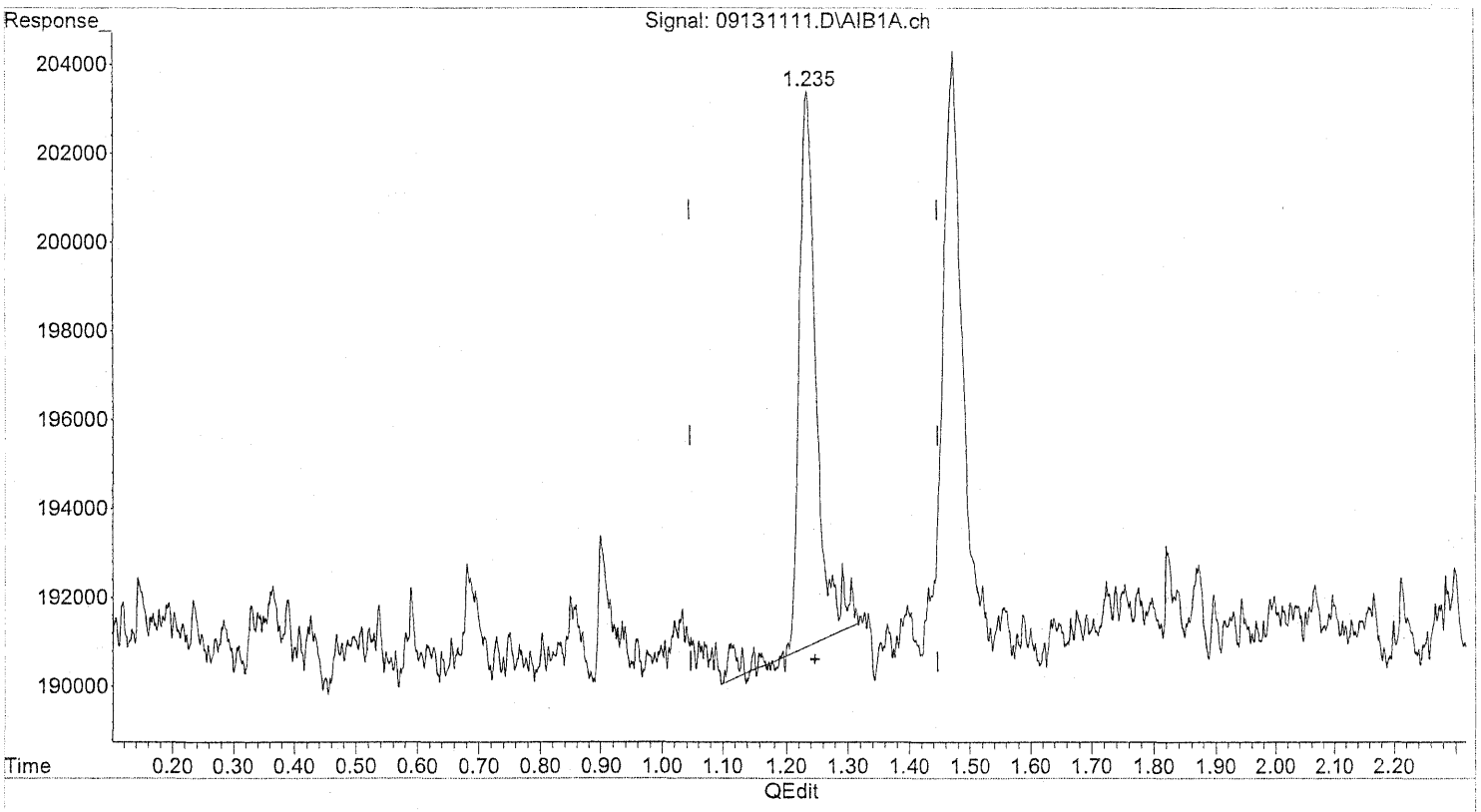
		Compound	R.T.	Response	Conc	Units	
Target Compounds							
1)	Z	Hydrogen_Sulfide	1.235	248573	5.201	ppb	m
2)	W	Carbonyl_Sulfide	1.473	296140	5.092	ppb	m
3)	T	Methyl_Mercaptan	2.458	295970	5.638	ppb	
4)	T	Ethyl_Mercaptan	3.397	253332	5.325	ppb	
5)	T	Dimethyl_Sulfide	3.610	300770	5.325	ppb	
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb	
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb	
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb	
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb	
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb	
11)	T	Thiophene	0.000	0	N.D.	ppb	
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb	
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb	
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb	
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb	
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb	
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb	
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb	
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb	
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb	
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb	
22)	T	Methyltrisulfide	0.000	0	N.D.	ppb	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131111.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 12:38 pm
Operator : LRK
Sample : std 5ppb s27-09131107
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:24:59 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:19:14 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



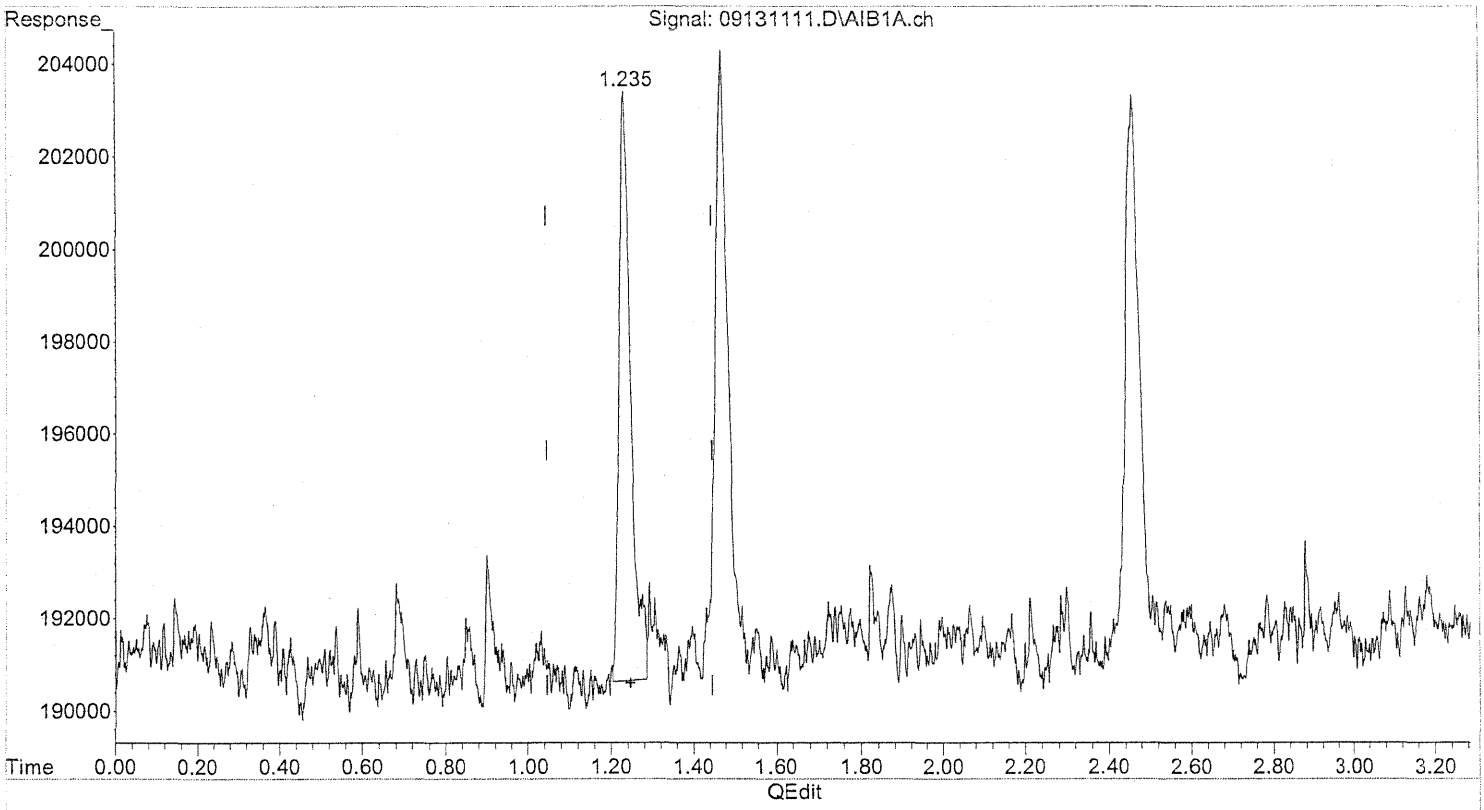
(1) Hydrogen_Sulfide (Z)
1.235min 5.322 ppb
response 254343

(+) = Expected Retention Time

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131111.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 12:38 pm
Operator : LRK
Sample : std 5ppb s27-09131107
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:24:59 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:19:14 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



(1) Hydrogen_Sulfide (Z)
1.235min 5.201 ppb m
response 248573

9/13/11 BW

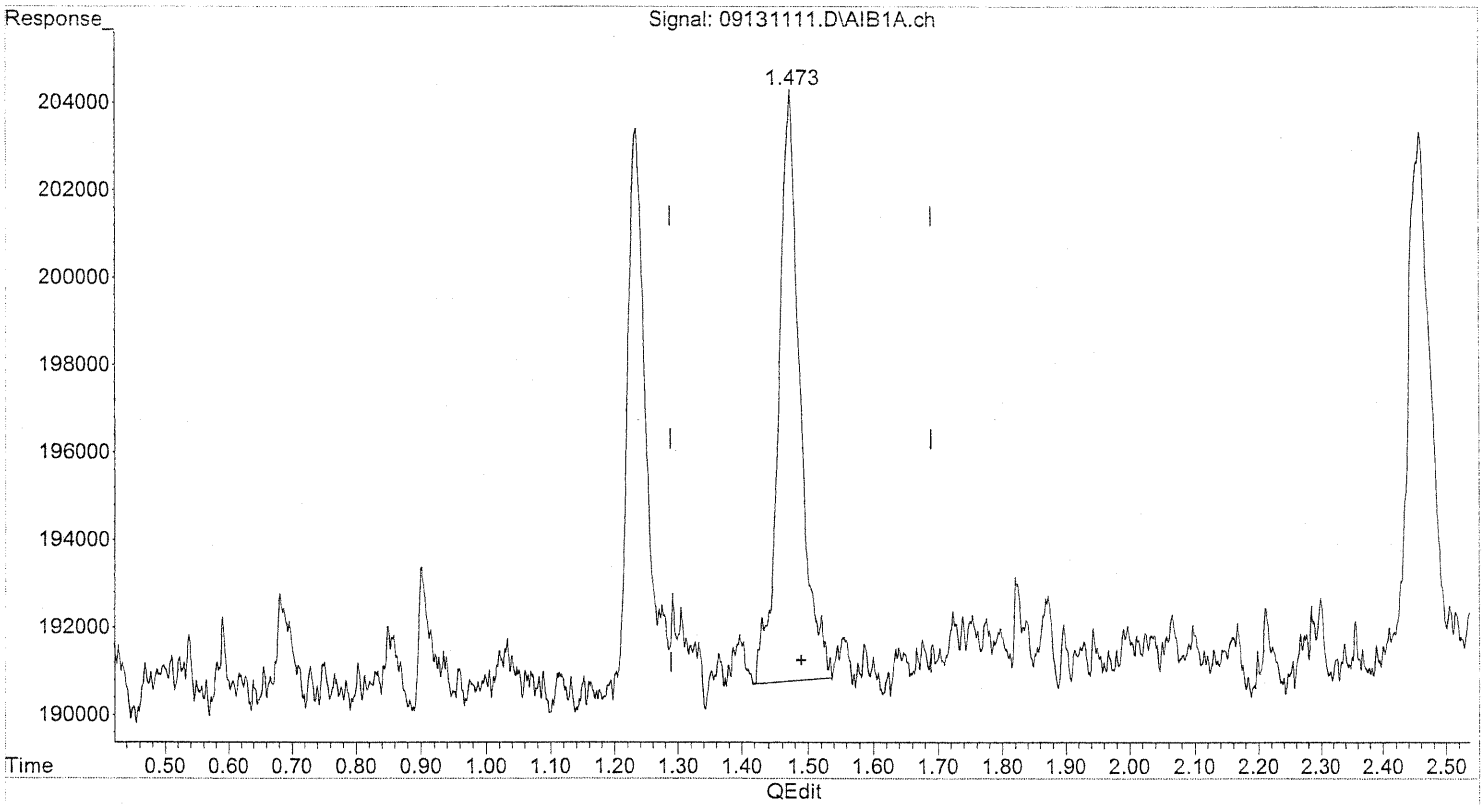
9/20/11

(+) = Expected Retention Time

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131111.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 12:38 pm
Operator : LRK
Sample : std 5ppb s27-09131107
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:24:59 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:19:14 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



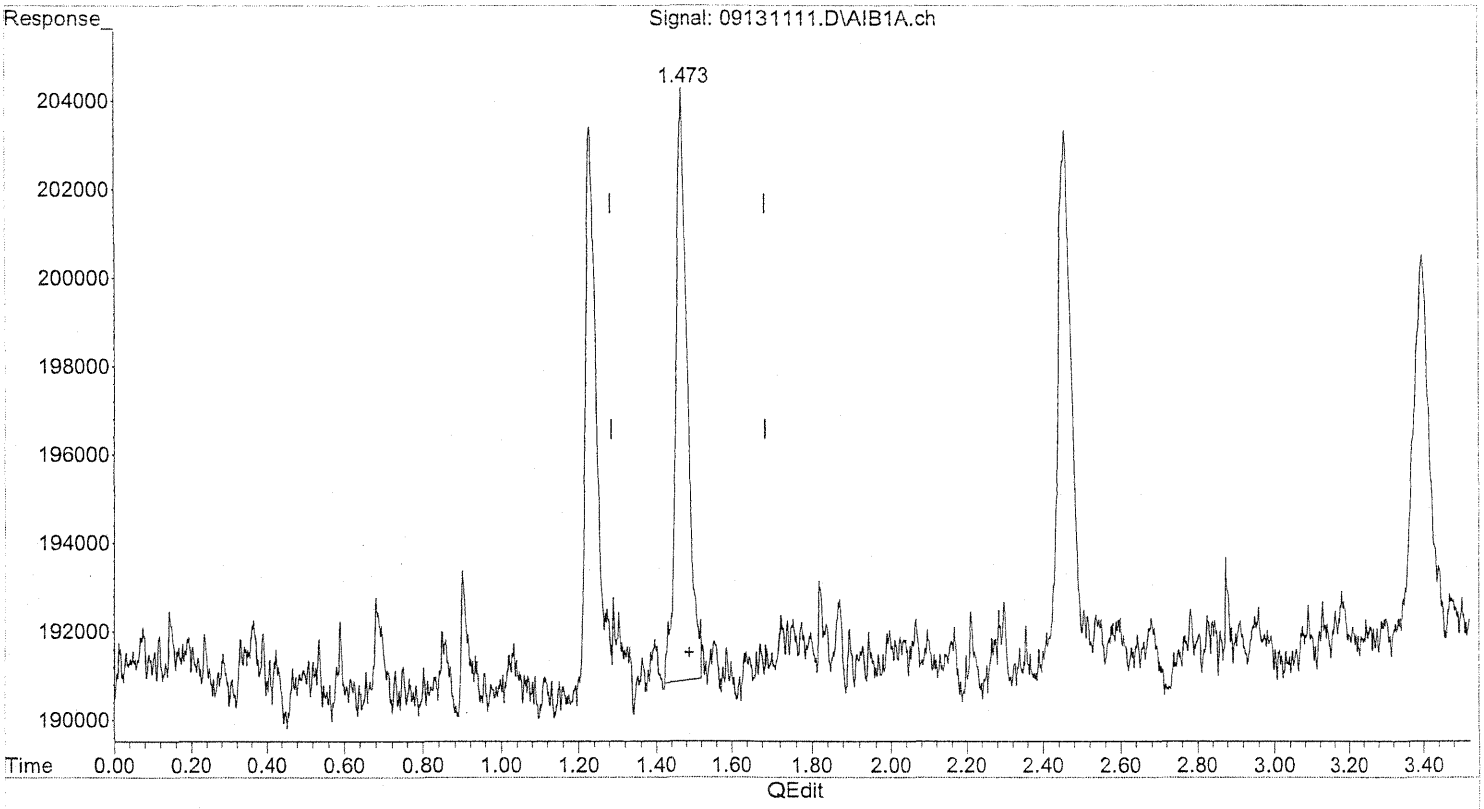
(2) Carbonyl_Sulfide (W)
1.473min 5.302 ppb
response 308335

(+) = Expected Retention Time

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131111.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 12:38 pm
Operator : LRK
Sample : std 5ppb s27-09131107
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:24:59 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:19:14 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



(2) Carbonyl_Sulfide (W)
1.473min 5.092 ppb m
response 296140

9/13/11 BL

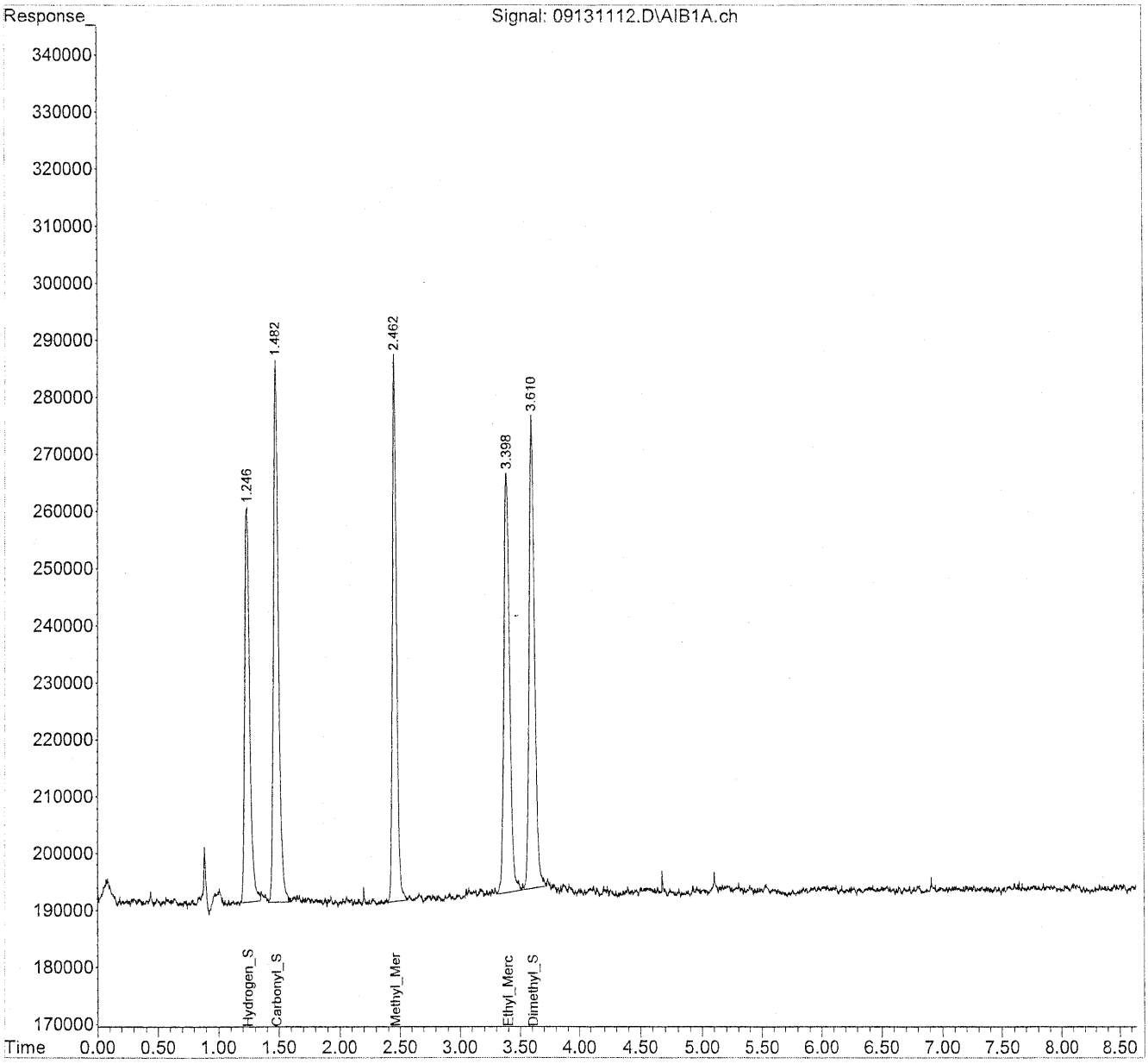
9/20/11

(+) = Expected Retention Time

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131112.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 12:44 pm
Operator : LRK
Sample : std 50ppb s27-09131108~~7~~ 7 9/13/11
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:25:53 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:19:14 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131112.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 12:44 pm
Operator : LRK
Sample : std 50ppb s27-09131108 fm 9/13/11
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:25:53 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:19:14 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

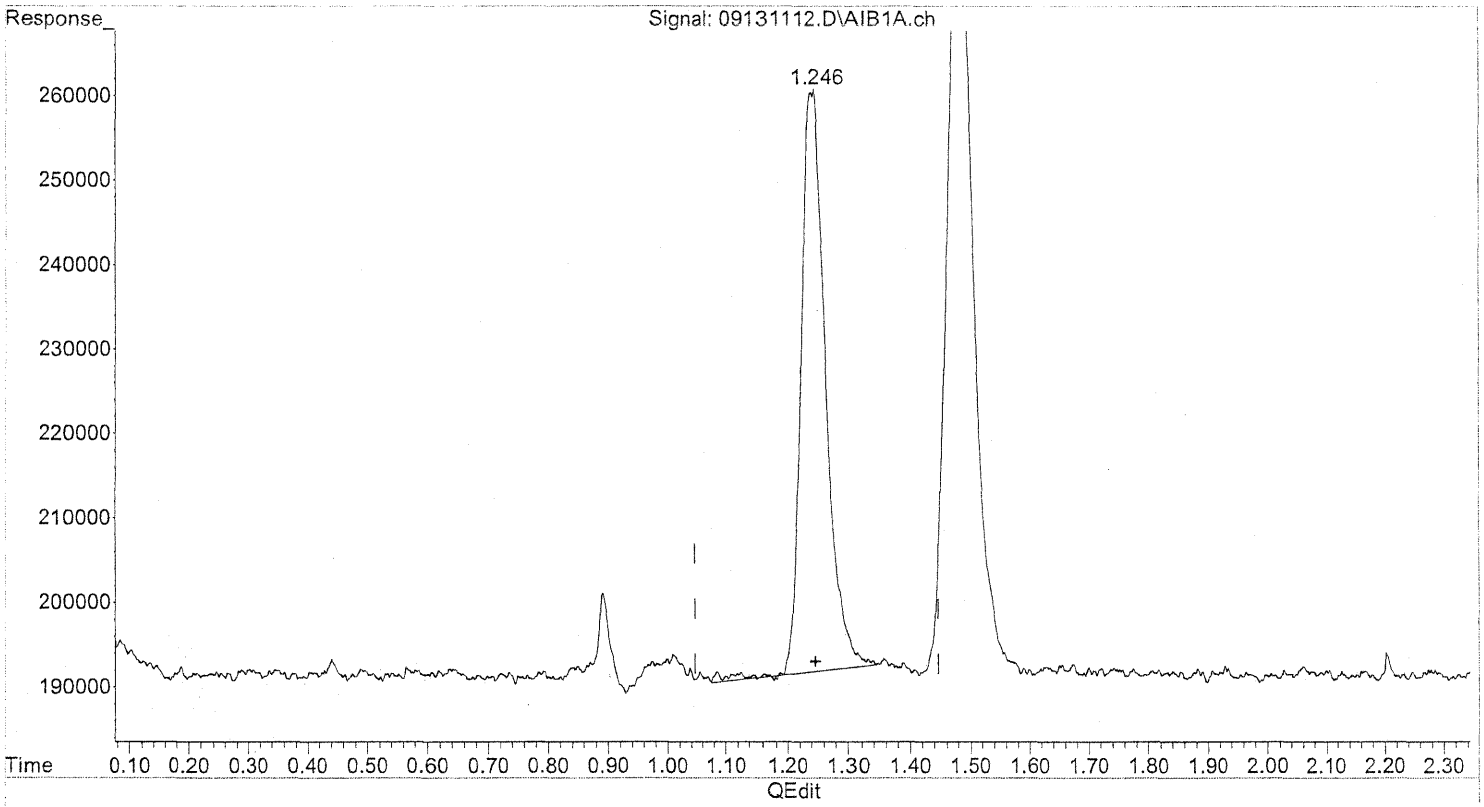
		Compound	R.T.	Response	Conc	Units	
Target Compounds							
1)	Z	Hydrogen_Sulfide	1.246	1984702	41.529	ppb	m
2)	W	Carbonyl_Sulfide	1.482	2872307	49.390	ppb	
3)	T	Methyl_Mercaptan	2.462	2372712	45.196	ppb	
4)	T	Ethyl_Mercaptan	3.396	2374525	49.912	ppb	
5)	T	Dimethyl_Sulfide	3.610	2680950	47.465	ppb	
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb	
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb	
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb	
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb	
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb	
11)	T	Thiophene	0.000	0	N.D.	ppb	
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb	
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb	
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb	
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb	
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb	
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb	
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb	
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb	
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb	
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb	
22)	T	Methyltrisulfide	0.000	0	N.D.	ppb	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131112.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 12:44 pm
Operator : LRK
Sample : std 50ppb s27-09131108 x fr-9/13/11
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:25:45 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:19:14 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



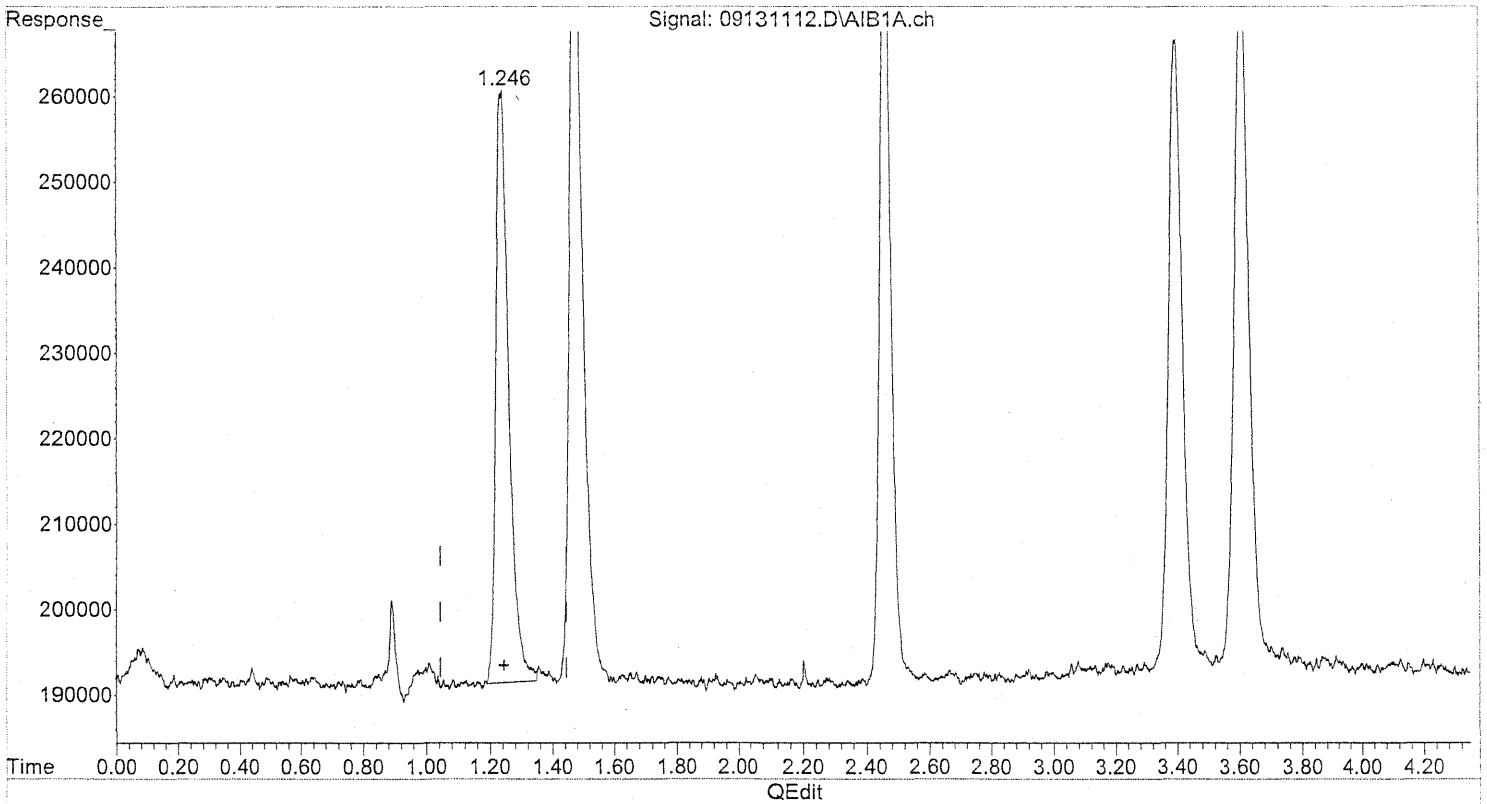
(1) Hydrogen_Sulfide (Z)
1.243min 41.003 ppb
response 1959546

