



DEPARTMENT OF NATURAL RESOURCES
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July 31, 2012
Mr. Kurt Schultz
5181 CR 331
Silt, CO 81652

Re: Encana NOAV 200355205 – Davis Ditch Release
Baseline Water Sample Laboratory Report
Facility ID 429791
Department of Water Resources Permit #113062
NESE 33 6S 92W
TestAmerica Laboratory Work Order 280-30378-1

Dear Mr. Schultz,

Enclosed is the laboratory analysis report for the water sample Craig Heydenberk collected on behalf of The Colorado Oil and Gas Conservation Commission (COGCC) from your domestic well on 6-22-2012. A summary table containing laboratory results from the recent domestic well and ditch samples in addition to previous samples from your domestic well is included as Attachment 1, with CDPHE standards for reference. I have copied the pages of the report that present your recent domestic well sample results and placed them behind this letter in Attachment 2, for your convenience. The remainder of the complete laboratory report, which includes laboratory quality control samples, is included as Attachment 3.

Additionally, I've entered the sample results into a tool developed by Colorado State University Extension Service in conjunction with other agencies for analyzing drinking and irrigation water. Results of this tool comparing your water well results to drinking water standards, and ditch sample results to irrigation water standards are included in this packet for the baseline sample as Attachments 4. Based on my initial evaluation the baseline sample results do not appear to show an impact to your water well or ditch from oil and gas activities in your area at the time the samples were collected.

Encana has also collected samples from your domestic water well in 2012 but I have not received results from those samples at this time. When I receive the results from the

Encana samples, I will include them in my analysis to determine if your well was impacted by the release to the Davis Ditch after the baseline sample was collected and infiltration to the aquifer occurred.

The COGCC will prepare an interpretive letter evaluating the water quality identified by the baseline sampling results and a comparison of baseline results to sample results collected from your well as required by the NOAV written to Encana. We will be analyzing your domestic well data closely and will generate a letter discussing all the various constituents reported by the laboratory and what the concentrations, if any, identified in the water sample mean.

Thank you for your patience.

Sincerely,

Linda Spry O'Rourke
Environmental Protection Specialist II, NW Region
970-625-2497 ext. 7
linda.spryorourk@state.co.us

encl.: TestAmerica Laboratory Work Order 280-30378-1

cc: Thom Kerr, Acting COGCC Director, w/o attachments,
Karen Spray, Acting COGCC Environmental Protection Manager
Alex Fischer, COGCC Environmental Protection Supervisor
Kathy Friesen, Encana Environmental Manager

Attachments:

Attachment 1 - Table 1 - Analytical Summary
Attachment 2 – TestAmerica Laboratory Well Sample Data Reports
Attachment 3 – TestAmerica Laboratory Well Sample Quality Control
Sample Data Reports

Attachment 1

Table 1 ANALYTICAL SUMMARY
Schultz Domestic Well
NOAV 200355205

Parameter	Sample Date							CDPHE Standards		
	05-Mar-02	14-Mar-03	13-Jul-04	12-Jun-07	22-Jun-12	22-Jun-12				
	Well	Well	Well	Well	Well	Ditch				
	Result	Result	Result	Result	Result	Result	Unit	Domestic	Agriculture	Units
Aluminum	NA	NA	NA	NA	ND (0.018)	0.030J	mg/l	NS	0.05	mg/l
Antimony	NA	NA	NA	NA	ND (0.00016)	ND (0.00016)	mg/l	0.006	NS	mg/l
Arsenic	NA	NA	NA	NA	0.002J	0.0026J	mg/l	0.01	0.1	mg/l
Barium	NA	NA	NA	NA	0.012	0.099	mg/l	2.0	NS	mg/l
Beryllium	NA	NA	NA	NA	ND (0.00047)	ND (0.00047)	mg/l	0.004	0.1	mg/l
Boron	NA	NA	NA	0.078	0.081J	0.32	mg/l	NS	0.75	mg/l
Cadmium	NA	NA	NA	NA	ND (0.000040)	ND (0.000040)	mg/l	0.005	0.01	mg/l
Calcium	54	NA	53	43.7	35	41	mg/l	NS	NS	
Chromium	NA	NA	NA	NA	ND (0.00066)	ND (0.00066)	mg/l	0.1	0.1	mg/l
Cobalt	NA	NA	NA	NA	0.000052J	0.00016J	mg/l	NS	0.05	mg/l
Copper	NA	NA	NA	NA	0.028	0.0013J	mg/l	1	0.2	mg/l
Iron	NA	NA	NA	ND(0.04)	ND (0.022)	0.023J	mg/l	0.3	5	mg/l
Lead	NA	NA	NA	NA	0.00014J	ND (0.00010)	mg/l	0.05	0.1	mg/l
Lithium	NA	NA	NA	NA	0.05	0.059	mg/l	NS	2.5	mg/l
Magnesium	3.2	NA	3.4	2.8	2.3	42	mg/l	NS	NS	
Manganese	0.014	NA	NA	NA	0.0023	0.0024	mg/l	0.05	0.2	mg/l
Mercury	NA	NA	NA	NA	ND (0.000027)	ND (0.000027)	mg/l	0.002	0.01	mg/l
Molybdenum	NA	NA	NA	NA	0.0023B	0.0068B	mg/l	0.035	NS	mg/l
Nickel	NA	NA	NA	NA	ND (0.0013)	ND (0.0013)	mg/l	0.1	0.2	mg/l
Potassium	1.6	NA	1.8	15B	2.2J	3.1	mg/l	NS	NS	
Selenium	0.011	NA	0.015	NA	0.013	0.0076	mg/l	0.05	0.02	mg/l
Silicon	NA	NA	NA	NA	3.2	11	mg/l	NS	NS	
Silver	NA	NA	NA	NA	0.000023JB	0.000047JB	mg/l	0.05	NS	mg/l
Sodium	900	NA	920	717	700	250	mg/l	NS	NS	

Table 1 ANALYTICAL SUMMARY
Schultz Domestic Well
NOAV 200355205

Parameter	Sample Date							CDPHE Standards		
	05-Mar-02	14-Mar-03	13-Jul-04	12-Jun-07	22-Jun-12	22-Jun-12				
	Well	Well	Well	Well	Well	Ditch				
	Result	Result	Result	Result	Result	Result	Unit	Domestic	Agriculture	Units
Strontium	NA	NA	NA	1.63	1.3	1.4	mg/l	NS	NS	
Thallium	NA	NA	NA	NA	ND (0.000066)	ND (0.000066)	mg/l	0.002	NS	mg/l
Uranium	NA	NA	NA	NA	0.005	0.03	mg/l	0.03	NS	mg/l
Vanadium	NA	NA	NA	NA	ND (0.0011)	0.004J	mg/l	NS	0.1	mg/l
Zinc	NA	NA	NA	NA	0.0068J	ND (0.0045)	mg/l	5	2	mg/l
Nitrite	ND (1.25)	ND (1.25)	NA	NA	ND (0.098)	ND (0.049)	mg/l	1.0	10	mg/l
Nitrate	ND (1.25)	ND (1.25)	0.1	NA	0.17J	0.083J	mg/l	10.0	100	mg/l
Total Nitrite/Nitrate	ND (2.5)	ND (2.5)	NA	NA	0.268	0.132	mg/l	10.0	100	mg/l
Sulfate	1650	NA	2100	1510	1200	99	mg/l	250	NS	mg/l
Chloride	122	NA	110	130	91J	21	mg/l	250	NS	mg/l
Fluoride	2.1	NA	1.6	1.7	1.8	1.8	mg/l	4.0	2	mg/l
Bromide	NA	NA	NA	2B	1.1	0.17J	mg/l	NS	NS	
pH	7.99	NA	8.1	8.4H	8.12HF	8.68HF	No units	6.5 - 8.5	6.5 - 8.5	No units
Total Dissolved Solids	2840	NA	2600	2440	2100	880	mg/l	400	*1500	mg/l
Total Alkalinity	184	NA	NA	186	210	690	mg/l	NS	NS	
Bicarbonate	NA	NA	180	NA	210	600	mg/l	NS	NS	
Carbonate	ND (5)	NA	NA	8B	ND (1.1)	92	mg/l	NS	NS	
Hydroxide Alkalinity	NA	NA	NA	ND (2)	ND (1.1)	ND (1.1)	mg/l	NS	NS	
Specific Conductivity	NA	NA	3780	NA	3200	1400	umhos/cm	NS	NS	
Sodium Adsorption Ratio	NA	NA	NA	NA	31	6.5	ratio	NS	NS	
Methane	ND (0.0009)	NA	NA	NA	0.002	0.0029	mg/l	NS	NS	
Ethane	NA	NA	NA	NA	0.0004J	ND (0.0003)	mg/l	NS	NS	
Propane	NA	NA	NA	NA	ND (0.00075)	ND (0.00075)	mg/l	NS	NS	
Benzene	ND (0.001)	NA	NA	NA	ND (0.00016)	ND (0.00016)	mg/l	0.005	NS	mg/l

Table 1 ANALYTICAL SUMMARY
Schultz Domestic Well
NOAV 200355205

Parameter	Sample Date							CDPHE Standards		
	05-Mar-02	14-Mar-03	13-Jul-04	12-Jun-07	22-Jun-12	22-Jun-12				
	Well	Well	Well	Well	Well	Ditch				
	Result	Result	Result	Result	Result	Result	Unit	Domestic	Agriculture	Units
Toluene	ND (0.002)	NA	NA	NA	ND (0.00017)	ND (0.00017)	mg/l	0.56	NS	mg/l
Ethylbenzene	NA	NA	NA	NA	ND (0.00016)	ND (0.00016)	mg/l	0.7	NS	mg/l
Total Xylenes	ND (0.004)	NA	NA	NA	ND (0.00019)	ND (0.00019)	mg/l	1.4	NS	mg/l
MTBE	ND (0.008)	NA	NA	NA	ND (0.00025)	ND (0.00025)	mg/l	NS	NS	
Methylene Chloride	NA	NA	NA	NA	0.00038JB	0.00038JB	mg/l	4.7	NS	
Bis(2-ethylhexyl) phthalate	NA	NA	NA	NA	ND (0.00053)	0.00053J	mg/l	NS	NS	
GRO	NA	NA	NA	NA	ND (0.010)	ND (0.010)	mg/l	NS	NS	
DRO	NA	NA	NA	NA	ND (0.053)	ND (0.053)	mg/l	NS	NS	
Total Organic Carbon	NA	NA	NA	NA	3.9B	6.7B	mg/l	NS	NS	
Notes										

CDPHE

Colorado Department of Public Health and the Environment.

Domestic

Water Quality Control Comm. 5 CCR 1002-41, Reg. No. 41 - The Basic Standards For Groundwater; Nov. 2009.

Agriculture

* Standards for agriculture compiled from CDPHE and other sources.

milligrams

mg/l

per liter

µmhos/cm

micromhos per centimeter

NA

Not analyzed.

ND (0.000)

Not detected, detection limit in parenthesis.

NS

No Standard.

Human health standard.

Secondary standard.

CDPHE basic ground water standard.

Attachment 2

SAMPLE SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-30378-1	WELL-SCHULTZ	Water	06/22/2012 1111	06/23/2012 0900
280-30378-2	DITCH-SCHULTZ	Water	06/22/2012 1250	06/23/2012 0900

EXECUTIVE SUMMARY - Detections

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-30378-1	WELL-SCHULTZ					
Methylene Chloride		0.38	J B	2.0	ug/L	8260B
Ethane		0.40	J	2.0	ug/L	RSK-175
Methane		2.0		1.0	ug/L	RSK-175
Sodium Adsorption Ratio		31		0.40	No Unit	20B
Bromide		1.1		0.40	mg/L	300.0
Nitrate as N		0.17	J	1.0	mg/L	300.0
Chloride		91	J	150	mg/L	300.0
Fluoride		1.8		1.0	mg/L	300.0
Sulfate		1200		250	mg/L	300.0
Total Alkalinity		210		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		210		5.0	mg/L	SM 2320B
Specific Conductance		3200		2.0	umhos/cm	SM 2510B
Total Dissolved Solids		2100		20	mg/L	SM 2540C
pH		8.12	HF	0.100	SU	SM 4500 H+ B
Total Organic Carbon - Average		3.9	B	1.0	mg/L	SM 5310B
<i>Dissolved</i>						
Boron		81	J	100	ug/L	200.7 Rev 4.4
Calcium		35000		200	ug/L	200.7 Rev 4.4
Lithium		50		10	ug/L	200.7 Rev 4.4
Magnesium		2300		200	ug/L	200.7 Rev 4.4
Potassium		2200	J	3000	ug/L	200.7 Rev 4.4
Silicon		3200		500	ug/L	200.7 Rev 4.4
Sodium		700000		5000	ug/L	200.7 Rev 4.4
Strontium		1300		10	ug/L	200.7 Rev 4.4
Zinc		6.8	J	20	ug/L	200.7 Rev 4.4
Arsenic		2.0	J	5.0	ug/L	200.8
Barium		12		1.0	ug/L	200.8
Cobalt		0.052	J	1.0	ug/L	200.8
Copper		28		2.0	ug/L	200.8
Lead		0.14	J	1.0	ug/L	200.8
Manganese		2.3		2.0	ug/L	200.8
Molybdenum		23	B	2.0	ug/L	200.8
Selenium		13		5.0	ug/L	200.8
Silver		0.023	J B	1.0	ug/L	200.8
Uranium		5.0		1.0	ug/L	200.8

EXECUTIVE SUMMARY - Detections

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-30378-2 DITCH-SCHULTZ						
Methylene Chloride		0.38	J B	2.0	ug/L	8260B
Bis(2-ethylhexyl) phthalate		0.53	J	9.5	ug/L	8270C
Methane		2.9		1.0	ug/L	RSK-175
Sodium Adsorption Ratio		6.5		0.40	No Unit	20B
Bromide		0.17	J	0.20	mg/L	300.0
Nitrate as N		0.083	J	0.50	mg/L	300.0
Chloride		21		3.0	mg/L	300.0
Fluoride		1.8		0.50	mg/L	300.0
Sulfate		99		25	mg/L	300.0
Total Alkalinity		690		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		600		5.0	mg/L	SM 2320B
Carbonate Alkalinity as CaCO3		92		5.0	mg/L	SM 2320B
Specific Conductance		1400		2.0	umhos/cm	SM 2510B
Total Dissolved Solids		880		10	mg/L	SM 2540C
pH		8.68	HF	0.100	SU	SM 4500 H+ B
Total Organic Carbon - Average		6.7	B	1.0	mg/L	SM 5310B
<i>Dissolved</i>						
Aluminum		30	J	100	ug/L	200.7 Rev 4.4
Boron		320		100	ug/L	200.7 Rev 4.4
Calcium		41000		200	ug/L	200.7 Rev 4.4
Iron		23	J	100	ug/L	200.7 Rev 4.4
Lithium		59		10	ug/L	200.7 Rev 4.4
Magnesium		42000		200	ug/L	200.7 Rev 4.4
Potassium		3100		3000	ug/L	200.7 Rev 4.4
Silicon		11000		500	ug/L	200.7 Rev 4.4
Sodium		250000		5000	ug/L	200.7 Rev 4.4
Strontium		1400		10	ug/L	200.7 Rev 4.4
Vanadium		4.0	J	10	ug/L	200.7 Rev 4.4
Arsenic		2.6	J	5.0	ug/L	200.8
Barium		99		1.0	ug/L	200.8
Cobalt		0.16	J	1.0	ug/L	200.8
Copper		1.3	J	2.0	ug/L	200.8
Manganese		2.4		2.0	ug/L	200.8
Molybdenum		6.8	B	2.0	ug/L	200.8
Selenium		7.6		5.0	ug/L	200.8
Silver		0.047	J B	1.0	ug/L	200.8
Uranium		30		1.0	ug/L	200.8

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-125949	Instrument ID:	MSV_R1
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	R7220.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	06/28/2012 1257			Final Weight/Volume:	20 mL
Prep Date:	06/28/2012 1257				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.21	1.0
1,1,1-Trichloroethane	ND		0.16	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.27	1.0
1,1-Dichloroethane	ND		0.22	1.0
1,1-Dichloroethene	ND		0.23	1.0
1,1-Dichloropropene	ND		0.19	1.0
1,2,3-Trichlorobenzene	ND		0.21	1.0
1,2,3-Trichloropropane	ND		0.33	2.5
1,2,4-Trichlorobenzene	ND		0.21	1.0
1,2,4-Trimethylbenzene	ND		0.15	1.0
1,2-Dibromo-3-Chloropropane	ND		0.47	5.0
1,2-Dibromoethane	ND		0.18	1.0
1,2-Dichlorobenzene	ND		0.15	1.0
1,2-Dichloroethane	ND		0.13	1.0
1,2-Dichloroethene, Total	ND		0.24	1.0
1,2-Dichloropropane	ND		0.18	1.0
1,3,5-Trimethylbenzene	ND		0.16	1.0
1,3-Dichlorobenzene	ND		0.13	1.0
1,3-Dichloropropane	ND		0.22	1.0
1,4-Dichlorobenzene	ND		0.16	1.0
2,2-Dichloropropane	ND		0.18	1.0
2-Butanone (MEK)	ND		2.0	6.0
2-Chlorotoluene	ND		0.17	1.0
2-Hexanone	ND		1.7	5.0
4-Chlorotoluene	ND		0.21	1.0
4-Isopropyltoluene	ND		0.20	1.0
4-Methyl-2-pentanone (MIBK)	ND		0.98	5.0
Acetone	ND		1.9	10
Benzene	ND		0.16	1.0
Bromobenzene	ND		0.17	1.0
Bromoform	ND		0.19	1.0
Bromomethane	ND		0.21	2.0
Carbon tetrachloride	ND		0.19	1.0
Chlorobenzene	ND		0.17	1.0
Chlorobromomethane	ND		0.10	1.0
Chlorodibromomethane	ND		0.17	1.0
Chloroethane	ND		0.41	2.0
Chloroform	ND		0.16	1.0
Chloromethane	ND		0.30	2.0
cis-1,2-Dichloroethene	ND		0.15	1.0
cis-1,3-Dichloropropene	ND		0.16	1.0
Dibromomethane	ND		0.17	1.0
Dichlorobromomethane	ND		0.17	1.0
Dichlorodifluoromethane	ND		0.31	2.0
Ethylbenzene	ND		0.16	1.0

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-125949	Instrument ID:	MSV_R1
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	R7220.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	06/28/2012 1257			Final Weight/Volume:	20 mL
Prep Date:	06/28/2012 1257				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	ND		0.36	1.0
Isopropylbenzene	ND		0.19	1.0
Methyl tert-butyl ether	ND		0.25	5.0
Methylene Chloride	0.38	J B	0.32	2.0
m-Xylene & p-Xylene	ND		0.34	2.0
Naphthalene	ND		0.22	1.0
n-Butylbenzene	ND		0.32	1.0
N-Propylbenzene	ND		0.16	1.0
o-Xylene	ND		0.19	1.0
sec-Butylbenzene	ND		0.17	1.0
Styrene	ND		0.17	1.0
tert-Butylbenzene	ND		0.16	1.0
Tetrachloroethene	ND		0.20	1.0
Toluene	ND		0.17	1.0
trans-1,2-Dichloroethene	ND		0.15	1.0
trans-1,3-Dichloropropene	ND		0.19	3.0
Trichloroethene	ND		0.16	1.0
Trichlorofluoromethane	ND		0.29	2.0
Vinyl chloride	ND		0.10	1.0
Xylenes, Total	ND		0.19	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 127
4-Bromofluorobenzene (Surr)	81		78 - 120
Dibromofluoromethane (Surr)	90		77 - 120
Toluene-d8 (Surr)	91		80 - 125

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-125949	Instrument ID:	MSV_R1
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	R7221.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	06/28/2012 1317			Final Weight/Volume:	20 mL
Prep Date:	06/28/2012 1317				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.21	1.0
1,1,1-Trichloroethane	ND		0.16	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.27	1.0
1,1-Dichloroethane	ND		0.22	1.0
1,1-Dichloroethene	ND		0.23	1.0
1,1-Dichloropropene	ND		0.19	1.0
1,2,3-Trichlorobenzene	ND		0.21	1.0
1,2,3-Trichloropropane	ND		0.33	2.5
1,2,4-Trichlorobenzene	ND		0.21	1.0
1,2,4-Trimethylbenzene	ND		0.15	1.0
1,2-Dibromo-3-Chloropropane	ND		0.47	5.0
1,2-Dibromoethane	ND		0.18	1.0
1,2-Dichlorobenzene	ND		0.15	1.0
1,2-Dichloroethane	ND		0.13	1.0
1,2-Dichloroethene, Total	ND		0.24	1.0
1,2-Dichloropropane	ND		0.18	1.0
1,3,5-Trimethylbenzene	ND		0.16	1.0
1,3-Dichlorobenzene	ND		0.13	1.0
1,3-Dichloropropane	ND		0.22	1.0
1,4-Dichlorobenzene	ND		0.16	1.0
2,2-Dichloropropane	ND		0.18	1.0
2-Butanone (MEK)	ND		2.0	6.0
2-Chlorotoluene	ND		0.17	1.0
2-Hexanone	ND		1.7	5.0
4-Chlorotoluene	ND		0.21	1.0
4-Isopropyltoluene	ND		0.20	1.0
4-Methyl-2-pentanone (MIBK)	ND		0.98	5.0
Acetone	ND		1.9	10
Benzene	ND		0.16	1.0
Bromobenzene	ND		0.17	1.0
Bromoform	ND		0.19	1.0
Bromomethane	ND		0.21	2.0
Carbon tetrachloride	ND		0.19	1.0
Chlorobenzene	ND		0.17	1.0
Chlorobromomethane	ND		0.10	1.0
Chlorodibromomethane	ND		0.17	1.0
Chloroethane	ND		0.41	2.0
Chloroform	ND		0.16	1.0
Chloromethane	ND		0.30	2.0
cis-1,2-Dichloroethene	ND		0.15	1.0
cis-1,3-Dichloropropene	ND		0.16	1.0
Dibromomethane	ND		0.17	1.0
Dichlorobromomethane	ND		0.17	1.0
Dichlorodifluoromethane	ND		0.31	2.0
Ethylbenzene	ND		0.16	1.0

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-125949	Instrument ID:	MSV_R1
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	R7221.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	06/28/2012 1317			Final Weight/Volume:	20 mL
Prep Date:	06/28/2012 1317				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	ND		0.36	1.0
Isopropylbenzene	ND		0.19	1.0
Methyl tert-butyl ether	ND		0.25	5.0
Methylene Chloride	0.38	J B	0.32	2.0
m-Xylene & p-Xylene	ND		0.34	2.0
Naphthalene	ND		0.22	1.0
n-Butylbenzene	ND		0.32	1.0
N-Propylbenzene	ND		0.16	1.0
o-Xylene	ND		0.19	1.0
sec-Butylbenzene	ND		0.17	1.0
Styrene	ND		0.17	1.0
tert-Butylbenzene	ND		0.16	1.0
Tetrachloroethene	ND		0.20	1.0
Toluene	ND		0.17	1.0
trans-1,2-Dichloroethene	ND		0.15	1.0
trans-1,3-Dichloropropene	ND		0.19	3.0
Trichloroethene	ND		0.16	1.0
Trichlorofluoromethane	ND		0.29	2.0
Vinyl chloride	ND		0.10	1.0
Xylenes, Total	ND		0.19	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 127
4-Bromofluorobenzene (Surr)	84		78 - 120
Dibromofluoromethane (Surr)	90		77 - 120
Toluene-d8 (Surr)	92		80 - 125