(+) = Expected Retention Time

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131112.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 12:44 pm
Operator : LRK
Sample : std 50ppb s27-09131108.7 [illegible] 9/20/11
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:25:45 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:19:14 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



(1) Hydrogen_Sulfide (Z)
1.246min 41.529 ppb m
response 1984702

[illegible] 9/13/11 BLL

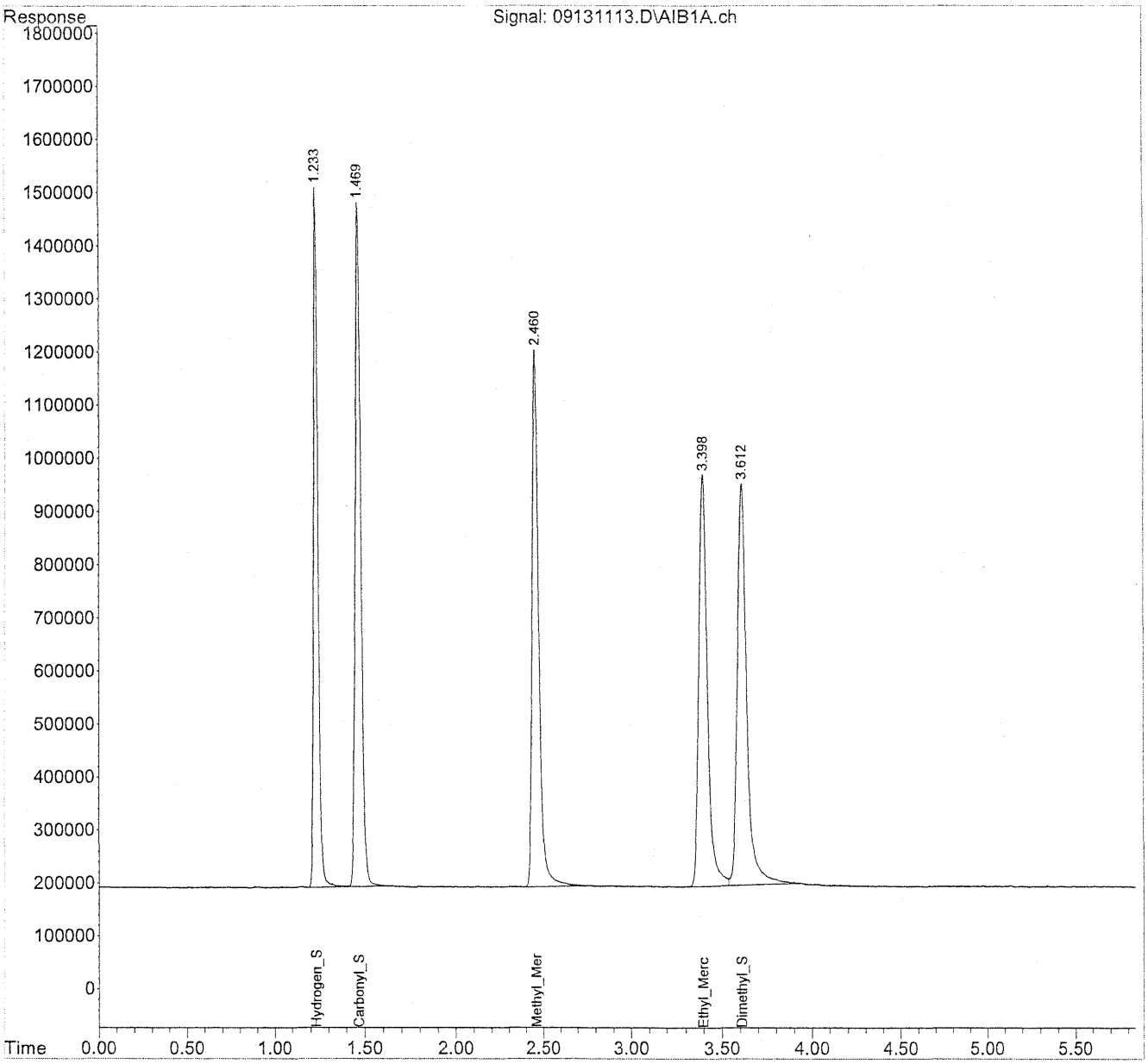
LM 9/20/11

(+) = Expected Retention Time

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131113.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 1:08 pm
Operator : LRK
Sample : std 500ppb s27-09131103
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:27:03 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:26:54 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131113.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 1:08 pm
Operator : LRK
Sample : std 500ppb s27-09131103
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:27:03 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:26:54 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

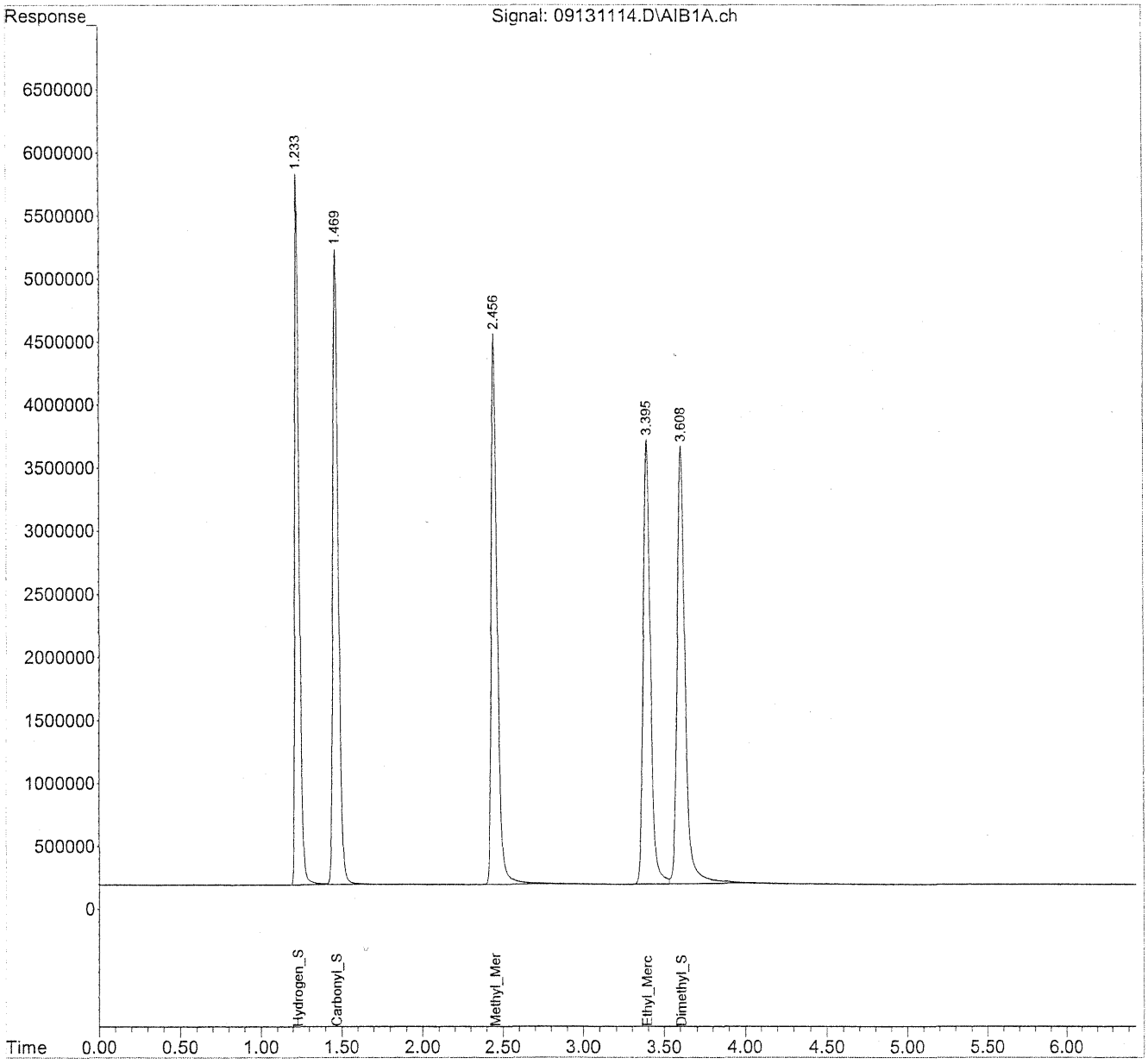
		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.233	22471904	503.684	ppb
2)	W	Carbonyl_Sulfide	1.470	28282525	483.843	ppb
3)	T	Methyl_Mercaptan	2.460	26610245	531.465	ppb
4)	T	Ethyl_Mercaptan	3.399	25801191	559.884	ppb
5)	T	Dimethyl_Sulfide	3.612	27480049	514.468	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Methyltrisulfide	0.000	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131114.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 1:26 pm
Operator : LRK
Sample : std 2000ppb s27-09131104~~3~~ 4 [illegible]
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 13:33:17 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 13:14:57 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131114.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 1:26 pm
Operator : LRK
Sample : std 2000ppb s27-091311043 9/13/11
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 13:33:17 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 13:14:57 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

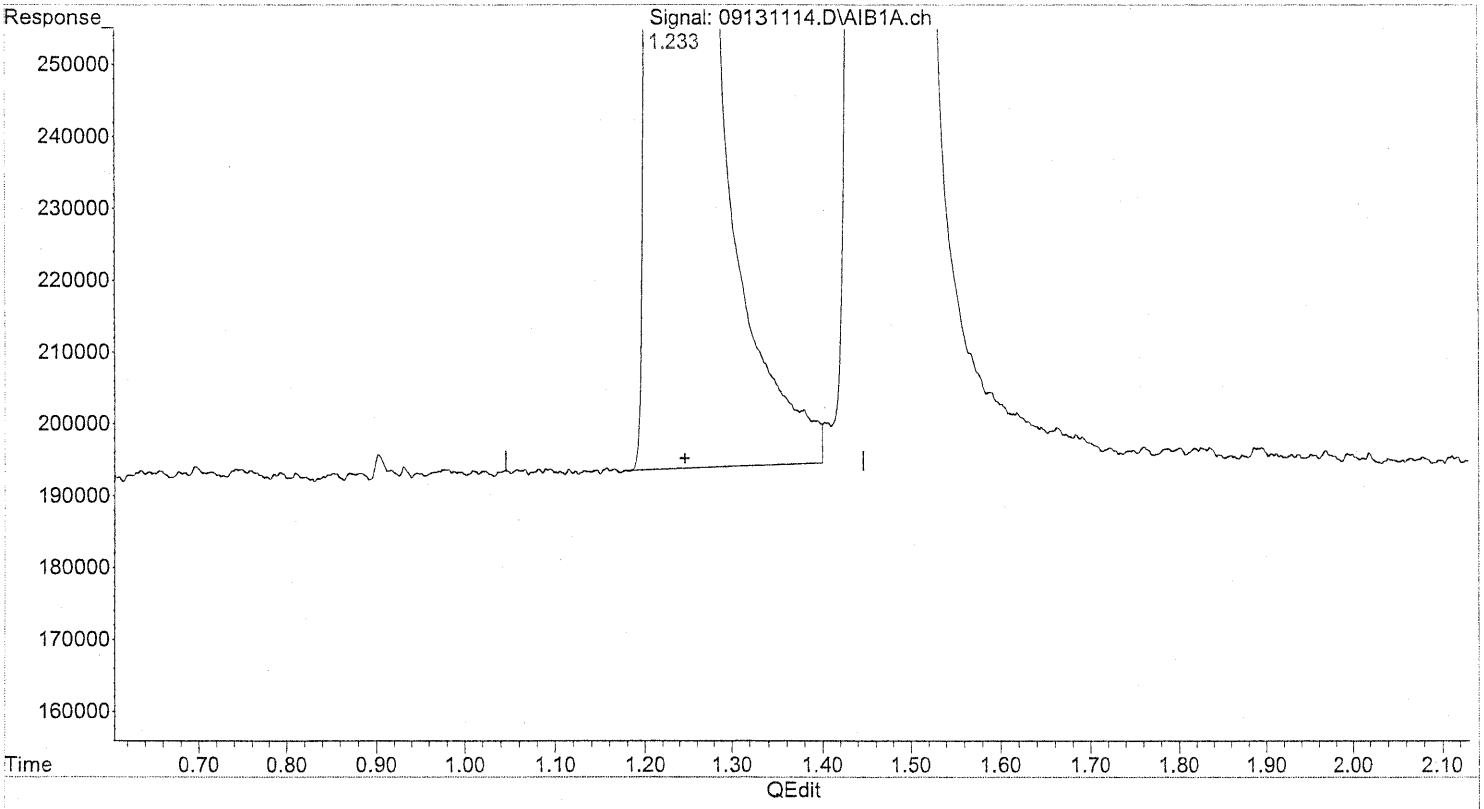
		Compound	R.T.	Response	Conc	Units	
Target Compounds							
1)	Z	Hydrogen_Sulfide	1.233	107014682	2414.311	ppb	m
2)	W	Carbonyl_Sulfide	1.470	118302229	2056.110	ppb	
3)	T	Methyl_Mercaptan	2.456	113284390	2311.057	ppb	
4)	T	Ethyl_Mercaptan	3.395	112158430	2392.814	ppb	
5)	T	Dimethyl_Sulfide	3.608	120117316	2274.450	ppb	
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb	
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb	
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb	
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb	
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb	
11)	T	Thiophene	0.000	0	N.D.	ppb	
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb	
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb	
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb	
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb	
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb	
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb	
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb	
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb	
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb	
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb	
22)	T	Methyltrisulfide	0.000	0	N.D.	ppb	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131114.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 1:26 pm
Operator : LRK
Sample : std 2000ppb s27-09131104~~3~~ LRA 9/13/11
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 13:33:17 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 13:14:57 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



(1) Hydrogen_Sulfide (Z)
1.233min 2414.311 ppb m
response 107014682

LRA 9/13/11 BLC

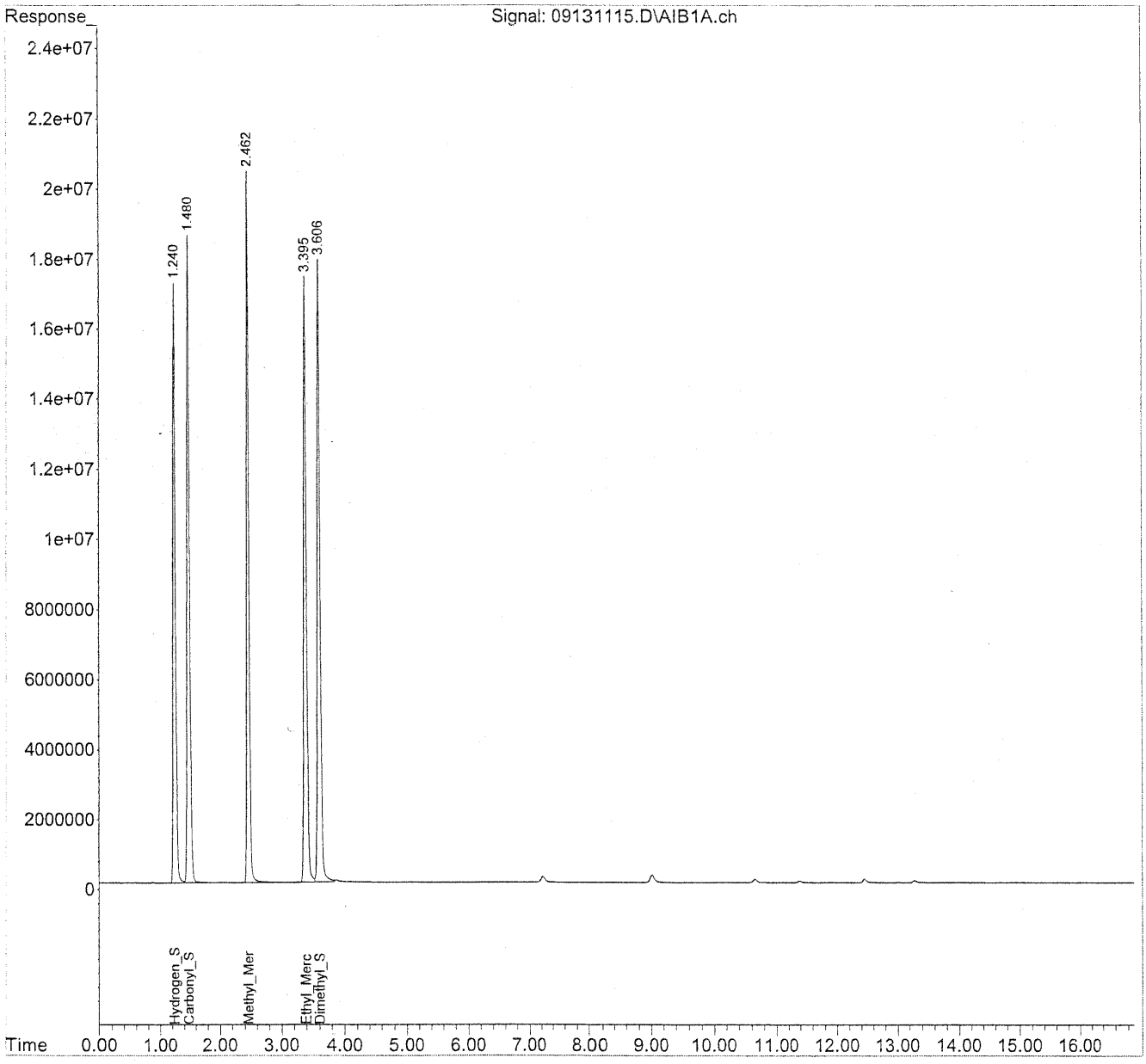
WV 9/20/11

(+) = Expected Retention Time

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131115.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 1:40 pm
Operator : LRK
Sample : std 10000ppb s27-0913110553 [illegible]
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:09:39 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 13:33:30 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131115.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 1:40 pm
Operator : LRK
Sample : std 10000ppb s27-091311053 LR 9/13/11
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:09:39 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 13:33:30 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

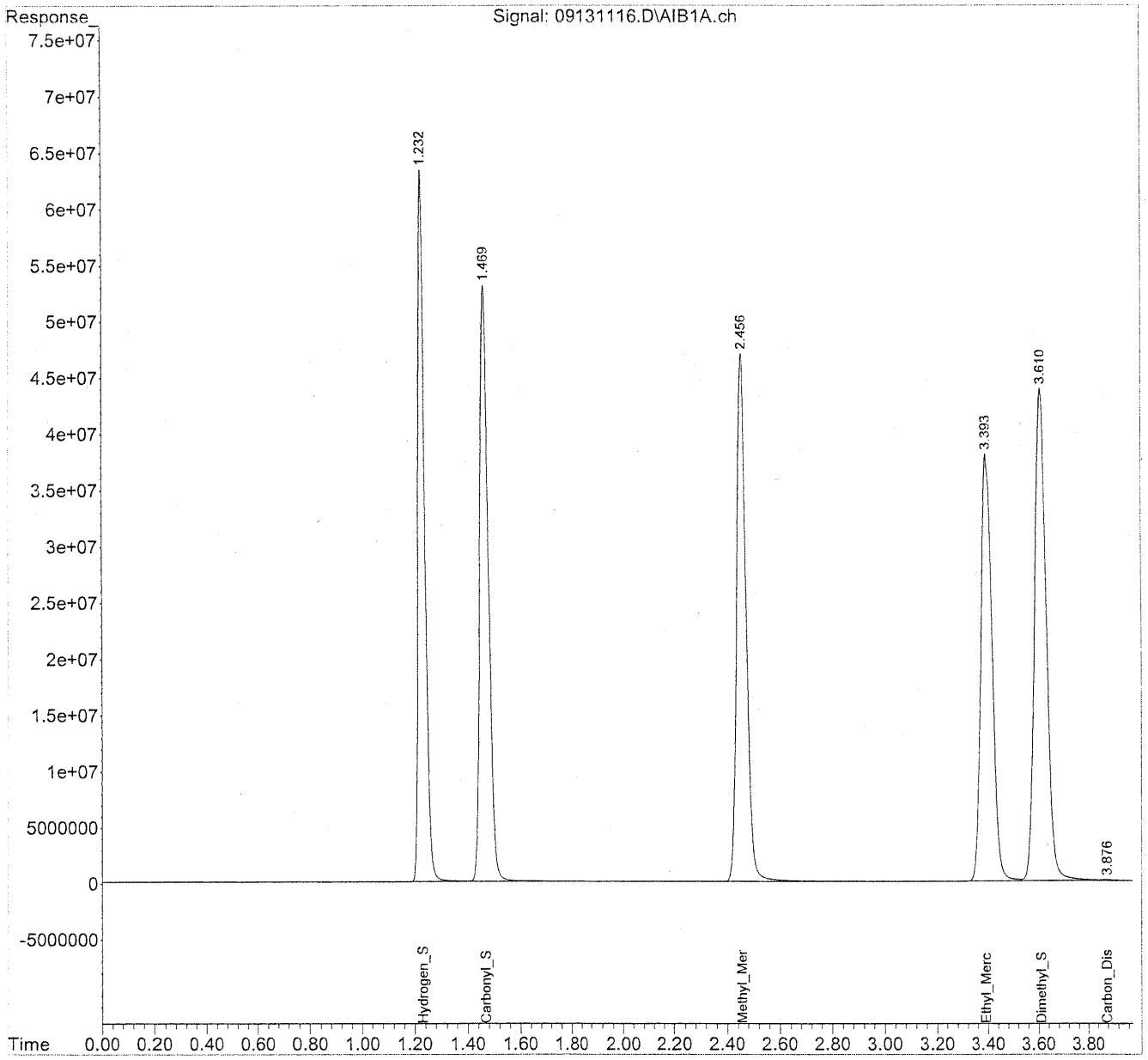
		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.241	486009822	10430.741	ppb
2)	W	Carbonyl_Sulfide	1.480	582173467	10042.651	ppb
3)	T	Methyl_Mercaptan	2.462	529780912	10582.895	ppb
4)	T	Ethyl_Mercaptan	3.395	536629759	11105.999	ppb
5)	T	Dimethyl_Sulfide	3.607	577872496	10759.732	ppb
6)	T	Carbon_Disulfide	3.876	2552406	NoCal	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	7.232	8332294	NoCal	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	10.647	4892357	NoCal	ppb
22)	T	Methyltrisulfide	11.384	2291097	NoCal	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131116.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 2:14 pm
Operator : LRK
Sample : std 25000ppb s27-12061001
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:19:02 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:09:55 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131116.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 2:14 pm
Operator : LRK
Sample : std 25000ppb s27-12061001
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:19:02 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:09:55 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

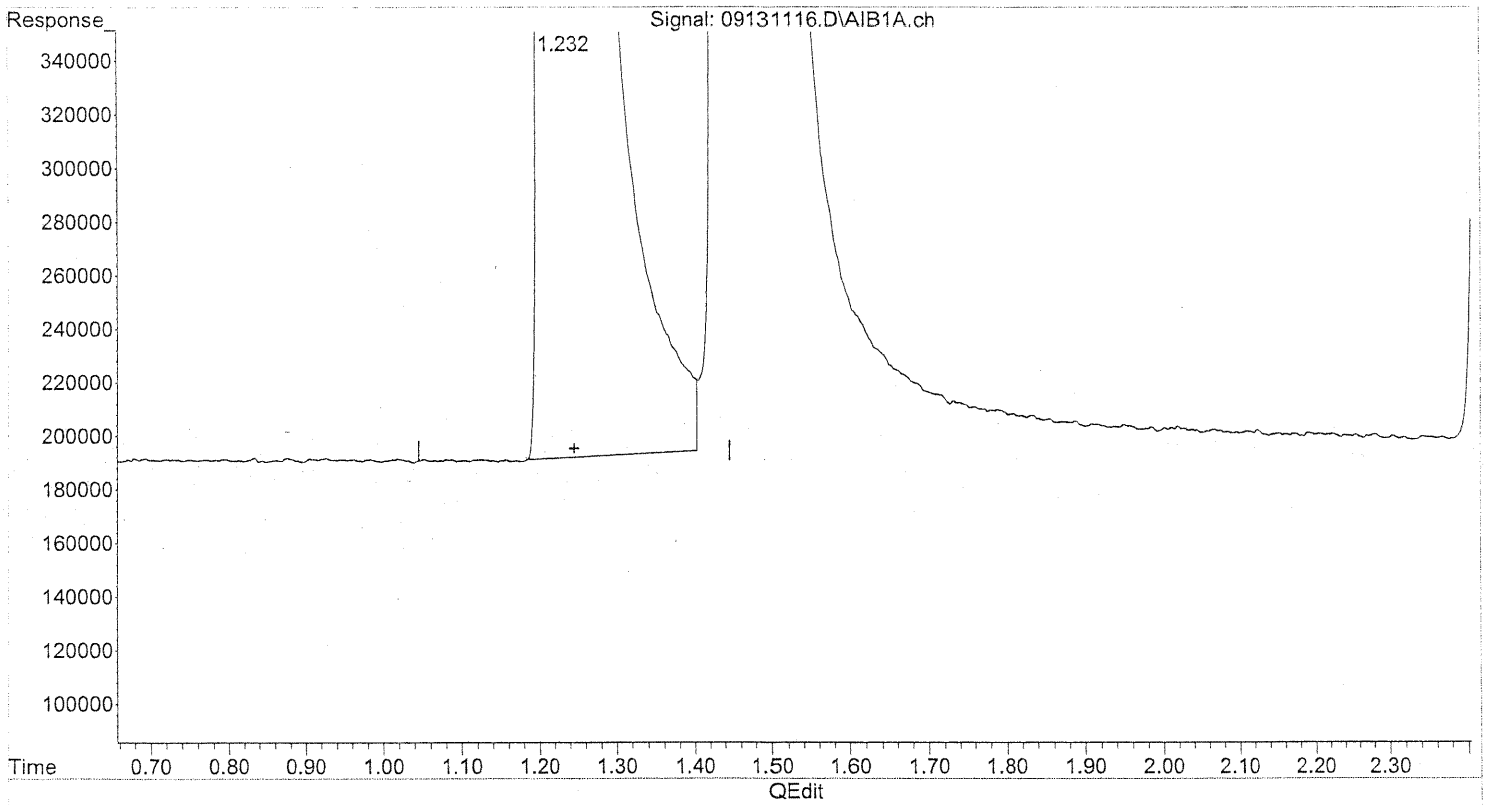
		Compound	R.T.	Response	Conc	Units	
Target Compounds							
1)	Z	Hydrogen_Sulfide	1.232	1111364227	23658.135	ppb	m
2)	W	Carbonyl_Sulfide	1.469	1213996426	20915.510	ppb	
3)	T	Methyl_Mercaptan	2.457	1200636276	24014.153	ppb	
4)	T	Ethyl_Mercaptan	3.394	1177125543	24154.745	ppb	
5)	T	Dimethyl_Sulfide	3.611	1418209794	26352.140	ppb	
6)	T	Carbon_Disulfide	3.878	3917546	8173.046	ppb	
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb	
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb	
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb	
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb	
11)	T	Thiophene	0.000	0	N.D.	ppb	
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb	
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb	
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb	
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb	
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb	
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb	
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb	
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb	
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb	
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb	
22)	T	Methyltrisulfide	0.000	0	N.D.	ppb	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131116.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 2:14 pm
Operator : LRK
Sample : std 25000ppb s27-12061001
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 14:19:02 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 14:09:55 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



(1) Hydrogen_Sulfide (Z)
1.232min 23658.135 ppb m
response 1111364227

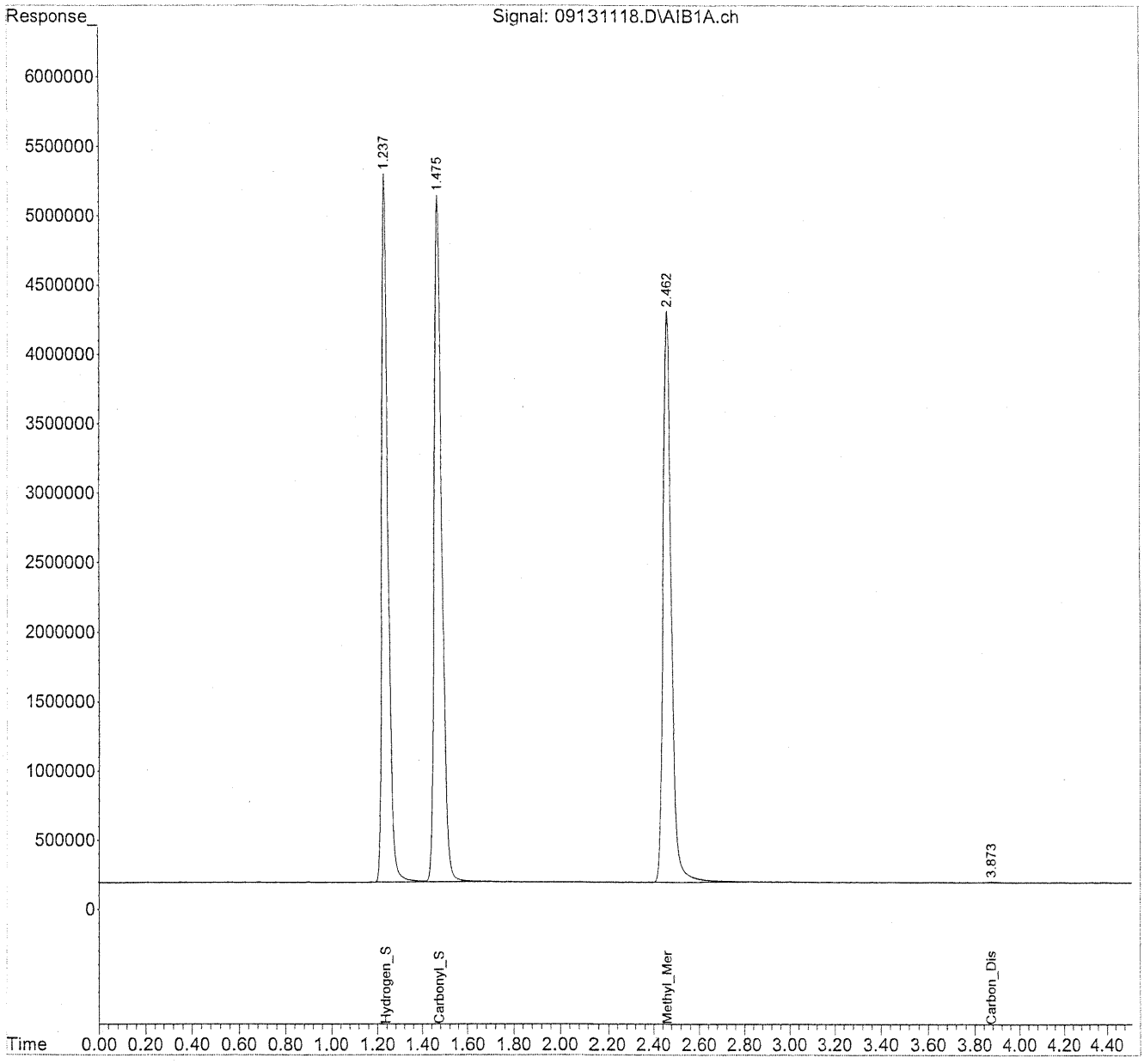
9/14/11 BLC No previous
WA 9/20/11

(+) = Expected Retention Time

Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131118.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 2:42 pm
Operator : LRK
Sample : icv 2000ppb s23-09131109
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 15:11:35 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : J:\GC22\DATA\SCD\2011_09\13\
Data File : 09131118.D
Signal(s) : AIB1A.ch
Acq On : 13 Sep 2011 2:42 pm
Operator : LRK
Sample : icv 2000ppb s23-091311098 9/13/11
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 13 15:11:35 2011
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.237	97500888	2086.662	ppb
2)	W	Carbonyl_Sulfide	1.475	115387213	2037.161	ppb
3)	T	Methyl_Mercaptan	2.462	105649753	2126.209	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	3.874	172452	1.735	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Methyltrisulfide	0.000	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Response Factor Report GC13

Method Path : J:\GC13\METHODS\
Method File : GC13071212A.M
Title : 20 Sulfurs Initial Calibration
Last Update : Fri Jul 13 12:44:45 2012
Response Via : Initial Calibration

Calibration Files
1 =07121206.D 2 =07121212.D 3 =07121208.D
4 =07121209.D 5 =07121210.D 6 =07121211.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	Z	Hydrogen_Sulfide	0.837	0.874	0.769	0.968	0.867	1.165	0.913	E4	15.22
2)	W	Carbonyl_Sulfide	1.191	1.036	1.093	1.177	1.034	1.251	1.130	E4	7.88
3)	T	Methyl_Mercaptan	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
4)	T	Ethyl_Mercaptan	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
5)	T	Dimethyl_Sulfide	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
6)	T	Carbon_Disulfide	1.961	1.872	1.821	2.369	2.043	2.558	2.104	E4	14.00
7)	T	2-Propyl_Merc...	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
8)	T	t-Butyl_Merca...	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
9)	T	Propyl_Mercaptan	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
10)	T	Ethyl_Methyl_...	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
11)	T	Thiophene	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
12)	T	i-Butyl_Merca...	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
13)	T	Diethyl_Sulfide	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
14)	T	n-Butyl_Merca...	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
15)	T	Dimethyl_Disu...	1.961	1.872	1.821	2.369	2.043	2.558	2.104	E4	14.00
16)	T	2-Methylthiop...	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
17)	T	3-Methylthiop...	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
18)	T	Tetrahydrothi...	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
19)	T	2,5-Dimethylt...	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
20)	T	2-Ethylthiophene	0.981	0.936	0.911	1.184	1.021	1.279	1.052	E4	14.00
21)	T	Diethyl_Disul...	1.961	1.872	1.821	2.369	2.043	2.558	2.104	E4	14.00
22)	T	Dimethyltrisu...	2.942	2.808	2.732	3.553	3.064	3.837	3.156	E4	14.00

(#) = Out of Range

GC13071212A.M Fri Jul 13 12:45:41 2012

Calibration Status Report GC13

Method Path : J:\GC13\METHODS\
Method File : GC13071212A.M
Title : 20 Sulfurs Initial Calibration
Last Update : Fri Jul 13 12:44:45 2012
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	2	0	J:\GC13\DATA\SCD\2012_07\12\07121206.D
2	2	16	0	J:\GC13\DATA\SCD\2012_07\12\07121212.D
3	3	157	0	J:\GC13\DATA\SCD\2012_07\12\07121208.D
4	4	629	0	J:\GC13\DATA\SCD\2012_07\12\07121209.D
5	5	3146	0	J:\GC13\DATA\SCD\2012_07\12\07121210.D
6	6	9439	0	J:\GC13\DATA\SCD\2012_07\12\07121211.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jul 13 12:29 2012	Jul 13 12:27 2012	12 Jul 2012 12:01 pm
2	2	Jul 13 12:35 2012	Jul 13 12:35 2012	12 Jul 2012 2:15 pm
3	3	Jul 13 12:33 2012	Jul 13 12:30 2012	12 Jul 2012 12:17 pm
4	4	Jul 13 12:33 2012	Jul 13 12:33 2012	12 Jul 2012 12:40 pm
5	5	Jul 13 12:34 2012	Jul 13 12:34 2012	12 Jul 2012 12:56 pm
6	6	Jul 13 12:34 2012	Jul 13 12:34 2012	12 Jul 2012 1:45 pm

GC13071212A.M Fri Jul 13 12:45:49 2012

Edit Compounds

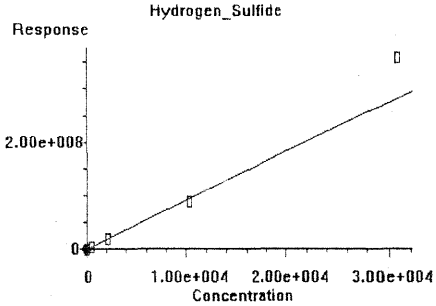
Search by: Ret Time | Name | Index | Find Compound

Compound Database
External Standard Compour
- Hydrogen_Sulfide
- Carbonyl_Sulfide
- Methyl_Mercaptan
- Ethyl_Mercaptan
- Dimethyl_Sulfide
- Carbon_Disulfide
- 2-Propyl_Mercaptan
- t-Butyl_Mercaptan
- Propyl_Mercaptan
- Ethyl_Methyl_Sulfide
- Thiophene
- i-Butyl_Mercaptan
- Diethyl_Sulfide
- n-Butyl_Mercaptan
- Dimethyl_Disulfide
- 2-Methylthiophene
- 3-Methylthiophene
- Tetrahydrothiophene
- 2,5-Dimethylthiophene
- 2-Ethylthiophene
- Diethyl_Disulfide
- Dimethyltrisulfide

Identification | Calibration | User Defined | Advanced | Reporting

Lvl ID	Concentration	Response	Lvl ID	Concentration	Response
1	5.113850	428817.882172			
2	51.138500	447047.699119			
3	511.385000	3931531.808201			
4	2045.540000	19797302.473189			
5	10227.700000	88668402.13538			
6	30683.100000	357469106.52109			

Hydrogen_Sulfide



0.000e+000	Quadratic term
9.133e+003	Linear term
0.000e+000	Constant term
15.2%	RF Rel Std Dev

ental Data A... | Environmental Data A...

Edit Compounds

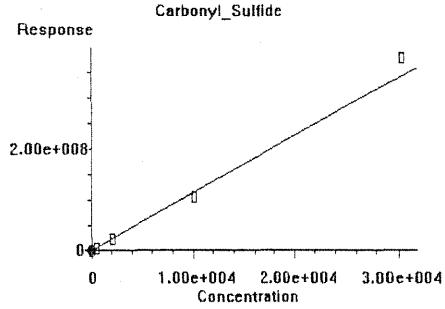
Search by: Ret Time | Name | Index | Find Compound

Compound Database
External Standard Compour
- Hydrogen_Sulfide
- Carbonyl_Sulfide
- Methyl_Mercaptan
- Ethyl_Mercaptan
- Dimethyl_Sulfide
- Carbon_Disulfide
- 2-Propyl_Mercaptan
- t-Butyl_Mercaptan
- Propyl_Mercaptan
- Ethyl_Methyl_Sulfide
- Thiophene
- i-Butyl_Mercaptan
- Diethyl_Sulfide
- n-Butyl_Mercaptan
- Dimethyl_Disulfide
- 2-Methylthiophene
- 3-Methylthiophene
- Tetrahydrothiophene
- 2,5-Dimethylthiophene
- 2-Ethylthiophene
- Diethyl_Disulfide
- Dimethyltrisulfide

Identification | Calibration | User Defined | Advanced | Reporting

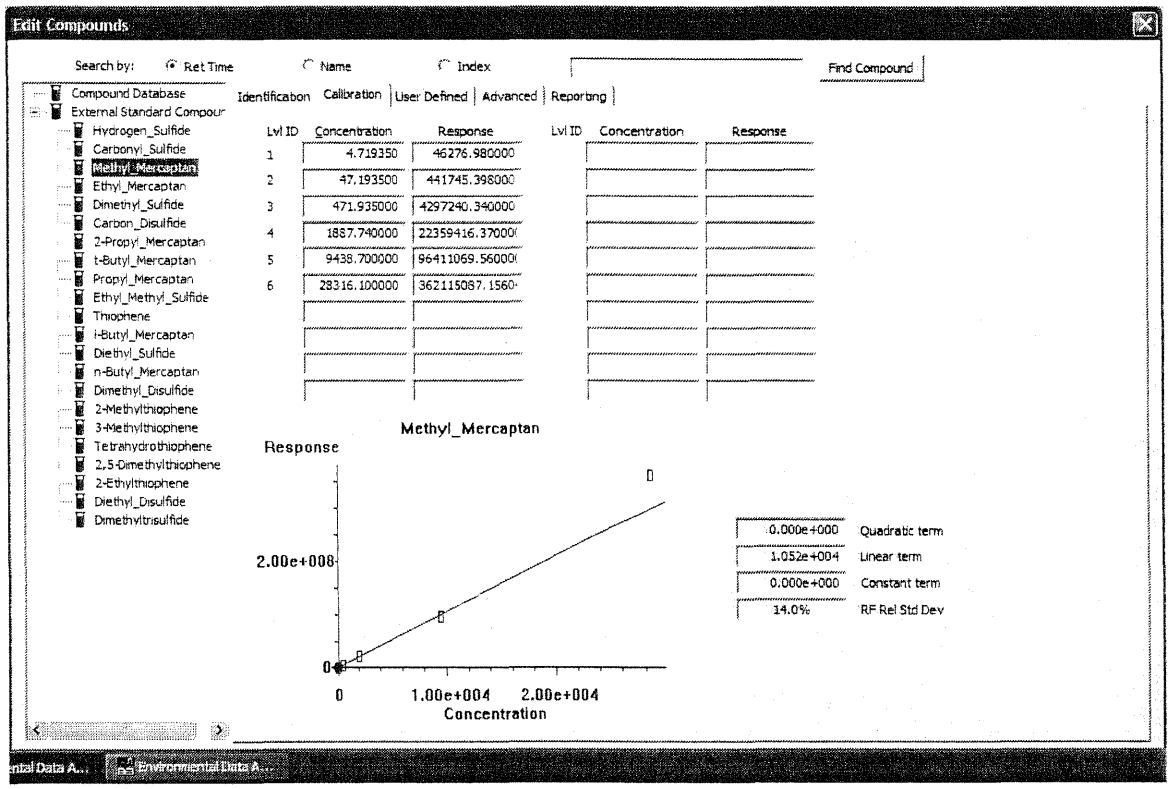
Lvl ID	Concentration	Response	Lvl ID	Concentration	Response
1	5.043700	60069.590000			
2	50.437000	522721.258634			
3	504.370000	5514778.954299			
4	2017.480000	23748534.61028			
5	10087.400000	104342088.8493			
6	30262.200000	378455386.6273			

Carbonyl_Sulfide



0.000e+000	Quadratic term
1.130e+004	Linear term
0.000e+000	Constant term
7.9%	RF Rel Std Dev

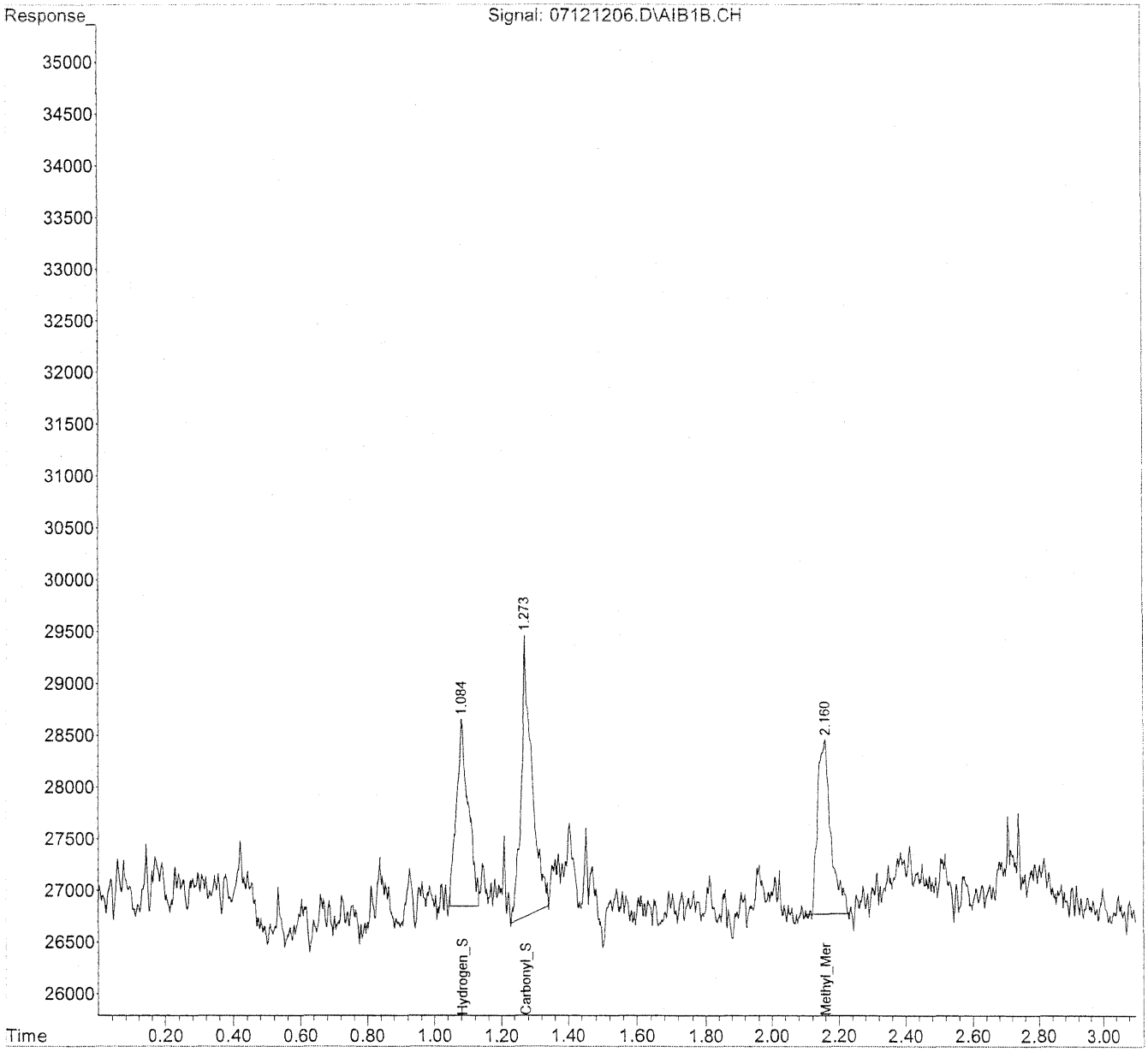
ental Data A... | Environmental Data A...


Edit Compounds
Search by: Ret Time Name Index
Find Compound
Compound Database
External Standard Compour
Hydrogen_Sulfide
Carbonyl_Sulfide
Methyl_Mercaptan
Ethyl_Mercaptan
Dimethyl_Sulfide
Carbon_Disulfide
2-Propyl_Mercaptan
t-Butyl_Mercaptan
Propyl_Mercaptan
Ethyl_Methyl_Sulfide
Thiophene
i-Butyl_Mercaptan
Diethyl_Sulfide
n-Butyl_Mercaptan
Dimethyl_Disulfide
2-Methylthiophene
3-Methylthiophene
Tetrahydrothiophene
2,5-Dimethylthiophene
2-Ethylthiophene
Diethyl_Disulfide
Dimethyltrisulfide
Identification Calibration User Defined Advanced Reporting
Lvl ID Concentration Response
1 4.719350 46276.980000
2 47.193500 441745.398000
3 471.935000 4297240.340000
4 1887.740000 22359416.370000
5 9438.700000 96411069.560000
6 28316.100000 362115087.1560
Lvl ID Concentration Response
Methyl_Mercaptan
Response
2.00e+008
0
0
1.00e+004
2.00e+004
Concentration
0.000e+000 Quadratic term
1.052e+004 Linear term
0.000e+000 Constant term
14.0% RF Rel Std Dev
Environmental Data A...

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121206.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:01 pm
Operator : WHH
Sample : s27-07121201 5ppm
Misc : 100ul of 200xdilution of s27-07111201
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:27:33 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:20:54 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121206.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:01 pm
Operator : WHH
Sample : s27-07121201 5ppm
Misc : 100ul of 200xdilution of s27-07111201
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:27:33 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:20:54 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units	
Target Compounds							
1)	Z	Hydrogen_Sulfide	1.084	42818	4.863	ppb	m
2)	W	Carbonyl_Sulfide	1.275	60070	5.887	ppb	
3)	T	Methyl_Mercaptan	2.160	46277	4.876	ppb	m
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb	
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb	
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb	
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb	
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb	
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb	
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb	
11)	T	Thiophene	0.000	0	N.D.	ppb	
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb	
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb	
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb	
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb	
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb	
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb	
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb	
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb	
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb	
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb	
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb	

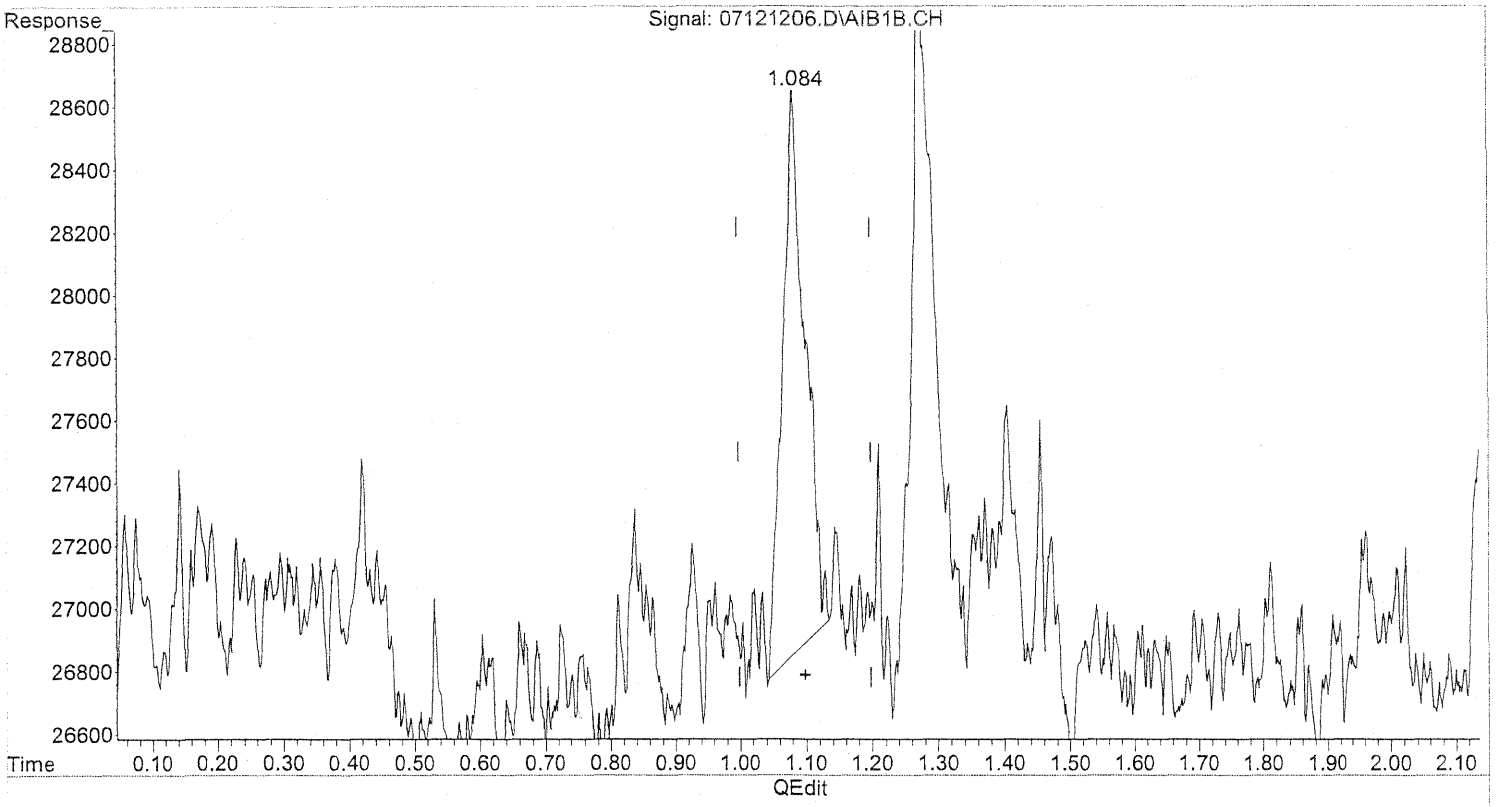
(f)=RT Delta > 1/2 Window (m)=manual int.

7/13/12

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121206.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:01 pm
Operator : WHH
Sample : s27-07121201 5ppm
Misc : 100ul of 200xdilution of s27-07111201
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:27:14 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:20:54 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



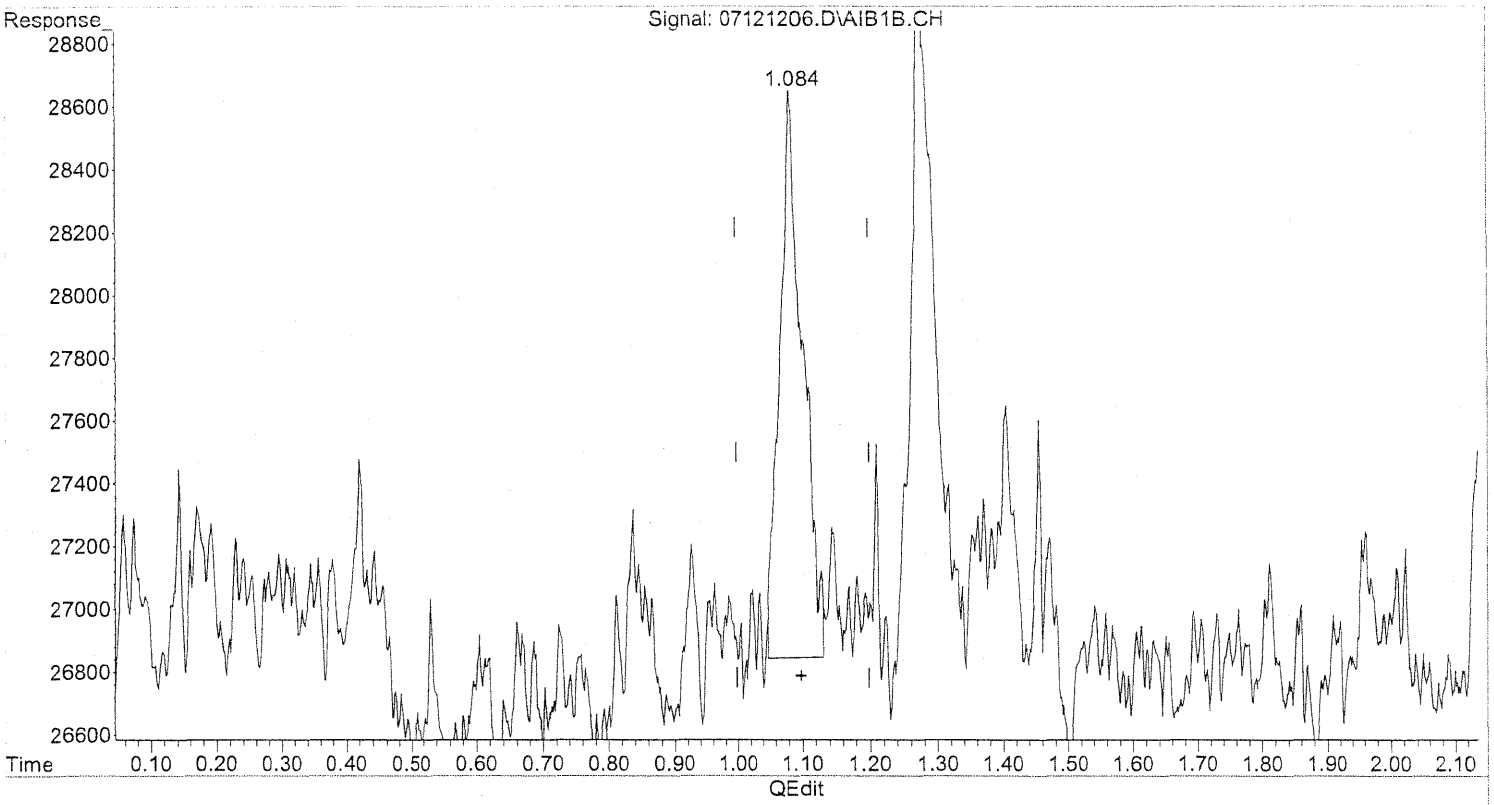
(1) Hydrogen_Sulfide (Z)
1.085min 4.773 ppb
response 42024

(+) = Expected Retention Time

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121206.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:01 pm
Operator : WHH
Sample : s27-07121201 5ppm
Misc : 100ul of 200xdilution of s27-07111201
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:27:14 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:20:54 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(1) Hydrogen_Sulfide (Z)
1.084min 4.863 ppb m
response 42818