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-126328	Instrument ID:	MSS_Y
Prep Method:	3520C	Prep Batch:	280-125338	Lab File ID:	Y8515.D
Dilution:	1.0			Initial Weight/Volume:	1058.9 mL
Analysis Date:	06/29/2012 1353			Final Weight/Volume:	1000 uL
Prep Date:	06/24/2012 0815			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2,2'-oxybis[1-chloropropane]	ND		0.26	9.4
2,4,5-Trichlorophenol	ND		0.42	9.4
2,4,6-Trichlorophenol	ND		0.27	9.4
2,4-Dichlorophenol	ND		0.60	9.4
2,4-Dimethylphenol	ND		0.55	9.4
2,4-Dinitrophenol	ND		9.4	28
2,4-Dinitrotoluene	ND		1.6	9.4
2,6-Dinitrotoluene	ND		1.8	9.4
2-Chloronaphthalene	ND		0.25	3.8
2-Chlorophenol	ND		1.9	9.4
2-Methylnaphthalene	ND		0.27	3.8
2-Methylphenol	ND		0.93	9.4
2-Nitroaniline	ND		1.6	9.4
2-Nitrophenol	ND		0.37	9.4
3 & 4 Methylphenol	ND		0.24	9.4
3,3'-Dichlorobenzidine	ND		1.9	47
3-Nitroaniline	ND		1.9	9.4
4,6-Dinitro-2-methylphenol	ND		3.8	47
4-Bromophenyl phenyl ether	ND		0.41	9.4
4-Chloro-3-methylphenol	ND		2.3	9.4
4-Chloroaniline	ND		2.0	9.4
4-Chlorophenyl phenyl ether	ND		1.6	9.4
4-Nitroaniline	ND		1.9	9.4
4-Nitrophenol	ND		1.2	9.4
Acenaphthene	ND		0.26	3.8
Acenaphthylene	ND		0.46	3.8
Acetophenone	ND		0.23	9.4
Anthracene	ND		0.40	3.8
Atrazine	ND		0.69	9.4
Benzidine	ND		47	94
Benzo[a]anthracene	ND		0.33	3.8
Benzo[a]pyrene	ND		0.29	3.8
Benzo[b]fluoranthene	ND		0.50	3.8
Benzo[g,h,i]perylene	ND		0.47	3.8
Benzo[k]fluoranthene	ND		0.43	3.8
Bis(2-chloroethoxy)methane	ND		0.92	9.4
Bis(2-chloroethyl)ether	ND		0.39	9.4
Bis(2-ethylhexyl) phthalate	ND		0.53	9.4
Butyl benzyl phthalate	ND		0.94	3.8
Caprolactam	ND		4.7	9.4
Carbazole	ND		0.41	3.8
Chrysene	ND		0.51	3.8
Cresols, Total	ND		0.24	9.4
Dibenz(a,h)anthracene	ND		0.48	3.8
Dibenzofuran	ND		0.27	3.8
Diethyl phthalate	ND		0.36	3.8

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-126328	Instrument ID:	MSS_Y
Prep Method:	3520C	Prep Batch:	280-125338	Lab File ID:	Y8515.D
Dilution:	1.0			Initial Weight/Volume:	1058.9 mL
Analysis Date:	06/29/2012 1353			Final Weight/Volume:	1000 uL
Prep Date:	06/24/2012 0815			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dimethyl phthalate	ND		0.20	3.8
Di-n-butyl phthalate	ND		1.1	3.8
Di-n-octyl phthalate	ND		0.33	3.8
Fluoranthene	ND		0.19	3.8
Fluorene	ND		0.29	3.8
Hexachlorobenzene	ND		0.62	9.4
Hexachlorobutadiene	ND		3.1	9.4
Hexachlorocyclopentadiene	ND		9.4	47
Hexachloroethane	ND		2.0	9.4
Indeno[1,2,3-cd]pyrene	ND		0.61	3.8
Naphthalene	ND		0.27	3.8
Nitrobenzene	ND		0.76	9.4
N-Nitrosodi-n-propylamine	ND		0.33	9.4
n-Nitrosodiphenylamine(as diphenylamine)	ND		0.42	9.4
Pentachlorophenol	ND		19	47
Phenanthrene	ND		0.25	3.8
Phenol	ND		1.9	9.4
Pyrene	ND		0.35	9.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	114		57 - 120
2-Fluorobiphenyl	86		38 - 120
2-Fluorophenol	82		51 - 120
Nitrobenzene-d5	95		48 - 120
Phenol-d5	89		51 - 120
Terphenyl-d14	108		50 - 120

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-126328	Instrument ID:	MSS_Y
Prep Method:	3520C	Prep Batch:	280-125338	Lab File ID:	Y8516.D
Dilution:	1.0			Initial Weight/Volume:	1052 mL
Analysis Date:	06/29/2012 1413			Final Weight/Volume:	1000 uL
Prep Date:	06/24/2012 0815			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2,2'-oxybis[1-chloropropane]	ND		0.27	9.5
2,4,5-Trichlorophenol	ND		0.43	9.5
2,4,6-Trichlorophenol	ND		0.28	9.5
2,4-Dichlorophenol	ND		0.61	9.5
2,4-Dimethylphenol	ND		0.55	9.5
2,4-Dinitrophenol	ND		9.5	29
2,4-Dinitrotoluene	ND		1.6	9.5
2,6-Dinitrotoluene	ND		1.8	9.5
2-Chloronaphthalene	ND		0.25	3.8
2-Chlorophenol	ND		1.9	9.5
2-Methylnaphthalene	ND		0.28	3.8
2-Methylphenol	ND		0.93	9.5
2-Nitroaniline	ND		1.6	9.5
2-Nitrophenol	ND		0.37	9.5
3 & 4 Methylphenol	ND		0.24	9.5
3,3'-Dichlorobenzidine	ND		1.9	48
3-Nitroaniline	ND		1.9	9.5
4,6-Dinitro-2-methylphenol	ND		3.8	48
4-Bromophenyl phenyl ether	ND		0.41	9.5
4-Chloro-3-methylphenol	ND		2.3	9.5
4-Chloroaniline	ND		2.0	9.5
4-Chlorophenyl phenyl ether	ND		1.6	9.5
4-Nitroaniline	ND		1.9	9.5
4-Nitrophenol	ND		1.2	9.5
Acenaphthene	ND		0.27	3.8
Acenaphthylene	ND		0.47	3.8
Acetophenone	ND		0.23	9.5
Anthracene	ND		0.40	3.8
Atrazine	ND		0.69	9.5
Benzidine	ND		48	95
Benzo[a]anthracene	ND		0.33	3.8
Benzo[a]pyrene	ND		0.29	3.8
Benzo[b]fluoranthene	ND		0.50	3.8
Benzo[g,h,i]perylene	ND		0.48	3.8
Benzo[k]fluoranthene	ND		0.44	3.8
Bis(2-chloroethoxy)methane	ND		0.92	9.5
Bis(2-chloroethyl)ether	ND		0.39	9.5
Bis(2-ethylhexyl) phthalate	0.53	J	0.53	9.5
Butyl benzyl phthalate	ND		0.95	3.8
Caprolactam	ND		4.8	9.5
Carbazole	ND		0.41	3.8
Chrysene	ND		0.51	3.8
Cresols, Total	ND		0.24	9.5
Dibenz(a,h)anthracene	ND		0.48	3.8
Dibenzofuran	ND		0.28	3.8
Diethyl phthalate	ND		0.36	3.8

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-126328	Instrument ID:	MSS_Y
Prep Method:	3520C	Prep Batch:	280-125338	Lab File ID:	Y8516.D
Dilution:	1.0			Initial Weight/Volume:	1052 mL
Analysis Date:	06/29/2012 1413			Final Weight/Volume:	1000 uL
Prep Date:	06/24/2012 0815			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dimethyl phthalate	ND		0.20	3.8
Di-n-butyl phthalate	ND		1.1	3.8
Di-n-octyl phthalate	ND		0.33	3.8
Fluoranthene	ND		0.19	3.8
Fluorene	ND		0.29	3.8
Hexachlorobenzene	ND		0.63	9.5
Hexachlorobutadiene	ND		3.1	9.5
Hexachlorocyclopentadiene	ND		9.5	48
Hexachloroethane	ND		2.0	9.5
Indeno[1,2,3-cd]pyrene	ND		0.62	3.8
Naphthalene	ND		0.28	3.8
Nitrobenzene	ND		0.77	9.5
N-Nitrosodi-n-propylamine	ND		0.33	9.5
n-Nitrosodiphenylamine(as diphenylamine)	ND		0.42	9.5
Pentachlorophenol	ND		19	48
Phenanthrene	ND		0.25	3.8
Phenol	ND		1.9	9.5
Pyrene	ND		0.35	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	116		57 - 120
2-Fluorobiphenyl	84		38 - 120
2-Fluorophenol	84		51 - 120
Nitrobenzene-d5	90		48 - 120
Phenol-d5	90		51 - 120
Terphenyl-d14	107		50 - 120

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8015B Gasoline Range Organics - (GC)

Analysis Method:	8015B	Analysis Batch:	280-125760	Instrument ID:	GCV_K
Prep Method:	5030B		N/A	Initial Weight/Volume:	5 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	06/26/2012 1541			Injection Volume:	5 mL
Prep Date:	06/26/2012 1541			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Gasoline Range Organics (GRO)-C6-C10	ND		10	25

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	90		82 - 110

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8015B Gasoline Range Organics - (GC)

Analysis Method:	8015B	Analysis Batch:	280-125760	Instrument ID:	GCV_K
Prep Method:	5030B		N/A	Initial Weight/Volume:	5 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	06/26/2012 2329			Injection Volume:	5 mL
Prep Date:	06/26/2012 2329			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Gasoline Range Organics (GRO)-C6-C10	ND		10	25

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	95		82 - 110

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

RSK-175 Dissolved Gases (GC)

Analysis Method: RSK-175

Analysis Batch: 600-83033

Instrument ID: FID14

N/A

N/A

Initial Weight/Volume: 1 mL

Dilution: 1.0

Final Weight/Volume: 1 mL

Analysis Date: 07/02/2012 1625

Injection Volume:

Prep Date: N/A

Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Ethane	0.40	J	0.30	2.0
Methane	2.0		0.36	1.0
Propane	ND		0.75	2.0

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

RSK-175 Dissolved Gases (GC)

Analysis Method: RSK-175

Analysis Batch: 600-83033

Instrument ID: FID14

N/A

N/A

Initial Weight/Volume: 1 mL

Dilution: 1.0

Final Weight/Volume: 1 mL

Analysis Date: 07/02/2012 1637

Injection Volume:

Prep Date: N/A

Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Ethane	ND		0.30	2.0
Methane	2.9		0.36	1.0
Propane	ND		0.75	2.0

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	280-125910	Instrument ID:	GCS_U2
Prep Method:	3510C	Prep Batch:	280-125504	Initial Weight/Volume:	1055.3 mL
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/27/2012 2018			Injection Volume:	1 uL
Prep Date:	06/25/2012 1906			Result Type:	PRIMARY

Analyte	Result (mg/L)	Qualifier	MDL	RL
C10-C36	ND		0.053	0.47

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	76		50 - 115
n-Octacosane	97		26 - 152

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	280-125910	Instrument ID:	GCS_U2
Prep Method:	3510C	Prep Batch:	280-125504	Initial Weight/Volume:	1052.7 mL
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/27/2012 2042			Injection Volume:	1 uL
Prep Date:	06/25/2012 1906			Result Type:	PRIMARY

Analyte	Result (mg/L)	Qualifier	MDL	RL
C10-C36	ND		0.053	0.47

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	74		50 - 115
n-Octacosane	98		26 - 152

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

200.7 Rev 4.4 Metals (ICP)-Dissolved

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-125764	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-125463	Lab File ID:	26A062612.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2012 0000			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	ND		18	100
Beryllium	ND		0.47	1.0
Boron	81	J	4.4	100
Calcium	35000		35	200
Chromium	ND		0.66	10
Iron	ND		22	100
Lithium	50		2.6	10
Magnesium	2300		11	200
Nickel	ND		1.3	40
Potassium	2200	J	240	3000
Silicon	3200		35	500
Sodium	700000		92	5000
Strontium	1300		0.30	10
Vanadium	ND		1.1	10
Zinc	6.8	J	4.5	20

200.8 Metals (ICP/MS)-Dissolved

Analysis Method:	200.8	Analysis Batch:	280-125775	Instrument ID:	MT_024
Prep Method:	200.8	Prep Batch:	280-125466	Lab File ID:	063AREF.D
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/26/2012 2351			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	ND		0.16	2.0
Arsenic	2.0	J	0.50	5.0
Barium	12		0.38	1.0
Cadmium	ND		0.040	1.0
Cobalt	0.052	J	0.050	1.0
Copper	28		0.20	2.0
Lead	0.14	J	0.10	1.0
Manganese	2.3		0.51	2.0
Molybdenum	23	B	0.040	2.0
Selenium	13		1.0	5.0
Silver	0.023	J B	0.020	1.0
Thallium	ND		0.066	1.0
Uranium	5.0		0.030	1.0

20B Sodium Adsorption Ratio

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

20B Sodium Adsorption Ratio

Analysis Method:	20B	Analysis Batch:	280-125550	Instrument ID:	MT_025
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	06/26/2012 0710			Final Weight/Volume:	1.0 mL
Prep Date:	N/A				

Analyte	Result (No Unit)	Qualifier	MDL	RL
Sodium Adsorption Ratio	31		0.40	0.40

245.1 Mercury (CVAA)-Dissolved

Analysis Method:	245.1	Analysis Batch:	280-125895	Instrument ID:	MT_033
Prep Method:	245.1	Prep Batch:	280-125678	Lab File ID:	120627aa.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	06/27/2012 1459			Final Weight/Volume:	30 mL
Prep Date:	06/27/2012 1035				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.027	0.20

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

200.7 Rev 4.4 Metals (ICP)-Dissolved

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-125764	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-125463	Lab File ID:	26A062612.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2012 0003			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	30	J	18	100
Beryllium	ND		0.47	1.0
Boron	320		4.4	100
Calcium	41000		35	200
Chromium	ND		0.66	10
Iron	23	J	22	100
Lithium	59		2.6	10
Magnesium	42000		11	200
Nickel	ND		1.3	40
Potassium	3100		240	3000
Silicon	11000		35	500
Sodium	250000		92	5000
Strontium	1400		0.30	10
Vanadium	4.0	J	1.1	10
Zinc	ND		4.5	20

200.8 Metals (ICP/MS)-Dissolved

Analysis Method:	200.8	Analysis Batch:	280-125775	Instrument ID:	MT_024
Prep Method:	200.8	Prep Batch:	280-125466	Lab File ID:	066SMPL.D
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2012 0000			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	ND		0.16	2.0
Arsenic	2.6	J	0.50	5.0
Barium	99		0.38	1.0
Cadmium	ND		0.040	1.0
Cobalt	0.16	J	0.050	1.0
Copper	1.3	J	0.20	2.0
Lead	ND		0.10	1.0
Manganese	2.4		0.51	2.0
Molybdenum	6.8	B	0.040	2.0
Selenium	7.6		1.0	5.0
Silver	0.047	J B	0.020	1.0
Thallium	ND		0.066	1.0
Uranium	30		0.030	1.0

20B Sodium Adsorption Ratio

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

20B Sodium Adsorption Ratio

Analysis Method:	20B	Analysis Batch:	280-125550	Instrument ID:	MT_025
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	06/26/2012 0710			Final Weight/Volume:	1.0 mL
Prep Date:	N/A				

Analyte	Result (No Unit)	Qualifier	MDL	RL
Sodium Adsorption Ratio	6.5		0.40	0.40

245.1 Mercury (CVAA)-Dissolved

Analysis Method:	245.1	Analysis Batch:	280-125895	Instrument ID:	MT_033
Prep Method:	245.1	Prep Batch:	280-125678	Lab File ID:	120627aa.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	06/27/2012 1501			Final Weight/Volume:	30 mL
Prep Date:	06/27/2012 1035				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.027	0.20

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

General Chemistry**Client Sample ID: WELL-SCHULTZ**

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	1.1		mg/L	0.23	0.40	2.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/23/2012 1521					
Nitrate as N	0.17	J	mg/L	0.084	1.0	2.0	300.0
	Analysis Batch: 280-125604	Analysis Date: 06/23/2012 1521					
Chloride	91	J	mg/L	13	150	50	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/24/2012 1155					
Nitrite as N	ND		mg/L	0.098	1.0	2.0	300.0
	Analysis Batch: 280-125604	Analysis Date: 06/23/2012 1521					
Fluoride	1.8		mg/L	0.12	1.0	2.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/23/2012 1521					
Sulfate	1200		mg/L	12	250	50	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/24/2012 1155					
Total Alkalinity	210		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0922					
Bicarbonate Alkalinity as CaCO3	210		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0922					
Carbonate Alkalinity as CaCO3	ND		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0922					
Hydroxide Alkalinity	ND		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0922					
Specific Conductance	3200		umhos/cm	2.0	2.0	1.0	SM 2510B
	Analysis Batch: 280-125960	Analysis Date: 06/28/2012 1108					
Total Dissolved Solids	2100		mg/L	9.4	20	1.0	SM 2540C
	Analysis Batch: 280-125916	Analysis Date: 06/28/2012 0900					
pH	8.12	HF	SU	0.100	0.100	1.0	SM 4500 H+ B
	Analysis Batch: 280-125326	Analysis Date: 06/23/2012 1159					
Total Organic Carbon - Average	3.9	B	mg/L	0.16	1.0	1.0	SM 5310B
	Analysis Batch: 280-126107	Analysis Date: 06/28/2012 0546					

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

General Chemistry**Client Sample ID: DITCH-SCHULTZ**

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	0.17	J	mg/L	0.11	0.20	1.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/23/2012 1538					
Nitrate as N	0.083	J	mg/L	0.042	0.50	1.0	300.0
	Analysis Batch: 280-125604	Analysis Date: 06/23/2012 1538					
Chloride	21		mg/L	0.25	3.0	1.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/23/2012 1538					
Nitrite as N	ND		mg/L	0.049	0.50	1.0	300.0
	Analysis Batch: 280-125604	Analysis Date: 06/23/2012 1538					
Fluoride	1.8		mg/L	0.060	0.50	1.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/23/2012 1538					
Sulfate	99		mg/L	1.2	25	5.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/24/2012 1213					
Total Alkalinity	690		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0928					
Bicarbonate Alkalinity as CaCO3	600		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0928					
Carbonate Alkalinity as CaCO3	92		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0928					
Hydroxide Alkalinity	ND		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0928					
Specific Conductance	1400		umhos/cm	2.0	2.0	1.0	SM 2510B
	Analysis Batch: 280-125960	Analysis Date: 06/28/2012 1108					
Total Dissolved Solids	880		mg/L	4.7	10	1.0	SM 2540C
	Analysis Batch: 280-125916	Analysis Date: 06/28/2012 0900					
pH	8.68	HF	SU	0.100	0.100	1.0	SM 4500 H+ B
	Analysis Batch: 280-125326	Analysis Date: 06/23/2012 1201					
Total Organic Carbon - Average	6.7	B	mg/L	0.16	1.0	1.0	SM 5310B
	Analysis Batch: 280-126107	Analysis Date: 06/28/2012 0603					

Attachment 3

ANALYTICAL REPORT

Job Number: 280-30378-1

Job Description: Kurt Schultz Silt, CO

For:

Colorado Oil&Gas Conservation Commision
707 Wapiti Court
Suite 204
Rifle, CO 81650

Attention: Linda Spry O'Rourke



Approved for release.
Joseph J Egry
Project Manager I
7/13/2012 10:52 AM

Joseph J Egry
Project Manager I
joseph.egry@testamericainc.com
07/13/2012

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

The Lab Certification ID# is E87667.

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

TestAmerica Laboratories, Inc.

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CASE NARRATIVE

Client: Colorado Oil & Gas Conservation Commission

Project: Kurt Schultz Silt, CO

Report Number: 280-30378-1

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

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

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

RECEIPT

The samples were received on 06/23/2012; the samples arrived in three (3) coolers in good condition, properly preserved, and on ice. The temperature of the coolers at receipt was 1.8°C, 2.4°C, and 2.8° C.

The results for the RSK-175 analysis, SW846 8015B, are included in this report and were performed by TestAmerica Houston: 6310 Rothway Street; Houston, TX 77040: Phone: 713.690.4444.

The sample ID's were changed per the revised Chain of Custody submitted 6/25/2012.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/28/2012.

Methylene Chloride was detected in method blank MB 280-125949/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

No other difficulties were encountered during the volatiles analyses.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 06/24/2012 and analyzed on 06/29/2012.

2,4,6-Tribromophenol failed the surrogate recovery criteria high for LCS 280-125338/2-A and LCSD 280-125338/3-A. All spike compounds were within control in both the LCS and LCSD, therefore the data will be reported.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 125338. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other difficulties were encountered during the SVOC analyses.

All other quality control parameters were within the acceptance limits.

GAS RANGE ORGANICS

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for gas range organics in accordance with EPA SW-846 Method 8015B - GRO. The samples were analyzed on 06/26/2012.

No difficulties were encountered during the GRO analyses.

All quality control parameters were within the acceptance limits.

DISSOLVED GASES

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for dissolved gases in accordance with RSK_175. The samples were analyzed on 07/02/2012.

No difficulties were encountered during the dissolved gases analyses.

All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for Diesel Range Organics in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 06/25/2012 and analyzed on 06/27/2012.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 125504 method 3510C/ 8015B_DRO. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other difficulties were encountered during the DRO analyses.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP)

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for dissolved metals (ICP) in accordance with EPA Method 200.7. The samples were prepared on 06/26/2012 and analyzed on 06/27/2012.

Sodium failed the recovery criteria low for the MS and MSD of sample 280-30333-1 in batch 280-125764. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for dissolved metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 06/26/2012 and analyzed on 06/26/2012 and 06/27/2012.

Molybdenum and Silver were detected in method blank MB 280-125420/1-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Cobalt and Copper failed the recovery criteria low for the MS and MSD of sample WELL-SCHULTZ (280-30378-1) in batch 280-125775. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other difficulties were encountered during the dissolved metals analyses.

All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for dissolved mercury (CVAA) in accordance with EPA Method 245.1. The samples were prepared and analyzed on 06/27/2012.

No difficulties were encountered during the dissolved mercury analyses.

All quality control parameters were within the acceptance limits.

SODIUM ABSORPTION RATIO

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for Sodium Absorption Ratio in accordance with USDA Handbook 60 - 20B. The samples were analyzed on 06/26/2012.

No difficulties were encountered during the SAR analyses.

All quality control parameters were within the acceptance limits.

ALKALINITY

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 06/26/2012.

No difficulties were encountered during the alkalinity analyses.

All quality control parameters were within the acceptance limits.

SPECIFIC CONDUCTIVITY

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for specific conductivity in accordance with SM20 2510B. The samples were analyzed on 06/28/2012.

No difficulties were encountered during the conductivity analyses.

All quality control parameters were within the acceptance limits.

TOTAL DISSOLVED SOLIDS

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 06/28/2012.

No difficulties were encountered during the TDS analyses.

All quality control parameters were within the acceptance limits.

ANIONS (28 DAYS)

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for anions (28 days) in accordance with EPA Method 300.0. The samples were analyzed on 06/23/2012 and 06/24/2012.

Samples WELL-SCHULTZ (280-30378-1) [2X], WELL-SCHULTZ (280-30378-1) [50X], and DITCH-SCHULTZ (280-30378-2) [5X] required dilution prior to analysis due to matrix. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the anions analyses.

All other quality control parameters were within the acceptance limits.

ANIONS (48 HOURS)

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for anions (48 hours) in accordance with EPA Method 300.0. The samples were analyzed on 06/23/2012.

Sample WELL-SCHULTZ (280-30378-1) [2X] required dilution prior to analysis due to matrix. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the anions analyses.

All quality control parameters were within the acceptance limits.

CORROSIVITY (PH)

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for corrosivity (pH) in accordance with SM20 4500 H+ B. The samples were analyzed on 06/23/2012.

No difficulties were encountered during the pH analyses.

All other quality control parameters were within the acceptance limits.

TOTAL ORGANIC CARBON

Samples WELL-SCHULTZ (280-30378-1) and DITCH-SCHULTZ (280-30378-2) were analyzed for total organic carbon in accordance with SM20 5310B. The samples were analyzed on 06/28/2012.

Total Organic Carbon - Average was detected in method blank MB 280-126107/25 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

No other difficulties were encountered during the TOC analyses.

All other quality control parameters were within the acceptance limits.