7/13/12 BW

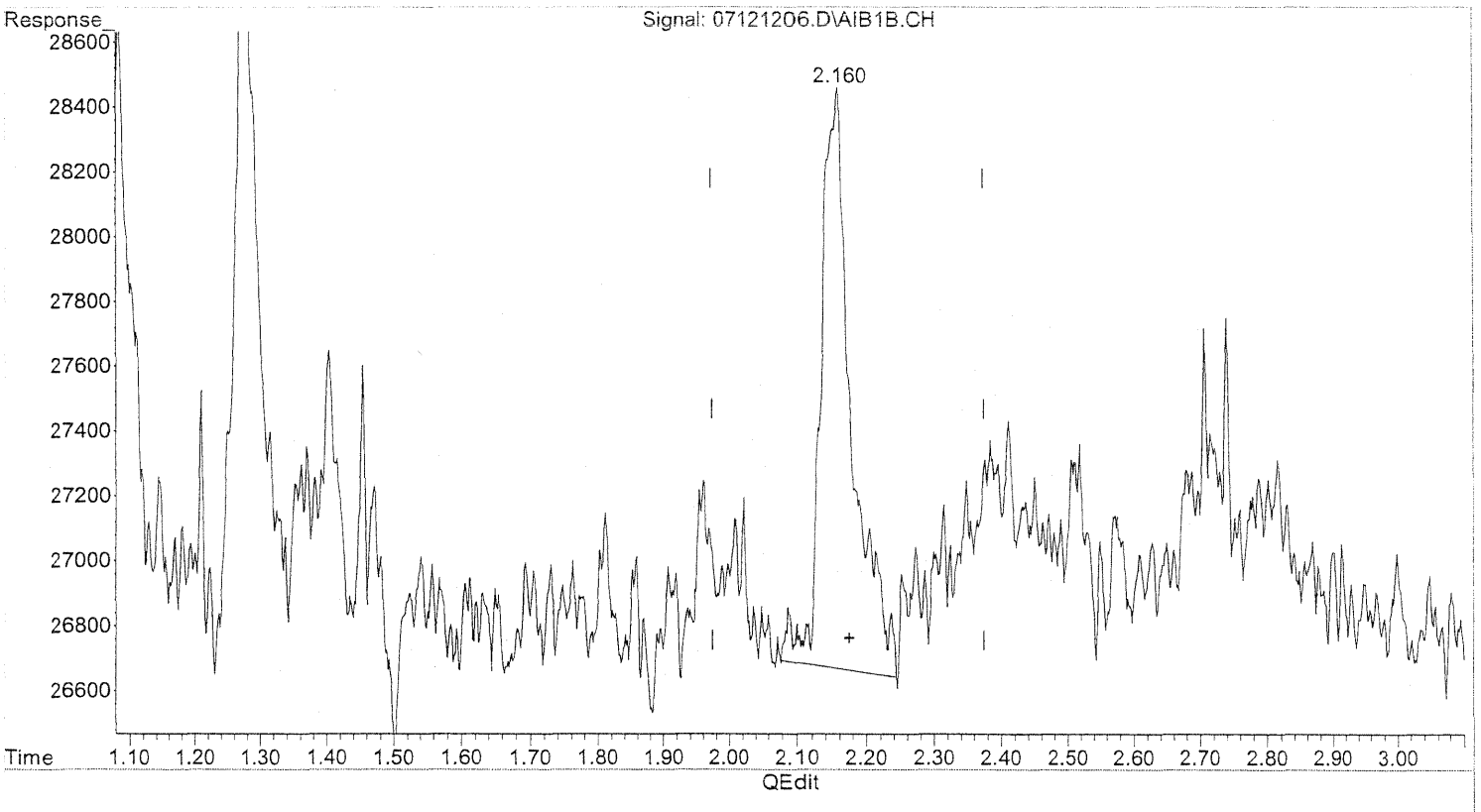
7/13/12

(+) = Expected Retention Time

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121206.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:01 pm
Operator : WHH
Sample : s27-07121201 5ppm
Misc : 100ul of 200xdilution of s27-07111201
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:27:14 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:20:54 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



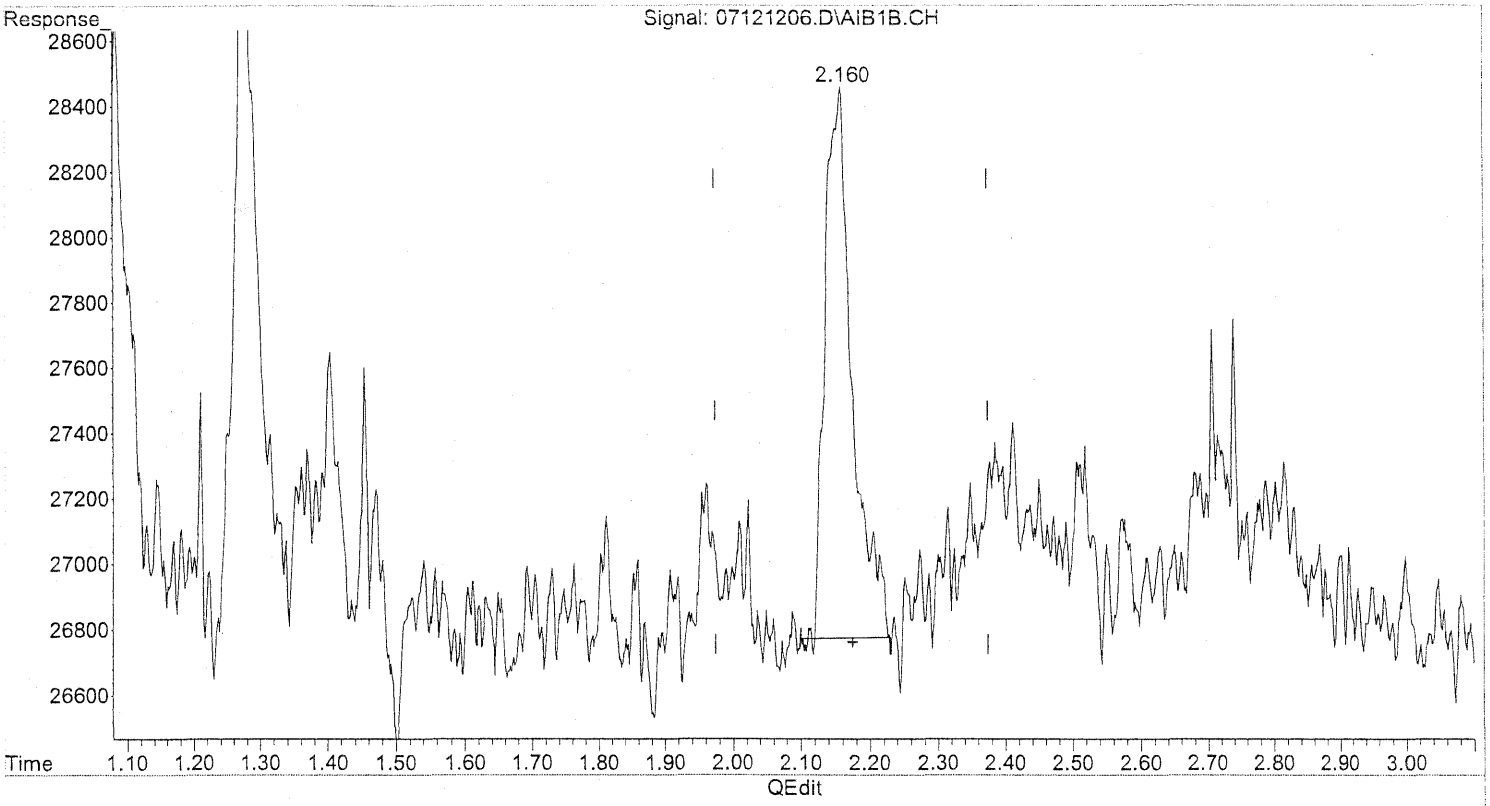
(3) Methyl_Mercaptan (T)
2.159min 5.963 ppb
response 56597

(+) = Expected Retention Time

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121206.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:01 pm
Operator : WHH
Sample : s27-07121201 5ppm
Misc : 100ul of 200xdilution of s27-07111201
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:27:14 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:20:54 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(3) Methyl_Mercaptan (T)
2.160min 4.876 ppb m
response 46277

7/13/12

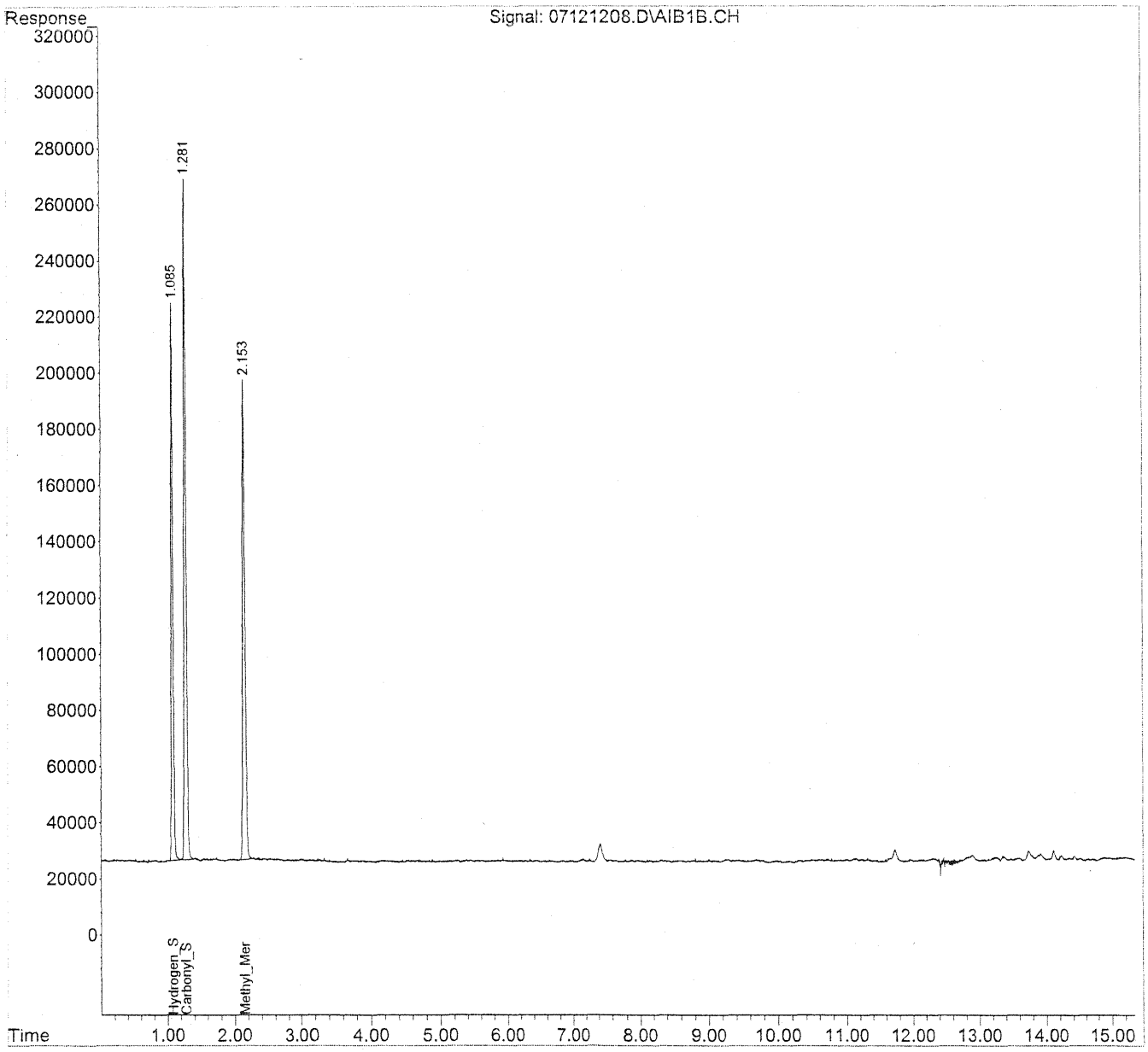
7/13/12

(+) = Expected Retention Time

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121208.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:17 pm
Operator : WHH
Sample : s27-07111201 500ppm
Misc : 50ul of s27-07111201
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:30:23 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:29:25 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121208.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:17 pm
Operator : WHH
Sample : s27-07111201 500ppm
Misc : 50ul of s27-07111201
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:30:23 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:29:25 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

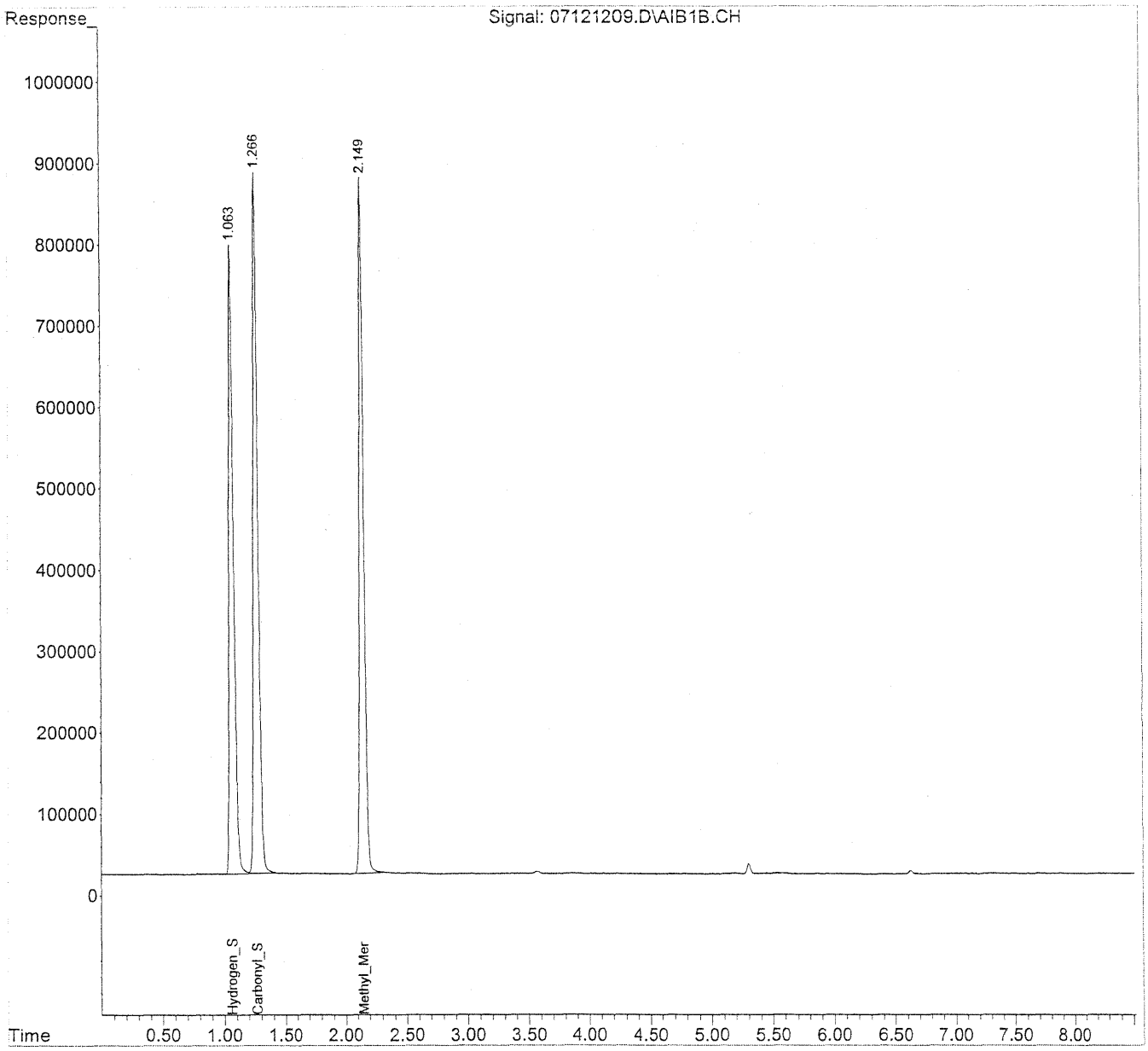
		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.085	3931532	469.553	ppb
2)	W	Carbonyl_Sulfide	1.282	5514779	463.044	ppb
3)	T	Methyl_Mercaptan	2.154	4297240	438.235	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	7.432	296174	NoCal	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	11.729f	155006	NoCal	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121209.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:40 pm
Operator : WHH
Sample : s27-07111201 2000ppm
Misc : 200ul of s27-07111201
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:33:36 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:33:19 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121209.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:40 pm
Operator : WHH
Sample : s27-07111201 2000ppm
Misc : 200ul of s27-07111201
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:33:36 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:33:19 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

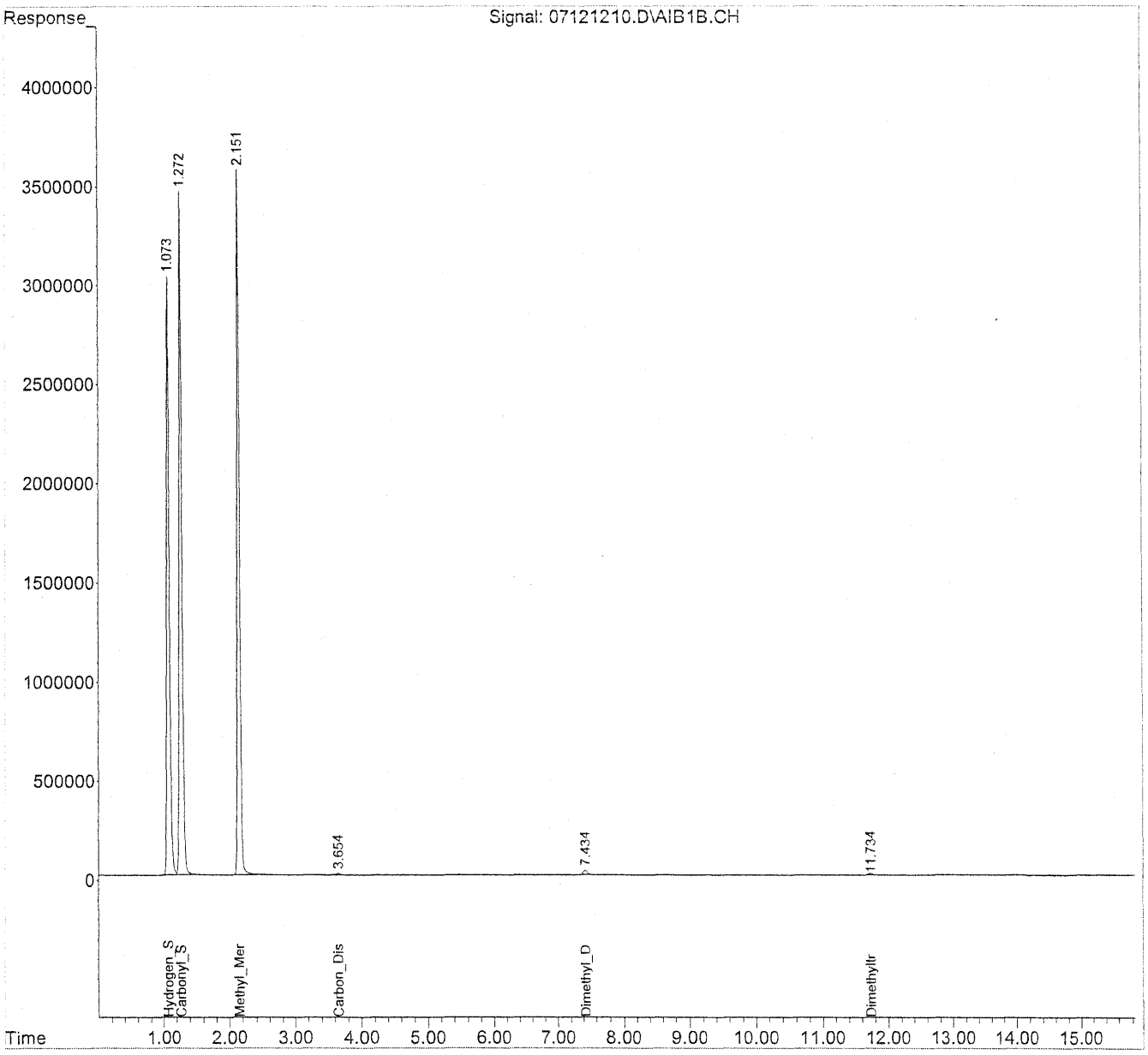
		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.064	19797302	639.028	ppb
2)	W	Carbonyl_Sulfide	1.267	23748535	538.989	ppb
3)	T	Methyl_Mercaptan	2.150	22359416	609.984	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	3.573f	77579	NoCal	ppb
6)	T	Carbon_Disulfide	3.573f	77579	NoCal	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	6.629	81737	NoCal	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121210.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:56 pm
Operator : WHH
Sample : s27-07111201 10000ppm
Misc : 1mll of s27-07111201
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:34:06 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:33:53 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121210.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 12:56 pm
Operator : WHH
Sample : s27-07111201 10000ppm
Misc : 1mll of s27-07111201
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:34:06 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:33:53 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

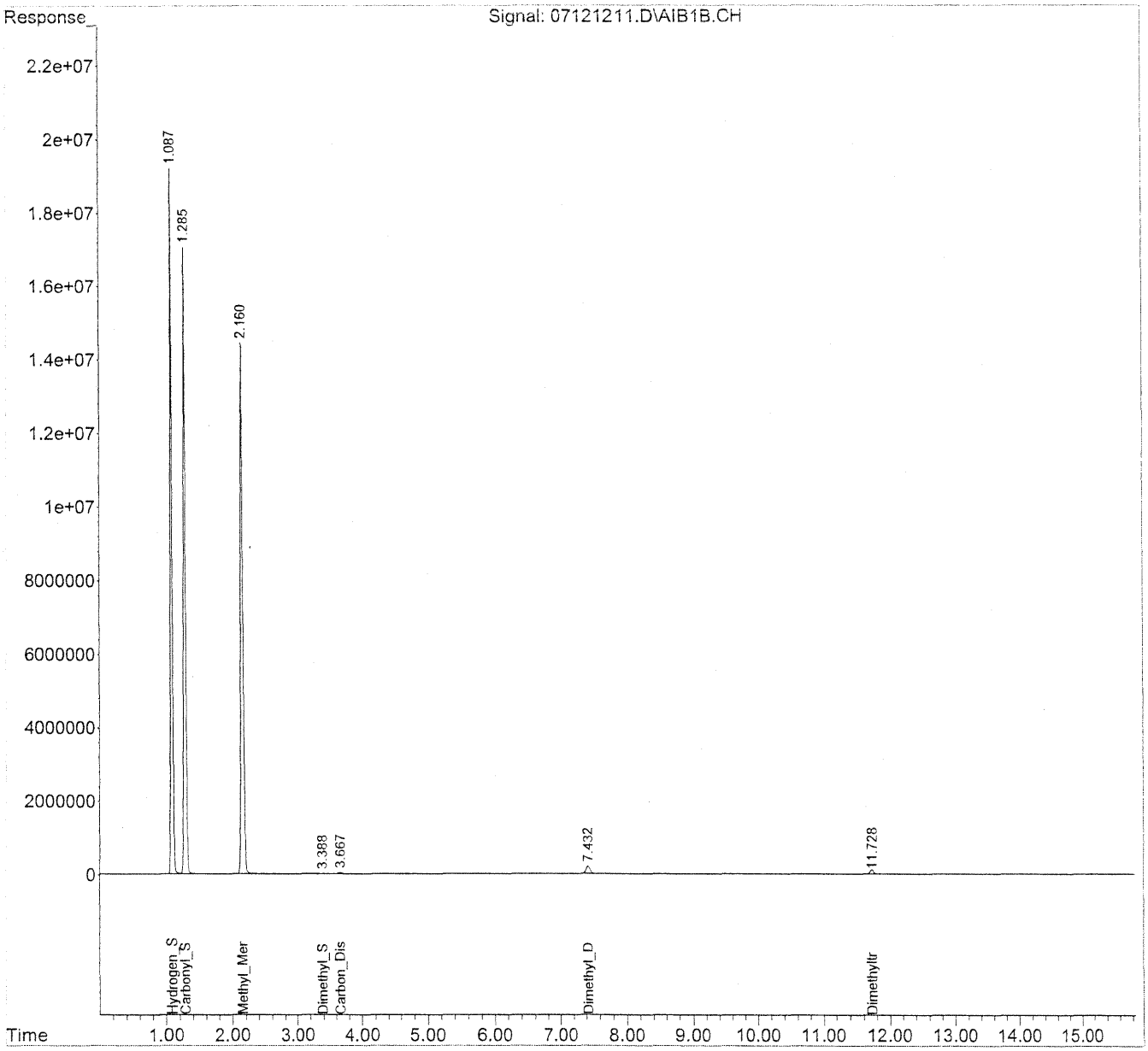
		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.074	88668402	3456.208	ppb
2)	W	Carbonyl_Sulfide	1.273	104342089	2899.294	ppb
3)	T	Methyl_Mercaptan	2.151	96411070	3165.906	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	3.655	307647	3743.011	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	7.434	997355	144.475	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	11.733f	312951	57.746	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121211.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 1:45 pm
Operator : WHH
Sample : s27-12051105 30000ppm
Misc : 30ul of s27-12051105
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:34:35 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:34:19 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121211.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 1:45 pm
Operator : WHH
Sample : s27-12051105 30000ppm
Misc : 30ul of s27-12051105
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:34:35 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:34:19 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

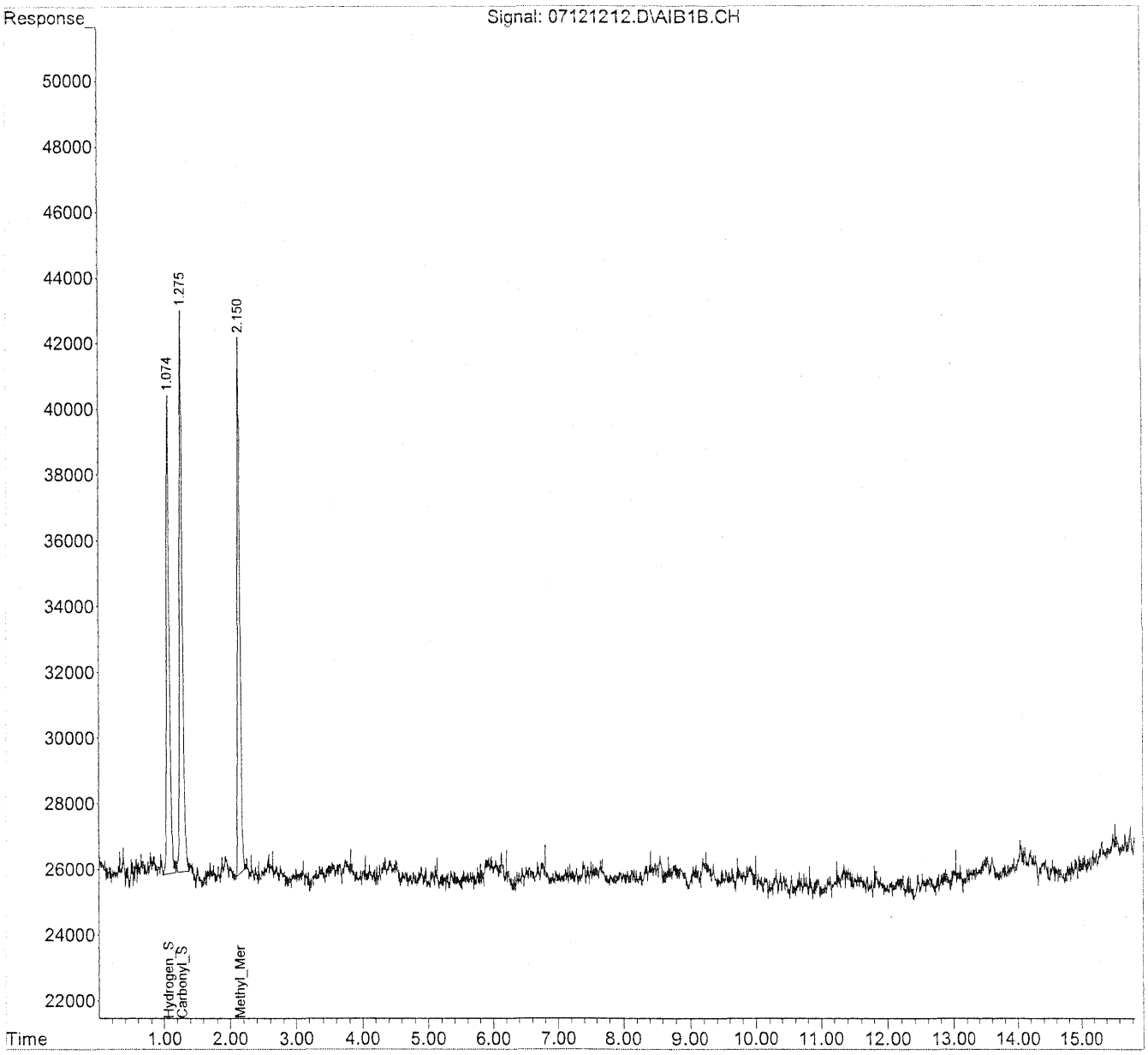
		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.088	357469107	16060.437	ppb
2)	W	Carbonyl_Sulfide	1.285	378435387	12263.057	ppb
3)	T	Methyl_Mercaptan	2.160	362115087	13713.766	ppb
4)	T	Ethyl_Mercaptan	3.133	6616	NoCal	ppb
5)	T	Dimethyl_Sulfide	3.388	99081	2410.967	ppb
6)	T	Carbon_Disulfide	3.667	1166444	15828.997	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	7.432	8718984	1865.958	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	11.729f	3932307	1078.502	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121212.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 2:15 pm
Operator : WHH
Sample : s27-07121202 50ppm
Misc : 1ml of s27-07121201
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:35:03 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:34:51 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121212.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 2:15 pm
Operator : WHH
Sample : s27-07121202 50ppm
Misc : 1ml of s27-07121202 7/13/12
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:35:03 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:34:51 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

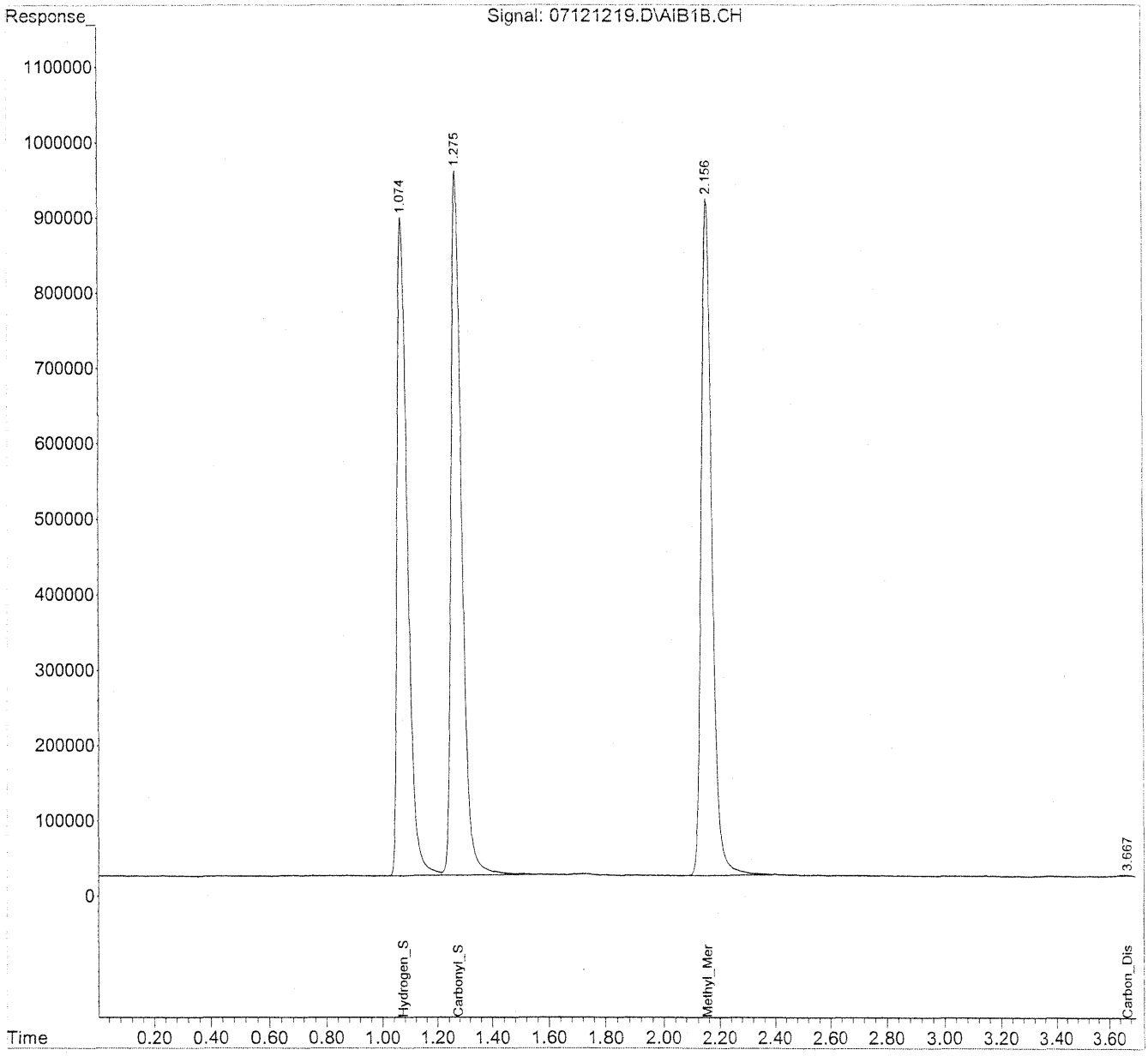
		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.075	447048	21.818	ppb
2)	W	Carbonyl_Sulfide	1.276	522721	18.802	ppb
3)	T	Methyl_Mercaptan	2.152	441745	18.303	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121219.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 4:04 pm
Operator : WHH
Sample : icv s27-07121303
Misc : 1ml of s27-07121201
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:49:31 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121219.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 4:04 pm
Operator : WHH
Sample : icv s27-07121303 2000ppb
Misc : 1~~ml of s27-07121201~~ 4/13/12
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:49:31 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

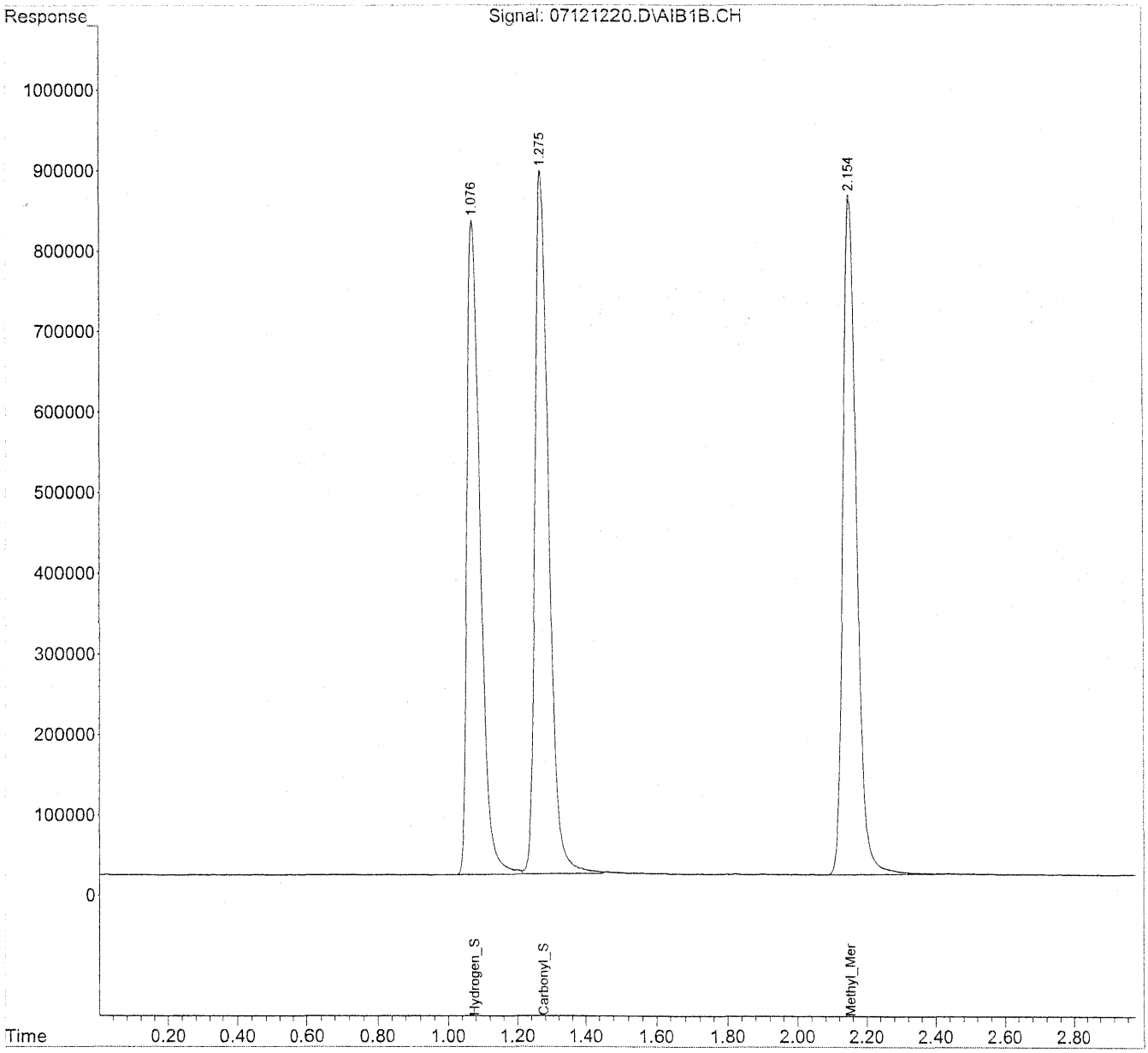
		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.075	23367598	2558.454	ppb
2)	W	Carbonyl_Sulfide	1.276	26292073	2325.769	ppb
3)	T	Methyl_Mercaptan	2.157	24652011	2343.385	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	3.667	28919	1.375	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121220.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 4:09 pm
Operator : WHH
Sample : icv s27-07121303
Misc : 1ml of s27-07121201
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:49:46 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\12\
Data File : 07121220.D
Signal(s) : AIB1B.CH
Acq On : 12 Jul 2012 4:09 pm
Operator : WHH
Sample : icv s27-07121303 2000ppb
Misc : 1~~ml of s27-07121201~~ 4/13/
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 12:49:46 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.077	21499646	2353.937	ppb
2)	W	Carbonyl_Sulfide	1.276	24385756	2157.138	ppb
3)	T	Methyl_Mercaptan	2.155	23219275	2207.191	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

COLUMBIA ANALYTICAL INC.

REPORT SUMMARY

Method : 20 Sulfurs Initial Calibration

Client & Job# : Kennedy/Jenks Consultants, Incorporated / K120

Analyst : MC

Gas Constant : 24.46

Printed : 7/28/2012

Instrument : GC#13, SCD#13

Date Acquired : 7/28/2012

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SAMPLE RESULT SUMMARIES (ug/L)

Compounds	MDL	RL	ppbv	% Diff	ug/L		ug/L		ug/L	ug/L	ug/L	ug/L	ug/L
Sample Information :	ug/L	ug/L	std 2000ppb s27-06131201		lcs 2000ppb s27-	%R	lcsD 2000ppb s27-	% R	mb 1ml	7165-001 1ml(10->300)	7165-003 1ml(10->300)	7165-004 1ml(10->300)	7165-006 1ml(10->300)
Inj. Vol. (ml)	1.00	1.00	0.20		0.20		0.20		1.00	1.00	1.00	1.00	1.00
Dilution	1.0	1.0	1.0		1.0		1.0		1.0	1.0	1.0	1.0	1.0
Sample Amount (ml, g)	10.0	10.0	1.000		10.00		10.00		10.00	10.000	10.000	10.000	10.000
Desorp./Head space Vol(L)	0.30	0.30	1.00		0.30		0.30		0.30	0.30	0.30	0.30	0.30
Hydrogen_Sulfide	0.226	0.836	12081.75	19.8%	465.5	110.1%	501.4	118.6%	ND	ND	ND	ND	6.333
Carbonyl_Sulfide	1.474	1.474	11231.85	9.8%	823.9	112.6%	921.0	125.9%	ND	ND	ND	ND	ND
Methyl_Mercaptan	0.342	1.180	11228.05	19.0%	622.5	109.3%	702.6	123.4%	ND	ND	ND	ND	ND
Ethyl_Mercaptan	0.442	1.524							ND	ND	ND	ND	ND
Dimethyl_Sulfide	0.442	1.524							ND	ND	ND	ND	ND
Carbon_Disulfide	0.934	0.934							ND	ND	ND	ND	ND
2-Propyl_Mercaptan	0.542	1.868							ND	ND	ND	ND	ND
t-Butyl_Mercaptan(2-Me-2-	0.642	2.212			Spike Amount				ND	~~40.537~~ NA	~~5.906~~ NA	~~3.448~~ NA	~~2.202~~ NA j
Propyl_Mercaptan	0.542	1.868			Hydrogen_Sulfide		422.59		ND	~~18.208~~ NA	~~2.552~~ NA	~~1.544~~ j NA	~~0.999~~ j
Ethtyl_Methyl_Sulfide	0.542	1.868			Carbonyl_Sulfide		731.60		ND	~~18.208~~ NA	~~2.552~~ NA	~~1.544~~ j NA	~~0.999~~ j
Thiophene	0.599	2.064			Methyl_Mercaptan		569.41		ND	ND	ND	ND	ND
i-Butyl_Mercaptan(2-Me-1-	0.642	2.212							ND	ND	ND	ND	ND
Diethyl_Sulfide	0.642	2.212							ND	ND	ND	ND	ND
n-Butyl_Mercaptan	0.642	2.212							ND	ND	ND	ND	ND
Dimethyl_Disulfide	0.335	1.155							ND	ND	ND	ND	ND
2-Methyl_Thiophene	0.698	2.408					%RPD		ND	ND	ND	ND	ND
3-Methyl_Thiophene	0.698	2.408					7.4%		ND	ND	ND	ND	ND
Tetrahydrothiophene	0.627	2.163					11.1%		ND	ND	ND	ND	ND
2,5-Dimethyl_Thiophene	0.798	2.752					12.1%		ND	ND	ND	ND	ND
2-Ethyl_Thiophene	0.798	2.752							ND	ND	ND	ND	ND
Diethyl_Disulfide	0.435	1.500							ND	ND	ND	ND	ND
Methyltrisulfide	0.449	0.775							ND	ND	ND	ND	ND

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7/28/12

COLUMBIA ANALYTICAL INC.

REPORT SUMMARY
Method : 20 Sulfurs Initial Calibration
ent & Job# : Kennedy/Jenks Consultants, Incorporated / K1207165
Analyst : MC

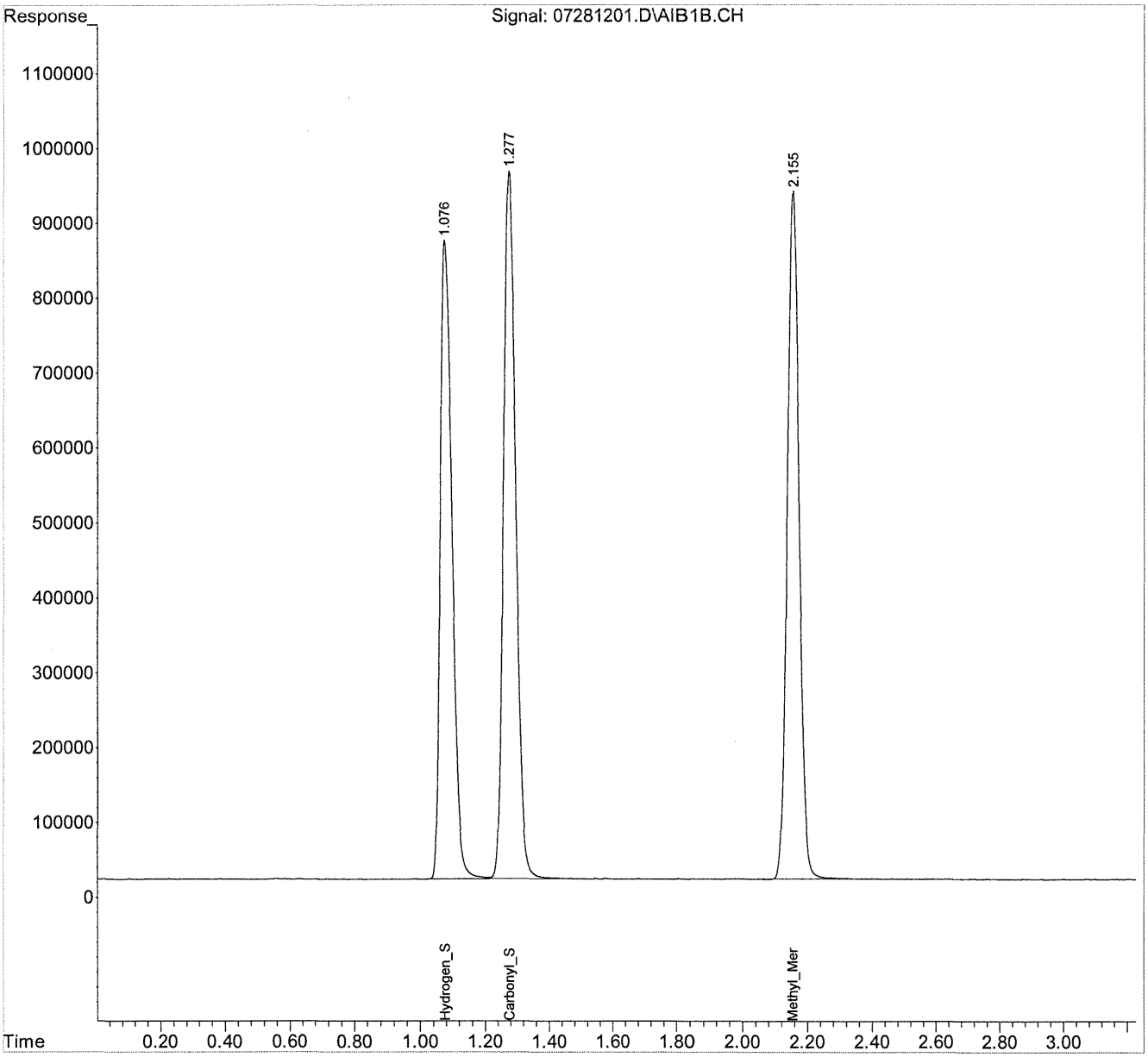
Compounds	MDL	RL	ug/L	ug/L	ug/L	ug/L	ppbv	% Diff
Sample Information :	ug/L	ug/L	7165-007 1ml(10->300)	7165-008 1ml(10->300)	blank 1ml purged		std 2000ppb s27-06131201	
Inj. Vol. (ml)	1.00	1.00	1.00	1.00	1.00		0.20	
Dilution	1.0	1.0	1.0	1.0	1.0		1.0	
Sample Amount (ml, g)	10.0	10.0	10.000	10.000	10.000		1.0	
Desorp./Head space Vol(L)	0.30	0.30	0.30	0.30	0.30		1.00	
Hydrogen_Sulfide	0.226	0.836	5.578	5.612	ND		10116.75	0.3%
Carbonyl_Sulfide	1.474	1.474	ND	ND	ND		9690.00	5.3%
Methyl_Mercaptan	0.342	1.180	ND	ND	ND		9916.90	5.1%
Ethyl_Mercaptan	0.442	1.524	ND	ND	ND			
Dimethyl_Sulfide	0.442	1.524	ND	ND	ND			
Carbon_Disulfide	0.934	0.934	ND	ND	ND			
2-Propyl_Mercaptan	0.542	1.868	ND	ND	ND			
t-Butyl_Mercaptan(2-Me-2-	0.642	2.212	ND	ND	ND			
Propyl_Mercaptan	0.542	1.868	ND	ND	ND			
Ethtyl_Methyl_Sulfide	0.542	1.868	ND	ND	ND			
Thiophene	0.599	2.064	ND	ND	ND			
i-Butyl_Mercaptan(2-Me-1-	0.642	2.212	ND	ND	ND			
Diethyl_Sulfide	0.642	2.212	ND	ND	ND			
n-Butyl_Mercaptan	0.642	2.212	ND	ND	ND			
Dimethyl_Disulfide	0.335	1.155	ND	ND	ND			
2-Methyl_Thiophene	0.698	2.408	ND	ND	ND			
3-Methyl_Thiophene	0.698	2.408	ND	ND	ND			
Tetrahydrothiophene	0.627	2.163	ND	ND	ND			
2,5-Dimethyl_Thiophene	0.798	2.752	ND	ND	ND			
2-Ethyl_Thiophene	0.798	2.752	ND	ND	ND			
Diethyl_Disulfide	0.435	1.500	ND	ND	ND			
Methyltrisulfide	0.449	0.775	ND	ND	ND			

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281201.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 7:41
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 15:43:17 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281201.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 7:41
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 15:43:17 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.077	22069726	2416.353	ppb
2)	W	Carbonyl_Sulfide	1.278	25394496	2246.370	ppb
3)	T	Methyl_Mercaptan	2.156	23623454	2245.612	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

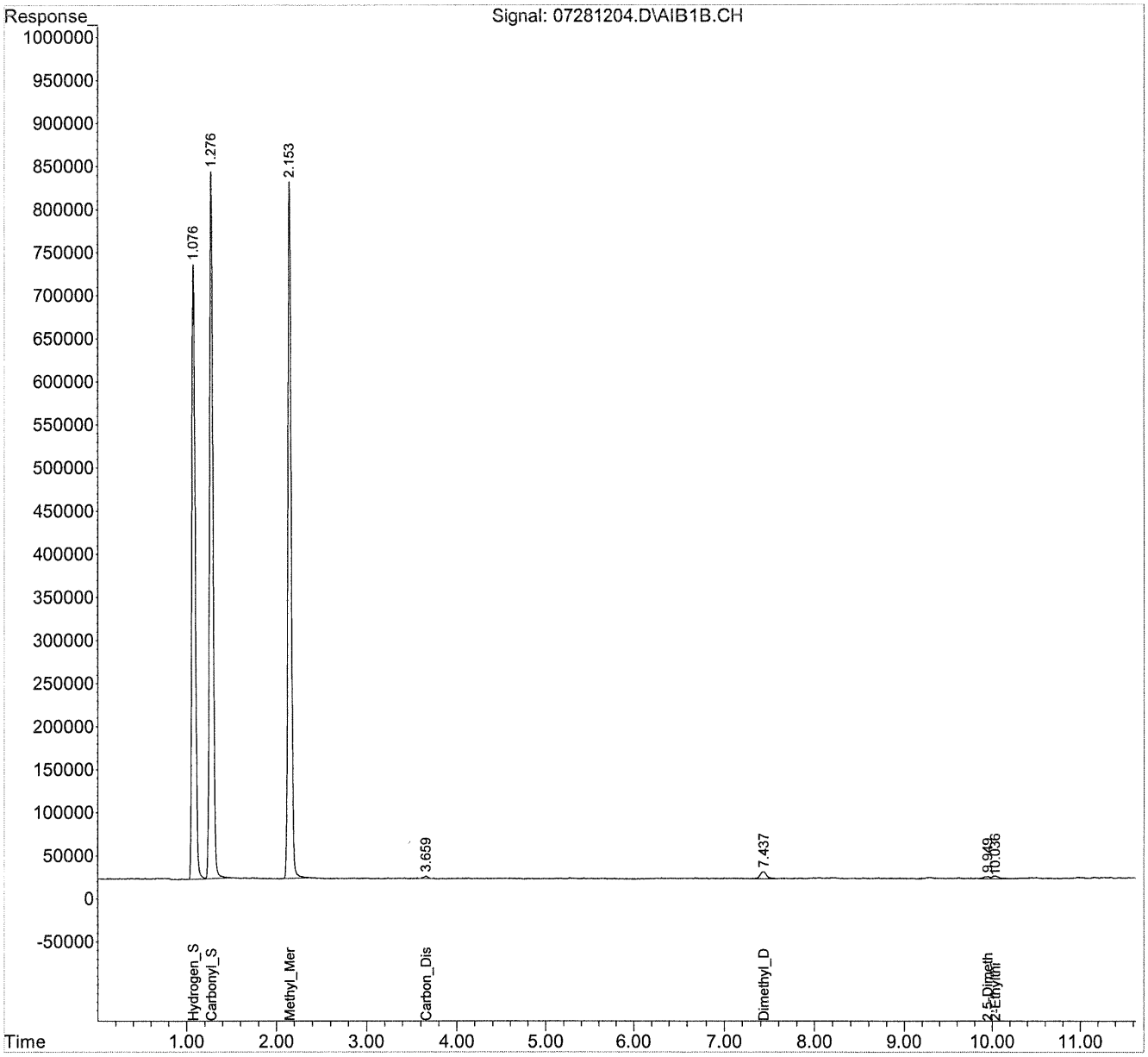
ML
7/28/12

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281204.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 8:32
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 15:44:09 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281204.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 8:32
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 15:44:09 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.077	18941710	2073.876	ppb
2)	W	Carbonyl_Sulfide	1.277	22183196	1962.302	ppb
3)	T	Methyl_Mercaptan	2.154	21141867	2009.716	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	3.660	95191	4.524	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	7.436	419585	19.943	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	9.948	108739	10.337	ppb
20)	T	2-Ethylthiophene	10.037	167400	15.913	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

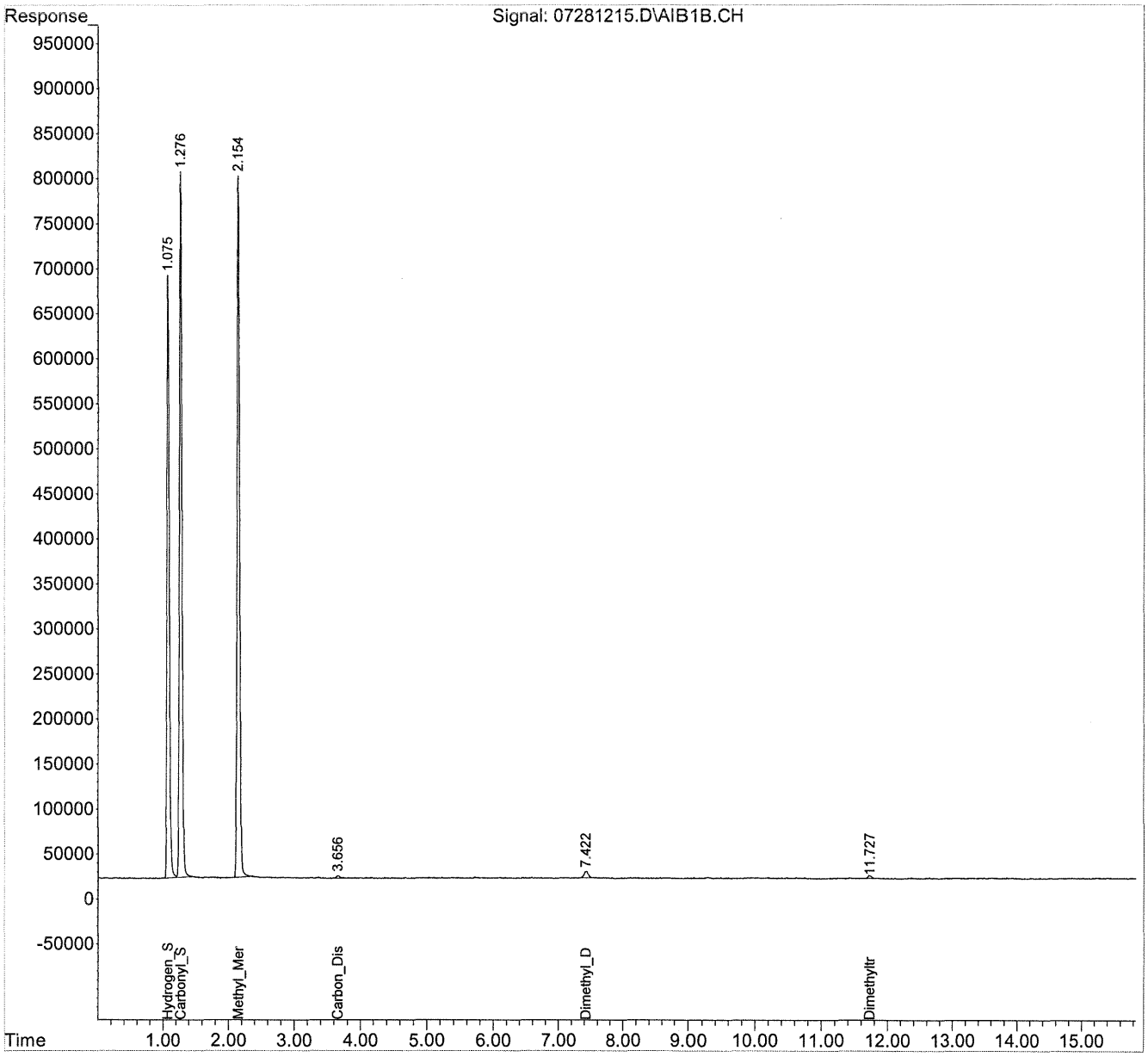
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281215.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 14:54
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 15:15:01 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281215.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 14:54
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 15:15:01 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.076	17588050	1925.667	ppb
2)	W	Carbonyl_Sulfide	1.277	21203180	1875.611	ppb
3)	T	Methyl_Mercaptan	2.155	20393912	1938.616	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	3.660	102362	4.865	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	7.423	318111	15.120	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	11.727f	117327	3.718	ppb