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: MSV_R1 Analysis Batch Number: 124031Lab Sample ID: IC 280-124031/3 Client Sample ID: _____Date Analyzed: 06/12/12 08:22 Lab File ID: R7009.D GC Column: DB-624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dibromo-3-Chloropropane	12.88	Analyte not Identified by the Data System	dobransky m	06/12/12 11:24

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCV_K Analysis Batch Number: 115193Lab Sample ID: IC 280-115193/3 Client Sample ID: _____Date Analyzed: 04/11/12 15:28 Lab File ID: 113F0301.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.57	Split Peak	byla	04/12/12 10:32
Gasoline Range Organics (GRO) -C6-C10	14.46	Baseline Event	byla	04/12/12 00:00
1-Chloro-4-fluorobenzene	15.39	Baseline Event	byla	04/12/12 10:31
Chlorobenzene	15.73	Baseline Event	byla	04/12/12 10:31
C5-C12	16.98	Baseline Event	byla	04/12/12 00:00
C6-C12	17.65	Baseline Event	byla	04/12/12 00:00

Lab Sample ID: IC 280-115193/4 Client Sample ID: _____Date Analyzed: 04/11/12 16:10 Lab File ID: 114F0401.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.57	Split Peak	byla	04/12/12 12:58
Gasoline Range Organics (GRO) -C6-C10	14.46	Baseline Event	byla	04/12/12 00:00
1-Chloro-4-fluorobenzene	15.38	Baseline Event	byla	04/12/12 12:58
Chlorobenzene	15.72	Baseline Event	byla	04/12/12 12:58
C5-C12	16.98	Baseline Event	byla	04/12/12 00:00
C6-C12	17.65	Baseline Event	byla	04/12/12 00:00

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCV_K Analysis Batch Number: 115193Lab Sample ID: ICRT 280-115193/5 Client Sample ID: _____Date Analyzed: 04/11/12 16:53 Lab File ID: 115F0501.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.57	Split Peak	byla	04/12/12 10:29
Gasoline Range Organics (GRO) -C6-C10	14.46	Baseline Event	byla	04/12/12 00:00
1-Chloro-4-fluorobenzene	15.38	Baseline Event	byla	04/12/12 10:29
Chlorobenzene	15.72	Baseline Event	byla	04/12/12 10:29
C5-C12	16.98	Baseline Event	byla	04/12/12 00:00
C6-C12	17.65	Baseline Event	byla	04/12/12 00:00

Lab Sample ID: IC 280-115193/6 Client Sample ID: _____Date Analyzed: 04/11/12 17:36 Lab File ID: 116F0601.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.57	Split Peak	byla	04/12/12 10:34
Gasoline Range Organics (GRO) -C6-C10	14.46	Baseline Event	byla	04/12/12 00:00
1-Chloro-4-fluorobenzene	15.38	Baseline Event	byla	04/12/12 10:34
Chlorobenzene	15.71	Baseline Event	byla	04/12/12 10:34
C5-C12	16.98	Baseline Event	byla	04/12/12 00:00
C6-C12	17.65	Baseline Event	byla	04/12/12 00:00

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCV_K Analysis Batch Number: 115193Lab Sample ID: IC 280-115193/7 Client Sample ID: _____Date Analyzed: 04/11/12 18:18 Lab File ID: 201F0701.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.57	Split Peak	byla	04/12/12 10:35
Gasoline Range Organics (GRO) -C6-C10	14.46	Baseline Event	byla	04/12/12 00:00
1-Chloro-4-fluorobenzene	15.38	Baseline Event	byla	04/12/12 10:34
Chlorobenzene	15.71	Baseline Event	byla	04/12/12 10:34
C5-C12	16.98	Baseline Event	byla	04/12/12 00:00
C6-C12	17.65	Baseline Event	byla	04/12/12 00:00

Lab Sample ID: IC 280-115193/8 Client Sample ID: _____Date Analyzed: 04/11/12 19:01 Lab File ID: 202F0801.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.56	Baseline Event	mooret	04/12/12 11:00
Gasoline Range Organics (GRO) -C6-C10	14.46	Baseline Event	mooret	04/12/12 00:00
1-Chloro-4-fluorobenzene	15.37	Baseline Event	mooret	04/12/12 11:00
Chlorobenzene	15.70	Baseline Event	mooret	04/12/12 11:00
C5-C12	16.98	Baseline Event	mooret	04/12/12 00:00
C6-C12	17.65	Baseline Event	mooret	04/12/12 00:00

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCV_K Analysis Batch Number: 115193Lab Sample ID: ICV 280-115193/9 Client Sample ID: _____Date Analyzed: 04/11/12 19:43 Lab File ID: 203F0901.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.55	Split Peak	byla	04/12/12 10:38
Gasoline Range Organics (GRO) -C6-C10	14.46	Baseline Event	byla	04/12/12 00:00
Chlorobenzene	15.69	Baseline Event	byla	04/12/12 10:38
C5-C12	16.98	Baseline Event	byla	04/12/12 00:00
C6-C12	17.65	Baseline Event	byla	04/12/12 00:00
Gasoline	17.65	Baseline Event	byla	04/12/12 00:00

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCV_K Analysis Batch Number: 125760Lab Sample ID: CCVRT 280-125760/2 Client Sample ID: _____Date Analyzed: 06/26/12 10:03 Lab File ID: 111F0201.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.57	Split Peak	byla	06/26/12 12:51
Gasoline Range Organics (GRO) -C6-C10	14.45	Baseline Event	byla	06/26/12 00:00
Chlorobenzene	15.71	Baseline Event	byla	06/26/12 12:51

Lab Sample ID: LCS 280-125760/3 Client Sample ID: _____Date Analyzed: 06/26/12 13:34 Lab File ID: 112F0301.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.56	Split Peak	byla	06/26/12 15:20
Gasoline Range Organics (GRO) -C6-C10	14.45	Baseline Event	byla	06/26/12 00:00

Lab Sample ID: LCSD 280-125760/4 Client Sample ID: _____Date Analyzed: 06/26/12 14:16 Lab File ID: 113F0401.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.58	Baseline Event	byla	06/26/12 15:20
Gasoline Range Organics (GRO) -C6-C10	14.45	Baseline Event	byla	06/26/12 00:00

Lab Sample ID: 280-30378-1 MS Client Sample ID: WELL-SCHULTZ MSDate Analyzed: 06/26/12 16:23 Lab File ID: 116F0701.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.58	Baseline Event	byla	06/27/12 08:26
Gasoline Range Organics (GRO) -C6-C10	14.45	Baseline Event	byla	06/27/12 00:00

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCV_K Analysis Batch Number: 125760Lab Sample ID: 280-30378-1 MSD Client Sample ID: WELL-SCHULTZ MSDDate Analyzed: 06/26/12 17:06 Lab File ID: 201F0801.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.58	Baseline Event	byla	06/27/12 08:26
Gasoline Range Organics (GRO) -C6-C10	14.45	Baseline Event	byla	06/27/12 00:00

Lab Sample ID: CCV 280-125760/13 Client Sample ID: _____Date Analyzed: 06/26/12 20:39 Lab File ID: 206F1301.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.55	Split Peak	byla	06/27/12 08:21
Gasoline Range Organics (GRO) -C6-C10	14.45	Baseline Event	byla	06/27/12 00:00
Chlorobenzene	15.69	Baseline Event	byla	06/27/12 08:21

Lab Sample ID: CCV 280-125760/21 Client Sample ID: _____Date Analyzed: 06/27/12 02:19 Lab File ID: 214F2101.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	10.53	Split Peak	byla	06/27/12 08:22
Gasoline Range Organics (GRO) -C6-C10	14.45	Baseline Event	byla	06/27/12 00:00
Chlorobenzene	15.67	Baseline Event	byla	06/27/12 08:21

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCS_U2 Analysis Batch Number: 117292Lab Sample ID: IC 280-117292/2 Client Sample ID: _____Date Analyzed: 04/26/12 15:10 Lab File ID: 004F0401.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	6.49	Baseline Event	birdsellm	04/27/12 00:00
C10-C24	6.82	Baseline Event	birdsellm	04/27/12 10:14
C10-C25	6.98	Baseline Event	birdsellm	04/27/12 10:14
C8-C34	7.00	Baseline Event	birdsellm	04/27/12 00:00
Diesel Range Organics [C10-C28]	7.41	Baseline Event	birdsellm	04/27/12 10:14
C10-C32	7.94	Baseline Event	birdsellm	04/27/12 10:14
C10-C36	8.40	Baseline Event	birdsellm	04/27/12 10:14

Lab Sample ID: IC 280-117292/3 Client Sample ID: _____Date Analyzed: 04/26/12 15:34 Lab File ID: 005F0501.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	6.49	Baseline Event	birdsellm	04/27/12 10:15
C10-C24	6.82	Baseline Event	birdsellm	04/27/12 10:15
C10-C25	6.98	Baseline Event	birdsellm	04/27/12 10:15
C8-C34	7.00	Baseline Event	birdsellm	04/27/12 10:15
Diesel Range Organics [C10-C28]	7.41	Baseline Event	birdsellm	04/27/12 10:15
C10-C32	7.94	Baseline Event	birdsellm	04/27/12 10:15
o-Terphenyl	8.22	Baseline Event	birdsellm	04/27/12 10:15
C10-C36	8.40	Baseline Event	birdsellm	04/27/12 10:15
n-Octacosane	11.38	Baseline Event	birdsellm	04/27/12 10:15

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCS_U2 Analysis Batch Number: 117292Lab Sample ID: IC 280-117292/4 Client Sample ID: _____Date Analyzed: 04/26/12 15:58 Lab File ID: 006F0601.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	6.49	Baseline Event	birdsellm	04/27/12 10:15
C10-C24	6.82	Baseline Event	birdsellm	04/27/12 10:15
C10-C25	6.98	Baseline Event	birdsellm	04/27/12 10:15
C8-C34	7.00	Baseline Event	birdsellm	04/27/12 10:15
Diesel Range Organics [C10-C28]	7.41	Baseline Event	birdsellm	04/27/12 10:15
C10-C32	7.94	Baseline Event	birdsellm	04/27/12 10:15
o-Terphenyl	8.21	Baseline Event	birdsellm	04/27/12 10:15
C10-C36	8.40	Baseline Event	birdsellm	04/27/12 10:15
n-Octacosane	11.38	Baseline Event	birdsellm	04/27/12 10:15

Lab Sample ID: ICRT 280-117292/5 Client Sample ID: _____Date Analyzed: 04/26/12 16:23 Lab File ID: 007F0701.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	6.49	Baseline Event	birdsellm	04/27/12 10:13
C10-C24	6.82	Baseline Event	birdsellm	04/27/12 10:13
C10-C25	6.98	Baseline Event	birdsellm	04/27/12 10:13
C8-C34	7.00	Baseline Event	birdsellm	04/27/12 10:13
Diesel Range Organics [C10-C28]	7.41	Baseline Event	birdsellm	04/27/12 10:13
C10-C32	7.94	Baseline Event	birdsellm	04/27/12 10:13
o-Terphenyl	8.21	Baseline Event	birdsellm	04/27/12 10:13
C10-C36	8.40	Baseline Event	birdsellm	04/27/12 10:13
n-Octacosane	11.38	Baseline Event	birdsellm	04/27/12 10:13

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCS_U2 Analysis Batch Number: 117292Lab Sample ID: IC 280-117292/6 Client Sample ID: _____Date Analyzed: 04/26/12 16:47 Lab File ID: 008F0801.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	6.49	Baseline Event	birdsellm	04/27/12 10:16
C10-C24	6.82	Baseline Event	birdsellm	04/27/12 10:16
C10-C25	6.98	Baseline Event	birdsellm	04/27/12 10:16
C8-C34	7.00	Baseline Event	birdsellm	04/27/12 10:16
Diesel Range Organics [C10-C28]	7.41	Baseline Event	birdsellm	04/27/12 10:16
C10-C32	7.94	Baseline Event	birdsellm	04/27/12 10:16
o-Terphenyl	8.20	Baseline Event	birdsellm	04/27/12 10:16
C10-C36	8.40	Baseline Event	birdsellm	04/27/12 10:16
n-Octacosane	11.38	Baseline Event	birdsellm	04/27/12 10:15

Lab Sample ID: IC 280-117292/7 Client Sample ID: _____Date Analyzed: 04/26/12 17:12 Lab File ID: 009F0901.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	6.49	Baseline Event	birdsellm	04/27/12 10:16
C10-C24	6.82	Baseline Event	birdsellm	04/27/12 10:16
C10-C25	6.98	Baseline Event	birdsellm	04/27/12 10:16
C8-C34	7.00	Baseline Event	birdsellm	04/27/12 10:16
Diesel Range Organics [C10-C28]	7.41	Baseline Event	birdsellm	04/27/12 10:16
C10-C32	7.94	Baseline Event	birdsellm	04/27/12 10:16
o-Terphenyl	8.20	Baseline Event	birdsellm	04/27/12 10:16
C10-C36	8.40	Baseline Event	birdsellm	04/27/12 10:16

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCS_U2 Analysis Batch Number: 117292Lab Sample ID: IC 280-117292/8 Client Sample ID: _____Date Analyzed: 04/26/12 17:36 Lab File ID: 010F1001.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	6.49	Baseline Event	birdsellm	04/27/12 10:16
C10-C24	6.82	Baseline Event	birdsellm	04/27/12 10:16
C10-C25	6.98	Baseline Event	birdsellm	04/27/12 10:16
C8-C34	7.00	Baseline Event	birdsellm	04/27/12 10:16
Diesel Range Organics [C10-C28]	7.41	Baseline Event	birdsellm	04/27/12 10:16
C10-C32	7.94	Baseline Event	birdsellm	04/27/12 10:16
o-Terphenyl	8.20	Baseline Event	birdsellm	04/27/12 10:16
C10-C36	8.40	Baseline Event	birdsellm	04/27/12 10:16

Lab Sample ID: ICV 280-117292/9 Client Sample ID: _____Date Analyzed: 04/26/12 18:01 Lab File ID: 011F1101.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C24	6.82	Baseline Event	birdsellm	04/27/12 10:19
C10-C25	6.98	Baseline Event	birdsellm	04/27/12 10:19
C8-C34	7.00	Baseline Event	birdsellm	04/27/12 10:19
Diesel Range Organics [C10-C28]	7.41	Baseline Event	birdsellm	04/27/12 10:19
C10-C32	7.94	Baseline Event	birdsellm	04/27/12 10:19
o-Terphenyl	8.20	Baseline Event	birdsellm	04/27/12 10:18
C10-C36	8.40	Baseline Event	birdsellm	04/27/12 10:19
n-Octacosane	11.37	Baseline Event	birdsellm	04/27/12 10:19

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCS_U2 Analysis Batch Number: 125910Lab Sample ID: CCVRT 280-125910/2 Client Sample ID: _____Date Analyzed: 06/27/12 14:36 Lab File ID: 004F0401.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Diesel Range Organics [C10-C28]	7.38	Baseline Event	pavlakoa	06/27/12 16:12
o-Terphenyl	8.18	Baseline Event	pavlakoa	06/27/12 16:12
C10-C36	8.37	Baseline Event	pavlakoa	06/27/12 16:12
n-Octacosane	11.35	Baseline Event	pavlakoa	06/27/12 16:12

Lab Sample ID: LCS 280-125504/2-A Client Sample ID: _____Date Analyzed: 06/27/12 19:29 Lab File ID: 016F1601.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Terphenyl	8.17	Baseline Event	pavlakoa	06/28/12 08:35
C10-C36	8.37	Baseline Event	pavlakoa	06/28/12 08:35
n-Octacosane	11.34	Baseline Event	pavlakoa	06/28/12 08:35

Lab Sample ID: LCSD 280-125504/3-A Client Sample ID: _____Date Analyzed: 06/27/12 19:53 Lab File ID: 017F1701.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Terphenyl	8.17	Baseline Event	pavlakoa	06/28/12 08:36
C10-C36	8.37	Baseline Event	pavlakoa	06/28/12 08:36
n-Octacosane	11.34	Baseline Event	pavlakoa	06/28/12 08:36

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: GCS_U2 Analysis Batch Number: 125910Lab Sample ID: 280-30378-2 Client Sample ID: DITCH-SCHULTZDate Analyzed: 06/27/12 20:42 Lab File ID: 019F1901.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Terphenyl	8.17	Baseline Event	pavlakoa	06/28/12 08:37
C10-C36	8.37	Baseline Event	pavlakoa	06/28/12 08:37
n-Octacosane	11.34	Baseline Event	pavlakoa	06/28/12 08:37

Lab Sample ID: CCV 280-125910/18 Client Sample ID: _____Date Analyzed: 06/27/12 21:31 Lab File ID: 021F2101.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Diesel Range Organics [C10-C28]	7.38	Baseline Event	pavlakoa	06/28/12 08:37
o-Terphenyl	8.18	Baseline Event	pavlakoa	06/28/12 08:37
C10-C36	8.37	Baseline Event	pavlakoa	06/28/12 08:37
n-Octacosane	11.35	Baseline Event	pavlakoa	06/28/12 08:37

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 280-30378-1

SDG No.: _____

Instrument ID: FID14 Analysis Batch Number: 83033Lab Sample ID: CCVRT 600-83033/1 Client Sample ID: _____Date Analyzed: 07/02/12 14:22 Lab File ID: rsk070212_001.d GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	0.92	Peak Integrated Incorrectly	lamj	07/02/12 14:37
Ethane	1.10	Peak Integrated Incorrectly	lamj	07/02/12 14:37

Lab Sample ID: LCS 600-83033/3 Client Sample ID: _____Date Analyzed: 07/02/12 14:52 Lab File ID: rsk070212_003.d GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	0.90	Peak Integrated Incorrectly	lamj	07/02/12 15:03
Ethane	1.08	Peak Integrated Incorrectly	lamj	

Lab Sample ID: 280-30378-1 Client Sample ID: WELL-SCHULTZDate Analyzed: 07/02/12 16:25 Lab File ID: rsk070212_009.d GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	0.97	Peak Integrated Incorrectly	lamj	07/03/12 15:59
Ethane	1.15	Peak Integrated Incorrectly	lamj	

Lab Sample ID: 280-30378-2 Client Sample ID: DITCH-SCHULTZDate Analyzed: 07/02/12 16:37 Lab File ID: rsk070212_010.d GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	0.92	Peak Integrated Incorrectly	lamj	07/03/12 15:59
Ethane	1.12	Peak Integrated Incorrectly	lamj	

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 280-30378-1

SDG No.: _____

Instrument ID: FID14 Analysis Batch Number: 83033Lab Sample ID: CCV 600-83033/12 Client Sample ID: _____Date Analyzed: 07/02/12 17:16 Lab File ID: rsk070212_012.d GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	0.92	Peak Integrated Incorrectly	lamj	07/02/12 17:26
Ethane	1.10	Peak Integrated Incorrectly	lamj	07/02/12 17:26

Lab Sample ID: 280-30378-1 MS Client Sample ID: WELL-SCHULTZ MSDate Analyzed: 07/02/12 17:29 Lab File ID: rsk070212_013.d GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	0.92	Peak Integrated Incorrectly	lamj	07/02/12 17:43
Ethane	1.10	Peak Integrated Incorrectly	lamj	07/02/12 17:43

Lab Sample ID: 280-30378-1 MSD Client Sample ID: WELL-SCHULTZ MSDDate Analyzed: 07/02/12 17:46 Lab File ID: rsk070212_014.d GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	0.92	Peak Integrated Incorrectly	lamj	07/02/12 17:55
Ethane	1.10	Peak Integrated Incorrectly	lamj	07/02/12 17:55

Lab Sample ID: CCV 600-83033/15 Client Sample ID: _____Date Analyzed: 07/02/12 18:10 Lab File ID: rsk070212_015.d GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	0.92	Peak Integrated Incorrectly	lamj	07/02/12 18:20
Ethane	1.08	Peak Integrated Incorrectly	lamj	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Instrument ID: MSV_R1 Analysis Batch Number: 124031

Lab Sample ID: IC 280-124031/3 Client Sample ID: _____

Date Analyzed: 06/12/12 08:22 Lab File ID: R7009.D GC Column: DB-624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST
1,2-Dibromo-3-Chloropropane	12.88	Analyte not Identified by the Data System	dobransky m
			06/12/12 11:24

82 070612

SAMPLE SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-30378-1	WELL-SCHULTZ	Water	06/22/2012 1111	06/23/2012 0900
280-30378-2	DITCH-SCHULTZ	Water	06/22/2012 1250	06/23/2012 0900

EXECUTIVE SUMMARY - Detections

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-30378-1	WELL-SCHULTZ					
Methylene Chloride		0.38	J B	2.0	ug/L	8260B
Ethane		0.40	J	2.0	ug/L	RSK-175
Methane		2.0		1.0	ug/L	RSK-175
Sodium Adsorption Ratio		31		0.40	No Unit	20B
Bromide		1.1		0.40	mg/L	300.0
Nitrate as N		0.17	J	1.0	mg/L	300.0
Chloride		91	J	150	mg/L	300.0
Fluoride		1.8		1.0	mg/L	300.0
Sulfate		1200		250	mg/L	300.0
Total Alkalinity		210		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		210		5.0	mg/L	SM 2320B
Specific Conductance		3200		2.0	umhos/cm	SM 2510B
Total Dissolved Solids		2100		20	mg/L	SM 2540C
pH		8.12	HF	0.100	SU	SM 4500 H+ B
Total Organic Carbon - Average		3.9	B	1.0	mg/L	SM 5310B
<i>Dissolved</i>						
Boron		81	J	100	ug/L	200.7 Rev 4.4
Calcium		35000		200	ug/L	200.7 Rev 4.4
Lithium		50		10	ug/L	200.7 Rev 4.4
Magnesium		2300		200	ug/L	200.7 Rev 4.4
Potassium		2200	J	3000	ug/L	200.7 Rev 4.4
Silicon		3200		500	ug/L	200.7 Rev 4.4
Sodium		700000		5000	ug/L	200.7 Rev 4.4
Strontium		1300		10	ug/L	200.7 Rev 4.4
Zinc		6.8	J	20	ug/L	200.7 Rev 4.4
Arsenic		2.0	J	5.0	ug/L	200.8
Barium		12		1.0	ug/L	200.8
Cobalt		0.052	J	1.0	ug/L	200.8
Copper		28		2.0	ug/L	200.8
Lead		0.14	J	1.0	ug/L	200.8
Manganese		2.3		2.0	ug/L	200.8
Molybdenum		23	B	2.0	ug/L	200.8
Selenium		13		5.0	ug/L	200.8
Silver		0.023	J B	1.0	ug/L	200.8
Uranium		5.0		1.0	ug/L	200.8

EXECUTIVE SUMMARY - Detections

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-30378-2 DITCH-SCHULTZ						
Methylene Chloride		0.38	J B	2.0	ug/L	8260B
Bis(2-ethylhexyl) phthalate		0.53	J	9.5	ug/L	8270C
Methane		2.9		1.0	ug/L	RSK-175
Sodium Adsorption Ratio		6.5		0.40	No Unit	20B
Bromide		0.17	J	0.20	mg/L	300.0
Nitrate as N		0.083	J	0.50	mg/L	300.0
Chloride		21		3.0	mg/L	300.0
Fluoride		1.8		0.50	mg/L	300.0
Sulfate		99		25	mg/L	300.0
Total Alkalinity		690		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		600		5.0	mg/L	SM 2320B
Carbonate Alkalinity as CaCO3		92		5.0	mg/L	SM 2320B
Specific Conductance		1400		2.0	umhos/cm	SM 2510B
Total Dissolved Solids		880		10	mg/L	SM 2540C
pH		8.68	HF	0.100	SU	SM 4500 H+ B
Total Organic Carbon - Average		6.7	B	1.0	mg/L	SM 5310B
<i>Dissolved</i>						
Aluminum		30	J	100	ug/L	200.7 Rev 4.4
Boron		320		100	ug/L	200.7 Rev 4.4
Calcium		41000		200	ug/L	200.7 Rev 4.4
Iron		23	J	100	ug/L	200.7 Rev 4.4
Lithium		59		10	ug/L	200.7 Rev 4.4
Magnesium		42000		200	ug/L	200.7 Rev 4.4
Potassium		3100		3000	ug/L	200.7 Rev 4.4
Silicon		11000		500	ug/L	200.7 Rev 4.4
Sodium		250000		5000	ug/L	200.7 Rev 4.4
Strontium		1400		10	ug/L	200.7 Rev 4.4
Vanadium		4.0	J	10	ug/L	200.7 Rev 4.4
Arsenic		2.6	J	5.0	ug/L	200.8
Barium		99		1.0	ug/L	200.8
Cobalt		0.16	J	1.0	ug/L	200.8
Copper		1.3	J	2.0	ug/L	200.8
Manganese		2.4		2.0	ug/L	200.8
Molybdenum		6.8	B	2.0	ug/L	200.8
Selenium		7.6		5.0	ug/L	200.8
Silver		0.047	J B	1.0	ug/L	200.8
Uranium		30		1.0	ug/L	200.8

METHOD SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Purge and Trap	TAL DEN		SW846 5030B
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Liquid-Liquid Extraction (Continuous)	TAL DEN		SW846 3520C
Gasoline Range Organics - (GC)	TAL DEN	SW846 8015B	
Purge and Trap	TAL DEN		SW846 5030B
Diesel Range Organics (DRO) (GC)	TAL DEN	SW846 8015B	
Liquid-Liquid Extraction (Separatory Funnel)	TAL DEN		SW846 3510C
Metals (ICP)	TAL DEN	EPA 200.7 Rev 4.4	
Preparation, Total Recoverable Metals	TAL DEN		EPA 200.7
Sample Filtration	TAL DEN		FILTRATION
Metals (ICP/MS)	TAL DEN	EPA 200.8	
Preparation, Total Recoverable Metals	TAL DEN		EPA 200.8
Sample Filtration	TAL DEN		FILTRATION
Sodium Adsorption Ratio	TAL DEN	USDA 20B	
Mercury (CVAA)	TAL DEN	EPA 245.1	
Preparation, Mercury	TAL DEN		EPA 245.1
Sample Filtration	TAL DEN		FILTRATION
Anions, Ion Chromatography	TAL DEN	MCAWW 300.0	
Alkalinity	TAL DEN	SM SM 2320B	
Conductivity, Specific Conductance	TAL DEN	SM SM 2510B	
Solids, Total Dissolved (TDS)	TAL DEN	SM SM 2540C	
pH	TAL DEN	SM SM 4500 H+ B	
Organic Carbon, Total (TOC)	TAL DEN	SM SM 5310B	
Dissolved Gases (GC)	TAL HOU	RSK RSK-175	

Lab References:

TAL DEN = TestAmerica Denver

TAL HOU = TestAmerica Houston

Method References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

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

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

USDA = "USDA Agriculture Handbook 60, section 20B".

METHOD / ANALYST SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method	Analyst	Analyst ID
SW846 8260B	Dobransky, Michael E	MD
SW846 8270C	Hoffman, Michael G	MGH
SW846 8015B	Byl, Amelia M	AMB
RSK RSK-175	Lam, Jason A	JAL
SW846 8015B	Pavlakovich, Adam M	AMP
EPA 200.7 Rev 4.4	Bowen, Heidi E	HEB
EPA 200.8	Lill, Thomas E	TEL
USDA 20B	Harre, John K	JKH
EPA 245.1	Ivey, Crystal L	CLI
MCAWW 300.0	Bonnett, Jaqueline C	JCB
SM SM 2320B	Gilbert, Bryan M	BMG
SM SM 2510B	Hostetler, Jeffrey M	JMH
SM SM 2540C	Domnick, Brandon J	BJD
SM SM 4500 H+ B	Ayala, Delaina	DA
SM SM 5310B	Bandy, Darlene F	DFB

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-125949	Instrument ID:	MSV_R1
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	R7220.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	06/28/2012 1257			Final Weight/Volume:	20 mL
Prep Date:	06/28/2012 1257				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.21	1.0
1,1,1-Trichloroethane	ND		0.16	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.27	1.0
1,1-Dichloroethane	ND		0.22	1.0
1,1-Dichloroethene	ND		0.23	1.0
1,1-Dichloropropene	ND		0.19	1.0
1,2,3-Trichlorobenzene	ND		0.21	1.0
1,2,3-Trichloropropane	ND		0.33	2.5
1,2,4-Trichlorobenzene	ND		0.21	1.0
1,2,4-Trimethylbenzene	ND		0.15	1.0
1,2-Dibromo-3-Chloropropane	ND		0.47	5.0
1,2-Dibromoethane	ND		0.18	1.0
1,2-Dichlorobenzene	ND		0.15	1.0
1,2-Dichloroethane	ND		0.13	1.0
1,2-Dichloroethene, Total	ND		0.24	1.0
1,2-Dichloropropane	ND		0.18	1.0
1,3,5-Trimethylbenzene	ND		0.16	1.0
1,3-Dichlorobenzene	ND		0.13	1.0
1,3-Dichloropropane	ND		0.22	1.0
1,4-Dichlorobenzene	ND		0.16	1.0
2,2-Dichloropropane	ND		0.18	1.0
2-Butanone (MEK)	ND		2.0	6.0
2-Chlorotoluene	ND		0.17	1.0
2-Hexanone	ND		1.7	5.0
4-Chlorotoluene	ND		0.21	1.0
4-Isopropyltoluene	ND		0.20	1.0
4-Methyl-2-pentanone (MIBK)	ND		0.98	5.0
Acetone	ND		1.9	10
Benzene	ND		0.16	1.0
Bromobenzene	ND		0.17	1.0
Bromoform	ND		0.19	1.0
Bromomethane	ND		0.21	2.0
Carbon tetrachloride	ND		0.19	1.0
Chlorobenzene	ND		0.17	1.0
Chlorobromomethane	ND		0.10	1.0
Chlorodibromomethane	ND		0.17	1.0
Chloroethane	ND		0.41	2.0
Chloroform	ND		0.16	1.0
Chloromethane	ND		0.30	2.0
cis-1,2-Dichloroethene	ND		0.15	1.0
cis-1,3-Dichloropropene	ND		0.16	1.0
Dibromomethane	ND		0.17	1.0
Dichlorobromomethane	ND		0.17	1.0
Dichlorodifluoromethane	ND		0.31	2.0
Ethylbenzene	ND		0.16	1.0

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-125949	Instrument ID:	MSV_R1
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	R7220.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	06/28/2012 1257			Final Weight/Volume:	20 mL
Prep Date:	06/28/2012 1257				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	ND		0.36	1.0
Isopropylbenzene	ND		0.19	1.0
Methyl tert-butyl ether	ND		0.25	5.0
Methylene Chloride	0.38	J B	0.32	2.0
m-Xylene & p-Xylene	ND		0.34	2.0
Naphthalene	ND		0.22	1.0
n-Butylbenzene	ND		0.32	1.0
N-Propylbenzene	ND		0.16	1.0
o-Xylene	ND		0.19	1.0
sec-Butylbenzene	ND		0.17	1.0
Styrene	ND		0.17	1.0
tert-Butylbenzene	ND		0.16	1.0
Tetrachloroethene	ND		0.20	1.0
Toluene	ND		0.17	1.0
trans-1,2-Dichloroethene	ND		0.15	1.0
trans-1,3-Dichloropropene	ND		0.19	3.0
Trichloroethene	ND		0.16	1.0
Trichlorofluoromethane	ND		0.29	2.0
Vinyl chloride	ND		0.10	1.0
Xylenes, Total	ND		0.19	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 127
4-Bromofluorobenzene (Surr)	81		78 - 120
Dibromofluoromethane (Surr)	90		77 - 120
Toluene-d8 (Surr)	91		80 - 125

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-125949	Instrument ID:	MSV_R1
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	R7221.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	06/28/2012 1317			Final Weight/Volume:	20 mL
Prep Date:	06/28/2012 1317				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.21	1.0
1,1,1-Trichloroethane	ND		0.16	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.27	1.0
1,1-Dichloroethane	ND		0.22	1.0
1,1-Dichloroethene	ND		0.23	1.0
1,1-Dichloropropene	ND		0.19	1.0
1,2,3-Trichlorobenzene	ND		0.21	1.0
1,2,3-Trichloropropane	ND		0.33	2.5
1,2,4-Trichlorobenzene	ND		0.21	1.0
1,2,4-Trimethylbenzene	ND		0.15	1.0
1,2-Dibromo-3-Chloropropane	ND		0.47	5.0
1,2-Dibromoethane	ND		0.18	1.0
1,2-Dichlorobenzene	ND		0.15	1.0
1,2-Dichloroethane	ND		0.13	1.0
1,2-Dichloroethene, Total	ND		0.24	1.0
1,2-Dichloropropane	ND		0.18	1.0
1,3,5-Trimethylbenzene	ND		0.16	1.0
1,3-Dichlorobenzene	ND		0.13	1.0
1,3-Dichloropropane	ND		0.22	1.0
1,4-Dichlorobenzene	ND		0.16	1.0
2,2-Dichloropropane	ND		0.18	1.0
2-Butanone (MEK)	ND		2.0	6.0
2-Chlorotoluene	ND		0.17	1.0
2-Hexanone	ND		1.7	5.0
4-Chlorotoluene	ND		0.21	1.0
4-Isopropyltoluene	ND		0.20	1.0
4-Methyl-2-pentanone (MIBK)	ND		0.98	5.0
Acetone	ND		1.9	10
Benzene	ND		0.16	1.0
Bromobenzene	ND		0.17	1.0
Bromoform	ND		0.19	1.0
Bromomethane	ND		0.21	2.0
Carbon tetrachloride	ND		0.19	1.0
Chlorobenzene	ND		0.17	1.0
Chlorobromomethane	ND		0.10	1.0
Chlorodibromomethane	ND		0.17	1.0
Chloroethane	ND		0.41	2.0
Chloroform	ND		0.16	1.0
Chloromethane	ND		0.30	2.0
cis-1,2-Dichloroethene	ND		0.15	1.0
cis-1,3-Dichloropropene	ND		0.16	1.0
Dibromomethane	ND		0.17	1.0
Dichlorobromomethane	ND		0.17	1.0
Dichlorodifluoromethane	ND		0.31	2.0
Ethylbenzene	ND		0.16	1.0

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-125949	Instrument ID:	MSV_R1
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	R7221.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	06/28/2012 1317			Final Weight/Volume:	20 mL
Prep Date:	06/28/2012 1317				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	ND		0.36	1.0
Isopropylbenzene	ND		0.19	1.0
Methyl tert-butyl ether	ND		0.25	5.0
Methylene Chloride	0.38	J B	0.32	2.0
m-Xylene & p-Xylene	ND		0.34	2.0
Naphthalene	ND		0.22	1.0
n-Butylbenzene	ND		0.32	1.0
N-Propylbenzene	ND		0.16	1.0
o-Xylene	ND		0.19	1.0
sec-Butylbenzene	ND		0.17	1.0
Styrene	ND		0.17	1.0
tert-Butylbenzene	ND		0.16	1.0
Tetrachloroethene	ND		0.20	1.0
Toluene	ND		0.17	1.0
trans-1,2-Dichloroethene	ND		0.15	1.0
trans-1,3-Dichloropropene	ND		0.19	3.0
Trichloroethene	ND		0.16	1.0
Trichlorofluoromethane	ND		0.29	2.0
Vinyl chloride	ND		0.10	1.0
Xylenes, Total	ND		0.19	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 127
4-Bromofluorobenzene (Surr)	84		78 - 120
Dibromofluoromethane (Surr)	90		77 - 120
Toluene-d8 (Surr)	92		80 - 125

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-126328	Instrument ID:	MSS_Y
Prep Method:	3520C	Prep Batch:	280-125338	Lab File ID:	Y8515.D
Dilution:	1.0			Initial Weight/Volume:	1058.9 mL
Analysis Date:	06/29/2012 1353			Final Weight/Volume:	1000 uL
Prep Date:	06/24/2012 0815			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2,2'-oxybis[1-chloropropane]	ND		0.26	9.4
2,4,5-Trichlorophenol	ND		0.42	9.4
2,4,6-Trichlorophenol	ND		0.27	9.4
2,4-Dichlorophenol	ND		0.60	9.4
2,4-Dimethylphenol	ND		0.55	9.4
2,4-Dinitrophenol	ND		9.4	28
2,4-Dinitrotoluene	ND		1.6	9.4
2,6-Dinitrotoluene	ND		1.8	9.4
2-Chloronaphthalene	ND		0.25	3.8
2-Chlorophenol	ND		1.9	9.4
2-Methylnaphthalene	ND		0.27	3.8
2-Methylphenol	ND		0.93	9.4
2-Nitroaniline	ND		1.6	9.4
2-Nitrophenol	ND		0.37	9.4
3 & 4 Methylphenol	ND		0.24	9.4
3,3'-Dichlorobenzidine	ND		1.9	47
3-Nitroaniline	ND		1.9	9.4
4,6-Dinitro-2-methylphenol	ND		3.8	47
4-Bromophenyl phenyl ether	ND		0.41	9.4
4-Chloro-3-methylphenol	ND		2.3	9.4
4-Chloroaniline	ND		2.0	9.4
4-Chlorophenyl phenyl ether	ND		1.6	9.4
4-Nitroaniline	ND		1.9	9.4
4-Nitrophenol	ND		1.2	9.4
Acenaphthene	ND		0.26	3.8
Acenaphthylene	ND		0.46	3.8
Acetophenone	ND		0.23	9.4
Anthracene	ND		0.40	3.8
Atrazine	ND		0.69	9.4
Benzidine	ND		47	94
Benzo[a]anthracene	ND		0.33	3.8
Benzo[a]pyrene	ND		0.29	3.8
Benzo[b]fluoranthene	ND		0.50	3.8
Benzo[g,h,i]perylene	ND		0.47	3.8
Benzo[k]fluoranthene	ND		0.43	3.8
Bis(2-chloroethoxy)methane	ND		0.92	9.4
Bis(2-chloroethyl)ether	ND		0.39	9.4
Bis(2-ethylhexyl) phthalate	ND		0.53	9.4
Butyl benzyl phthalate	ND		0.94	3.8
Caprolactam	ND		4.7	9.4
Carbazole	ND		0.41	3.8
Chrysene	ND		0.51	3.8
Cresols, Total	ND		0.24	9.4
Dibenz(a,h)anthracene	ND		0.48	3.8
Dibenzofuran	ND		0.27	3.8
Diethyl phthalate	ND		0.36	3.8

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-126328	Instrument ID:	MSS_Y
Prep Method:	3520C	Prep Batch:	280-125338	Lab File ID:	Y8515.D
Dilution:	1.0			Initial Weight/Volume:	1058.9 mL
Analysis Date:	06/29/2012 1353			Final Weight/Volume:	1000 uL
Prep Date:	06/24/2012 0815			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dimethyl phthalate	ND		0.20	3.8
Di-n-butyl phthalate	ND		1.1	3.8
Di-n-octyl phthalate	ND		0.33	3.8
Fluoranthene	ND		0.19	3.8
Fluorene	ND		0.29	3.8
Hexachlorobenzene	ND		0.62	9.4
Hexachlorobutadiene	ND		3.1	9.4
Hexachlorocyclopentadiene	ND		9.4	47
Hexachloroethane	ND		2.0	9.4
Indeno[1,2,3-cd]pyrene	ND		0.61	3.8
Naphthalene	ND		0.27	3.8
Nitrobenzene	ND		0.76	9.4
N-Nitrosodi-n-propylamine	ND		0.33	9.4
n-Nitrosodiphenylamine(as diphenylamine)	ND		0.42	9.4
Pentachlorophenol	ND		19	47
Phenanthrene	ND		0.25	3.8
Phenol	ND		1.9	9.4
Pyrene	ND		0.35	9.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	114		57 - 120
2-Fluorobiphenyl	86		38 - 120
2-Fluorophenol	82		51 - 120
Nitrobenzene-d5	95		48 - 120
Phenol-d5	89		51 - 120
Terphenyl-d14	108		50 - 120

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-126328	Instrument ID:	MSS_Y
Prep Method:	3520C	Prep Batch:	280-125338	Lab File ID:	Y8516.D
Dilution:	1.0			Initial Weight/Volume:	1052 mL
Analysis Date:	06/29/2012 1413			Final Weight/Volume:	1000 uL
Prep Date:	06/24/2012 0815			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2,2'-oxybis[1-chloropropane]	ND		0.27	9.5
2,4,5-Trichlorophenol	ND		0.43	9.5
2,4,6-Trichlorophenol	ND		0.28	9.5
2,4-Dichlorophenol	ND		0.61	9.5
2,4-Dimethylphenol	ND		0.55	9.5
2,4-Dinitrophenol	ND		9.5	29
2,4-Dinitrotoluene	ND		1.6	9.5
2,6-Dinitrotoluene	ND		1.8	9.5
2-Chloronaphthalene	ND		0.25	3.8
2-Chlorophenol	ND		1.9	9.5
2-Methylnaphthalene	ND		0.28	3.8
2-Methylphenol	ND		0.93	9.5
2-Nitroaniline	ND		1.6	9.5
2-Nitrophenol	ND		0.37	9.5
3 & 4 Methylphenol	ND		0.24	9.5
3,3'-Dichlorobenzidine	ND		1.9	48
3-Nitroaniline	ND		1.9	9.5
4,6-Dinitro-2-methylphenol	ND		3.8	48
4-Bromophenyl phenyl ether	ND		0.41	9.5
4-Chloro-3-methylphenol	ND		2.3	9.5
4-Chloroaniline	ND		2.0	9.5
4-Chlorophenyl phenyl ether	ND		1.6	9.5
4-Nitroaniline	ND		1.9	9.5
4-Nitrophenol	ND		1.2	9.5
Acenaphthene	ND		0.27	3.8
Acenaphthylene	ND		0.47	3.8
Acetophenone	ND		0.23	9.5
Anthracene	ND		0.40	3.8
Atrazine	ND		0.69	9.5
Benzidine	ND		48	95
Benzo[a]anthracene	ND		0.33	3.8
Benzo[a]pyrene	ND		0.29	3.8
Benzo[b]fluoranthene	ND		0.50	3.8
Benzo[g,h,i]perylene	ND		0.48	3.8
Benzo[k]fluoranthene	ND		0.44	3.8
Bis(2-chloroethoxy)methane	ND		0.92	9.5
Bis(2-chloroethyl)ether	ND		0.39	9.5
Bis(2-ethylhexyl) phthalate	0.53	J	0.53	9.5
Butyl benzyl phthalate	ND		0.95	3.8
Caprolactam	ND		4.8	9.5
Carbazole	ND		0.41	3.8
Chrysene	ND		0.51	3.8
Cresols, Total	ND		0.24	9.5
Dibenz(a,h)anthracene	ND		0.48	3.8
Dibenzofuran	ND		0.28	3.8
Diethyl phthalate	ND		0.36	3.8

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-126328	Instrument ID:	MSS_Y
Prep Method:	3520C	Prep Batch:	280-125338	Lab File ID:	Y8516.D
Dilution:	1.0			Initial Weight/Volume:	1052 mL
Analysis Date:	06/29/2012 1413			Final Weight/Volume:	1000 uL
Prep Date:	06/24/2012 0815			Injection Volume:	0.5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dimethyl phthalate	ND		0.20	3.8
Di-n-butyl phthalate	ND		1.1	3.8
Di-n-octyl phthalate	ND		0.33	3.8
Fluoranthene	ND		0.19	3.8
Fluorene	ND		0.29	3.8
Hexachlorobenzene	ND		0.63	9.5
Hexachlorobutadiene	ND		3.1	9.5
Hexachlorocyclopentadiene	ND		9.5	48
Hexachloroethane	ND		2.0	9.5
Indeno[1,2,3-cd]pyrene	ND		0.62	3.8
Naphthalene	ND		0.28	3.8
Nitrobenzene	ND		0.77	9.5
N-Nitrosodi-n-propylamine	ND		0.33	9.5
n-Nitrosodiphenylamine(as diphenylamine)	ND		0.42	9.5
Pentachlorophenol	ND		19	48
Phenanthrene	ND		0.25	3.8
Phenol	ND		1.9	9.5
Pyrene	ND		0.35	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	116		57 - 120
2-Fluorobiphenyl	84		38 - 120
2-Fluorophenol	84		51 - 120
Nitrobenzene-d5	90		48 - 120
Phenol-d5	90		51 - 120
Terphenyl-d14	107		50 - 120

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8015B Gasoline Range Organics - (GC)

Analysis Method:	8015B	Analysis Batch:	280-125760	Instrument ID:	GCV_K
Prep Method:	5030B		N/A	Initial Weight/Volume:	5 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	06/26/2012 1541			Injection Volume:	5 mL
Prep Date:	06/26/2012 1541			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Gasoline Range Organics (GRO)-C6-C10	ND		10	25

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	90		82 - 110

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8015B Gasoline Range Organics - (GC)

Analysis Method:	8015B	Analysis Batch:	280-125760	Instrument ID:	GCV_K
Prep Method:	5030B		N/A	Initial Weight/Volume:	5 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	06/26/2012 2329			Injection Volume:	5 mL
Prep Date:	06/26/2012 2329			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Gasoline Range Organics (GRO)-C6-C10	ND		10	25

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	95		82 - 110

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

RSK-175 Dissolved Gases (GC)

Analysis Method: RSK-175

Analysis Batch: 600-83033

Instrument ID: FID14

N/A

N/A

Initial Weight/Volume: 1 mL

Dilution: 1.0

Final Weight/Volume: 1 mL

Analysis Date: 07/02/2012 1625

Injection Volume:

Prep Date: N/A

Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Ethane	0.40	J	0.30	2.0
Methane	2.0		0.36	1.0
Propane	ND		0.75	2.0

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

RSK-175 Dissolved Gases (GC)

Analysis Method:	RSK-175	Analysis Batch:	600-83033	Instrument ID:	FID14
	N/A		N/A	Initial Weight/Volume:	1 mL
Dilution:	1.0			Final Weight/Volume:	1 mL
Analysis Date:	07/02/2012 1637			Injection Volume:	
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Ethane	ND		0.30	2.0
Methane	2.9		0.36	1.0
Propane	ND		0.75	2.0

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	280-125910	Instrument ID:	GCS_U2
Prep Method:	3510C	Prep Batch:	280-125504	Initial Weight/Volume:	1055.3 mL
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/27/2012 2018			Injection Volume:	1 uL
Prep Date:	06/25/2012 1906			Result Type:	PRIMARY

Analyte	Result (mg/L)	Qualifier	MDL	RL
C10-C36	ND		0.053	0.47

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	76		50 - 115
n-Octacosane	97		26 - 152

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	280-125910	Instrument ID:	GCS_U2
Prep Method:	3510C	Prep Batch:	280-125504	Initial Weight/Volume:	1052.7 mL
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/27/2012 2042			Injection Volume:	1 uL
Prep Date:	06/25/2012 1906			Result Type:	PRIMARY

Analyte	Result (mg/L)	Qualifier	MDL	RL
C10-C36	ND		0.053	0.47

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	74		50 - 115
n-Octacosane	98		26 - 152

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

200.7 Rev 4.4 Metals (ICP)-Dissolved

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-125764	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-125463	Lab File ID:	26A062612.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2012 0000			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	ND		18	100
Beryllium	ND		0.47	1.0
Boron	81	J	4.4	100
Calcium	35000		35	200
Chromium	ND		0.66	10
Iron	ND		22	100
Lithium	50		2.6	10
Magnesium	2300		11	200
Nickel	ND		1.3	40
Potassium	2200	J	240	3000
Silicon	3200		35	500
Sodium	700000		92	5000
Strontium	1300		0.30	10
Vanadium	ND		1.1	10
Zinc	6.8	J	4.5	20

200.8 Metals (ICP/MS)-Dissolved

Analysis Method:	200.8	Analysis Batch:	280-125775	Instrument ID:	MT_024
Prep Method:	200.8	Prep Batch:	280-125466	Lab File ID:	063AREF.D
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/26/2012 2351			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	ND		0.16	2.0
Arsenic	2.0	J	0.50	5.0
Barium	12		0.38	1.0
Cadmium	ND		0.040	1.0
Cobalt	0.052	J	0.050	1.0
Copper	28		0.20	2.0
Lead	0.14	J	0.10	1.0
Manganese	2.3		0.51	2.0
Molybdenum	23	B	0.040	2.0
Selenium	13		1.0	5.0
Silver	0.023	J B	0.020	1.0
Thallium	ND		0.066	1.0
Uranium	5.0		0.030	1.0

20B Sodium Adsorption Ratio

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

20B Sodium Adsorption Ratio

Analysis Method:	20B	Analysis Batch:	280-125550	Instrument ID:	MT_025
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	06/26/2012 0710			Final Weight/Volume:	1.0 mL
Prep Date:	N/A				

Analyte	Result (No Unit)	Qualifier	MDL	RL
Sodium Adsorption Ratio	31		0.40	0.40

245.1 Mercury (CVAA)-Dissolved

Analysis Method:	245.1	Analysis Batch:	280-125895	Instrument ID:	MT_033
Prep Method:	245.1	Prep Batch:	280-125678	Lab File ID:	120627aa.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	06/27/2012 1459			Final Weight/Volume:	30 mL
Prep Date:	06/27/2012 1035				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.027	0.20