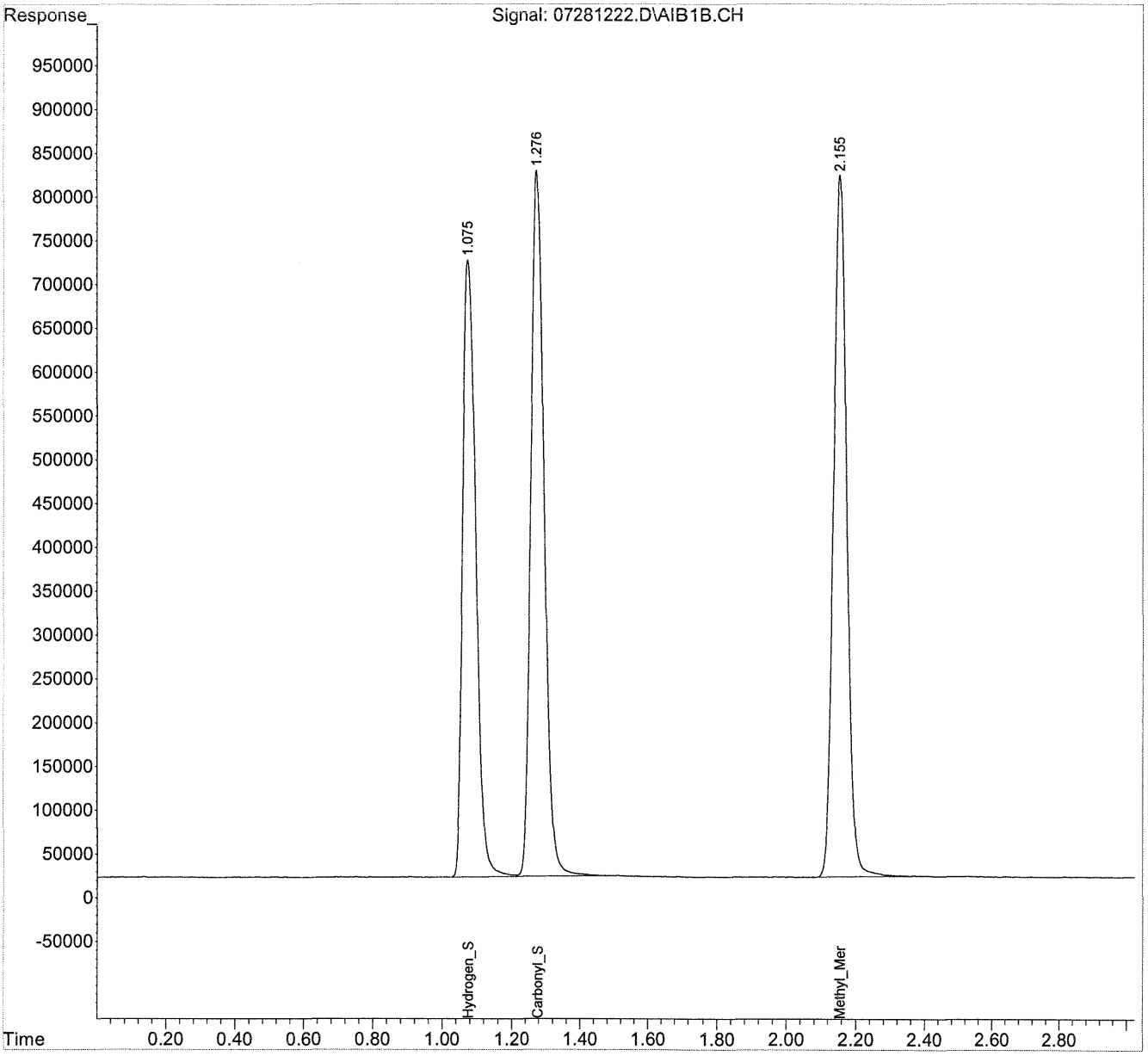
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281222.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 16:25
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:29:00 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC13\DATA\SCD\2012_07\28\
Data File : 07281222.D
Signal(s) : AIB1B.CH
Acq On : 28 Jul 2012 16:25
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 28 16:29:00 2012
Quant Method : J:\GC13\METHODS\GC13071212A.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Fri Jul 13 12:44:45 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.076	18480223	2023.349	ppb
2)	W	Carbonyl_Sulfide	1.277	21908457	1937.999	ppb
3)	T	Methyl_Mercaptan	2.155	20864843	1983.382	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Dimethyltrisulfide	0.000	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

COLUMBIA ANALYTICAL INC.

REPORT SUMMARY

Method : 20 Sulfurs Initial Calibration

Client & Job# : Kennedy/Jenks Consultants, Incorporated / K120

Analyst : MC

Gas Constant : 24.46

Printed : 8/3/2012

Instrument : GC#22, SCD#22

Date Acquired : 3 Aug 2012 12:02

Clie

SAMPLE RESULT SUMMARIES (ug/L)

Compounds	MDL	RL	ppbv	% Diff	ug/L		ug/L		ug/L	ug/L	ug/L	ug/L	ug/L
Sample Information :	ug/L	ug/L	std 2000ppb s27-06131201		lcs 2000ppb s27-	%R	lcsd 2000ppb s27-	% R	mb 1ml	7165-010 1ml(10->300)	blank 1ml purged		
Inj. Vol. (ml)	1.00	1.00	0.20		0.20		0.20		1.00	1.00	1.00		
Dilution	1.0	1.0	1.0		1.0		1.0		1.0	1.0	1.0		
Sample Amount (ml, g)	10.0	10.0	1.000		10.00		10.00		10.00	10.000	10.000		
Desorp./Head space Vol(L)	0.30	0.30	1.00		0.30		0.30		0.30	0.30	0.30		
Hydrogen_Sulfide	0.226	0.836	9052.00	10.3%	371.1	87.8%	418.8	99.1%	ND	ND	ND		
Carbonyl_Sulfide	1.474	1.474	8541.70	16.5%	719.7	98.4%	780.4	106.7%	ND	ND	ND		
Methyl_Mercaptan	0.342	1.180	9093.85	3.7%	498.5	87.5%	586.3	103.0%	ND	1.318	ND		
Ethyl_Mercaptan	0.442	1.524							ND	ND	ND		
Dimethyl_Sulfide	0.442	1.524							ND	ND	ND		
Carbon_Disulfide	0.934	0.934							ND	ND	ND		
2-Propyl_Mercaptan	0.542	1.868							ND	ND	ND		
t-Butyl_Mercaptan(2-Me-2-	0.642	2.212			Spike Amount				ND	ND	ND		
Propyl_Mercaptan	0.542	1.868			Hydrogen_Sulfide		422.59		ND	ND	ND		
Ethtyl_Methyl_Sulfide	0.542	1.868			Carbonyl_Sulfide		731.60		ND	ND	ND		
Thiophene	0.599	2.064			Methyl_Mercaptan		569.41		ND	ND	ND		
i-Butyl_Mercaptan(2-Me-1-	0.642	2.212							ND	ND	ND		
Diethyl_Sulfide	0.642	2.212							ND	ND	ND		
n-Butyl_Mercaptan	0.642	2.212							ND	ND	ND		
Dimethyl_Disulfide	0.335	1.155							ND	ND	ND		
2-Methyl_Thiophene	0.698	2.408					%RPD		ND	ND	ND		
3-Methyl_Thiophene	0.698	2.408					12.1%		ND	ND	ND		
Tetrahydrothiophene	0.627	2.163					8.1%		ND	ND	ND		
2,5-Dimethyl_Thiophene	0.798	2.752					16.2%		ND	ND	ND		
2-Ethyl_Thiophene	0.798	2.752							ND	ND	ND		
Diethyl_Disulfide	0.435	1.500							ND	ND	ND		
Methyltrisulfide	0.449	0.775							ND	ND	ND		

MC
8/3/12

COLUMBIA ANALYTICAL INC.

REPORT SUMMARY

Method : 20 Sulfurs Initial Calibration

ent & Job# : Kennedy/Jenks Consultants, Incor

Analyst : MC

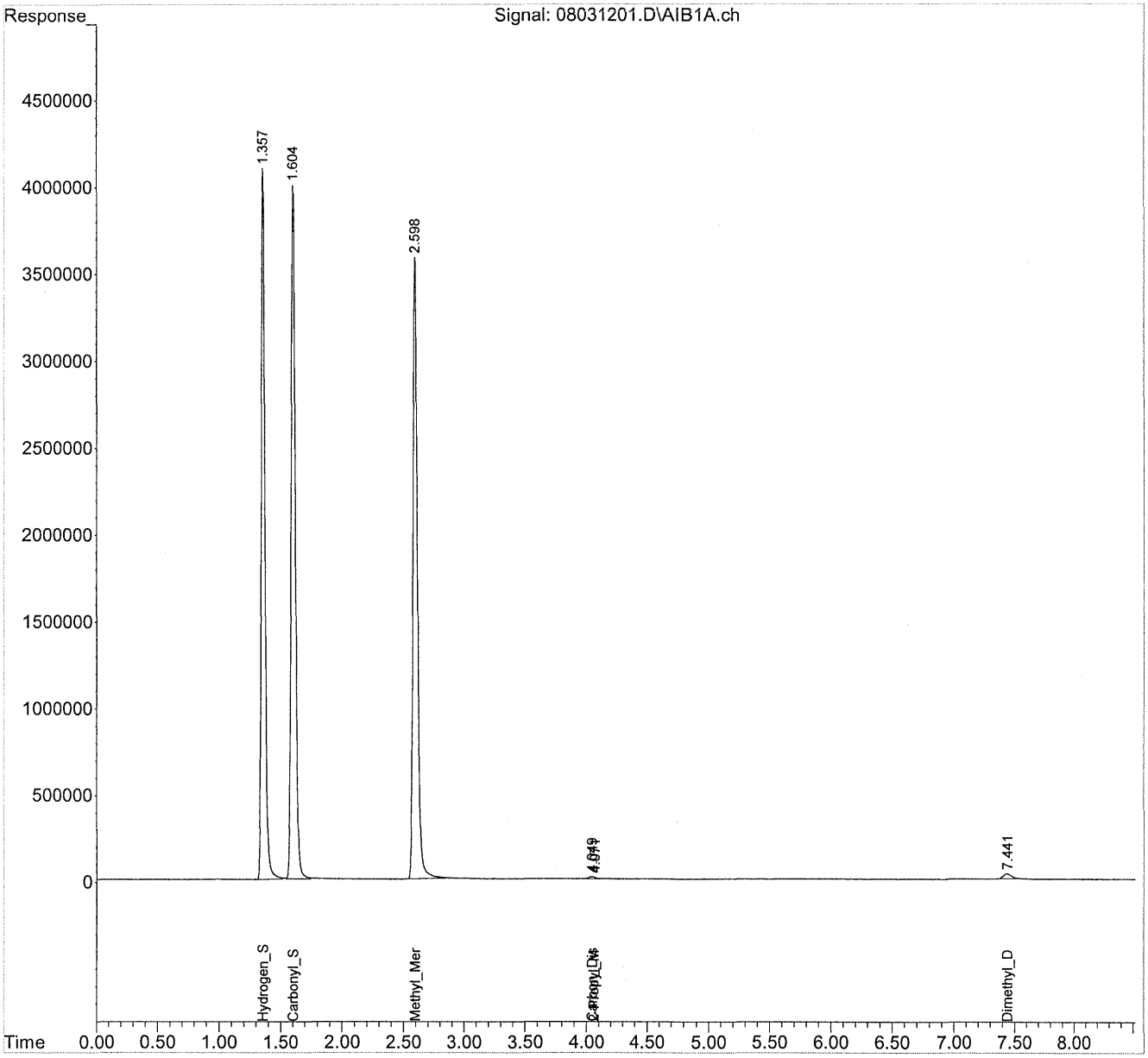
Compounds	MDL	RL	ug/L	ug/L	ppbv	% Diff
Sample Information :	ug/L	ug/L			std 2000ppb s27-06131201	
Inj. Vol. (ml)	1.00	1.00			0.20	
Dilution	1.0	1.0			1.0	
Sample Amount (ml, g)	10.0	10.0			1.0	
Desorp./Head space Vol(L)	0.30	0.30			1.00	
Hydrogen_Sulfide	0.226	0.836			10396.25	3.1%
Carbonyl_Sulfide	1.474	1.474			10139.20	0.9%
Methyl_Mercaptan	0.342	1.180			10472.55	11.0%
Ethyl_Mercaptan	0.442	1.524				
Dimethyl_Sulfide	0.442	1.524				
Carbon_Disulfide	0.934	0.934				
2-Propyl_Mercaptan	0.542	1.868				
t-Butyl_Mercaptan(2-Me-2-	0.642	2.212				
Propyl_Mercaptan	0.542	1.868				
Ethtyl_Methyl_Sulfide	0.542	1.868				
Thiophene	0.599	2.064				
i-Butyl_Mercaptan(2-Me-1-	0.642	2.212				
Diethyl_Sulfide	0.642	2.212				
n-Butyl_Mercaptan	0.642	2.212				
Dimethyl_Disulfide	0.335	1.155				
2-Methyl_Thiophene	0.698	2.408				
3-Methyl_Thiophene	0.698	2.408				
Tetrahydrothiophene	0.627	2.163				
2,5-Dimethyl_Thiophene	0.798	2.752				
2-Ethyl_Thiophene	0.798	2.752				
Diethyl_Disulfide	0.435	1.500				
Methyltrisulfide	0.449	0.775				

Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031201.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 7:10
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 07:19:39 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031201.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 7:10
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 07:19:39 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.358	84592420	1810.402	ppb
2)	W	Carbonyl_Sulfide	1.605	96762559	1708.343	ppb
3)	T	Methyl_Mercaptan	2.599	90373148	1818.766	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	4.049	345145	3.473	ppb
7)	T	2-Propyl_Mercaptan	4.071f	103981	2.093	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	7.442	1421750	14.306	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Methyltrisulfide	0.000	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

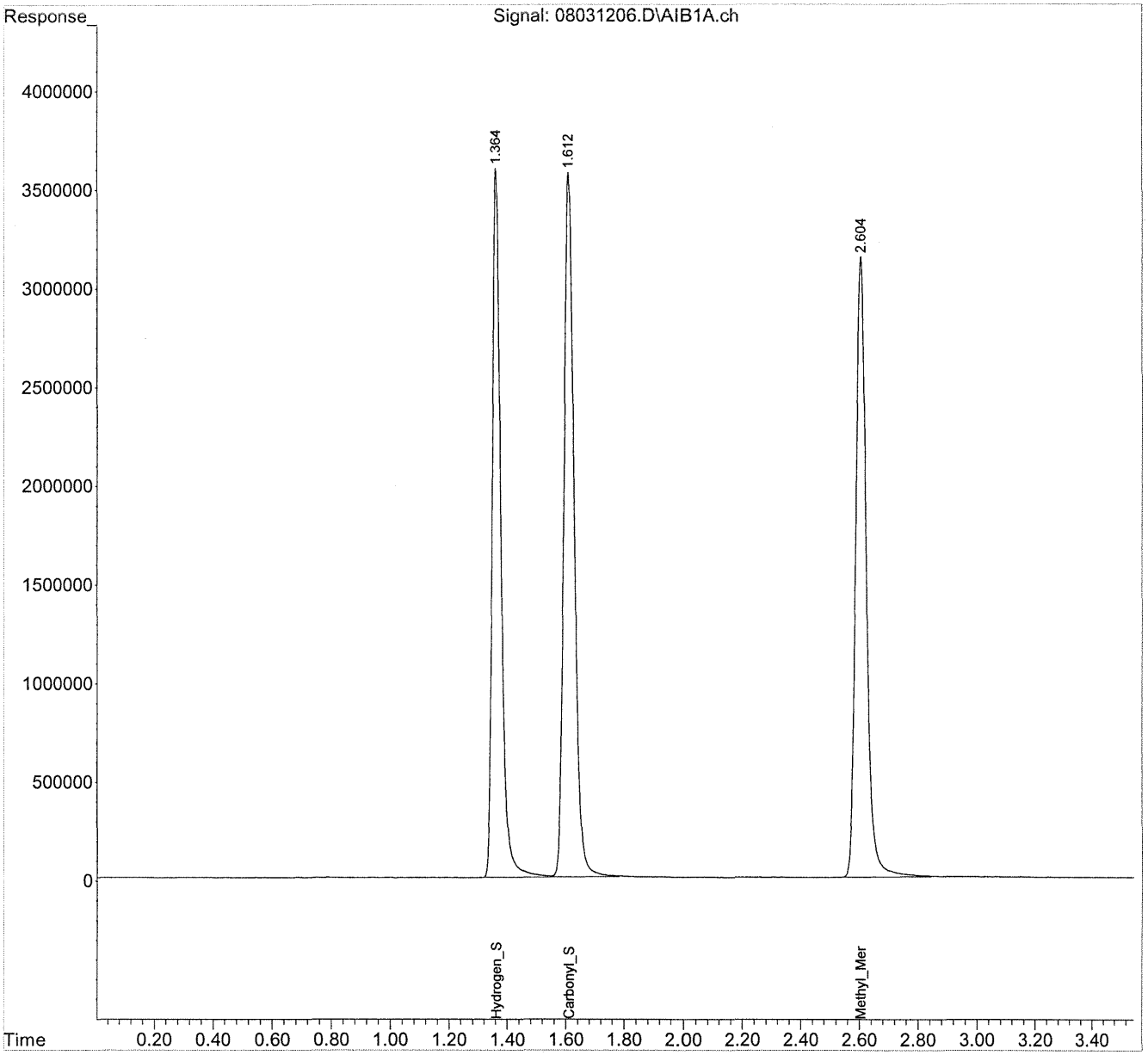
MC
8/31/12

Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031206.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 8:51
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 08:55:59 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031206.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 8:51
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 08:55:59 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.365	75141280	1608.133	ppb
2)	W	Carbonyl_Sulfide	1.613	86346019	1524.439	ppb
3)	T	Methyl_Mercaptan	2.605	79177961	1593.462	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	0.000	0	N.D.	ppb
7)	T	2-Propyl_Mercaptan	0.000	0	N.D.	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	0.000	0	N.D.	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Methyltrisulfide	0.000	0	N.D.	ppb

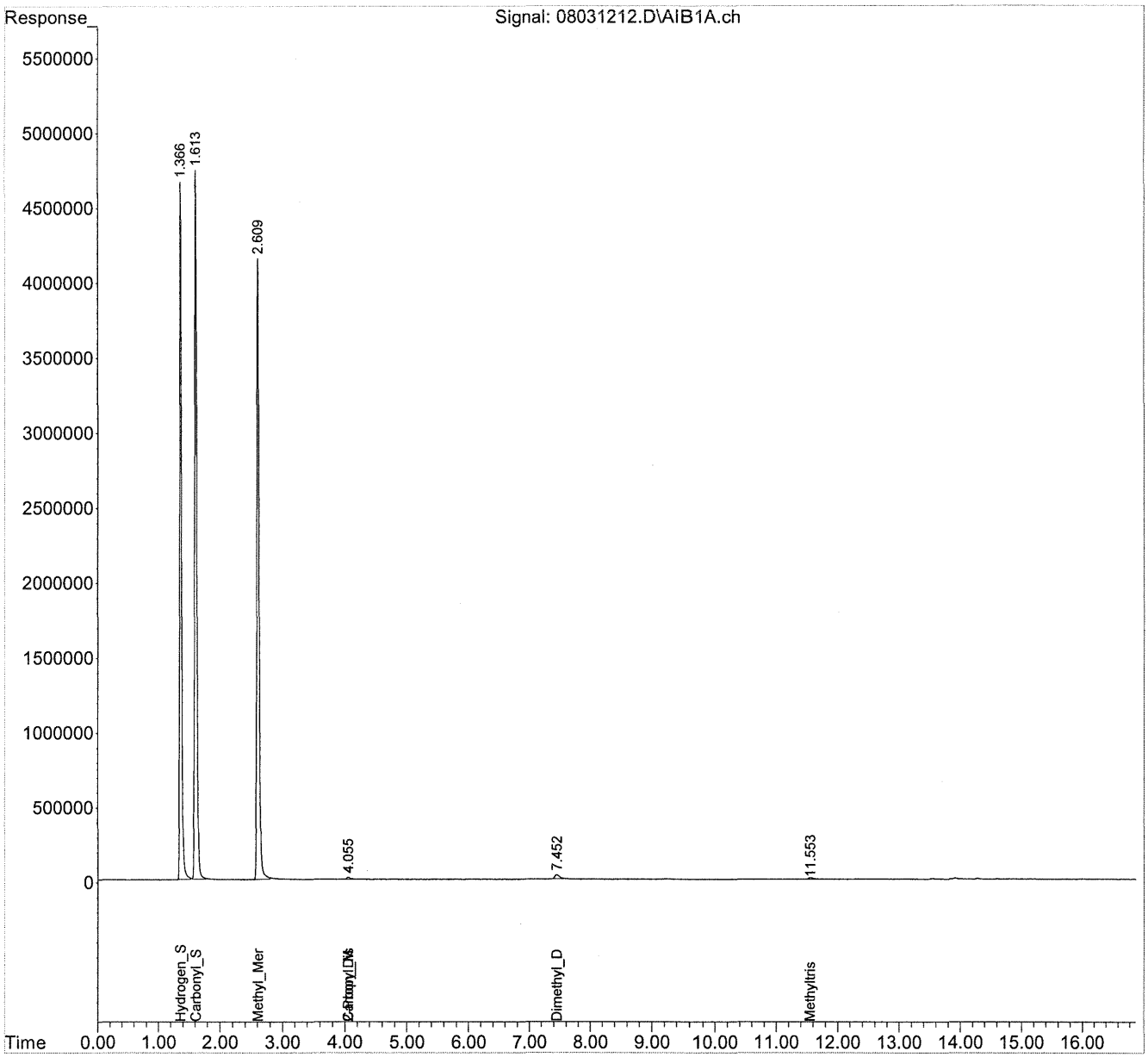
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031212.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 12:02
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 12:24:11 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : J:\GC22\DATA\SCD\2012_08\03\
Data File : 08031212.D
Signal(s) : AIB1A.ch
Acq On : 3 Aug 2012 12:02
Operator : WHH
Sample : std 2000ppb s27-06131201
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 03 12:24:11 2012
Quant Method : J:\GC22\METHODS\GC22091311.M
Quant Title : 20 Sulfurs Initial Calibration
QLast Update : Tue Sep 13 15:10:19 2011
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units
Target Compounds						
1)	Z	Hydrogen_Sulfide	1.366	97154478	2079.248	ppb
2)	W	Carbonyl_Sulfide	1.614	114859515	2027.844	ppb
3)	T	Methyl_Mercaptan	2.610	104074449	2094.506	ppb
4)	T	Ethyl_Mercaptan	0.000	0	N.D.	ppb
5)	T	Dimethyl_Sulfide	0.000	0	N.D.	ppb
6)	T	Carbon_Disulfide	4.055	450847	4.537	ppb
7)	T	2-Propyl_Mercaptan	4.055f	450847	9.073	ppb
8)	T	t-Butyl_Mercaptan	0.000	0	N.D.	ppb
9)	T	Propyl_Mercaptan	0.000	0	N.D.	ppb
10)	T	Ethyl_Methyl_Sulfide	0.000	0	N.D.	ppb
11)	T	Thiophene	0.000	0	N.D.	ppb
12)	T	i-Butyl_Mercaptan	0.000	0	N.D.	ppb
13)	T	Diethyl_Sulfide	0.000	0	N.D.	ppb
14)	T	n-Butyl_Mercaptan	0.000	0	N.D.	ppb
15)	T	Dimethyl_Disulfide	7.452	1514690	15.242	ppb
16)	T	2-Methylthiophene	0.000	0	N.D.	ppb
17)	T	3-Methylthiophene	0.000	0	N.D.	ppb
18)	T	Tetrahydrothiophene	0.000	0	N.D.	ppb
19)	T	2,5-Dimethylthiophene	0.000	0	N.D.	ppb
20)	T	2-Ethylthiophene	0.000	0	N.D.	ppb
21)	T	Diethyl_Disulfide	0.000	0	N.D.	ppb
22)	T	Methyltrisulfide	11.554	538067	3.610	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Columbia Analytical Services

SAMPLE RUN LOG

ID: Agilent 7890A/ GC22

DATA SYSTEM : HP Chemstation

INJECTOR : PACKED COLUMN

DATE : 9 / 13 / 2011

Refer to appropriate SOP for instrument parameters.

TYPE OF ANALYSIS :

SULFUR - ☐ H2O ☑ SCAQMD 307M/ ASTM D5504

GC METHOD : _____

DATA PATHWAY : J:\GC22\DATA\SCD\ 2011-09/13

METHOD FILE NAME : J:\GC22\METHODS\ GC22092210 + GC22091311 .M

	DATA FILE HEADER INFO	CLIENT	ANALYST
01	Prime STD 200ppb		
02	~~STD 2000ppb~~ RT|LCS 2500ppb		
03	MB 1ml M2		
04	STD 200ppb		
05	↓		
06	3431-008 1ml	Screen	
07	-010	↓	
08	-012	↓	
09	STD 200ppb		
10	↓		
11	STD 5ppb S27-09131107		
12	STD 50ppb S27-09131107		
13	STD 500ppb S27-09131103		
14	STD 2000ppb S27-09131103		
15	STD 10000ppb ↓		
16	STD 25000ppb S27-12061001		
17	icv 2000ppb S27-09131108		
18	icv 200ppb S27-09131108		
19	MB 1ml M2		
20	STD 200ppb		
21			
22			
23			
24			
25			

	DATA FILE HEADER INFO	CLIENT	ANALYST
26			
27			
28			
29			
30			
31			
32			
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49			
50			

Injection Log

Directory: j:\gc13\data\scd\2012_07\12

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	07121201.d	1.	Prime		12 Jul 12 10:40
2	2	07121202.d	1.	Prime		12 Jul 12 11:01
3	3	07121203.d	1.	Prime		12 Jul 12 11:09
4	4	07121204.d	1.	Prime		12 Jul 12 11:24
5	5	07121205.d	1.	s27-07121201 5ppm	100ul of 200xdilution of s27-07111201	12 Jul 12 11:53
6	6	07121206.d	1.	s27-07121201 5ppm	100ul of 200xdilution of s27-07111201	12 Jul 12 12:01
7	7	07121207.d	1.	s27-07121201 50ppm	1ml of 200xdilution of s27-07111201	12 Jul 12 12:05
8	8	07121208.d	1.	s27-07111201 500ppm	50ul of s27-07111201	12 Jul 12 12:17
9	9	07121209.d	1.	s27-07111201 2000ppm	200ul of s27-07111201	12 Jul 12 12:40
10	10	07121210.d	1.	s27-07111201 10000ppm	1mll of s27-07111201	12 Jul 12 12:56
11	11	07121211.d	1.	s27-12051105 30000ppm	30ul of s27-12051105	12 Jul 12 13:45
12	12	07121212.d	1.	s27-07121202 50ppm	1ml of s27-07121202	12 Jul 12 14:15
13	13	07121213.d	1.	MB 1ml	1ml of s27-07121201	12 Jul 12 14:36
14	14	07121214.d	1.	icv s27-07121303	1ml of s27-07121201	12 Jul 12 14:57
15	15	07121215.d	1.	icv s27-07121303	1ml of s27-07121201	12 Jul 12 15:25
16	16	07121216.d	1.	xmisinject		12 Jul 12 15:31
17	17	07121217.d	1.	icv s27-07121303	1ml of s27-07121201	12 Jul 12 15:57
18	18	07121218.d	1.	icv s27-07121303	1ml of s27-07121201	12 Jul 12 16:01
19	19	07121219.d	1.	icv s27-07121303	1ml of s27-07121201	12 Jul 12 16:04
20	20	07121220.d	1.	icv s27-07121303	1ml of s27-07121201	12 Jul 12 16:09
21	21	07121221.d	1.	std 2000ppb s27-06131201		12 Jul 12 16:13
22	22	07121222.d	1.	2804-001 1ml		12 Jul 12 16:30
23	23	07121223.d	1.	2804-002 1ml		12 Jul 12 16:38
24	20	07121224.d	1.	icvd s27-07121303	1ml of s27-07121201	12 Jul 12 17:07
25	21	07121225.d	1.	icvd s27-07121303	1ml of s27-07121201	12 Jul 12 17:27
26	22	07121226.d	1.	2813-003 1ml		12 Jul 12 17:41
27	23	07121227.d	1.	2813-004 1ml		12 Jul 12 17:59
28	24	07121228.d	1.	2813-015 1ml		12 Jul 12 18:15
29	25	07121229.d	1.	RT s27-11071103		12 Jul 12 18:36
30	27	07121231.d	1.	std		12 Jul 12 19:06

Columbia Analytical Services™

Now part of the ALS Group

SAMPLE RUN LOG

ID: Agilent 6890A/ GC13

DATA SYSTEM : HP Chemstation / *INJECTOR* : PACKED COLUMN *DATE* : 7 / 28 / 2012

TYPE OF ANALYSIS : SULFUR - ☐ H2O ☑ SCAQMD 307M/ ASTM D5504

Refer to appropriate SOP for instrument parameters.