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

200.7 Rev 4.4 Metals (ICP)-Dissolved

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-125764	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-125463	Lab File ID:	26A062612.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2012 0003			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	30	J	18	100
Beryllium	ND		0.47	1.0
Boron	320		4.4	100
Calcium	41000		35	200
Chromium	ND		0.66	10
Iron	23	J	22	100
Lithium	59		2.6	10
Magnesium	42000		11	200
Nickel	ND		1.3	40
Potassium	3100		240	3000
Silicon	11000		35	500
Sodium	250000		92	5000
Strontium	1400		0.30	10
Vanadium	4.0	J	1.1	10
Zinc	ND		4.5	20

200.8 Metals (ICP/MS)-Dissolved

Analysis Method:	200.8	Analysis Batch:	280-125775	Instrument ID:	MT_024
Prep Method:	200.8	Prep Batch:	280-125466	Lab File ID:	066SMPL.D
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2012 0000			Final Weight/Volume:	50 mL
Prep Date:	06/26/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	ND		0.16	2.0
Arsenic	2.6	J	0.50	5.0
Barium	99		0.38	1.0
Cadmium	ND		0.040	1.0
Cobalt	0.16	J	0.050	1.0
Copper	1.3	J	0.20	2.0
Lead	ND		0.10	1.0
Manganese	2.4		0.51	2.0
Molybdenum	6.8	B	0.040	2.0
Selenium	7.6		1.0	5.0
Silver	0.047	J B	0.020	1.0
Thallium	ND		0.066	1.0
Uranium	30		0.030	1.0

20B Sodium Adsorption Ratio

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Client Sample ID: DITCH-SCHULTZ

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

20B Sodium Adsorption Ratio

Analysis Method:	20B	Analysis Batch:	280-125550	Instrument ID:	MT_025
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	06/26/2012 0710			Final Weight/Volume:	1.0 mL
Prep Date:	N/A				

Analyte	Result (No Unit)	Qualifier	MDL	RL
Sodium Adsorption Ratio	6.5		0.40	0.40

245.1 Mercury (CVAA)-Dissolved

Analysis Method:	245.1	Analysis Batch:	280-125895	Instrument ID:	MT_033
Prep Method:	245.1	Prep Batch:	280-125678	Lab File ID:	120627aa.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	06/27/2012 1501			Final Weight/Volume:	30 mL
Prep Date:	06/27/2012 1035				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.027	0.20

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

General Chemistry**Client Sample ID:** WELL-SCHULTZ

Lab Sample ID: 280-30378-1

Date Sampled: 06/22/2012 1111

Client Matrix: Water

Date Received: 06/23/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	1.1		mg/L	0.23	0.40	2.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/23/2012 1521					
Nitrate as N	0.17	J	mg/L	0.084	1.0	2.0	300.0
	Analysis Batch: 280-125604	Analysis Date: 06/23/2012 1521					
Chloride	91	J	mg/L	13	150	50	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/24/2012 1155					
Nitrite as N	ND		mg/L	0.098	1.0	2.0	300.0
	Analysis Batch: 280-125604	Analysis Date: 06/23/2012 1521					
Fluoride	1.8		mg/L	0.12	1.0	2.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/23/2012 1521					
Sulfate	1200		mg/L	12	250	50	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/24/2012 1155					
Total Alkalinity	210		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0922					
Bicarbonate Alkalinity as CaCO3	210		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0922					
Carbonate Alkalinity as CaCO3	ND		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0922					
Hydroxide Alkalinity	ND		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0922					
Specific Conductance	3200		umhos/cm	2.0	2.0	1.0	SM 2510B
	Analysis Batch: 280-125960	Analysis Date: 06/28/2012 1108					
Total Dissolved Solids	2100		mg/L	9.4	20	1.0	SM 2540C
	Analysis Batch: 280-125916	Analysis Date: 06/28/2012 0900					
pH	8.12	HF	SU	0.100	0.100	1.0	SM 4500 H+ B
	Analysis Batch: 280-125326	Analysis Date: 06/23/2012 1159					
Total Organic Carbon - Average	3.9	B	mg/L	0.16	1.0	1.0	SM 5310B
	Analysis Batch: 280-126107	Analysis Date: 06/28/2012 0546					

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

General Chemistry**Client Sample ID: DITCH-SCHULTZ**

Lab Sample ID: 280-30378-2

Date Sampled: 06/22/2012 1250

Client Matrix: Water

Date Received: 06/23/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	0.17	J	mg/L	0.11	0.20	1.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/23/2012 1538					
Nitrate as N	0.083	J	mg/L	0.042	0.50	1.0	300.0
	Analysis Batch: 280-125604	Analysis Date: 06/23/2012 1538					
Chloride	21		mg/L	0.25	3.0	1.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/23/2012 1538					
Nitrite as N	ND		mg/L	0.049	0.50	1.0	300.0
	Analysis Batch: 280-125604	Analysis Date: 06/23/2012 1538					
Fluoride	1.8		mg/L	0.060	0.50	1.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/23/2012 1538					
Sulfate	99		mg/L	1.2	25	5.0	300.0
	Analysis Batch: 280-125605	Analysis Date: 06/24/2012 1213					
Total Alkalinity	690		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0928					
Bicarbonate Alkalinity as CaCO3	600		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0928					
Carbonate Alkalinity as CaCO3	92		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0928					
Hydroxide Alkalinity	ND		mg/L	1.1	5.0	1.0	SM 2320B
	Analysis Batch: 280-125734	Analysis Date: 06/26/2012 0928					
Specific Conductance	1400		umhos/cm	2.0	2.0	1.0	SM 2510B
	Analysis Batch: 280-125960	Analysis Date: 06/28/2012 1108					
Total Dissolved Solids	880		mg/L	4.7	10	1.0	SM 2540C
	Analysis Batch: 280-125916	Analysis Date: 06/28/2012 0900					
pH	8.68	HF	SU	0.100	0.100	1.0	SM 4500 H+ B
	Analysis Batch: 280-125326	Analysis Date: 06/23/2012 1201					
Total Organic Carbon - Average	6.7	B	mg/L	0.16	1.0	1.0	SM 5310B
	Analysis Batch: 280-126107	Analysis Date: 06/28/2012 0603					

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-30378-1	WELL-SCHULTZ	90	95	91	81
280-30378-2	DITCH-SCHULTZ	90	95	92	84
MB 280-125949/5		85	92	87	85
LCS 280-125949/4		85	88	91	83
280-30310-D-1 MS		86	92	92	83
280-30310-D-1 MSD		90	92	92	85

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Surrogate Recovery Report

8270C Semivolatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	2FP %Rec	PHL %Rec	NBZ %Rec	FBP %Rec	TBP %Rec	TPH %Rec
280-30378-1	WELL-SCHULTZ	82	89	95	86	114	108
280-30378-2	DITCH-SCHULTZ	84	90	90	84	116	107
MB 280-125338/1-A		84	89	89	67	106	110
LCS 280-125338/2-A		91	97	98	94	128X	113
LCSD 280-125338/3-A		86	92	96	71	122X	111

Surrogate	Acceptance Limits
2FP = 2-Fluorophenol	51-120
PHL = Phenol-d5	51-120
NBZ = Nitrobenzene-d5	48-120
FBP = 2-Fluorobiphenyl	38-120
TBP = 2,4,6-Tribromophenol	57-120
TPH = Terphenyl-d14	50-120

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Surrogate Recovery Report

8015B Gasoline Range Organics - (GC)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TFT2 %Rec
280-30378-1	WELL-SCHULTZ	90
280-30378-2	DITCH-SCHULTZ	95
MB 280-125760/5		97
LCS 280-125760/3		109
LCSD 280-125760/4		105
280-30378-1 MS	WELL-SCHULTZ MS	106
280-30378-1 MSD	WELL-SCHULTZ MSD	105

Surrogate

Acceptance Limits

TFT = a,a,a-Trifluorotoluene

82-110

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Surrogate Recovery Report

8015B Diesel Range Organics (DRO) (GC)

Client Matrix: Water

Lab Sample ID	Client Sample ID	OTPH1 %Rec	OTC1 %Rec
280-30378-1	WELL-SCHULTZ	76	97
280-30378-2	DITCH-SCHULTZ	74	98
MB 280-125504/1-A		63	100
LCS 280-125504/2-A		81	97
LCSD 280-125504/3-A		73	86

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	50-115
OTC = n-Octacosane	26-152

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125949

Method: 8260B

Preparation: 5030B

Lab Sample ID: MB 280-125949/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/28/2012 0750
Prep Date: 06/28/2012 0750
Leach Date: N/A

Analysis Batch: 280-125949
Prep Batch: N/A
Leach Batch: N/A
Units: ug/L

Instrument ID: MSV_R1
Lab File ID: R7205.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	ND		0.21	1.0
1,1,1-Trichloroethane	ND		0.16	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.27	1.0
1,1-Dichloroethane	ND		0.22	1.0
1,1-Dichloroethene	ND		0.23	1.0
1,1-Dichloropropene	ND		0.19	1.0
1,2,3-Trichlorobenzene	ND		0.21	1.0
1,2,3-Trichloropropane	ND		0.33	2.5
1,2,4-Trichlorobenzene	ND		0.21	1.0
1,2,4-Trimethylbenzene	ND		0.15	1.0
1,2-Dibromo-3-Chloropropane	ND		0.47	5.0
1,2-Dibromoethane	ND		0.18	1.0
1,2-Dichlorobenzene	ND		0.15	1.0
1,2-Dichloroethane	ND		0.13	1.0
1,2-Dichloroethene, Total	ND		0.24	1.0
1,2-Dichloropropane	ND		0.18	1.0
1,3,5-Trimethylbenzene	ND		0.16	1.0
1,3-Dichlorobenzene	ND		0.13	1.0
1,3-Dichloropropane	ND		0.22	1.0
1,4-Dichlorobenzene	ND		0.16	1.0
2,2-Dichloropropane	ND		0.18	1.0
2-Butanone (MEK)	ND		2.0	6.0
2-Chlorotoluene	ND		0.17	1.0
2-Hexanone	ND		1.7	5.0
4-Chlorotoluene	ND		0.21	1.0
4-Isopropyltoluene	ND		0.20	1.0
4-Methyl-2-pentanone (MIBK)	ND		0.98	5.0
Acetone	ND		1.9	10
Benzene	ND		0.16	1.0
Bromobenzene	ND		0.17	1.0
Bromoform	ND		0.19	1.0
Bromomethane	ND		0.21	2.0
Carbon tetrachloride	ND		0.19	1.0
Chlorobenzene	ND		0.17	1.0
Chlorobromomethane	ND		0.10	1.0
Chlorodibromomethane	ND		0.17	1.0
Chloroethane	ND		0.41	2.0
Chloroform	ND		0.16	1.0
Chloromethane	ND		0.30	2.0
cis-1,2-Dichloroethene	ND		0.15	1.0
cis-1,3-Dichloropropene	ND		0.16	1.0
Dibromomethane	ND		0.17	1.0
Dichlorobromomethane	ND		0.17	1.0
Dichlorodifluoromethane	ND		0.31	2.0

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Method Blank - Batch: 280-125949

Method: 8260B

Preparation: 5030B

Lab Sample ID: MB 280-125949/5
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 06/28/2012 0750
 Prep Date: 06/28/2012 0750
 Leach Date: N/A

Analysis Batch: 280-125949
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: MSV_R1
 Lab File ID: R7205.D
 Initial Weight/Volume: 20 mL
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Ethylbenzene	ND		0.16	1.0
Hexachlorobutadiene	ND		0.36	1.0
Isopropylbenzene	ND		0.19	1.0
Methyl tert-butyl ether	ND		0.25	5.0
Methylene Chloride	0.339	J	0.32	2.0
m-Xylene & p-Xylene	ND		0.34	2.0
Naphthalene	ND		0.22	1.0
n-Butylbenzene	ND		0.32	1.0
N-Propylbenzene	ND		0.16	1.0
o-Xylene	ND		0.19	1.0
sec-Butylbenzene	ND		0.17	1.0
Styrene	ND		0.17	1.0
tert-Butylbenzene	ND		0.16	1.0
Tetrachloroethene	ND		0.20	1.0
Toluene	ND		0.17	1.0
trans-1,2-Dichloroethene	ND		0.15	1.0
trans-1,3-Dichloropropene	ND		0.19	3.0
Trichloroethene	ND		0.16	1.0
Trichlorofluoromethane	ND		0.29	2.0
Vinyl chloride	ND		0.10	1.0
Xylenes, Total	ND		0.19	2.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92	70 - 127
4-Bromofluorobenzene (Surr)	85	78 - 120
Dibromofluoromethane (Surr)	85	77 - 120
Toluene-d8 (Surr)	87	80 - 125

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Lab Control Sample - Batch: 280-125949

Method: 8260B

Preparation: 5030B

Lab Sample ID:	LCS 280-125949/4	Analysis Batch:	280-125949	Instrument ID:	MSV_R1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	R7204.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	06/28/2012 0730	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	06/28/2012 0730				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1-Trichloroethane	5.00	4.43	89	70 - 135	
1,1-Dichloroethane	5.00	4.56	91	75 - 135	
1,1-Dichloroethene	5.00	4.38	88	71 - 136	
1,2-Dichloropropane	5.00	4.23	85	71 - 120	
1,3-Dichlorobenzene	5.00	4.02	80	74 - 135	
Benzene	5.00	4.30	86	74 - 135	
Carbon tetrachloride	5.00	4.69	94	67 - 135	
Chlorobenzene	5.00	4.19	84	76 - 135	
Chloroform	5.00	4.34	87	76 - 120	
Dichlorobromomethane	5.00	4.54	91	73 - 135	
Ethylbenzene	5.00	4.30	86	72 - 120	
Methylene Chloride	5.00	4.13	83	54 - 141	
Tetrachloroethene	5.00	4.31	86	70 - 135	
Toluene	5.00	4.31	86	73 - 120	
trans-1,2-Dichloroethene	5.00	4.16	83	75 - 135	
Trichloroethene	5.00	4.09	82	73 - 135	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88	70 - 127
4-Bromofluorobenzene (Surr)	83	78 - 120
Dibromofluoromethane (Surr)	85	77 - 120
Toluene-d8 (Surr)	91	80 - 125

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-125949**

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

MS Lab Sample ID:	280-30310-D-1 MS	Analysis Batch:	280-125949	Instrument ID:	MSV_R1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	R7214.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	06/28/2012 1054			Final Weight/Volume:	20 mL
Prep Date:	06/28/2012 1054				
Leach Date:	N/A				

MSD Lab Sample ID:	280-30310-D-1 MSD	Analysis Batch:	280-125949	Instrument ID:	MSV_R1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	R7215.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	06/28/2012 1114			Final Weight/Volume:	20 mL
Prep Date:	06/28/2012 1114				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,1,1-Trichloroethane	86	92	70 - 135	7	20		
1,1-Dichloroethane	89	95	75 - 135	7	21		
1,1-Dichloroethene	84	92	71 - 136	9	20		
1,2-Dichloropropane	82	87	71 - 120	6	20		
1,3-Dichlorobenzene	79	83	74 - 135	5	20		
Benzene	84	88	74 - 135	5	20		
Carbon tetrachloride	91	97	67 - 135	7	21		
Chlorobenzene	83	86	76 - 135	3	20		
Chloroform	86	91	76 - 120	6	20		
Dichlorobromomethane	88	94	73 - 135	6	20		
Ethylbenzene	85	87	72 - 120	3	26		
Methylene Chloride	75	79	54 - 141	6	20		
Tetrachloroethene	84	87	70 - 135	3	20		
Toluene	85	89	73 - 120	5	20		
trans-1,2-Dichloroethene	84	89	75 - 135	5	24		
Trichloroethene	78	84	73 - 135	8	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92	92	70 - 127
4-Bromofluorobenzene (Surr)	83	85	78 - 120
Dibromofluoromethane (Surr)	86	90	77 - 120
Toluene-d8 (Surr)	92	92	80 - 125

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-125949**

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

MS Lab Sample ID: 280-30310-D-1 MS Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/28/2012 1054
Prep Date: 06/28/2012 1054
Leach Date: N/A

MSD Lab Sample ID: 280-30310-D-1 MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/28/2012 1114
Prep Date: 06/28/2012 1114
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,1,1-Trichloroethane	ND	5.00	5.00	4.29	4.60
1,1-Dichloroethane	ND	5.00	5.00	4.44	4.77
1,1-Dichloroethene	ND	5.00	5.00	4.20	4.62
1,2-Dichloropropane	ND	5.00	5.00	4.10	4.36
1,3-Dichlorobenzene	ND	5.00	5.00	3.97	4.15
Benzene	ND	5.00	5.00	4.20	4.42
Carbon tetrachloride	ND	5.00	5.00	4.55	4.87
Chlorobenzene	ND	5.00	5.00	4.16	4.29
Chloroform	ND	5.00	5.00	4.29	4.57
Dichlorobromomethane	ND	5.00	5.00	4.39	4.68
Ethylbenzene	ND	5.00	5.00	4.23	4.34
Methylene Chloride	0.34 J	5.00	5.00	4.07	4.31
Tetrachloroethene	ND	5.00	5.00	4.22	4.36
Toluene	ND	5.00	5.00	4.24	4.44
trans-1,2-Dichloroethene	ND	5.00	5.00	4.21	4.43
Trichloroethene	ND	5.00	5.00	3.89	4.19

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125338

Method: 8270C

Preparation: 3520C

Lab Sample ID: MB 280-125338/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 06/29/2012 1211
 Prep Date: 06/24/2012 0815
 Leach Date: N/A

Analysis Batch: 280-126328
 Prep Batch: 280-125338
 Leach Batch: N/A
 Units: ug/L

Instrument ID: MSS_Y
 Lab File ID: Y8510.D
 Initial Weight/Volume: 1000 mL
 Final Weight/Volume: 1000 uL
 Injection Volume: 0.5 uL

Analyte	Result	Qual	MDL	RL
2,2'-oxybis[1-chloropropane]	ND		0.28	10
2,4,5-Trichlorophenol	ND		0.45	10
2,4,6-Trichlorophenol	ND		0.29	10
2,4-Dichlorophenol	ND		0.64	10
2,4-Dimethylphenol	ND		0.58	10
2,4-Dinitrophenol	ND		10	30
2,4-Dinitrotoluene	ND		1.7	10
2,6-Dinitrotoluene	ND		1.9	10
2-Chloronaphthalene	ND		0.26	4.0
2-Chlorophenol	ND		2.0	10
2-Methylnaphthalene	ND		0.29	4.0
2-Methylphenol	ND		0.98	10
2-Nitroaniline	ND		1.7	10
2-Nitrophenol	ND		0.39	10
3 & 4 Methylphenol	ND		0.25	10
3,3'-Dichlorobenzidine	ND		2.0	50
3-Nitroaniline	ND		2.0	10
4,6-Dinitro-2-methylphenol	ND		4.0	50
4-Bromophenyl phenyl ether	ND		0.43	10
4-Chloro-3-methylphenol	ND		2.4	10
4-Chloroaniline	ND		2.1	10
4-Chlorophenyl phenyl ether	ND		1.7	10
4-Nitroaniline	ND		2.0	10
4-Nitrophenol	ND		1.2	10
Acenaphthene	ND		0.28	4.0
Acenaphthylene	ND		0.49	4.0
Acetophenone	ND		0.24	10
Anthracene	ND		0.42	4.0
Atrazine	ND		0.73	10
Benzidine	ND		50	100
Benzo[a]anthracene	ND		0.35	4.0
Benzo[a]pyrene	ND		0.31	4.0
Benzo[b]fluoranthene	ND		0.53	4.0
Benzo[g,h,i]perylene	ND		0.50	4.0
Benzo[k]fluoranthene	ND		0.46	4.0
Bis(2-chloroethoxy)methane	ND		0.97	10
Bis(2-chloroethyl)ether	ND		0.41	10
Bis(2-ethylhexyl) phthalate	ND		0.56	10
Butyl benzyl phthalate	ND		1.0	4.0
Caprolactam	ND		5.0	10
Carbazole	ND		0.43	4.0
Chrysene	ND		0.54	4.0
Cresols, Total	ND		0.25	10
Dibenz(a,h)anthracene	ND		0.51	4.0
Dibenzofuran	ND		0.29	4.0

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125338

Method: 8270C

Preparation: 3520C

Lab Sample ID: MB 280-125338/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 06/29/2012 1211
 Prep Date: 06/24/2012 0815
 Leach Date: N/A

Analysis Batch: 280-126328
 Prep Batch: 280-125338
 Leach Batch: N/A
 Units: ug/L

Instrument ID: MSS_Y
 Lab File ID: Y8510.D
 Initial Weight/Volume: 1000 mL
 Final Weight/Volume: 1000 uL
 Injection Volume: 0.5 uL

Analyte	Result	Qual	MDL	RL
Diethyl phthalate	ND		0.38	4.0
Dimethyl phthalate	ND		0.21	4.0
Di-n-butyl phthalate	ND		1.2	4.0
Di-n-octyl phthalate	ND		0.35	4.0
Fluoranthene	ND		0.20	4.0
Fluorene	ND		0.31	4.0
Hexachlorobenzene	ND		0.66	10
Hexachlorobutadiene	ND		3.3	10
Hexachlorocyclopentadiene	ND		10	50
Hexachloroethane	ND		2.1	10
Indeno[1,2,3-cd]pyrene	ND		0.65	4.0
Naphthalene	ND		0.29	4.0
Nitrobenzene	ND		0.81	10
N-Nitrosodi-n-propylamine	ND		0.35	10
n-Nitrosodiphenylamine(as diphenylamine)	ND		0.44	10
Pentachlorophenol	ND		20	50
Phenanthrene	ND		0.26	4.0
Phenol	ND		2.0	10
Pyrene	ND		0.37	10

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol	106	57 - 120
2-Fluorobiphenyl	67	38 - 120
2-Fluorophenol	84	51 - 120
Nitrobenzene-d5	89	48 - 120
Phenol-d5	89	51 - 120
Terphenyl-d14	110	50 - 120

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Lab Control Sample/

Lab Control Sample Duplicate Recovery Report - Batch: 280-125338

Method: 8270C

Preparation: 3520C

LCS Lab Sample ID:	LCS 280-125338/2-A	Analysis Batch:	280-126328	Instrument ID:	MSS_Y
Client Matrix:	Water	Prep Batch:	280-125338	Lab File ID:	Y8511.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	06/29/2012 1232	Units:	ug/L	Final Weight/Volume:	1000 uL
Prep Date:	06/24/2012 0815			Injection Volume:	0.5 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-125338/3-A	Analysis Batch:	280-126328	Instrument ID:	MSS_Y
Client Matrix:	Water	Prep Batch:	280-125338	Lab File ID:	Y8512.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	06/29/2012 1252	Units:	ug/L	Final Weight/Volume:	1000 uL
Prep Date:	06/24/2012 0815			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
1,2,4-Trichlorobenzene	74	59	28 - 120	23	42		
1,4-Dichlorobenzene	67	61	25 - 120	10	52		
2,4,5-Trichlorophenol	110	103	64 - 120	7	30		
2,4,6-Trichlorophenol	104	100	62 - 120	4	30		
2,4-Dinitrotoluene	116	113	76 - 120	3	32		
2-Chlorophenol	95	94	58 - 120	2	30		
2-Methylnaphthalene	88	70	42 - 120	23	32		
2-Methylphenol	92	93	62 - 120	1	30		
4-Chloro-3-methylphenol	105	105	69 - 120	0	30		
4-Nitrophenol	121	117	59 - 129	3	35		
Acenaphthene	95	87	61 - 120	9	30		
Anthracene	102	100	71 - 120	2	30		
Carbazole	105	103	72 - 120	2	30		
N-Nitrosodi-n-propylamine	98	97	58 - 120	1	30		
Pentachlorophenol	99	97	57 - 120	2	33		
Phenol	95	92	61 - 120	3	42		
Pyrene	101	101	71 - 120	0	30		

Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits	
2,4,6-Tribromophenol	128	X	122	X	57 - 120	
2-Fluorobiphenyl	94		71		38 - 120	
2-Fluorophenol	91		86		51 - 120	
Nitrobenzene-d5	98		96		48 - 120	
Phenol-d5	97		92		51 - 120	
Terphenyl-d14	113		111		50 - 120	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-125338**

**Method: 8270C
Preparation: 3520C**

LCS Lab Sample ID: LCS 280-125338/2-A Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/29/2012 1232
Prep Date: 06/24/2012 0815
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-125338/3-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/29/2012 1252
Prep Date: 06/24/2012 0815
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
1,2,4-Trichlorobenzene	80.0	80.0	59.0	47.0
1,4-Dichlorobenzene	80.0	80.0	53.4	48.5
2,4,5-Trichlorophenol	80.0	80.0	88.2	82.1
2,4,6-Trichlorophenol	80.0	80.0	83.6	80.1
2,4-Dinitrotoluene	80.0	80.0	92.8	90.2
2-Chlorophenol	80.0	80.0	76.4	74.9
2-Methylnaphthalene	80.0	80.0	70.7	56.2
2-Methylphenol	80.0	80.0	73.6	74.5
4-Chloro-3-methylphenol	80.0	80.0	83.9	83.9
4-Nitrophenol	80.0	80.0	96.7	93.6
Acenaphthene	80.0	80.0	76.0	69.4
Anthracene	80.0	80.0	81.6	80.4
Carbazole	80.0	80.0	83.9	82.5
N-Nitrosodi-n-propylamine	80.0	80.0	78.6	77.9
Pentachlorophenol	80.0	80.0	79.1	77.4
Phenol	80.0	80.0	76.0	73.7
Pyrene	80.0	80.0	80.6	80.8

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Method Blank - Batch: 280-125760

Method: 8015B
Preparation: 5030B

Lab Sample ID:	MB 280-125760/5	Analysis Batch:	280-125760	Instrument ID:	GCV_K
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	114F0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/26/2012 1458	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/26/2012 1458			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Gasoline Range Organics (GRO)-C6-C10	ND		10	25

Surrogate	% Rec	Acceptance Limits
a,a,a-Trifluorotoluene	97	82 - 110

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 280-125760

Method: 8015B
Preparation: 5030B

LCS Lab Sample ID:	LCS 280-125760/3	Analysis Batch:	280-125760	Instrument ID:	GCV_K
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112F0301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/26/2012 1334	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/26/2012 1334			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 280-125760/4	Analysis Batch:	280-125760	Instrument ID:	GCV_K
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	113F0401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	06/26/2012 1416	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	06/26/2012 1416			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C6-C10	113	108	79 - 149	4	27		
Surrogate	LCS % Rec		LCSD % Rec	Acceptance Limits			
a,a,a-Trifluorotoluene	109	105		82 - 110			

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-125760

Method: 8015B
Preparation: 5030B

LCS Lab Sample ID: LCS 280-125760/3 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 1334
Prep Date: 06/26/2012 1334
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-125760/4
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 1416
Prep Date: 06/26/2012 1416
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Gasoline Range Organics (GRO)-C6-C10	101	101	114	109

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-125760

Method: 8015B
Preparation: 5030B

MS Lab Sample ID: 280-30378-1 Analysis Batch: 280-125760
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0 Leach Batch: N/A
Analysis Date: 06/26/2012 1623
Prep Date: 06/26/2012 1623
Leach Date: N/A

Instrument ID: GCV_K
Lab File ID: 116F0701.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL
Injection Volume: 5 mL
Column ID: PRIMARY

MSD Lab Sample ID: 280-30378-1 Analysis Batch: 280-125760
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0 Leach Batch: N/A
Analysis Date: 06/26/2012 1706
Prep Date: 06/26/2012 1706
Leach Date: N/A

Instrument ID: GCV_K
Lab File ID: 201F0801.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL
Injection Volume: 5 mL
Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Gasoline Range Organics (GRO)-C6-C10	108	105	79 - 149	2	27		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
a,a,a-Trifluorotoluene		106	105			82 - 110	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-125760**

**Method: 8015B
Preparation: 5030B**

MS Lab Sample ID: 280-30378-1 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 1623
Prep Date: 06/26/2012 1623
Leach Date: N/A

MSD Lab Sample ID: 280-30378-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 1706
Prep Date: 06/26/2012 1706
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Gasoline Range Organics (GRO)-C6-C10	ND	101	101	109	106

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 600-83033

Method: RSK-175

Preparation: N/A

Lab Sample ID:	MB 600-83033/2	Analysis Batch:	600-83033	Instrument ID:	FID14
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	rsk070212_002.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 mL
Analysis Date:	07/02/2012 1438	Units:	ug/L	Final Weight/Volume:	1 mL
Prep Date:	N/A			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Ethane	ND		0.30	2.0
Methane	ND		0.36	1.0
Propane	ND		0.75	2.0

Lab Control Sample - Batch: 600-83033

Method: RSK-175

Preparation: N/A

Lab Sample ID:	LCS 600-83033/3	Analysis Batch:	600-83033	Instrument ID:	FID14
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	rsk070212_003.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 mL
Analysis Date:	07/02/2012 1452	Units:	ug/L	Final Weight/Volume:	1 mL
Prep Date:	N/A			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Ethane	12.9	10.8	84	70 - 130	
Methane	6.86	6.66	97	70 - 130	
Propane	18.9	16.7	88	70 - 130	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-83033**

**Method: RSK-175
Preparation: N/A**

MS Lab Sample ID:	280-30378-1	Analysis Batch:	600-83033	Instrument ID:	FID14
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	rsk070212_013.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 mL
Analysis Date:	07/02/2012 1729			Final Weight/Volume:	1 mL
Prep Date:	N/A			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-30378-1	Analysis Batch:	600-83033	Instrument ID:	FID14
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	rsk070212_014.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 mL
Analysis Date:	07/02/2012 1746			Final Weight/Volume:	1 mL
Prep Date:	N/A			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ethane	83	82	70 - 130	1	30		
Methane	81	81	70 - 130	0	30		
Propane	90	88	70 - 130	2	30		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-83033**

**Method: RSK-175
Preparation: N/A**

MS Lab Sample ID:	280-30378-1	Units:	ug/L	MSD Lab Sample ID:	280-30378-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	07/02/2012 1729			Analysis Date:	07/02/2012 1746
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
	Result/Qual					
Ethane	0.40	J	12.9	12.9	11.1	10.9
Methane	2.0		6.86	6.86	7.57	7.55
Propane	ND		18.9	18.9	16.9	16.6

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125504

Method: 8015B

Preparation: 3510C

Lab Sample ID:	MB 280-125504/1-A	Analysis Batch:	280-125910	Instrument ID:	GCS_U2
Client Matrix:	Water	Prep Batch:	280-125504	Lab File ID:	015F1501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	06/27/2012 1905	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	06/25/2012 1906			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
C10-C36	ND		0.056	0.50
Surrogate	% Rec	Acceptance Limits		
o-Terphenyl	63	50 - 115		
n-Octacosane	100	26 - 152		

Lab Control Sample/

Lab Control Sample Duplicate Recovery Report - Batch: 280-125504

Method: 8015B

Preparation: 3510C

LCS Lab Sample ID:	LCS 280-125504/2-A	Analysis Batch:	280-125910	Instrument ID:	GCS_U2
Client Matrix:	Water	Prep Batch:	280-125504	Lab File ID:	016F1601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	06/27/2012 1929	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	06/25/2012 1906			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 280-125504/3-A	Analysis Batch:	280-125910	Instrument ID:	GCS_U2
Client Matrix:	Water	Prep Batch:	280-125504	Lab File ID:	017F1701.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	06/27/2012 1953	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	06/25/2012 1906			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
C10-C36	86	74	57 - 115	15	31		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
o-Terphenyl	81		73		50 - 115		
n-Octacosane	97		86		26 - 152		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-125504**

**Method: 8015B
Preparation: 3510C**

LCS Lab Sample ID: LCS 280-125504/2-A Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/27/2012 1929
Prep Date: 06/25/2012 1906
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-125504/3-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/27/2012 1953
Prep Date: 06/25/2012 1906
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
C10-C36	2.00	2.00	1.72	1.48

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125463

Lab Sample ID: MB 280-125231/1-C
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 2340
Prep Date: 06/26/2012 1400
Leach Date: N/A

Analysis Batch: 280-125764
Prep Batch: 280-125463
Leach Batch: N/A
Units: ug/L

Method: 200.7 Rev 4.4

Preparation: 200.7 Dissolved

Instrument ID: MT_026
Lab File ID: 26A062612.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Aluminum	ND		18	100
Beryllium	ND		0.47	1.0
Boron	ND		4.4	100
Calcium	ND		35	200
Chromium	ND		0.66	10
Iron	ND		22	100
Lithium	ND		2.6	10
Magnesium	ND		11	200
Nickel	ND		1.3	40
Potassium	ND		240	3000
Silicon	ND		35	500
Sodium	ND		92	5000
Strontium	ND		0.30	10
Vanadium	ND		1.1	10
Zinc	ND		4.5	20

Lab Control Sample - Batch: 280-125463

Lab Sample ID: LCS 280-125231/2-C
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 2343
Prep Date: 06/26/2012 1400
Leach Date: N/A

Analysis Batch: 280-125764
Prep Batch: 280-125463
Leach Batch: N/A
Units: ug/L

Method: 200.7 Rev 4.4

Preparation: 200.7 Dissolved

Instrument ID: MT_026
Lab File ID: 26A062612.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	2000	1970	99	87 - 111	
Beryllium	50.0	49.7	99	89 - 113	
Boron	1000	1060	106	86 - 110	
Calcium	50000	49300	99	90 - 111	
Chromium	200	200	100	90 - 113	
Iron	1000	987	99	89 - 115	
Lithium	1000	1020	102	90 - 112	
Magnesium	50000	50500	101	90 - 113	
Nickel	500	497	99	89 - 111	
Potassium	50000	52100	104	89 - 114	
Silicon	10000	10000	100	90 - 110	
Sodium	50000	51800	104	90 - 115	
Strontium	1000	1010	101	90 - 111	
Vanadium	500	511	102	90 - 111	
Zinc	500	505	101	85 - 111	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-125463

Method: 200.7 Rev 4.4
Preparation: 200.7
Dissolved

MS Lab Sample ID: 280-30333-I-1-F MS
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 2351
Prep Date: 06/26/2012 1400
Leach Date: N/A

Analysis Batch: 280-125764
Prep Batch: 280-125463
Leach Batch: N/A

Instrument ID: MT_026
Lab File ID: 26A062612.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-30333-I-1-G MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 2354
Prep Date: 06/26/2012 1400
Leach Date: N/A

Analysis Batch: 280-125764
Prep Batch: 280-125463
Leach Batch: N/A

Instrument ID: MT_026
Lab File ID: 26A062612.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Aluminum	93	92	87 - 111	2	20		
Beryllium	97	95	89 - 113	2	20		
Boron	98	96	86 - 110	1	20		
Calcium	96	92	90 - 111	1	20		
Chromium	98	96	90 - 113	2	20		
Iron	99	97	89 - 115	2	20		
Lithium	106	104	90 - 112	1	20		
Magnesium	96	93	90 - 113	1	20		
Nickel	96	95	89 - 111	1	20		
Potassium	114	113	89 - 114	1	20		
Silicon	100	97	90 - 110	1	20		
Sodium	85	65	90 - 115	1	20	4	4
Strontium	97	93	90 - 111	1	20		
Vanadium	104	102	90 - 111	2	20		
Zinc	102	100	85 - 111	2	20		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 280-125463

Method: 200.7 Rev 4.4

Preparation: 200.7 Dissolved

MS Lab Sample ID: 280-30333-I-1-F MS Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 2351
Prep Date: 06/26/2012 1400
Leach Date: N/A

MSD Lab Sample ID: 280-30333-I-1-G MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 2354
Prep Date: 06/26/2012 1400
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Aluminum	ND	2000	2000	1860	1830
Beryllium	ND	50.0	50.0	48.4	47.5
Boron	480	1000	1000	1460	1440
Calcium	110000	50000	50000	154000	152000
Chromium	ND	200	200	196	193
Iron	ND	1000	1000	990	969
Lithium	100	1000	1000	1160	1150
Magnesium	100000	50000	50000	150000	149000
Nickel	3.8 J	500	500	486	479
Potassium	5100	50000	50000	62200	61400
Silicon	6200	10000	10000	16200	15900
Sodium	1200000	50000	50000	1250000 4	1240000 4
Strontium	3500	1000	1000	4440	4400
Vanadium	1.6 J	500	500	521	513
Zinc	8.5 J	500	500	518	510

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Serial Dilution - Batch: 280-125463

Method: 200.7 Rev 4.4

Preparation: 200.7

Dissolved

Lab Sample ID: 280-30333-I-1-E SD ^5
Client Matrix: Water
Dilution: 5.0
Analysis Date: 06/26/2012 2349
Prep Date: 06/26/2012 1400
Leach Date: N/A

Analysis Batch: 280-125764
Prep Batch: 280-125463
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_026
Lab File ID: 26A062612.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Aluminum	ND	ND	NC	10	
Beryllium	ND	ND	NC	10	
Boron	480	523	9.0	10	
Calcium	110000	111000	4.8	10	
Chromium	ND	ND	NC	10	
Iron	ND	ND	NC	10	
Lithium	100	111	NC	10	
Magnesium	100000	107000	4.4	10	
Nickel	3.8 J	ND	NC	10	
Potassium	5100	5790	NC	10	J
Silicon	6200	6470	4.8	10	
Sodium	1200000	1260000	4.1	10	
Strontium	3500	3620	4.3	10	
Vanadium	1.6 J	ND	NC	10	
Zinc	8.5 J	25.4	NC	10	J

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125466

Lab Sample ID: MB 280-125420/1-B
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 06/26/2012 2345
 Prep Date: 06/26/2012 1400
 Leach Date: N/A

Analysis Batch: 280-125775
 Prep Batch: 280-125466
 Leach Batch: N/A
 Units: ug/L

Method: 200.8 Preparation: 200.8 Dissolved

Instrument ID: MT_024
 Lab File ID: 061_BLK.D
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Antimony	ND		0.16	2.0
Arsenic	ND		0.50	5.0
Barium	ND		0.38	1.0
Cadmium	ND		0.040	1.0
Cobalt	ND		0.050	1.0
Copper	ND		0.20	2.0
Lead	ND		0.10	1.0
Manganese	ND		0.51	2.0
Molybdenum	0.0689	J	0.040	2.0
Selenium	ND		1.0	5.0
Silver	0.0394	J	0.020	1.0
Thallium	ND		0.066	1.0
Uranium	ND		0.030	1.0

Lab Control Sample - Batch: 280-125466

Lab Sample ID: LCS 280-125420/2-B
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 06/26/2012 2348
 Prep Date: 06/26/2012 1400
 Leach Date: N/A

Analysis Batch: 280-125775
 Prep Batch: 280-125466
 Leach Batch: N/A
 Units: ug/L

Method: 200.8 Preparation: 200.8 Dissolved

Instrument ID: MT_024
 Lab File ID: 062_LCS.D
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	40.0	40.3	101	85 - 115	
Arsenic	40.0	41.1	103	89 - 111	
Barium	40.0	41.2	103	89 - 115	
Cadmium	40.0	40.0	100	89 - 111	
Cobalt	40.0	39.3	98	92 - 115	
Copper	40.0	39.3	98	90 - 115	
Lead	40.0	41.4	104	88 - 115	
Manganese	40.0	39.5	99	87 - 115	
Molybdenum	40.0	41.2	103	89 - 112	
Selenium	40.0	40.7	102	85 - 114	
Silver	40.0	39.4	98	90 - 114	
Thallium	40.0	44.1	110	86 - 115	
Uranium	40.0	44.7	112	85 - 115	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 280-125466

Method: 200.8

**Preparation: 200.8
Dissolved**

MS Lab Sample ID: 280-30378-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 2354
Prep Date: 06/26/2012 1400
Leach Date: N/A

Analysis Batch: 280-125775
Prep Batch: 280-125466
Leach Batch: N/A

Instrument ID: MT_024
Lab File ID: 064_MS.D
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-30378-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 2357
Prep Date: 06/26/2012 1400
Leach Date: N/A

Analysis Batch: 280-125775
Prep Batch: 280-125466
Leach Batch: N/A

Instrument ID: MT_024
Lab File ID: 065_MSD.D
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Antimony	98	96	85 - 115	2	30		
Arsenic	103	100	79 - 120	2	30		
Barium	99	96	89 - 115	2	30		
Cadmium	91	91	89 - 111	0	30		
Cobalt	91	90	92 - 115	1	30	F	F
Copper	85	83	90 - 115	1	30	F	F
Lead	90	90	88 - 115	0	30		
Manganese	92	91	87 - 115	1	35		
Molybdenum	100	97	89 - 112	2	30		
Selenium	106	106	85 - 114	0	35		
Silver	84	83	20 - 120	1	40		
Thallium	96	96	86 - 115	1	30		
Uranium	106	107	85 - 115	0	30		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 280-125466

Method: 200.8

**Preparation: 200.8
Dissolved**

MS Lab Sample ID: 280-30378-1 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 2354
Prep Date: 06/26/2012 1400
Leach Date: N/A

MSD Lab Sample ID: 280-30378-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 2357
Prep Date: 06/26/2012 1400
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Antimony	ND		40.0	40.0	39.2		38.3	
Arsenic	2.0	J	40.0	40.0	43.1		42.2	
Barium	12		40.0	40.0	51.1		50.0	
Cadmium	ND		40.0	40.0	36.4		36.3	
Cobalt	0.052	J	40.0	40.0	36.3	F	36.0	F
Copper	28		40.0	40.0	62.3	F	61.6	F
Lead	0.14	J	40.0	40.0	36.2		36.3	
Manganese	2.3		40.0	40.0	39.0		38.7	
Molybdenum	23		40.0	40.0	62.9		61.7	
Selenium	13		40.0	40.0	54.8		55.0	
Silver	0.023	J	40.0	40.0	33.6		33.3	
Thallium	ND		40.0	40.0	38.3		38.6	
Uranium	5.0		40.0	40.0	47.5		47.7	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125550

Method: 20B Preparation: N/A

Lab Sample ID: MB 280-125550/1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 0710
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-125550
Prep Batch: N/A
Leach Batch: N/A
Units: No Unit

Instrument ID: MT_025
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	MDL	RL
Sodium Adsorption Ratio	ND		0.40	0.40

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125678

Lab Sample ID: MB 280-125420/1-C
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/27/2012 1454
Prep Date: 06/27/2012 1035
Leach Date: N/A

Analysis Batch: 280-125895
Prep Batch: 280-125678
Leach Batch: N/A
Units: ug/L

Method: 245.1 Preparation: 245.1 Dissolved

Instrument ID: MT_033
Lab File ID: 120627aa.txt
Initial Weight/Volume: 30 mL
Final Weight/Volume: 30 mL

Analyte	Result	Qual	MDL	RL
Mercury	ND		0.027	0.20

Lab Control Sample - Batch: 280-125678

Lab Sample ID: LCS 280-125420/2-C
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/27/2012 1456
Prep Date: 06/27/2012 1035
Leach Date: N/A

Analysis Batch: 280-125895
Prep Batch: 280-125678
Leach Batch: N/A
Units: ug/L

Method: 245.1 Preparation: 245.1 Dissolved

Instrument ID: MT_033
Lab File ID: 120627aa.txt
Initial Weight/Volume: 30 mL
Final Weight/Volume: 30 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	5.00	4.52	90	90 - 110	

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-125678

Method: 245.1 Preparation: 245.1 Dissolved

MS Lab Sample ID: 280-30378-F-3-E MS
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/27/2012 1510
Prep Date: 06/27/2012 1035
Leach Date: N/A

Analysis Batch: 280-125895
Prep Batch: 280-125678
Leach Batch: N/A

Instrument ID: MT_033
Lab File ID: 120627aa.txt
Initial Weight/Volume: 30 mL
Final Weight/Volume: 30 mL

MSD Lab Sample ID: 280-30378-F-3-F MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/27/2012 1512
Prep Date: 06/27/2012 1035
Leach Date: N/A

Analysis Batch: 280-125895
Prep Batch: 280-125678
Leach Batch: N/A

Instrument ID: MT_033
Lab File ID: 120627aa.txt
Initial Weight/Volume: 30 mL
Final Weight/Volume: 30 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Mercury	98	93	80 - 120	5	10		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 280-125678

Method: 245.1

Preparation: 245.1 Dissolved

MS Lab Sample ID: 280-30378-F-3-E MS Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/27/2012 1510
Prep Date: 06/27/2012 1035
Leach Date: N/A

MSD Lab Sample ID: 280-30378-F-3-F MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/27/2012 1512
Prep Date: 06/27/2012 1035
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Mercury	ND	5.00	5.00	4.89	4.67

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125604

Method: 300.0

Preparation: N/A

Lab Sample ID:	MB 280-125604/7	Analysis Batch:	280-125604	Instrument ID:	WC_IC6
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	116.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/23/2012 1103	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Nitrate as N	ND		0.042	0.50
Nitrite as N	ND		0.049	0.50

Method Reporting Limit Check - Batch: 280-125604

Method: 300.0

Preparation: N/A

Lab Sample ID:	MRL 280-125604/3	Analysis Batch:	280-125604	Instrument ID:	WC_IC6
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/23/2012 0954	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	0.200	0.200	100	50 - 150	J
Nitrite as N	0.200	0.194	97	50 - 150	J

Lab Control Sample/

Method: 300.0

Lab Control Sample Duplicate Recovery Report - Batch: 280-125604

Preparation: N/A

LCS Lab Sample ID:	LCS 280-125604/5	Analysis Batch:	280-125604	Instrument ID:	WC_IC6
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	114.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/23/2012 1029	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-125604/6	Analysis Batch:	280-125604	Instrument ID:	WC_IC6
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	115.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/23/2012 1046	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Nitrate as N	93	93	90 - 110	0	10		
Nitrite as N	96	96	90 - 110	0	10		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-125604

Method: 300.0
Preparation: N/A

LCS Lab Sample ID: LCS 280-125604/5 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/23/2012 1029
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-125604/6
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/23/2012 1046
Prep Date: N/A
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Nitrate as N	5.00	5.00	4.66	4.67
Nitrite as N	5.00	5.00	4.81	4.81

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-125604

Method: 300.0
Preparation: N/A

MS Lab Sample ID: 280-30379-A-4 MS
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/23/2012 1429
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-125604
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_IC6
Lab File ID: 122.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 280-30379-A-4 MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/23/2012 1446
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-125604
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_IC6
Lab File ID: 123.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Nitrate as N	98	99	80 - 120	1	20		
Nitrite as N	101	101	80 - 120	0	20		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-125604

Method: 300.0
Preparation: N/A

MS Lab Sample ID: 280-30379-A-4 MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/23/2012 1429
Prep Date: N/A
Leach Date: N/A

MSD Lab Sample ID: 280-30379-A-4 MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/23/2012 1446
Prep Date: N/A
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Nitrate as N	0.56	5.00	5.00	5.48	5.51
Nitrite as N	ND	5.00	5.00	5.05	5.06

Duplicate - Batch: 280-125604

Method: 300.0
Preparation: N/A

Lab Sample ID: 280-30379-A-4 DU
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/23/2012 1411
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-125604
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC_IC6
Lab File ID: 121.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Nitrate as N	0.56	0.553	0.4	15	
Nitrite as N	ND	ND	NC	15	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125605

Method: 300.0

Preparation: N/A

Lab Sample ID:	MB 280-125605/7	Analysis Batch:	280-125605	Instrument ID:	WC_IC6
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	116.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/23/2012 1103	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Bromide	ND		0.11	0.20
Chloride	ND		0.25	3.0
Fluoride	ND		0.060	0.50
Sulfate	ND		0.23	5.0

Method Reporting Limit Check - Batch: 280-125605

Method: 300.0

Preparation: N/A

Lab Sample ID:	MRL 280-125605/3	Analysis Batch:	280-125605	Instrument ID:	WC_IC6
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/23/2012 0954	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Bromide	0.200	0.156	78	50 - 150	J
Chloride	1.00	0.644	64	50 - 150	J
Fluoride	0.200	0.165	83	50 - 150	J
Sulfate	1.00	1.00	100	50 - 150	J

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Lab Control Sample/

Lab Control Sample Duplicate Recovery Report - Batch: 280-125605

Method: 300.0

Preparation: N/A

LCS Lab Sample ID:	LCS 280-125605/5	Analysis Batch:	280-125605	Instrument ID:	WC_IC6
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	114.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/23/2012 1029	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-125605/6	Analysis Batch:	280-125605	Instrument ID:	WC_IC6
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	115.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/23/2012 1046	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Bromide	92	92	90 - 110	0	10		
Chloride	96	96	90 - 110	0	10		
Fluoride	97	97	90 - 110	0	10		
Sulfate	97	97	90 - 110	0	10		

Laboratory Control/

Laboratory Duplicate Data Report - Batch: 280-125605

Method: 300.0

Preparation: N/A

LCS Lab Sample ID:	LCS 280-125605/5	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-125605/6
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/23/2012 1029			Analysis Date:	06/23/2012 1046
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Bromide	5.00	5.00	4.58	4.58
Chloride	25.0	25.0	24.0	24.0
Fluoride	5.00	5.00	4.87	4.85
Sulfate	25.0	25.0	24.2	24.2