DATA PATHWAY : J:\GC13\DATA\SCD\ Wa - 07/28

METHOD FILE NAME : J:\GC13\METHODS\ G-C 307HCLA .M

	DATA FILE HEADER INFO	CLIENT	ANALYST
01	Std 200ppb S2+ - 0613201		MC
02	RT/LCS 250 ppb S2+ - 1107201		
03	mb 1mL		
04	Std 200ppb S2+ - 0613201		
05	mss inject		
06	blank 1ml purged		
07	↓		
08			
09	mb 1ml N2		
10	blank 1mL purged		
11	LCS 200ppb S2+ 0728201 purged		
12	↓ LCSD 200ppb S2+ - 0728203 purged		
13	3028-001 1mL (10→300)		
14	3028-001 0.5 mL (10→300) purged		
15	Std 200ppb S2+ - 0613201		
16	7165-001 1mL (10→300)		
17	7165-003 1mL (10→300)		
18	7165-004 1mL (10→300)		
19	7165-006 1mL (10→300)		
20	7165-007 1mL (10→300)		
21	7165-005 1mL (10→300)		
22	Std 200 ppb S2+ - 0613201		
23			
24			
25			

	DATA FILE HEADER INFO	CLIENT	ANALYST
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Columbia Analytical Services™

Now part of the ALS Group

SAMPLE RUN LOG

ID: Agilent 7890A/ GC22

DATA SYSTEM: HP Chemstation

INJECTOR: PACKED COLUMN

DATE: 8 / 3 / 2012

TYPE OF ANALYSIS: SULFUR ☐ H2O ☑ SCAQMD 307M/ ASTM D5504

Refer to appropriate SOP for instrument parameters.

DATA PATHWAY: J:\GC22\DATA\SCD\ 2012 _ 08/03

METHOD FILE NAME: J:\GC22\METHODS\ GC22080201 .M

	DATA FILE HEADER INFO	CLIENT	ANALYST
01	Std 200ppb S27-0613201		MJL
02	XRT/LCS 2500ppb S27-0807/03		
03	RT/LCS 2500ppb S27-1107/03		
04	mb 1mL		
05	Std 200ppb S27-0613201		
06	↓		
07	blank 1mL purged		
08	LCS 200ppb S27-0801/202 purged		
09	LCSD 200ppb S27-0801/203 purged		
10	3140-001 1mL (10÷300) purged		
11	7105-010 1mL (10÷300) purged		
12	Std 200ppb S27-0613201		
13	3157-001 1mL (10÷300)		
14	3564-004 0.1mL 1÷300)		
15	3564-007 0.1mL (1÷300)		
16	3564-010 0.1mL (1÷300)		
17	Std 200ppb S27-0613201		
18	blank purged test		
19			
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ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

August 21, 2012

Report to:
Lisa Domenighini
Columbia Analytical Services
1317 S. 13th Ave.
Kelso, WA 98626

Bill to:
Lynda Huckestein
Columbia Analytical Services
1317 S. 13th Ave.
Kelso, WA 98626

cc: Columbia Analytical Services, Inc.

Project ID: K1207165
ACZ Project ID: L95902

Lisa Domenighini:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on July 27, 2012. This project has been assigned to ACZ's project number, L95902. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L95902. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after September 21, 2012. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Columbia Analytical Services

August 21, 2012

Project ID: K1207165
ACZ Project ID: L95902

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 3 drinking water samples from Columbia Analytical Services on July 27, 2012. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L95902. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for radiochemistry parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following anomaly required further explanation not provided by the Extended Qualifier Report:

1. For the Gross Alpha value flagged with an "N1", the duplicate failed due to uneven sediment distribution on the planchet. This causes a negative affect on our efficiency curve.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

RadioChemistry Analytical Results

Columbia Analytical Services
Project ID: K1207165
Sample ID: DW-1
Locator:

ACZ Sample ID: ***L95902-01***
Date Sampled: *07/25/12 11:30*
Date Received: *07/27/12*
Sample Matrix: *Drinking Water*

Gross Alpha & Beta — Prep Method:
M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Alpha	08/13/12 10:18		1.5	1.5	1.3	pCi/L	*	mla
Beta	08/13/12 10:18		2.7	1.8	2.6	pCi/L	*	mla

Radium 226 — Prep Method:
M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226	08/08/12 16:35		0.1	0.12	0.31	pCi/L	*	jjg

Radium 228 — Prep Method:
M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	08/17/12 13:41		0.24	0.24	0.58	pCi/L		thf

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

RadioChemistry Analytical Results

Columbia Analytical Services
Project ID: K1207165
Sample ID: DW-7
Locator:

ACZ Sample ID: ***L95902-02***
Date Sampled: *07/26/12 13:00*
Date Received: *07/27/12*
Sample Matrix: *Drinking Water*

Gross Alpha & Beta — Prep Method:
M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Alpha	08/13/12 10:19		6.1	2.6	1.4	pCi/L	*	mla
Beta	08/13/12 10:19		6.1	2.2	2.7	pCi/L	*	mla

Radium 226 — Prep Method:
M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226	08/08/12 16:36		0.29	0.09	0.17	pCi/L	*	jjg

Radium 228 — Prep Method:
M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	08/17/12 13:41		-0.2	0.21	0.7	pCi/L		thf

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

RadioChemistry Analytical Results

Columbia Analytical Services
Project ID: K1207165
Sample ID: DUP-1
Locator:

ACZ Sample ID: ***L95902-03***
Date Sampled: *07/26/12 12:00*
Date Received: *07/27/12*
Sample Matrix: *Drinking Water*

Gross Alpha & Beta — Prep Method:
M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Alpha	08/13/12 10:21		1.1	1.4	1.3	pCi/L	*	mla
Beta	08/13/12 10:21		4.3	2.1	2.6	pCi/L	*	mla

Radium 226 — Prep Method:
M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226	08/08/12 16:38		0.11	0.09	0.13	pCi/L	*	jjg

Radium 228 — Prep Method:
M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	08/17/12 13:41		0.13	0.24	0.6	pCi/L		thf

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Error(+/-)	Calculated sample specific uncertainty
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
LCL	Lower Control Limit, in % (except for LCSS, mg/Kg)
LLD	Calculated sample specific Lower Limit of Detection
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
RER	Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.
UCL	Upper Control Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

DUP	Sample Duplicate	MS/MSD	Matrix Spike/Matrix Spike Duplicate
LCSS	Laboratory Control Sample - Soil	PBS	Prep Blank - Soil
LCSW	Laboratory Control Sample - Water	PBW	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Matrix Spikes	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

H	Analysis exceeded method hold time.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Replicate Error Ratio (RER) accepted because sample concentrations are less than 10x the MDL.
U	No nuclides detected above the Lower Limit of Detection (LLD)
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
X	QC is out of control. See Case Narrative.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

Method Prefix Reference

M	EPA methodology, including those under SDWA, CWA, and RCRA
SM	Standard Methods for the Examination of Water and Wastewater, 19th edition (1995) & 20th edition (1998).
D	ASTM
RP	DOE
ESM	DOE/ESM

Comments

(1)	Solid matrices are reported on a dry weight basis.
(2)	Preparation method: "Method" indicates preparation defined in analytical method.
(3)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click: http://www.acz.com/public/extquallist.pdf

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Radiochemistry QC Summary

Columbia Analytical Services
Project ID: K1207165

ACZ Project ID: ***L95902***

Alpha

M900.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG328101																
WG327580PBW	PBW	08/13/12						1.2	1	0.95			1.9			
WG327580LCSW	LCSW	08/13/12	RC111214-2	81.06				87	8	1.4	107.3	83	133			
L95902-02DUP	DUP-RPD	08/13/12			6.1	2.6	1.4	-.23	1.1	1.3				215.7	20	N1
L95902-02DUP	DUP-RER	08/13/12			6.1	2.6	1.4	-.23	1.1	1.3				2.24	2	N1
L95902-02MS	MS	08/13/12	RC111214-2	54.04	6.1	2.6	1.4	45	5.7	1.4	72	83	133			M2

Beta

M900.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG328101																
WG327580PBW	PBW	08/13/12						2.9	1.9	2.6			5.2			
WG327580LCSW	LCSW	08/13/12	RC110517-11	100				88	6	3.8	88	70	129			
L95902-02DUP	DUP-RER	08/13/12			6.1	2.2	2.7	3.8	1.8	2.6				0.81	2	
L95902-02DUP	DUP-RPD	08/13/12			6.1	2.2	2.7	3.8	1.8	2.6				46.5	20	RG
L95995-01MS	MS	08/13/12	RC110517-11	66.67	3.8	1.9	2.7	62	4.2	2.6	87.3	70	129			

Radium 226

M903.1 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG327998																
WG327484PBW	PBW	08/08/12						.02	0.08	0.13			0.26			
WG327484LCSW	LCSW	08/08/12	RC120627-2	23.92				23	0.57	0.09	96.2	43	148			
L95752-01DUP	DUP-RPD	08/08/12			3.2	0.27	0.23	3.9	0.28	0.16				19.7	20	
L95902-02DUP	DUP-RER	08/08/12			0.29	0.09	0.17	.2	0.1	0.17				0.67	2	
L95902-02DUP	DUP-RPD	08/08/12			0.29	0.09	0.17	.2	0.1	0.17				36.7	20	RG
L95684-01MS	MS	08/08/12	RC120627-2	23.92	5.5	0.28	0.1	13	0.44	0.16	31.4	43	148			M2

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Radiochemistry QC Summary

Columbia Analytical Services
Project ID: K1207165

ACZ Project ID: ***L95902***

Radium 228 M904.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG328561																
WG328120PBW	PBW	08/17/12						.23	0.25	0.55			1.1			
WG328120LCSW1	LCSW	08/17/12	PCN39533	18.9				18	1.3	0.98	95.2	47	123			
L96047-02MS	MS	08/20/12	PCN39533	18.88	0.6	0.43	0.92	18	1.2	1.2	92.2	47	123			
WG328120LCSW2	LCSW	08/20/12						19	1.3	1.4		47	123			
L95931-05DUP	DUP-RPD	08/20/12			2.6	0.68	0.77	3	0.65	1.2				14.3	20	

Columbia Analytical Services ACZ Project ID: ***L95902***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L95902-01	WG328101	Alpha	M900.0	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M900.0	N1	See Case Narrative.
		Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG327998	Radium 226	M903.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L95902-02	WG328101	Alpha	M900.0	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M900.0	N1	See Case Narrative.
		Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG327998	Radium 226	M903.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L95902-03	WG328101	Alpha	M900.0	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M900.0	N1	See Case Narrative.
		Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG327998	Radium 226	M903.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Columbia Analytical Services
K1207165

ACZ Project ID:	L95902
Date Received:	07/27/2012 10:21
Received By:	ksj
Date Printed:	7/27/2012

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?			X
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody complete and accurate?		X	
The 'sampled by' field on the Chain of Custody was not completed.			
7) Were any changes made to the Chain of Custody prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits?	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/Hr)	Custody Seal Intact?
NA15842	2.7	14	Yes

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ALS Environmental Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

L95902

Project Number: K1207165
Project Manager: Lisa Domenighini

L95902 Chain of Custody

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	Radioact 900.0	Radium 226 903.1	Radium 228 904.0
K1207165-001	DW-9	Ø	Water	7/24/12	1345	ACZ			
K1207165-003	DW-2	Ø	Water	7/25/12	1130	ACZ			
K1207165-004	DW-5	Ø	Water	7/25/12	1130	ACZ			
K1207165-006	DW-1	5	Water	7/25/12	1130	ACZ	✓	✓	✓
K1207165-007	DW-7	5	Water	7/26/12	1300	ACZ	✓	✓	✓
K1207165-008	Dup-1	5	Water	7/26/12	1200	ACZ	✓	✓	✓

Test Comments

Radioact - 900.0 K1207165-001,3,4,6,7,8 Gross Alpha,Beta,Radium 226 and 228

Folder Comments:

Use Baseline for Performance Testing Samples

Special Instructions/Comments

Please provide the electronic(PDF and EDD) report to the following e-mail address:
kelso_data@caslab.com

Turnaround Requirements

____ RUSH (Surcharges Apply)

PLEASE CIRCLE WORK DAYS

1 2 3 4 5

____ STANDARD

Requested FAX Date: _____

Requested Report Date: 08/10/12

Report Requirements

____ I. Results Only

____ II. Results + QC Summaries

____ III. Results + QC and Calibration Summaries

____ IV. Data Validation Report with Raw Data

PQL/MDL/I ___N

EDD ___Y

Invoice Information

PO# K1207165

Bill to

Relinquished By: [signature] 415 7/26/12 1530 Received By: [signature] Airbill Number:

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

August 13, 2012

Report to:
Lisa Domenighini
Columbia Analytical Services
1317 S. 13th Ave.
Kelso, WA 98626

Bill to:
Shelly Dykstra
Columbia Analytical Services
1317 South 13th Ave.
Kelso, WA 98626

cc: Columbia Analytical Services, Inc.

Project ID: K1207165
ACZ Project ID: L95869

Lisa Domenighini:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on July 26, 2012. This project has been assigned to ACZ's project number, L95869. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L95869. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after September 13, 2012. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

RadioChemistry Analytical Results

Columbia Analytical Services
Project ID: K1207165
Sample ID: DW-9
Locator:

ACZ Sample ID: ***L95869-01***
Date Sampled: *07/24/12 13:45*
Date Received: *07/26/12*
Sample Matrix: *Drinking Water*

Gross Alpha & Beta
M900.0
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Alpha	08/07/12 10:32		2.3	1.5	1.3	pCi/L	*	mla
Beta	08/07/12 10:32		6.1	2.2	2.6	pCi/L	*	mla

Radium 226
M903.1
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226	08/08/12 16:33		0.1	0.11	0.19	pCi/L	*	jjg

Radium 228
M904.0
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	08/09/12 15:44		0.91	0.23	0.45	pCi/L	*	thf

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Error(+/-)	Calculated sample specific uncertainty
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
LCL	Lower Control Limit, in % (except for LCSS, mg/Kg)
LLD	Calculated sample specific Lower Limit of Detection
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
RER	Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.
UCL	Upper Control Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

DUP	Sample Duplicate	MS/MSD	Matrix Spike/Matrix Spike Duplicate
LCSS	Laboratory Control Sample - Soil	PBS	Prep Blank - Soil
LCSW	Laboratory Control Sample - Water	PBW	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Matrix Spikes	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

H	Analysis exceeded method hold time.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Replicate Error Ratio (RER) accepted because sample concentrations are less than 10x the MDL.
U	No nuclides detected above the Lower Limit of Detection (LLD)
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
X	QC is out of control. See Case Narrative.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

Method Prefix Reference

M	EPA methodology, including those under SDWA, CWA, and RCRA
SM	Standard Methods for the Examination of Water and Wastewater, 19th edition (1995) & 20th edition (1998).
D	ASTM
RP	DOE
ESM	DOE/ESM

Comments

(1)	Solid matrices are reported on a dry weight basis.
(2)	Preparation method: "Method" indicates preparation defined in analytical method.
(3)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click: http://www.acz.com/public/extquallist.pdf

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Radiochemistry QC Summary

Columbia Analytical Services
Project ID: K1207165

ACZ Project ID: ***L95869***

Alpha

M900.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG327814																
WG327313PBW	PBW	08/07/12						.72	0.85	0.95			1.9			
WG327313LCSW	LCSW	08/07/12	RC111214-2	81.06				81	7.7	1.4	99.9	83	133			
L95848-02DUP	DUP-RPD	08/07/12			2.4	2.9	2.8	4.7	3.5	2.9				64.8	20	RG
L95848-02DUP	DUP-RER	08/07/12			2.4	2.9	2.8	4.7	3.5	2.9				0.51	2	
L95846-01MS	MS	08/07/12	RC111214-2	81.06	36	6.9	2.4	74	10	2.7	46.9	83	133			M2

Beta

M900.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG327814																
WG327313PBW	PBW	08/07/12						1.2	1.8	2.6			5.2			
WG327313LCSW	LCSW	08/07/12	RC110517-11	100				91	6	3.8	91	70	129			
L95848-02DUP	DUP-RPD	08/07/12			7.2	3.2	4.1	3.4	2.9	4.1				71.7	20	RG
L95848-02DUP	DUP-RER	08/07/12			7.2	3.2	4.1	3.4	2.9	4.1				0.88	2	
L95848-02MS	MS	08/07/12	RC110517-11	100	7.2	3.2	4.1	94	6.4	4	86.8	70	129			

Radium 226

M903.1 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG327998																
WG327484PBW	PBW	08/08/12						.02	0.08	0.13			0.26			
WG327484LCSW	LCSW	08/08/12	RC120627-2	23.92				23	0.57	0.09	96.2	43	148			
L95752-01DUP	DUP-RPD	08/08/12			3.2	0.27	0.23	3.9	0.28	0.16				19.7	20	
L95684-01MS	MS	08/08/12	RC120627-2	23.92	5.5	0.28	0.1	13	0.44	0.16	31.4	43	148			M2

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Radiochemistry QC Summary

Columbia Analytical Services
Project ID: K1207165

ACZ Project ID: ***L95869***

Radium 228 M904.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG328065																
WG327724LCSW	LCSW	08/09/12	PCN39536	18.95				17	1	0.82	89.7	47	123			
WG327724PBW	PBW	08/09/12						.84	0.24	0.46			0.92			
L95931-01DUP	DUP-RPD	08/09/12			4.1	0.58	0.97	5.3	0.68	1.1				25.5	20	RG
L95931-03MS	MS	08/09/12	PCN39536	18.95	2.9	0.55	1	18	1	1.3	79.7	47	123			
L95931-01DUP	DUP-RER	08/09/12			4.1	0.58	0.97	5.3	0.68	1.1				1.34	2	

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

RadChem Extended Qualifier Report

Columbia Analytical Services ACZ Project ID: ***L95869***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L95869-01	WG327814	Alpha	M900.0	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG327998	Radium 226	M903.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG328065	Radium 228	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

Certification Qualifiers

Columbia Analytical Services ACZ Project ID: ***L95869***

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Columbia Analytical Services
K1207165

ACZ Project ID: L95869
Date Received: 07/26/2012 09:43
Received By: ksj
Date Printed: 7/26/2012

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?			X
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody complete and accurate?	X		
7) Were any changes made to the Chain of Custody prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits?	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/Hr)	Custody Seal Intact?
NA15825	2.9	14	Yes

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ALS Environmental Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

L95869 Chain of Custody

L95869

Project Number: K12071(

Project Manager: Lisa Domenighini

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	Radioact 900.0	Radium 226 903.1	Radium 228 904.0
K1207165-001	DW-9	5	Water	7/24/12	1345	ACZ	✓	✓	✓

Test Comments

Radioact - 900.0 K1207165-001 Gross Alpha,Beta,Radium 226 and 228

Folder Comments:

Use Baseline for Performance Testing Samples

LSAD
7/12/12

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
Please provide the electronic(PDF and EDD) report to the following e-mail address: kelso_data@caslab.com	____RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 X STANDARD Requested FAX Date: _____ Requested Report Date: 08/10/12	___ I. Results Only X II. Results + QC Summaries ___ III. Results + QC and Calibration Summaries ___ IV. Data Validation Report with Raw Data PQL/MDL/J N EDD Y	PO# K1207165 Bill to

Relinquished By: [signature] ALS 7/25/12 1240 Received By: [signature] 7/26/12 0900 Airbill Number: _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

August 23, 2012

Report to:
Lisa Domenighini
Columbia Analytical Services
1317 S. 13th Ave.
Kelso, WA 98626

Bill to:
Lynda Huckestein
Columbia Analytical Services
1317 S. 13th Ave.
Kelso, WA 98626

cc: Columbia Analytical Services, Inc.

Project ID: K1207165
ACZ Project ID: L95903

Lisa Domenighini:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on July 27, 2012. This project has been assigned to ACZ's project number, L95903. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L95903. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after September 23, 2012. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Columbia Analytical Services

August 23, 2012

Project ID: K1207165
ACZ Project ID: L95903

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 2 drinking water samples from Columbia Analytical Services on July 27, 2012. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L95903. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for radiochemistry parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following anomaly required further explanation not provided by the Extended Qualifier Report:

1. For the Gross Alpha value flagged with an "N1", the duplicate failed due to uneven sediment distribution on the planchet. This causes a negative affect on our efficiency curve.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

RadioChemistry Analytical Results

Columbia Analytical Services
Project ID: K1207165
Sample ID: DW-2
Locator:

ACZ Sample ID: ***L95903-01***
Date Sampled: *07/25/12 11:30*
Date Received: *07/27/12*
Sample Matrix: *Drinking Water*

Gross Alpha & Beta — Prep Method:
M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Alpha	08/13/12 10:22		0.9	1.2	1.4	pCi/L	*	mla
Beta	08/13/12 10:22		4.5	1.9	2.6	pCi/L	*	mla

Radium 226 — Prep Method:
M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226	08/08/12 16:39		0.18	0.11	0.12	pCi/L	*	jjg

Radium 228 — Prep Method:
M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	08/15/12 18:28		0.6	0.23	0.54	pCi/L	*	thf

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

RadioChemistry Analytical Results

Columbia Analytical Services
Project ID: K1207165
Sample ID: DW-5
Locator:

ACZ Sample ID: ***L95903-02***
Date Sampled: *07/25/12 14:10*
Date Received: *07/27/12*
Sample Matrix: *Drinking Water*

Gross Alpha & Beta
M900.0
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Alpha	08/13/12 10:24		-0.16	1.2	1.5	pCi/L	*	mla
Beta	08/13/12 10:24		3.6	1.8	2.6	pCi/L	*	mla

Radium 226
M903.1
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226	08/08/12 16:41		0.16	0.12	0.24	pCi/L	*	jjg

Radium 228
M904.0
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	08/15/12 18:28		0.47	0.26	0.57	pCi/L	*	thf

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Error(+/-)	Calculated sample specific uncertainty
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
LCL	Lower Control Limit, in % (except for LCSS, mg/Kg)
LLD	Calculated sample specific Lower Limit of Detection
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
RER	Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.
UCL	Upper Control Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

DUP	Sample Duplicate	MS/MSD	Matrix Spike/Matrix Spike Duplicate
LCSS	Laboratory Control Sample - Soil	PBS	Prep Blank - Soil
LCSW	Laboratory Control Sample - Water	PBW	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Matrix Spikes	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

H	Analysis exceeded method hold time.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Replicate Error Ratio (RER) accepted because sample concentrations are less than 10x the MDL.
U	No nuclides detected above the Lower Limit of Detection (LLD)
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
X	QC is out of control. See Case Narrative.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

Method Prefix Reference

M	EPA methodology, including those under SDWA, CWA, and RCRA
SM	Standard Methods for the Examination of Water and Wastewater, 19th edition (1995) & 20th edition (1998).
D	ASTM
RP	DOE
ESM	DOE/ESM

Comments

(1)	Solid matrices are reported on a dry weight basis.
(2)	Preparation method: "Method" indicates preparation defined in analytical method.
(3)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click: http://www.acz.com/public/extquallist.pdf

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Radiochemistry QC Summary

Columbia Analytical Services

ACZ Project ID: ***L95903***

Alpha

M900.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG328101																
WG327580PBW	PBW	08/13/12						1.2	1	0.95			1.9			
WG327580LCSW	LCSW	08/13/12	RC111214-2	81.06				87	8	1.4	107.3	83	133			
L95902-02DUP	DUP-RPD	08/13/12			6.1	2.6	1.4	-.23	1.1	1.3				215.7	20	N1
L95902-02DUP	DUP-RER	08/13/12			6.1	2.6	1.4	-.23	1.1	1.3				2.24	2	N1
L95902-02MS	MS	08/13/12	RC111214-2	54.04	6.1	2.6	1.4	45	5.7	1.4	72	83	133			M2

Beta

M900.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG328101																
WG327580PBW	PBW	08/13/12						2.9	1.9	2.6			5.2			
WG327580LCSW	LCSW	08/13/12	RC110517-11	100				88	6	3.8	88	70	129			
L95902-02DUP	DUP-RPD	08/13/12			6.1	2.2	2.7	3.8	1.8	2.6				46.5	20	RG
L95902-02DUP	DUP-RER	08/13/12			6.1	2.2	2.7	3.8	1.8	2.6				0.81	2	
L95995-01MS	MS	08/13/12	RC110517-11	66.67	3.8	1.9	2.7	62	4.2	2.6	87.3	70	129			

Radium 226

M903.1

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG327998																
WG327484PBW	PBW	08/08/12						.02	0.08	0.13			0.26			
WG327484LCSW	LCSW	08/08/12	RC120627-2	23.92				23	0.57	0.09	96.2	43	148			
L95752-01DUP	DUP-RPD	08/08/12			3.2	0.27	0.23	3.9	0.28	0.16				19.7	20	
L95902-02DUP	DUP-RPD	08/08/12			0.29	0.09	0.17	.2	0.1	0.17				36.7	20	RG
L95902-02DUP	DUP-RER	08/08/12			0.29	0.09	0.17	.2	0.1	0.17				0.67	2	
L95684-01MS	MS	08/08/12	RC120627-2	23.92	5.5	0.28	0.1	13	0.44	0.16	31.4	43	148			M2

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Radiochemistry QC Summary

Columbia Analytical Services

ACZ Project ID: ***L95903***

Radium 228 M904.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG328745																
WG327707PBW	PBW	08/15/12						.35	0.23	0.56			1.12			
WG327954LCSW	LCSW	08/15/12	PCN39534	18.91				16	1.1	0.85	84.6	47	123			
WG327706PBW	PBW	08/15/12						.68	0.25	0.48			0.96			
L95822-01DUP	DUP-RER	08/15/12			2.4	1.4	3.5	.65	1.4	3.9				0.88	2	
L95822-01DUP	DUP-RPD	08/15/12			2.4	1.4	3.5	.65	1.4	3.9				114.8	20	RG
L95813-01MS	MS	08/15/12	PCN39534	63.03	3.1	1.5	3.4	53	3.8	3.3	79.2	47	123			

Columbia Analytical Services ACZ Project ID: ***L95903***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L95903-01	WG328101	Alpha	M900.0	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M900.0	N1	See Case Narrative.
		Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG327998	Radium 226	M903.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG328745	Radium 228	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L95903-02	WG328101	Alpha	M900.0	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M900.0	N1	See Case Narrative.
		Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG327998	Radium 226	M903.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG328745	Radium 228	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Columbia Analytical Services
K1207165

ACZ Project ID:	L95903
Date Received:	07/27/2012 10:22
Received By:	ksj
Date Printed:	7/27/2012

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?			X
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody complete and accurate?		X	
The 'sampled by' field on the Chain of Custody was not completed.			
7) Were any changes made to the Chain of Custody prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits?	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/Hr)	Custody Seal Intact?
NA15843	1.5	15	Yes

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ALS Environmental Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

Project Number: K1207165
Project Manager: Lisa Domenighini

L95903 Chain of Custody

L95903

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	Radioact 900.0	Radium 226 903.1	Radium 228 904.0
K1207165-001	DW-9	Ø	Water	7/24/12	1345	ACZ			
K1207165-003	DW-2	5	Water	7/25/12	1130	ACZ	✓	✓	✓
K1207165-004	DW-5	5	Water	7/25/12	1410	ACZ	✓	✓	✓

Test Comments

Radioact - 900.0 K1207165-001,3,4 Gross Alpha,Beta,Radium 226 and 228

Folder Comments:

Use Baseline for Performance Testing Samples

WA - Drinking H2O

LISA D 7/26/12

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
Please provide the electronic(PDF and EDD) report to the following e-mail address: kelso_data@caslab.com	____RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 X STANDARD Requested FAX Date: ____ Requested Report Date: 08/10/12	____ I. Results Only X II. Results + QC Summaries ____ III. Results + QC and Calibration Summaries ____ IV. Data Validation Report with Raw Data PQL/MDL/J N EDD Y	PO# K1207165 Bill to

Relinquished By: [signature] ALS 7/26/12 1130 Received By: [signature] 7-27-12 10:00 Airbill Number: ____

Lab/Cor, Inc.
7619 6th Ave NW
Seattle, WA 98117

Analysis Report Cover

Final Report

A Professional Service Corporation in the Northwest

Phone: (206) 781-0155
Fax: (206) 789-8424
http://www.labcor.net

Job Number: 120966 **SEA**
Client: ALS Laboratory Group
Address: 1317 13th Avenue
Kelso, WA 98626
Project Name:
Project No.: K1207165
PO Number: K1207165
PWS ID:
Reference No.:

Report Number: 120966R01
Report Date: 7/26/2012

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
120966 - S1	K1207165-001 - DW-9, WA Water ID#: 119-15057	EPA 100.2 - Potable Water		7/26/2012

EPA 100.2 - Potable Water

Preparation and analysis of the above samples was conducted in accordance with the EPA method #100.2. In this method, samples are taken from an affected water supply to measure the amount of asbestos contamination in the system. Samples received 48 hours after collection, or with a sample received temperature greater than 10ºC, are subjected to ozone/UV treatment.