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-125605

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-30379-A-4 MS	Analysis Batch:	280-125605	Instrument ID:	WC_IC6
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	122.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/23/2012 1429			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-30379-A-4 MSD	Analysis Batch:	280-125605	Instrument ID:	WC_IC6
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	123.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/23/2012 1446			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Bromide	99	99	80 - 120	1	20		
Chloride	103	103	80 - 120	0	20	E	E
Fluoride	96	97	80 - 120	1	20		
Sulfate	96	95	80 - 120	0	20	E	E

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-125605

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-30379-A-4 MS	Units:	mg/L	MSD Lab Sample ID:	280-30379-A-4 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/23/2012 1429			Analysis Date:	06/23/2012 1446
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample		MS Spike Amount	MSD Spike Amount	MS		MSD	
	Result/Qual				Result/Qual		Result/Qual	
Bromide	0.46		5.00	5.00	5.40		5.43	
Chloride	40		25.0	25.0	65.5	E	65.6	E
Fluoride	0.47	J	5.00	5.00	5.28		5.31	
Sulfate	48		25.0	25.0	71.5	E	71.4	E

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Duplicate - Batch: 280-125605

Method: 300.0
Preparation: N/A

Lab Sample ID: 280-30379-A-4 DU
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/23/2012 1411
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-125605
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC_IC6
Lab File ID: 121.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Bromide	0.46	0.455	0.4	15	
Chloride	40	39.8	0.02	15	
Fluoride	0.47 J	0.470	0.2	15	J
Sulfate	48	47.6	0.03	15	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125734

Method: SM 2320B

Preparation: N/A

Lab Sample ID:	MB 280-125734/6	Analysis Batch:	280-125734	Instrument ID:	WC-AT3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062612.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/26/2012 0851	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Total Alkalinity	ND		1.1	5.0
Bicarbonate Alkalinity as CaCO3	ND		1.1	5.0
Carbonate Alkalinity as CaCO3	ND		1.1	5.0
Hydroxide Alkalinity	ND		1.1	5.0

Lab Control Sample/

Method: SM 2320B

Lab Control Sample Duplicate Recovery Report - Batch: 280-125734

Preparation: N/A

LCS Lab Sample ID:	LCS 280-125734/4	Analysis Batch:	280-125734	Instrument ID:	WC-AT3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062612.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/26/2012 0842	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-125734/5	Analysis Batch:	280-125734	Instrument ID:	WC-AT3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062612.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/26/2012 0847	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Total Alkalinity	104	104	90 - 110	1	10		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-125734

Method: SM 2320B
Preparation: N/A

LCS Lab Sample ID: LCS 280-125734/4 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 0842
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-125734/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 0847
Prep Date: N/A
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Total Alkalinity	200	200	208	207

Duplicate - Batch: 280-125734

Method: SM 2320B
Preparation: N/A

Lab Sample ID: 280-30361-B-1 DU
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/26/2012 0917
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-125734
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC-AT3
Lab File ID: 062612.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Alkalinity	84	83.1	2	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Method Blank - Batch: 280-125960

Method: SM 2510B

Preparation: N/A

Lab Sample ID:	MB 280-125960/5	Analysis Batch:	280-125960	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/28/2012 1108	Units:	umhos/cm	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Specific Conductance	ND		2.0	2.0

Lab Control Sample/

Method: SM 2510B

Lab Control Sample Duplicate Recovery Report - Batch: 280-125960

Preparation: N/A

LCS Lab Sample ID:	LCS 280-125960/3	Analysis Batch:	280-125960	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/28/2012 1108	Units:	umhos/cm	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-125960/4	Analysis Batch:	280-125960	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/28/2012 1108	Units:	umhos/cm	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Specific Conductance	102	101	90 - 110	1	10		

Laboratory Control/

Method: SM 2510B

Laboratory Duplicate Data Report - Batch: 280-125960

Preparation: N/A

LCS Lab Sample ID:	LCS 280-125960/3	Units:	umhos/cm	LCSD Lab Sample ID:	LCSD 280-125960/4
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/28/2012 1108			Analysis Date:	06/28/2012 1108
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Specific Conductance	1420	1420	1440	1430

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Duplicate - Batch: 280-125960

Method: SM 2510B

Preparation: N/A

Lab Sample ID:	280-30301-A-2 DU	Analysis Batch:	280-125960	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/28/2012 1108	Units:	umhos/cm	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Specific Conductance	1200	1220	0.5	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Method Blank - Batch: 280-125916

Method: SM 2540C

Preparation: N/A

Lab Sample ID:	MB 280-125916/1	Analysis Batch:	280-125916	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/28/2012 0900	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Total Dissolved Solids	ND		4.7	10

Lab Control Sample/

Method: SM 2540C

Lab Control Sample Duplicate Recovery Report - Batch: 280-125916

Preparation: N/A

LCS Lab Sample ID:	LCS 280-125916/2	Analysis Batch:	280-125916	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/28/2012 0900	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-125916/3	Analysis Batch:	280-125916	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/28/2012 0900	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Total Dissolved Solids	96	96	86 - 110	0	20		

Laboratory Control/

Method: SM 2540C

Laboratory Duplicate Data Report - Batch: 280-125916

Preparation: N/A

LCS Lab Sample ID:	LCS 280-125916/2	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-125916/3
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/28/2012 0900			Analysis Date:	06/28/2012 0900
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Total Dissolved Solids	501	501	482	480

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Duplicate - Batch: 280-125916

Method: SM 2540C

Preparation: N/A

Lab Sample ID:	280-30357-A-12 DU	Analysis Batch:	280-125916	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/28/2012 0900	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids	250	255	2	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 280-125326

Method: SM 4500 H+ B
Preparation: N/A

LCS Lab Sample ID:	LCS 280-125326/5	Analysis Batch:	280-125326	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/23/2012 1158	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-125326/16	Analysis Batch:	280-125326	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/23/2012 1219	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
pH	100	100	99 - 101	1	5		

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-125326

Method: SM 4500 H+ B
Preparation: N/A

LCS Lab Sample ID:	LCS 280-125326/5	Units:	SU	LCSD Lab Sample ID:	LCSD 280-125326/16
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/23/2012 1158			Analysis Date:	06/23/2012 1219
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
pH	7.00	7.00	6.970	7.010

Duplicate - Batch: 280-125326

Method: SM 4500 H+ B
Preparation: N/A

Lab Sample ID:	280-30378-1	Analysis Batch:	280-125326	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/23/2012 1200	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
pH	8.12	8.180	0.7	5	HF

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Method Blank - Batch: 280-126107

Method: SM 5310B

Preparation: N/A

Lab Sample ID:	MB 280-126107/25	Analysis Batch:	280-126107	Instrument ID:	WC_SHI2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062712.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	06/28/2012 0339	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Total Organic Carbon - Average	0.282	J	0.16	1.0

Lab Control Sample/

Method: SM 5310B

Lab Control Sample Duplicate Recovery Report - Batch: 280-126107

Preparation: N/A

LCS Lab Sample ID:	LCS 280-126107/23	Analysis Batch:	280-126107	Instrument ID:	WC_SHI2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062712.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	06/28/2012 0301	Units:	mg/L	Final Weight/Volume:	200 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-126107/24	Analysis Batch:	280-126107	Instrument ID:	WC_SHI2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062712.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	06/28/2012 0320	Units:	mg/L	Final Weight/Volume:	200 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Total Organic Carbon - Average	98	97	88 - 112	1	15		

Laboratory Control/

Method: SM 5310B

Laboratory Duplicate Data Report - Batch: 280-126107

Preparation: N/A

LCS Lab Sample ID:	LCS 280-126107/23	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-126107/24
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/28/2012 0301			Analysis Date:	06/28/2012 0320
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Total Organic Carbon - Average	25.0	25.0	24.6	24.3

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-126107**

**Method: SM 5310B
Preparation: N/A**

MS Lab Sample ID:	280-30328-B-1 MS	Analysis Batch:	280-126107	Instrument ID:	WC_SHI2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062712.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/28/2012 0413			Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-30328-B-1 MSD	Analysis Batch:	280-126107	Instrument ID:	WC_SHI2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	062712.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/28/2012 0509			Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Total Organic Carbon - Average	95	96	88 - 112	1	15		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-126107**

**Method: SM 5310B
Preparation: N/A**

MS Lab Sample ID:	280-30328-B-1 MS	Units:	mg/L	MSD Lab Sample ID:	280-30328-B-1 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/28/2012 0413			Analysis Date:	06/28/2012 0509
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Total Organic Carbon - Average	1.5	25.0	25.0	25.4	25.6

DATA REPORTING QUALIFIERS

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

Lab Section	Qualifier	Description
GC/MS VOA	B	Compound was found in the blank and sample.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC/MS Semi VOA	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	X	Surrogate is outside control limits
GC VOA	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals	B	Compound was found in the blank and sample.
	F	MS or MSD exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry	B	Compound was found in the blank and sample.
	HF	Field parameter with a holding time of 15 minutes
	E	Result exceeded calibration range.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:280-125949					
LCS 280-125949/4	Lab Control Sample	T	Water	8260B	
MB 280-125949/5	Method Blank	T	Water	8260B	
280-30310-D-1 MS	Matrix Spike	T	Water	8260B	
280-30310-D-1 MSD	Matrix Spike Duplicate	T	Water	8260B	
280-30378-1	WELL-SCHULTZ	T	Water	8260B	
280-30378-2	DITCH-SCHULTZ	T	Water	8260B	

Report Basis

T = Total

GC/MS Semi VOA

Prep Batch: 280-125338					
LCS 280-125338/2-A	Lab Control Sample	T	Water	3520C	
LCSD 280-125338/3-A	Lab Control Sample Duplicate	T	Water	3520C	
MB 280-125338/1-A	Method Blank	T	Water	3520C	
280-30378-1	WELL-SCHULTZ	T	Water	3520C	
280-30378-2	DITCH-SCHULTZ	T	Water	3520C	
Analysis Batch:280-126328					
LCS 280-125338/2-A	Lab Control Sample	T	Water	8270C	280-125338
LCSD 280-125338/3-A	Lab Control Sample Duplicate	T	Water	8270C	280-125338
MB 280-125338/1-A	Method Blank	T	Water	8270C	280-125338
280-30378-1	WELL-SCHULTZ	T	Water	8270C	280-125338
280-30378-2	DITCH-SCHULTZ	T	Water	8270C	280-125338

Report Basis

T = Total

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC VOA					
Analysis Batch:600-83033					
LCS 600-83033/3	Lab Control Sample	T	Water	RSK-175	
MB 600-83033/2	Method Blank	T	Water	RSK-175	
280-30378-1	WELL-SCHULTZ	T	Water	RSK-175	
280-30378-1MS	Matrix Spike	T	Water	RSK-175	
280-30378-1MSD	Matrix Spike Duplicate	T	Water	RSK-175	
280-30378-2	DITCH-SCHULTZ	T	Water	RSK-175	
Analysis Batch:280-125760					
LCS 280-125760/3	Lab Control Sample	T	Water	8015B	
LCSD 280-125760/4	Lab Control Sample Duplicate	T	Water	8015B	
MB 280-125760/5	Method Blank	T	Water	8015B	
280-30378-1	WELL-SCHULTZ	T	Water	8015B	
280-30378-1MS	Matrix Spike	T	Water	8015B	
280-30378-1MSD	Matrix Spike Duplicate	T	Water	8015B	
280-30378-2	DITCH-SCHULTZ	T	Water	8015B	
Report Basis					
T = Total					
GC Semi VOA					
Prep Batch: 280-125504					
LCS 280-125504/2-A	Lab Control Sample	T	Water	3510C	
LCSD 280-125504/3-A	Lab Control Sample Duplicate	T	Water	3510C	
MB 280-125504/1-A	Method Blank	T	Water	3510C	
280-30378-1	WELL-SCHULTZ	T	Water	3510C	
280-30378-2	DITCH-SCHULTZ	T	Water	3510C	
Analysis Batch:280-125910					
LCS 280-125504/2-A	Lab Control Sample	T	Water	8015B	280-125504
LCSD 280-125504/3-A	Lab Control Sample Duplicate	T	Water	8015B	280-125504
MB 280-125504/1-A	Method Blank	T	Water	8015B	280-125504
280-30378-1	WELL-SCHULTZ	T	Water	8015B	280-125504
280-30378-2	DITCH-SCHULTZ	T	Water	8015B	280-125504
Report Basis					
T = Total					

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-30378-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-125463					
LCS 280-125231/2-C	Lab Control Sample	D	Water	200.7	
MB 280-125231/1-C	Method Blank	D	Water	200.7	
280-30333-I-1-F MS	Matrix Spike	D	Water	200.7	
280-30333-I-1-G MSD	Matrix Spike Duplicate	D	Water	200.7	
280-30378-1	WELL-SCHULTZ	D	Water	200.7	
280-30378-2	DITCH-SCHULTZ	D	Water	200.7	
Prep Batch: 280-125466					
LCS 280-125420/2-B	Lab Control Sample	D	Water	200.8	
MB 280-125420/1-B	Method Blank	D	Water	200.8	
280-30378-1	WELL-SCHULTZ	D	Water	200.8	
280-30378-1MS	Matrix Spike	D	Water	200.8	
280-30378-1MSD	Matrix Spike Duplicate	D	Water	200.8	
280-30378-2	DITCH-SCHULTZ	D	Water	200.8	
Analysis Batch:280-125550					
MB 280-125550/1	Method Blank	T	Water	20B	
280-30378-1	WELL-SCHULTZ	T	Water	20B	
280-30378-2	DITCH-SCHULTZ	T	Water	20B	
Prep Batch: 280-125678					
LCS 280-125420/2-C	Lab Control Sample	D	Water	245.1	
MB 280-125420/1-C	Method Blank	D	Water	245.1	
280-30378-1	WELL-SCHULTZ	D	Water	245.1	
280-30378-2	DITCH-SCHULTZ	D	Water	245.1	
280-30378-F-3-E MS	Matrix Spike	D	Water	245.1	
280-30378-F-3-F MSD	Matrix Spike Duplicate	D	Water	245.1	
Analysis Batch:280-125764					
LCS 280-125231/2-C	Lab Control Sample	D	Water	200.7 Rev 4.4	280-125463
MB 280-125231/1-C	Method Blank	D	Water	200.7 Rev 4.4	280-125463
280-30333-I-1-F MS	Matrix Spike	D	Water	200.7 Rev 4.4	280-125463
280-30333-I-1-G MSD	Matrix Spike Duplicate	D	Water	200.7 Rev 4.4	280-125463
280-30378-1	WELL-SCHULTZ	D	Water	200.7 Rev 4.4	280-125463
280-30378-2	DITCH-SCHULTZ	D	Water	200.7 Rev 4.4	280-125463
Analysis Batch:280-125775					
LCS 280-125420/2-B	Lab Control Sample	D	Water	200.8	280-125466
MB 280-125420/1-B	Method Blank	D	Water	200.8	280-125466
280-30378-1	WELL-SCHULTZ	D	Water	200.8	280-125466
280-30378-1MS	Matrix Spike	D	Water	200.8	280-125466
280-30378-1MSD	Matrix Spike Duplicate	D	Water	200.8	280-125466
280-30378-2	DITCH-SCHULTZ	D	Water	200.8	280-125466

TestAmerica Denver

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-125895					
LCS 280-125420/2-C	Lab Control Sample	D	Water	245.1	280-125678
MB 280-125420/1-C	Method Blank	D	Water	245.1	280-125678
280-30378-1	WELL-SCHULTZ	D	Water	245.1	280-125678
280-30378-2	DITCH-SCHULTZ	D	Water	245.1	280-125678
280-30378-F-3-E MS	Matrix Spike	D	Water	245.1	280-125678
280-30378-F-3-F MSD	Matrix Spike Duplicate	D	Water	245.1	280-125678

Report Basis

D = Dissolved

T = Total

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-125326					
LCS 280-125326/5	Lab Control Sample	T	Water	SM 4500 H+ B	
LCSD 280-125326/16	Lab Control Sample Duplicate	T	Water	SM 4500 H+ B	
280-30378-1	WELL-SCHULTZ	T	Water	SM 4500 H+ B	
280-30378-1DU	Duplicate	T	Water	SM 4500 H+ B	
280-30378-2	DITCH-SCHULTZ	T	Water	SM 4500 H+ B	
Analysis Batch:280-125604					
LCS 280-125604/5	Lab Control Sample	T	Water	300.0	
LCSD 280-125604/6	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-125604/7	Method Blank	T	Water	300.0	
280-30378-1	WELL-SCHULTZ	T	Water	300.0	
280-30378-2	DITCH-SCHULTZ	T	Water	300.0	
280-30379-A-4 DU	Duplicate	T	Water	300.0	
280-30379-A-4 MS	Matrix Spike	T	Water	300.0	
280-30379-A-4 MSD	Matrix Spike Duplicate	T	Water	300.0	
Analysis Batch:280-125605					
LCS 280-125605/5	Lab Control Sample	T	Water	300.0	
LCSD 280-125605/6	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-125605/7	Method Blank	T	Water	300.0	
280-30378-1	WELL-SCHULTZ	T	Water	300.0	
280-30378-2	DITCH-SCHULTZ	T	Water	300.0	
280-30379-A-4 DU	Duplicate	T	Water	300.0	
280-30379-A-4 MS	Matrix Spike	T	Water	300.0	
280-30379-A-4 MSD	Matrix Spike Duplicate	T	Water	300.0	
Analysis Batch:280-125734					
LCS 280-125734/4	Lab Control Sample	T	Water	SM 2320B	
LCSD 280-125734/5	Lab Control Sample Duplicate	T	Water	SM 2320B	
MB 280-125734/6	Method Blank	T	Water	SM 2320B	
280-30361-B-1 DU	Duplicate	T	Water	SM 2320B	
280-30378-1	WELL-SCHULTZ	T	Water	SM 2320B	
280-30378-2	DITCH-SCHULTZ	T	Water	SM 2320B	
Analysis Batch:280-125916					
LCS 280-125916/2	Lab Control Sample	T	Water	SM 2540C	
LCSD 280-125916/3	Lab Control Sample Duplicate	T	Water	SM 2540C	
MB 280-125916/1	Method Blank	T	Water	SM 2540C	
280-30357-A-12 DU	Duplicate	T	Water	SM 2540C	
280-30378-1	WELL-SCHULTZ	T	Water	SM 2540C	
280-30378-2	DITCH-SCHULTZ	T	Water	SM 2540C	

TestAmerica Denver

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-125960					
LCS 280-125960/3	Lab Control Sample	T	Water	SM 2510B	
LCSD 280-125960/4	Lab Control Sample Duplicate	T	Water	SM 2510B	
MB 280-125960/5	Method Blank	T	Water	SM 2510B	
280-30301-A-2 DU	Duplicate	T	Water	SM 2510B	
280-30378-1	WELL-SCHULTZ	T	Water	SM 2510B	
280-30378-2	DITCH-SCHULTZ	T	Water	SM 2510B	
Analysis Batch:280-126107					
LCS 280-126107/23	Lab Control Sample	T	Water	SM 5310B	
LCSD 280-126107/24	Lab Control Sample Duplicate	T	Water	SM 5310B	
MB 280-126107/25	Method Blank	T	Water	SM 5310B	
280-30328-B-1 MS	Matrix Spike	T	Water	SM 5310B	
280-30328-B-1 MSD	Matrix Spike Duplicate	T	Water	SM 5310B	
280-30378-1	WELL-SCHULTZ	T	Water	SM 5310B	
280-30378-2	DITCH-SCHULTZ	T	Water	SM 5310B	

Report Basis

T = Total

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Laboratory Chronicle

Lab ID: 280-30378-1

Client ID: WELL-SCHULTZ

Sample Date/Time: 06/22/2012 11:11

Received Date/Time: 06/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-30378-M-1		280-125949		06/28/2012 12:57	1	TAL DEN	MD
A:8260B	280-30378-M-1		280-125949		06/28/2012 12:57	1	TAL DEN	MD
P:3520C	280-30378-D-1-A		280-126328	280-125338	06/24/2012 08:15	1	TAL DEN	CRC
A:8270C	280-30378-D-1-A		280-126328	280-125338	06/29/2012 13:53	1	TAL DEN	MGH
P:5030B	280-30378-L-1		280-125760		06/26/2012 15:41	1	TAL DEN	AMB
A:8015B	280-30378-L-1		280-125760		06/26/2012 15:41	1	TAL DEN	AMB
A:RSK-175	280-30378-P-1		600-83033		07/02/2012 16:25	1	TAL HOU	JAL
P:3510C	280-30378-C-1-A		280-125910	280-125504	06/25/2012 19:06	1	TAL DEN	SPF
A:8015B	280-30378-C-1-A		280-125910	280-125504	06/27/2012 20:18	1	TAL DEN	AMP
P:200.7	280-30378-F-1-B		280-125764	280-125463	06/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-30378-F-1-B		280-125764	280-125463	06/27/2012 00:00	1	TAL DEN	HEB
P:200.8	280-30378-F-1-C		280-125775	280-125466	06/26/2012 14:00	1	TAL DEN	JM
A:200.8	280-30378-F-1-C		280-125775	280-125466	06/26/2012 23:51	1	TAL DEN	TEL
A:20B	280-30378-F-1		280-125550		06/26/2012 07:10	1	TAL DEN	JKH
P:245.1	280-30378-F-1-F		280-125895	280-125678	06/27/2012 10:35	1	TAL DEN	BLR
A:245.1	280-30378-F-1-F		280-125895	280-125678	06/27/2012 14:59	1	TAL DEN	CLI
A:300.0	280-30378-E-1		280-125604		06/23/2012 15:21	2	TAL DEN	JCB
A:300.0	280-30378-E-1		280-125605		06/23/2012 15:21	2	TAL DEN	JCB
A:300.0	280-30378-E-1		280-125605		06/24/2012 11:55	50	TAL DEN	JCB
A:SM 2320B	280-30378-E-1		280-125734		06/26/2012 09:22	1	TAL DEN	BMG
A:SM 2510B	280-30378-G-1		280-125960		06/28/2012 11:08	1	TAL DEN	JMH
A:SM 2540C	280-30378-E-1		280-125916		06/28/2012 09:00	1	TAL DEN	BJD
A:SM 4500 H+ B	280-30378-E-1		280-125326		06/23/2012 11:59	1	TAL DEN	DA
A:SM 5310B	280-30378-I-1		280-126107		06/28/2012 05:46	1	TAL DEN	DFB

Lab ID: 280-30378-1 MS

Client ID: WELL-SCHULTZ

Sample Date/Time: 06/22/2012 11:11

Received Date/Time: 06/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-30378-L-1 MS		280-125760		06/26/2012 16:23	1	TAL DEN	AMB
A:8015B	280-30378-L-1 MS		280-125760		06/26/2012 16:23	1	TAL DEN	AMB
A:RSK-175	280-30378-P-1 MS		600-83033		07/02/2012 17:29	1	TAL HOU	JAL
P:200.8	280-30378-F-1-D MS		280-125775	280-125466	06/26/2012 14:00	1	TAL DEN	JM
A:200.8	280-30378-F-1-D MS		280-125775	280-125466	06/26/2012 23:54	1	TAL DEN	TEL

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Laboratory Chronicle

Lab ID: 280-30378-1 MSD

Client ID: WELL-SCHULTZ

Sample Date/Time: 06/22/2012 11:11

Received Date/Time: 06/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-30378-L-1 MSD		280-125760		06/26/2012 17:06	1	TAL DEN	AMB
A:8015B	280-30378-L-1 MSD		280-125760		06/26/2012 17:06	1	TAL DEN	AMB
A:RSK-175	280-30378-P-1 MSD		600-83033		07/02/2012 17:46	1	TAL HOU	JAL
P:200.8	280-30378-F-1-E MSD		280-125775	280-125466	06/26/2012 14:00	1	TAL DEN	JM
A:200.8	280-30378-F-1-E MSD		280-125775	280-125466	06/26/2012 23:57	1	TAL DEN	TEL

Lab ID: 280-30378-1 DU

Client ID: WELL-SCHULTZ

Sample Date/Time: 06/22/2012 11:11

Received Date/Time: 06/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 4500 H+ B	280-30378-E-1 DU		280-125326		06/23/2012 12:00	1	TAL DEN	DA