Each sample was shaken, then sonicated briefly in a Branson 2200 sonicator to distribute particulate evenly. Several aliquots were filtered onto 0.22 µm, 25 mm diameter mixed cellulose ester filters. Briefly, the samples were collapsed with a solution of N,N-dimethylformamide and acetic acid, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in N,N-Dimethlyformamide / Acetone baths until cleared of filter debris.

Each aliquot was examined at low magnification to determine the best particulate loading for analysis. Analysis was performed using a transmission electron microscope equipped with an EDS X ray analyzer. The samples were analyzed at an approximate screen magnification of 10,000x, with an accelerating voltage of 100 KV. The sizing of grid openings was performed using a calibrated digital imaging system at low magnification.

Disclaimer

The results reported relate only to the samples tested or analyzed; the laboratory did not have control over sample collection. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor, Inc. the opportunity to provide you with the analytical services.

Sincerely,

X

Nina Borchowiec
Technician/Analyst

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

August 21, 2012

Report to:
Lisa Domenighini
Columbia Analytical Services
1317 S. 13th Ave.
Kelso, WA 98626

Bill to:
Lynda Huckestein
Columbia Analytical Services
1317 S. 13th Ave.
Kelso, WA 98626

cc: Columbia Analytical Services, Inc.

Project ID: K1207165
ACZ Project ID: L95933

Lisa Domenighini:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on July 31, 2012. This project has been assigned to ACZ's project number, L95933. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L95933. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after September 21, 2012. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Columbia Analytical Services

August 21, 2012

Project ID: K1207165
ACZ Project ID: L95933

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 1 drinking water sample from Columbia Analytical Services on July 31, 2012. The sample was received in good condition. Upon receipt, the sample custodian removed the sample from the cooler, inspected the contents, and logged the sample into ACZ's computerized Laboratory Information Management System (LIMS). The sample was assigned ACZ LIMS project number L95933. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

This sample was analyzed for radiochemistry parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following anomaly required further explanation not provided by the Extended Qualifier Report:

1. For the Gross Alpha value flagged with an "N1", the duplicate failed due to uneven sediment distribution on the planchet. This causes a negative affect on our efficiency curve.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

RadioChemistry Analytical Results

Columbia Analytical Services
Project ID: K1207165
Sample ID: DW-6
Locator:

ACZ Sample ID: ***L95933-01***
Date Sampled: *07/27/12 10:30*
Date Received: *07/31/12*
Sample Matrix: *Drinking Water*

Gross Alpha & Beta — Prep Method:
M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Alpha	08/13/12 10:29		-0.08	1	1.5	pCi/L	*	mla
Beta	08/13/12 10:29		2.3	1.7	2.6	pCi/L	*	mla

Radium 226 — Prep Method:
M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226	08/08/12 16:42		0.39	0.12	0.18	pCi/L	*	jjg

Radium 228 — Prep Method:
M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	08/17/12 13:41		0.11	0.24	0.75	pCi/L		thf

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Error(+/-)	Calculated sample specific uncertainty
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
LCL	Lower Control Limit, in % (except for LCSS, mg/Kg)
LLD	Calculated sample specific Lower Limit of Detection
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
RER	Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.
UCL	Upper Control Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

DUP	Sample Duplicate	MS/MSD	Matrix Spike/Matrix Spike Duplicate
LCSS	Laboratory Control Sample - Soil	PBS	Prep Blank - Soil
LCSW	Laboratory Control Sample - Water	PBW	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Matrix Spikes	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

H	Analysis exceeded method hold time.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Replicate Error Ratio (RER) accepted because sample concentrations are less than 10x the MDL.
U	No nuclides detected above the Lower Limit of Detection (LLD)
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
X	QC is out of control. See Case Narrative.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

Method Prefix Reference

M	EPA methodology, including those under SDWA, CWA, and RCRA
SM	Standard Methods for the Examination of Water and Wastewater, 19th edition (1995) & 20th edition (1998).
D	ASTM
RP	DOE
ESM	DOE/ESM

Comments

(1)	Solid matrices are reported on a dry weight basis.
(2)	Preparation method: "Method" indicates preparation defined in analytical method.
(3)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click: http://www.acz.com/public/extquallist.pdf

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Radiochemistry QC Summary

Columbia Analytical Services
Project ID: K1207165

ACZ Project ID: ***L95933***

Alpha

M900.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG328101																
WG327580PBW	PBW	08/13/12						1.2	1	0.95			1.9			
WG327580LCSW	LCSW	08/13/12	RC111214-2	81.06				87	8	1.4	107.3	83	133			
L95902-02DUP	DUP-RPD	08/13/12			6.1	2.6	1.4	-.23	1.1	1.3				215.7	20	N1
L95902-02DUP	DUP-RER	08/13/12			6.1	2.6	1.4	-.23	1.1	1.3				2.24	2	N1
L95902-02MS	MS	08/13/12	RC111214-2	54.04	6.1	2.6	1.4	45	5.7	1.4	72	83	133			M2

Beta

M900.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG328101																
WG327580PBW	PBW	08/13/12						2.9	1.9	2.6			5.2			
WG327580LCSW	LCSW	08/13/12	RC110517-11	100				88	6	3.8	88	70	129			
L95902-02DUP	DUP-RER	08/13/12			6.1	2.2	2.7	3.8	1.8	2.6				0.81	2	
L95902-02DUP	DUP-RPD	08/13/12			6.1	2.2	2.7	3.8	1.8	2.6				46.5	20	RG
L95995-01MS	MS	08/13/12	RC110517-11	66.67	3.8	1.9	2.7	62	4.2	2.6	87.3	70	129			

Radium 226

M903.1 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG327998																
WG327484PBW	PBW	08/08/12						.02	0.08	0.13			0.26			
WG327484LCSW	LCSW	08/08/12	RC120627-2	23.92				23	0.57	0.09	96.2	43	148			
L95752-01DUP	DUP-RPD	08/08/12			3.2	0.27	0.23	3.9	0.28	0.16				19.7	20	
L95902-02DUP	DUP-RER	08/08/12			0.29	0.09	0.17	.2	0.1	0.17				0.67	2	
L95902-02DUP	DUP-RPD	08/08/12			0.29	0.09	0.17	.2	0.1	0.17				36.7	20	RG
L95684-01MS	MS	08/08/12	RC120627-2	23.92	5.5	0.28	0.1	13	0.44	0.16	31.4	43	148			M2

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Radiochemistry QC Summary

Columbia Analytical Services
Project ID: K1207165

ACZ Project ID: ***L95933***

Radium 228 M904.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec	Lower	Upper	RPD/RER	Limit	Qual
WG328561																
WG328120PBW	PBW	08/17/12						.23	0.25	0.55			1.1			
WG328120LCSW1	LCSW	08/17/12	PCN39533	18.9				18	1.3	0.98	95.2	47	123			
L96047-02MS	MS	08/20/12	PCN39533	18.88	0.6	0.43	0.92	18	1.2	1.2	92.2	47	123			
WG328120LCSW2	LCSW	08/20/12						19	1.3	1.4		47	123			
L95931-05DUP	DUP-RPD	08/20/12			2.6	0.68	0.77	3	0.65	1.2				14.3	20	

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

RadChem Extended Qualifier Report

Columbia Analytical Services ACZ Project ID: ***L95933***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L95933-01	WG328101	Alpha	M900.0	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M900.0	N1	See Case Narrative.
		Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG327998	Radium 226	M903.1	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Columbia Analytical Services
K1207165

ACZ Project ID:	L95933
Date Received:	07/31/2012 09:42
Received By:	ksj
Date Printed:	7/31/2012

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?			X
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody complete and accurate?	X		
7) Were any changes made to the Chain of Custody prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits?	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/Hr)	Custody Seal Intact?
NA15855	1.8	15	Yes

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ALS Environmental Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

L95933

Project Number: K1207165
Project Manager: Lisa Domenighini

L95933 Chain of Custody

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	Radioact 900.0	Radium 226 903.1	Radium 228 904.0
K1207165-010	DW-6	5	Water	7/27/12	1030	ACZ	X	X	X

Test Comments

Radioact - 900.0 K1207165-001,3,4,6,7,8,10 Gross Alpha,Beta,Radium 226 and 228

Drinking H2O
LD 7/27/12

Folder Comments:
Use Baseline for Performance Testing Samples

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
Please provide the electronic (PDF and EDD) report to the following e-mail address: kelso_data@caslab.com	____RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 ____STANDARD Requested FAX Date: _____ Requested Report Date: 08/10/12	___ I. Results Only X II. Results + QC Summaries ___ III. Results + QC and Calibration Summaries ___ IV. Data Validation Report with Raw Data PQL/MDL/J N EDD Y	PO# K1207165 Bill to

Relinquished By: Kaila Smith 7/30/12 1156 Received By: 7.31.12 9:50 Airbill Number:

Lab/Cor, Inc.
7619 6th Ave NW
Seattle, WA 98117

Final Report

Phone: (206) 781-0155
Fax: (206) 789-8424
http://www.labcor.net

A Professional Service Corporation in the Northwest

EPA 100.2 - Potable Water Summary Data

Job Number: 120966 **SEA**
Client: ALS Laboratory Group
Project Name:

Report Number: 120966R01
Date Received: 7/26/2012

Lab/Cor Sample No.: S1
Client Sample No.: K1207165-001
Description: DW-9, WA Water ID#: 119-15057
Filter Fraction: 1 **Aliquot Dilution:** 1
Volume Taken: 10 **Final Dilution:** 1

Sample Area/Mass/Volume (ml) : 800
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 11
Average Grid Opening Area : 0.0096
Area Analyzed (mm2) : 0.1056
Analytical Sens. (struc/MFL>10-um) : 0.183
Detection Limit. (struc/MFL>10-um) : 0.546

Analyst(s)	Analysis Date	Microscope	Magnification
NB	7/26/2012	Hitachi 7000FA	10000

Structure Type	Concen-tration MFL>10-um	95% Confidence Interval MFL>10-um	Structure Count[1] Prim/Total	
TEM Water Amphibole	< 0.183	0 - 0.674 - Poisson	0	
TEM Water Chrysotile	< 0.183	0 - 0.674 - Poisson	0	
TEM Water Total	< 0.183	0 - 0.674 - Poisson	0	

Reviewed by:

X

Nina Borchowiec
Technician/Analyst

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

Lab/Cor, Inc.
7619 6th Ave NW
Seattle, WA 98117

Final Report

Phone: (206) 781-0155
Fax: (206) 789-8424
http://www.labcor.net

A Professional Service Corporation in the Northwest

EPA 100.2 - Potable Water Raw Data

Job Number: 120966 **SEA**
Client: ALS Laboratory Group
Project Name:
Project No.: K1207165

Report Number: 120966R01
Date Received: 7/26/2012

Lab/Cor Sample No: S1
Client Sample No: K1207165-001
Description: DW-9, WA Water ID#: 119-15057

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G5	1	C34				NSD							
G5	2	E33				NSD							
G5	3	E42				NSD							
G5	4	F41				NSD							
G6	5	E44	NAM	1		Fiber	16	0.1	160	Non Asbestos Mineral	None	Possible Organic	
G6	6	F43				NSD							
G6	7	F52				NSD							
G7	8	F32				NSD							
G7	9	G31				NSD							
G7	10	G34				NSD							
G7	11	H33				NSD							

Count Categories

Water_Amph	TEM Water Amphibole	WATER_Chrys	TEM Water Chrysotile	WATER_Total	TEM Water Total

Reviewed by:

X

Nina Borchowiec
Technician/Analyst

1209ler

ALS Environmental Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

Project Number: K1207165
Project Manager: Lisa Domenighini

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	Asbestos 100.1
K1207165-001	DW-9	1	Water	7/24/12	1345	LabCOR	✓

Test Comments
Asbestos - 100.1 K1207165-001

Asbestos in drinking water (not chlorinated)

EPA 100.2

Folder Comments:
Use Baseline for Performance Testing Samples

Lisa D

497

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
Please provide the electronic(PDF and EDD) report to the following e-mail address: kelso_data@caslab.com	____RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 X STANDARD Requested FAX Date: _____ Requested Report Date: 08/10/12	____ I. Results Only X II. Results + QC Summaries ____ III. Results + QC and Calibration Summaries ____ IV. Data Validation Report with Raw Data PQL/MDL/J N EDD Y	PO# K1207165 Bill to

Relinquished By: [signature] ALS 7/25/12 1340 Received By: [signature] 7/26/12 10:05 Airbill Number:

3.1°C good

Lab/Cor, Inc.
7619 6th Ave NW
Seattle, WA 98117

Analysis Report Cover

Final Report

A Professional Service Corporation in the Northwest

Phone: (206) 781-0155
Fax: (206) 789-8424
http://www.labcor.net

Job Number: 120972 **SEA**
Client: ALS Laboratory Group
Address: 1317 13th Avenue
Kelso, WA 98626
Project Name:
Project No.: K1207165
PO Number: K1207165
PWS ID:
Reference No.:

Report Number: 120972R01
Report Date: 7/31/2012

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
120972 - S1	K1207165-006 - DW-1, WA Water ID#: 119-15061	EPA 100.2 - Potable Water		7/27/2012
120972 - S2	K1207165-007 - DW-7, WA Water ID#: 119-15062	EPA 100.2 - Potable Water		7/27/2012
120972 - S3	K1207165-008 - Dup-1, WA Water ID#: 119-15063	EPA 100.2 - Potable Water		7/27/2012

EPA 100.2 - Potable Water

Preparation and analysis of the above samples was conducted in accordance with the EPA method #100.2. In this method, samples are taken from an affected water supply to measure the amount of asbestos contamination in the system. Samples received 48 hours after collection, or with a sample received temperature greater than 10ºC, are subjected to ozone/UV treatment.

Each sample was shaken, then sonicated briefly in a Branson 2200 sonicator to distribute particulate evenly. Several aliquots were filtered onto 0.22 µm, 25 mm diameter mixed cellulose ester filters. Briefly, the samples were collapsed with a solution of N,N-dimethylformamide and acetic acid, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in N,N-Dimethlyformamide / Acetone baths until cleared of filter debris.

Each aliquot was examined at low magnification to determine the best particulate loading for analysis. Analysis was performed using a transmission electron microscope equipped with an EDS X ray analyzer. The samples were analyzed at an approximate screen magnification of 10,000x, with an accelerating voltage of 100 KV. The sizing of grid openings was performed using a calibrated digital imaging system at low magnification.

Disclaimer

The results reported relate only to the samples tested or analyzed; the laboratory did not have control over sample collection. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor, Inc. the opportunity to provide you with the analytical services.

Sincerely,

X

Nina Borchowiec
Technician/Analyst

Lab/Cor, Inc.
7619 6th Ave NW
Seattle, WA 98117

Final Report

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Fax: (206) 789-8424
http://www.labcor.net

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EPA 100.2 - Potable Water Summary Data

Job Number: 120972 **SEA**
Client: ALS Laboratory Group
Project Name:

Report Number: 120972R01
Date Received: 7/27/2012

Lab/Cor Sample No.: S1
Client Sample No.: K1207165-006
Description: DW-1, WA Water ID#: 119-15061
Filter Fraction: 1 **Aliquot Dilution:** 1
Volume Taken: 10 **Final Dilution:** 1

Sample Area/Mass/Volume (L) : 800
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 11
Average Grid Opening Area : 0.0096
Area Analyzed (mm2) : 0.1056
Analytical Sens. (struc/MFL>10-um) : 0.183
Detection Limit. (struc/MFL>10-um) : 0.546

Analyst(s)	Analysis Date	Microscope	Magnification
NB	7/30/2012	Hitachi 7000FA	10000

Structure Type	Concen-tration MFL>10-um	95% Confidence Interval MFL>10-um	Structure Count[1] Prim/Total	
TEM Water Amphibole	< 0.183	0 - 0.674 - Poisson	0	
TEM Water Chrysotile	< 0.183	0 - 0.674 - Poisson	0	
TEM Water Total	< 0.183	0 - 0.674 - Poisson	0	

Lab/Cor Sample No.: S2
Client Sample No.: K1207165-007
Description: DW-7, WA Water ID#: 119-15062
Filter Fraction: 1 **Aliquot Dilution:** 1
Volume Taken: 10 **Final Dilution:** 1

Sample Area/Mass/Volume (L) : 800
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 11
Average Grid Opening Area : 0.0096
Area Analyzed (mm2) : 0.1056
Analytical Sens. (struc/MFL>10-um) : 0.183
Detection Limit. (struc/MFL>10-um) : 0.546

Analyst(s)	Analysis Date	Microscope	Magnification
NB	7/30/2012	Hitachi 7000FA	10000

Structure Type	Concen-tration MFL>10-um	95% Confidence Interval MFL>10-um	Structure Count[1] Prim/Total	
TEM Water Amphibole	< 0.183	0 - 0.674 - Poisson	0	
TEM Water Chrysotile	< 0.183	0 - 0.674 - Poisson	0	
TEM Water Total	< 0.183	0 - 0.674 - Poisson	0	

Lab/Cor Sample No.: S3
Client Sample No.: K1207165-008
Description: Dup-1, WA Water ID#: 119-15063
Filter Fraction: 1 **Aliquot Dilution:** 1
Volume Taken: 10 **Final Dilution:** 1

Sample Area/Mass/Volume (L) : 800
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 11
Average Grid Opening Area : 0.0096
Area Analyzed (mm2) : 0.1056
Analytical Sens. (struc/MFL>10-um) : 0.183
Detection Limit. (struc/MFL>10-um) : 0.546

Analyst(s)	Analysis Date	Microscope	Magnification
NB	7/31/2012	Hitachi 7000FA	10000

Structure Type	Concen-tration MFL>10-um	95% Confidence Interval MFL>10-um	Structure Count[1] Prim/Total	
TEM Water Amphibole	< 0.183	0 - 0.674 - Poisson	0	
TEM Water Chrysotile	< 0.183	0 - 0.674 - Poisson	0	
TEM Water Total	< 0.183	0 - 0.674 - Poisson	0	

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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EPA 100.2 - Potable Water Summary Data

Job Number: 120972 **SEA**
Client: ALS Laboratory Group
Project Name:

Report Number: 120972R01
Date Received: 7/27/2012

Reviewed by:

X

Nina Borchowiec
Technician/Analyst

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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EPA 100.2 - Potable Water Raw Data

Job Number: 120972 **SEA**
Client: ALS Laboratory Group
Project Name:
Project No.: K1207165

Report Number: 120972R01
Date Received: 7/27/2012

Lab/Cor Sample No: S1
Client Sample No: K1207165-006
Description: DW-1, WA Water ID#: 119-15061

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G5	1	C33				NSD							
G5	2	C42				NSD							
G5	3	E41				NSD							
G5	4	E34				NSD							
G6	5	E44				NSD							
G6	6	F43				NSD							
G6	7	F52				NSD							
G6	8	G51				NSD							
G7	9	F32				NSD							
G7	10	G31				NSD							
G7	11	G32				NSD							

Lab/Cor Sample No: S2
Client Sample No: K1207165-007
Description: DW-7, WA Water ID#: 119-15062

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G5	1	C34				NSD							
G5	2	E33				NSD							
G5	3	E42				NSD							
G5	4	F41				NSD							
G6	5	E44				NSD							
G6	6	F43				NSD							
G6	7	F52				NSD							
G6	8	G51				NSD							
G7	9	G32				NSD							
G7	10	H31				NSD							
G7	11	H32				NSD							

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EPA 100.2 - Potable Water Raw Data

Job Number: 120972 **SEA**
Client: ALS Laboratory Group
Project Name:
Project No.: K1207165

Report Number: 120972R01
Date Received: 7/27/2012

Lab/Cor Sample No: S3
Client Sample No: K1207165-008
Description: Dup-1, WA Water ID#: 119-15063

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G5	1	C34				NSD							
G5	2	E33				NSD							
G5	3	E42				NSD							
G5	4	F41				NSD							
G6	5	E44				NSD							
G6	6	F43				NSD							
G6	7	F52				NSD							
G6	8	G51				NSD							
G7	9	F32				NSD							
G7	10	G31				NSD							
G7	11	G32				NSD							

Count Categories

Water_Amph	TEM Water Amphibole	WATER_Chrys	TEM Water Chrysotile	WATER_Total	TEM Water Total

Reviewed by:

X

Nina Borchowiec
Technician/Analyst

ALS Environmental Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

120972

Project Number: K1207165
Project Manager: Lisa Domenighini

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	Asbestos 100.1
K1207165-001	DW-9	Ø	Water	7/24/12	1345	LabCOR	
K1207165-003	DW-2	Ø	Water	7/25/12	1130	LabCOR	
K1207165-004	DW-5	Ø	Water	7/25/12	1130	LabCOR	
1 K1207165-006	DW-1	1	Water	7/25/12	1130	LabCOR	✓
2 K1207165-007	DW-7	1	Water	7/26/12	1300	LabCOR	✓
3 K1207165-008	Dup-1	1	Water	7/26/12	1200	LabCOR	✓

Test Comments

Asbestos - 100.1 K1207165-001,3,4,6,7,8 Asbestos in drinking water (not chlorinated)

EPA 100.2

503

Folder Comments:
Use Baseline for Performance Testing Samples

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
Please provide the electronic(PDF and EDD) report to the following e-mail address: kelso_data@caslab.com	____RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 ____ STANDARD Requested FAX Date: _____ Requested Report Date: 08/10/12	____ I. Results Only ____ II. Results + QC Summaries ____ III. Results + QC and Calibration Summaries ____ IV. Data Validation Report with Raw Data PQL/MDL/J N EDD Y	PO# K1207165 Bill to

Relinquished By: [signature] ALS 7/26/12 1530 Received By: [signature] 7/27/12 9:40 Airbill Number:

26°C good

Lab/Cor, Inc.
7619 6th Ave NW
Seattle, WA 98117

Analysis Report Cover

Final Report

A Professional Service Corporation in the Northwest

Phone: (206) 781-0155
Fax: (206) 789-8424
http://www.labcor.net

Job Number: 120973 **SEA**
Client: ALS Laboratory Group
Address: 1317 13th Avenue
Kelso, WA 98626
Project Name:
Project No.: K1207165
PO Number: K1207165
PWS ID:
Reference No.:

Report Number: 120973R01
Report Date: 7/31/2012

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
120973 - S1	K1207165-003 - DW-2, WA Water ID#: 119-15064	EPA 100.2 - Potable Water		7/27/2012
120973 - S2	K1207165-004 - DW-5, WA Water ID#: 119-15065	EPA 100.2 - Potable Water		7/27/2012

EPA 100.2 - Potable Water

Preparation and analysis of the above samples was conducted in accordance with the EPA method #100.2. In this method, samples are taken from an affected water supply to measure the amount of asbestos contamination in the system. Samples received 48 hours after collection, or with a sample received temperature greater than 10ºC, are subjected to ozone/UV treatment.

Each sample was shaken, then sonicated briefly in a Branson 2200 sonicator to distribute particulate evenly. Several aliquots were filtered onto 0.22 µm, 25 mm diameter mixed cellulose ester filters. Briefly, the samples were collapsed with a solution of N,N-dimethylformamide and acetic acid, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in N,N-Dimethlyformamide / Acetone baths until cleared of filter debris.

Each aliquot was examined at low magnification to determine the best particulate loading for analysis. Analysis was performed using a transmission electron microscope equipped with an EDS X ray analyzer. The samples were analyzed at an approximate screen magnification of 10,000x, with an accelerating voltage of 100 KV. The sizing of grid openings was performed using a calibrated digital imaging system at low magnification.

Disclaimer

The results reported relate only to the samples tested or analyzed; the laboratory did not have control over sample collection. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor, Inc. the opportunity to provide you with the analytical services.

Sincerely,

X

Nina Borchowiec
Technician/Analyst

Lab/Cor, Inc.
7619 6th Ave NW
Seattle, WA 98117

Final Report

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EPA 100.2 - Potable Water Summary Data

Job Number: 120973 **SEA**
Client: ALS Laboratory Group
Project Name:

Report Number: 120973R01
Date Received: 7/27/2012

Lab/Cor Sample No.: S1
Client Sample No.: K1207165-003
Description: DW-2, WA Water ID#: 119-15064
Filter Fraction: 1 **Aliquot Dilution:** 1
Volume Taken: 40 **Final Dilution:** 1

Sample Area/Mass/Volume (L) : 800
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 4
Average Grid Opening Area : 0.0096
Area Analyzed (mm2) : 0.0384
Analytical Sens. (struc/MFL>10-um) : 0.126
Detection Limit. (struc/MFL>10-um) : 0.376

Analyst(s)	Analysis Date	Microscope	Magnification
NB	7/31/2012	Hitachi 7000FA	10000

Structure Type	Concen-tration MFL>10-um	95% Confidence Interval MFL>10-um	Structure Count[1] Prim/Total	
TEM Water Amphibole	< 0.126	0 - 0.464 - Poisson	0	
TEM Water Chrysotile	< 0.126	0 - 0.464 - Poisson	0	
TEM Water Total	< 0.126	0 - 0.464 - Poisson	0	

Lab/Cor Sample No.: S2
Client Sample No.: K1207165-004
Description: DW-5, WA Water ID#: 119-15065
Filter Fraction: 1 **Aliquot Dilution:** 1
Volume Taken: 40 **Final Dilution:** 1

Sample Area/Mass/Volume (L) : 800
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 4
Average Grid Opening Area : 0.0096
Area Analyzed (mm2) : 0.0384
Analytical Sens. (struc/MFL>10-um) : 0.126
Detection Limit. (struc/MFL>10-um) : 0.376

Analyst(s)	Analysis Date	Microscope	Magnification
NB	7/31/2012	Hitachi 7000FA	10000

Structure Type	Concen-tration MFL>10-um	95% Confidence Interval MFL>10-um	Structure Count[1] Prim/Total	
TEM Water Amphibole	< 0.126	0 - 0.464 - Poisson	0	
TEM Water Chrysotile	< 0.126	0 - 0.464 - Poisson	0	
TEM Water Total	< 0.126	0 - 0.464 - Poisson	0	

Reviewed by:

X

Nina Borchowiec
Technician/Analyst

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

Lab/Cor, Inc.
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Final Report

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EPA 100.2 - Potable Water Raw Data

Job Number: 120973 **SEA**
Client: ALS Laboratory Group
Project Name:
Project No.: K1207165

Report Number: 120973R01
Date Received: 7/27/2012

Lab/Cor Sample No: S1
Client Sample No: K1207165-003
Description: DW-2, WA Water ID#: 119-15064

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G9	1	C34				NSD							
G9	2	F51				NSD							
G10	3	E44				NSD							
G11	4	G42				NSD							

Lab/Cor Sample No: S2
Client Sample No: K1207165-004
Description: DW-5, WA Water ID#: 119-15065

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G9	1	C33				NSD							
G9	2	F51				NSD							
G10	3	E44				NSD							
G11	4	G42				NSD							

Count Categories

Water_Amph	TEM Water Amphibole	WATER_Chrys	TEM Water Chrysotile	WATER_Total	TEM Water Total

Reviewed by:

X

Nina Borchowiec
Technician/Analyst

ALS Environmental Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1068

ALS Contact: Lisa Domenighini

120973

Project Number: K1207165
Project Manager: Lisa Domenighini

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	Asbestos 100.1
K1207165-001	DW-9	1	Water	7/24/12	1345	LabCOR	
K1207165-003	DW-2	1	Water	7/25/12	1130	LabCOR	✓
K1207165-004	DW-5	1	Water	7/25/12	1410	LabCOR	✓

Test Comments

Asbestos - 100.1 K1207165-001,3,4 Asbestos in drinking water (not chlorinated)

EPA 100.2

507

Folder Comments:
Use Baseline for Performance Testing Samples

Lisa D
7/26/12

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
Please provide the electronic(PDF and EDD) report to the following e-mail address: kelso_data@castlab.com	____RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 X STANDARD Requested FAX Date: _____ Requested Report Date: 08/10/12	____ I. Results Only X II. Results + QC Summaries ____ III. Results + QC and Calibration Summaries ____ IV. Data Validation Report with Raw Data PQL/MDL/J N EDD Y	PO# K1207165 Bill to

Relinquished By: ALS 7/26/12 1130 Received By: 7/27/12 9:40 Airbill Number:

0.7°C good