Lab ID: 280-30378-2

Client ID: DITCH-SCHULTZ

Sample Date/Time: 06/22/2012 12:50

Received Date/Time: 06/23/2012 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-30378-M-2		280-125949		06/28/2012 13:17	1	TAL DEN	MD
A:8260B	280-30378-M-2		280-125949		06/28/2012 13:17	1	TAL DEN	MD
P:3520C	280-30378-A-2-A		280-126328	280-125338	06/24/2012 08:15	1	TAL DEN	CRC
A:8270C	280-30378-A-2-A		280-126328	280-125338	06/29/2012 14:13	1	TAL DEN	MGH
P:5030B	280-30378-K-2		280-125760		06/26/2012 23:29	1	TAL DEN	AMB
A:8015B	280-30378-K-2		280-125760		06/26/2012 23:29	1	TAL DEN	AMB
A:RSK-175	280-30378-P-2		600-83033		07/02/2012 16:37	1	TAL HOU	JAL
P:3510C	280-30378-B-2-A		280-125910	280-125504	06/25/2012 19:06	1	TAL DEN	SPF
A:8015B	280-30378-B-2-A		280-125910	280-125504	06/27/2012 20:42	1	TAL DEN	AMP
P:200.7	280-30378-F-2-B		280-125764	280-125463	06/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-30378-F-2-B		280-125764	280-125463	06/27/2012 00:03	1	TAL DEN	HEB
P:200.8	280-30378-F-2-C		280-125775	280-125466	06/26/2012 14:00	1	TAL DEN	JM
A:200.8	280-30378-F-2-C		280-125775	280-125466	06/27/2012 00:00	1	TAL DEN	TEL
A:20B	280-30378-F-2		280-125550		06/26/2012 07:10	1	TAL DEN	JKH
P:245.1	280-30378-F-2-D		280-125895	280-125678	06/27/2012 10:35	1	TAL DEN	BLR
A:245.1	280-30378-F-2-D		280-125895	280-125678	06/27/2012 15:01	1	TAL DEN	CLI
A:300.0	280-30378-E-2		280-125604		06/23/2012 15:38	1	TAL DEN	JCB
A:300.0	280-30378-E-2		280-125605		06/23/2012 15:38	1	TAL DEN	JCB
A:300.0	280-30378-E-2		280-125605		06/24/2012 12:13	5	TAL DEN	JCB
A:SM 2320B	280-30378-E-2		280-125734		06/26/2012 09:28	1	TAL DEN	BMG
A:SM 2510B	280-30378-H-2		280-125960		06/28/2012 11:08	1	TAL DEN	JMH
A:SM 2540C	280-30378-E-2		280-125916		06/28/2012 09:00	1	TAL DEN	BJD
A:SM 4500 H+ B	280-30378-E-2		280-125326		06/23/2012 12:01	1	TAL DEN	DA
A:SM 5310B	280-30378-I-2		280-126107		06/28/2012 06:03	1	TAL DEN	DFB

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Laboratory Chronicle

Lab ID: MB

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	MB 280-125949/5		280-125949		06/28/2012 07:50	1	TAL DEN	MD
A:8260B	MB 280-125949/5		280-125949		06/28/2012 07:50	1	TAL DEN	MD
P:3520C	MB 280-125338/1-A		280-126328	280-125338	06/24/2012 08:15	1	TAL DEN	CRC
A:8270C	MB 280-125338/1-A		280-126328	280-125338	06/29/2012 12:11	1	TAL DEN	MGH
P:5030B	MB 280-125760/5		280-125760		06/26/2012 14:58	1	TAL DEN	AMB
A:8015B	MB 280-125760/5		280-125760		06/26/2012 14:58	1	TAL DEN	AMB
A:RSK-175	MB 600-83033/2		600-83033		07/02/2012 14:38	1	TAL HOU	JAL
P:3510C	MB 280-125504/1-A		280-125910	280-125504	06/25/2012 19:06	1	TAL DEN	SPF
A:8015B	MB 280-125504/1-A		280-125910	280-125504	06/27/2012 19:05	1	TAL DEN	AMP
P:200.7	MB 280-125231/1-C		280-125764	280-125463	06/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	MB 280-125231/1-C		280-125764	280-125463	06/26/2012 23:40	1	TAL DEN	HEB
P:200.8	MB 280-125420/1-B		280-125775	280-125466	06/26/2012 14:00	1	TAL DEN	JM
A:200.8	MB 280-125420/1-B		280-125775	280-125466	06/26/2012 23:45	1	TAL DEN	TEL
A:20B	MB 280-125550/1		280-125550		06/26/2012 07:10	1	TAL DEN	JKH
P:245.1	MB 280-125420/1-C		280-125895	280-125678	06/27/2012 10:35	1	TAL DEN	BLR
A:245.1	MB 280-125420/1-C		280-125895	280-125678	06/27/2012 14:54	1	TAL DEN	CLI
A:300.0	MB 280-125604/7		280-125604		06/23/2012 11:03	1	TAL DEN	JCB
A:300.0	MB 280-125605/7		280-125605		06/23/2012 11:03	1	TAL DEN	JCB
A:SM 2320B	MB 280-125734/6		280-125734		06/26/2012 08:51	1	TAL DEN	BMG
A:SM 2510B	MB 280-125960/5		280-125960		06/28/2012 11:08	1	TAL DEN	JMH
A:SM 2540C	MB 280-125916/1		280-125916		06/28/2012 09:00	1	TAL DEN	BJD
A:SM 5310B	MB 280-126107/25		280-126107		06/28/2012 03:39	1	TAL DEN	DFB

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Laboratory Chronicle

Lab ID: LCS

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	LCS 280-125949/4		280-125949		06/28/2012 07:30	1	TAL DEN	MD
A:8260B	LCS 280-125949/4		280-125949		06/28/2012 07:30	1	TAL DEN	MD
P:3520C	LCS 280-125338/2-A		280-126328	280-125338	06/24/2012 08:15	1	TAL DEN	CRC
A:8270C	LCS 280-125338/2-A		280-126328	280-125338	06/29/2012 12:32	1	TAL DEN	MGH
P:5030B	LCS 280-125760/3		280-125760		06/26/2012 13:34	1	TAL DEN	AMB
A:8015B	LCS 280-125760/3		280-125760		06/26/2012 13:34	1	TAL DEN	AMB
A:RSK-175	LCS 600-83033/3		600-83033		07/02/2012 14:52	1	TAL HOU	JAL
P:3510C	LCS 280-125504/2-A		280-125910	280-125504	06/25/2012 19:06	1	TAL DEN	SPF
A:8015B	LCS 280-125504/2-A		280-125910	280-125504	06/27/2012 19:29	1	TAL DEN	AMP
P:200.7	LCS 280-125231/2-C		280-125764	280-125463	06/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	LCS 280-125231/2-C		280-125764	280-125463	06/26/2012 23:43	1	TAL DEN	HEB
P:200.8	LCS 280-125420/2-B		280-125775	280-125466	06/26/2012 14:00	1	TAL DEN	JM
A:200.8	LCS 280-125420/2-B		280-125775	280-125466	06/26/2012 23:48	1	TAL DEN	TEL
P:245.1	LCS 280-125420/2-C		280-125895	280-125678	06/27/2012 10:35	1	TAL DEN	BLR
A:245.1	LCS 280-125420/2-C		280-125895	280-125678	06/27/2012 14:56	1	TAL DEN	CLI
A:300.0	LCS 280-125604/5		280-125604		06/23/2012 10:29	1	TAL DEN	JCB
A:300.0	LCS 280-125605/5		280-125605		06/23/2012 10:29	1	TAL DEN	JCB
A:SM 2320B	LCS 280-125734/4		280-125734		06/26/2012 08:42	1	TAL DEN	BMG
A:SM 2510B	LCS 280-125960/3		280-125960		06/28/2012 11:08	1	TAL DEN	JMH
A:SM 2540C	LCS 280-125916/2		280-125916		06/28/2012 09:00	1	TAL DEN	BJD
A:SM 4500 H+ B	LCS 280-125326/5		280-125326		06/23/2012 11:58	1	TAL DEN	DA
A:SM 5310B	LCS 280-126107/23		280-126107		06/28/2012 03:01	1	TAL DEN	DFB

Lab ID: LCSD

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	LCSD		280-126328	280-125338	06/24/2012 08:15	1	TAL DEN	CRC
	280-125338/3-A							
A:8270C	LCSD		280-126328	280-125338	06/29/2012 12:52	1	TAL DEN	MGH
	280-125338/3-A							
P:5030B	LCSD 280-125760/4		280-125760		06/26/2012 14:16	1	TAL DEN	AMB
A:8015B	LCSD 280-125760/4		280-125760		06/26/2012 14:16	1	TAL DEN	AMB
P:3510C	LCSD		280-125910	280-125504	06/25/2012 19:06	1	TAL DEN	SPF
	280-125504/3-A							
A:8015B	LCSD		280-125910	280-125504	06/27/2012 19:53	1	TAL DEN	AMP
	280-125504/3-A							
A:300.0	LCSD 280-125604/6		280-125604		06/23/2012 10:46	1	TAL DEN	JCB
A:300.0	LCSD 280-125605/6		280-125605		06/23/2012 10:46	1	TAL DEN	JCB
A:SM 2320B	LCSD 280-125734/5		280-125734		06/26/2012 08:47	1	TAL DEN	BMG
A:SM 2510B	LCSD 280-125960/4		280-125960		06/28/2012 11:08	1	TAL DEN	JMH
A:SM 2540C	LCSD 280-125916/3		280-125916		06/28/2012 09:00	1	TAL DEN	BJD
A:SM 4500 H+ B	LCSD 280-125326/16		280-125326		06/23/2012 12:19	1	TAL DEN	DA
A:SM 5310B	LCSD 280-126107/24		280-126107		06/28/2012 03:20	1	TAL DEN	DFB

TestAmerica Denver

A = Analytical Method P = Prep Method

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Laboratory Chronicle

Lab ID: MRL

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	MRL 280-125604/3		280-125604		06/23/2012 09:54	1	TAL DEN	JCB
A:300.0	MRL 280-125605/3		280-125605		06/23/2012 09:54	1	TAL DEN	JCB

Lab ID: MS

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-30310-D-1 MS		280-125949		06/28/2012 10:54	1	TAL DEN	MD
A:8260B	280-30310-D-1 MS		280-125949		06/28/2012 10:54	1	TAL DEN	MD
P:200.7	280-30333-I-1-F MS		280-125764	280-125463	06/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-30333-I-1-F MS		280-125764	280-125463	06/26/2012 23:51	1	TAL DEN	HEB
P:245.1	280-30378-F-3-E MS		280-125895	280-125678	06/27/2012 10:35	1	TAL DEN	BLR
A:245.1	280-30378-F-3-E MS		280-125895	280-125678	06/27/2012 15:10	1	TAL DEN	CLI
A:300.0	280-30379-A-4 MS		280-125604		06/23/2012 14:29	1	TAL DEN	JCB
A:300.0	280-30379-A-4 MS		280-125605		06/23/2012 14:29	1	TAL DEN	JCB
A:SM 5310B	280-30328-B-1 MS		280-126107		06/28/2012 04:13	1	TAL DEN	DFB

Lab ID: MSD

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-30310-D-1 MSD		280-125949		06/28/2012 11:14	1	TAL DEN	MD
A:8260B	280-30310-D-1 MSD		280-125949		06/28/2012 11:14	1	TAL DEN	MD
P:200.7	280-30333-I-1-G MSD		280-125764	280-125463	06/26/2012 14:00	1	TAL DEN	JM
A:200.7 Rev 4.4	280-30333-I-1-G MSD		280-125764	280-125463	06/26/2012 23:54	1	TAL DEN	HEB
P:245.1	280-30378-F-3-F MSD		280-125895	280-125678	06/27/2012 10:35	1	TAL DEN	BLR
A:245.1	280-30378-F-3-F MSD		280-125895	280-125678	06/27/2012 15:12	1	TAL DEN	CLI
A:300.0	280-30379-A-4 MSD		280-125604		06/23/2012 14:46	1	TAL DEN	JCB
A:300.0	280-30379-A-4 MSD		280-125605		06/23/2012 14:46	1	TAL DEN	JCB
A:SM 5310B	280-30328-B-1 MSD		280-126107		06/28/2012 05:09	1	TAL DEN	DFB

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Laboratory Chronicle

Lab ID: DU

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-30379-A-4 DU		280-125604		06/23/2012 14:11	1	TAL DEN	JCB
A:300.0	280-30379-A-4 DU		280-125605		06/23/2012 14:11	1	TAL DEN	JCB
A:SM 2320B	280-30361-B-1 DU		280-125734		06/26/2012 09:17	1	TAL DEN	BMG
A:SM 2510B	280-30301-A-2 DU		280-125960		06/28/2012 11:08	1	TAL DEN	JMH
A:SM 2540C	280-30357-A-12 DU		280-125916		06/28/2012 09:00	1	TAL DEN	BJD

Lab ID: SD

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:200.7	280-30333-I-1-E SD ^5		280-125764	280-125463	06/26/2012 14:00	5	TAL DEN	JM
A:200.7 Rev 4.4	280-30333-I-1-E SD ^5		280-125764	280-125463	06/26/2012 23:49	5	TAL DEN	HEB

Lab References:

TAL DEN = TestAmerica Denver

TAL HOU = TestAmerica Houston

Certification Summary

Client: Colorado Oil&Gas Conservation Commision
Project/Site: Kurt Schultz Silt, CO

TestAmerica Job ID: 280-30378-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alabama	State Program	4	40730
TestAmerica Denver	Alaska (UST)	State Program	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas DEQ	State Program	6	88-0687
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Colorado	State Program	8	N/A
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Florida	NELAC	4	E87667
TestAmerica Denver	Georgia	State Program	4	N/A
TestAmerica Denver	Idaho	State Program	10	CO00026
TestAmerica Denver	Illinois	NELAC	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Kansas	NELAC	7	E-10166
TestAmerica Denver	Louisiana	NELAC	6	30785
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Maryland	State Program	3	268
TestAmerica Denver	Minnesota	NELAC	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New Jersey	NELAC	2	CO004
TestAmerica Denver	New Mexico	State Program	6	N/A
TestAmerica Denver	New York	NELAC	2	11964
TestAmerica Denver	North Carolina DENR	State Program	4	358
TestAmerica Denver	North Dakota	State Program	8	R-034
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAC	10	CO200001
TestAmerica Denver	Pennsylvania	NELAC	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002
TestAmerica Denver	Tennessee	State Program	4	TN02944
TestAmerica Denver	Texas	NELAC	6	T104704183-08-TX
TestAmerica Denver	USDA	Federal		P330-08-00036
TestAmerica Denver	Utah	NELAC	8	QUAN5
TestAmerica Denver	Virginia	NELAC	3	
TestAmerica Denver	Washington	State Program	10	C1284
TestAmerica Denver	West Virginia DEP	State Program	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430
TestAmerica Denver	Wyoming (UST)	A2LA	8	
TestAmerica Houston	Arkansas DEQ	State Program	6	88-0759
TestAmerica Houston	Oklahoma	State Program	6	9503
TestAmerica Houston	Texas	NELAC	6	T104704223-10-6-TX
TestAmerica Houston	USDA	Federal		P330-08-00217
TestAmerica Houston	Utah	NELAC	8	GULF

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

Method 8260B

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Client Sample ID: WELL-SCHULTZ Lab Sample ID: 280-30378-1

Matrix: Water Lab File ID: R7220.D

Analysis Method: 8260B Date Collected: 06/22/2012 11:11

Sample wt/vol: 20 (mL) Date Analyzed: 06/28/2012 12:57

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: DB-624 (60.25) ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 125949 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
95-63-6	1,2,4-Trimethylbenzene	ND		1.0	0.15
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
106-93-4	1,2-Dibromoethane	ND		1.0	0.18
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
540-59-0	1,2-Dichloroethene, Total	ND		1.0	0.24
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
108-67-8	1,3,5-Trimethylbenzene	ND		1.0	0.16
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
142-28-9	1,3-Dichloropropane	ND		1.0	0.22
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
594-20-7	2,2-Dichloropropane	ND		1.0	0.18
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
95-49-8	2-Chlorotoluene	ND		1.0	0.17
591-78-6	2-Hexanone	ND		5.0	1.7
106-43-4	4-Chlorotoluene	ND		1.0	0.21
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
67-64-1	Acetone	ND		10	1.9
71-43-2	Benzene	ND		1.0	0.16
108-86-1	Bromobenzene	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.19
74-83-9	Bromomethane	ND		2.0	0.21
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
74-97-5	Chlorobromomethane	ND		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Client Sample ID: WELL-SCHULTZ Lab Sample ID: 280-30378-1

Matrix: Water Lab File ID: R7220.D

Analysis Method: 8260B Date Collected: 06/22/2012 11:11

Sample wt/vol: 20 (mL) Date Analyzed: 06/28/2012 12:57

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: DB-624 (60.25) ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 125949 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
74-95-3	Dibromomethane	ND		1.0	0.17
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
100-41-4	Ethylbenzene	ND		1.0	0.16
87-68-3	Hexachlorobutadiene	ND		1.0	0.36
98-82-8	Isopropylbenzene	ND		1.0	0.19
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.25
75-09-2	Methylene Chloride	0.38	J B	2.0	0.32
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.34
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.32
103-65-1	N-Propylbenzene	ND		1.0	0.16
95-47-6	o-Xylene	ND		1.0	0.19
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		1.0	0.17
98-06-6	tert-Butylbenzene	ND		1.0	0.16
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
75-01-4	Vinyl chloride	ND		1.0	0.10
1330-20-7	Xylenes, Total	ND		2.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1
SDG No.: _____
Client Sample ID: WELL-SCHULTZ Lab Sample ID: 280-30378-1
Matrix: Water Lab File ID: R7220.D
Analysis Method: 8260B Date Collected: 06/22/2012 11:11
Sample wt/vol: 20 (mL) Date Analyzed: 06/28/2012 12:57
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 (60.25) ID: 0.25 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 125949 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
460-00-4	4-Bromofluorobenzene (Surr)	81		78-120
1868-53-7	Dibromofluoromethane (Surr)	90		77-120
2037-26-5	Toluene-d8 (Surr)	91		80-125

TestAmerica

VOLATILE REPORT SW-846

Data file : \\DenSvr03\Public\chem\MSV\R1.i\062812.b\R7220.D
 Lab Smp Id: 280-30378-M-1 Client Smp ID: WELL-SCHULTZ
 Inj Date : 28-JUN-2012 12:57
 Operator : DOBRANSKYM Inst ID: R1.i
 Smp Info : 280-30378-m-1,,PH<2
 Misc Info : 280-30378-M-1
 Comment :
 Method : \\DenSvr03\Public\chem\MSV\R1.i\062812.b\8260B-H2O.m
 Meth Date : 29-Jun-2012 08:35 R1.i Quant Type: ISTD
 Cal Date : 12-JUN-2012 13:31 Cal File: R7024.D
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: TALS.sub
 Target Version: 4.14
 Processing Host: DENPC364

Concentration Formula: Amt * DF * Vp/Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Purge Volume (mL)
Vs	20.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
*****	****	----	-----	-----	-----	-----	-----
* 68 Fluorobenzene	96	7.647	7.647 (1.000)		1797350	12.5000	
* 96 Chlorobenzene-d5	119	9.918	9.918 (1.000)		366375	12.5000	
* 121 1,4-Dichlorobenzene-d4	152	11.759	11.752 (1.000)		467893	12.5000	
\$ 53 Dibromofluoromethane (Surr)	111	7.096	7.096 (0.928)		236277	8.59248	8.59248
\$ 62 1,2-Dichloroethane-d4	65	7.389	7.389 (0.966)		203614	9.04268	9.04268
\$ 83 Toluene-d8	98	8.844	8.836 (0.892)		1132130	8.60993	8.60993
\$ 107 4-Bromofluorobenzene (Surr)	95	10.785	10.785 (0.917)		307193	7.73396	7.73396
M 1 1,2-Dichloroethene (total)	96	Compound Not Detected.					
M 2 Xylene (total)	106	Compound Not Detected.					
5 dichlorodifluoromethane	85	Compound Not Detected.					
6 1,2-Dichlorotetrafluoroethane	85	Compound Not Detected.					
7 Chloromethane	50	Compound Not Detected.					
8 Vinyl Chloride	62	Compound Not Detected.					
9 Ethylene Oxide	43	Compound Not Detected.					
10 Bromomethane	94	Compound Not Detected.					
11 Chloroethane	64	Compound Not Detected.					
12 Dichlorofluoromethane	67	Compound Not Detected.					
14 Trichlorofluoromethane	101	Compound Not Detected.					
13 Ethanol	45	Compound Not Detected.					
15 1,2-dichloro-1,1,2-trifluoroe	117	Compound Not Detected.					
16 Ethyl Ether	59	Compound Not Detected.					
17 2,2-dichloro-1,1,1-trifluoroe	83	Compound Not Detected.					

Compounds	QUANT	SIG					CONCENTRATIONS	
			RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
19 Acrolein	56					Compound Not Detected.		
20 Acetone	43					Compound Not Detected.		
21 Trichlorotrifluoroethane	151					Compound Not Detected.		
22 2-propanol	45					Compound Not Detected.		
23 1,1-Dichloroethene	96					Compound Not Detected.		
26 Iodomethane	142					Compound Not Detected.		
25 Acetonitrile	41					Compound Not Detected.		
24 Methyl Acetate	43					Compound Not Detected.		
28 Carbon Disulfide	76					Compound Not Detected.		
27 Allyl Chloride	41					Compound Not Detected.		
29 tert-Butyl alcohol	59					Compound Not Detected.		
30 Methylene Chloride	84		5.783	5.783	(0.756)	12990	0.37644	0.376438(a)
31 Acrylonitrile	53					Compound Not Detected.		
32 Methyl t-butyl ether	73					Compound Not Detected.		
33 trans-1,2-Dichloroethene	96					Compound Not Detected.		
34 Hexane	57					Compound Not Detected.		
35 Vinyl acetate	43					Compound Not Detected.		
36 Isopropyl ether	87					Compound Not Detected.		
37 1,1-Dichloroethane	63					Compound Not Detected.		
38 Chloroprene	53					Compound Not Detected.		
39 ETBE	59					Compound Not Detected.		
42 2-Butanone	43					Compound Not Detected.		
41 Ethyl Acetate	43					Compound Not Detected.		
46 cis-1,2-Dichloroethene	96					Compound Not Detected.		
45 Propionitrile	54					Compound Not Detected.		
47 2,2-Dichloropropane	77					Compound Not Detected.		
48 Methacrylonitrile	41					Compound Not Detected.		
50 Bromochloromethane	128					Compound Not Detected.		
51 Chloroform	83					Compound Not Detected.		
52 Tetrahydrofuran	42					Compound Not Detected.		
55 1,1,1-Trichloroethane	97					Compound Not Detected.		
54 Isobutanol	41					Compound Not Detected.		
58 Cyclohexane	56					Compound Not Detected.		
59 1,1-Dichloropropene	75					Compound Not Detected.		
60 Carbon Tetrachloride	117					Compound Not Detected.		
64 1,2-Dichloroethane	62					Compound Not Detected.		
66 Benzene	78					Compound Not Detected.		
65 TAME	73					Compound Not Detected.		
69 n-Butanol	56					Compound Not Detected.		
71 Trichloroethene	130					Compound Not Detected.		
72 2-Pentanone	43					Compound Not Detected.		
73 Methyl Methacrylate	100					Compound Not Detected.		
74 1,2-Dichloropropane	63					Compound Not Detected.		
75 Methyl Cyclohexane	55					Compound Not Detected.		
76 1,4-Dioxane	88					Compound Not Detected.		
77 Dibromomethane	93					Compound Not Detected.		
78 Bromodichloromethane	83					Compound Not Detected.		
79 2-nitropropane	41					Compound Not Detected.		
80 2-Chloroethyl vinyl ether	63					Compound Not Detected.		
81 cis-1,3-Dichloropropene	75					Compound Not Detected.		
82 4-Methyl-2-pentanone	43					Compound Not Detected.		
85 Toluene	91					Compound Not Detected.		
87 trans-1,3-Dichloropropene	75					Compound Not Detected.		
86 Ethyl methacrylate	69					Compound Not Detected.		

Compounds	QUANT SIG						CONCENTRATIONS	
		RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/L)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
88 1,1,2-Trichloroethane	97				Compound Not Detected.			
89 2-Hexanone	43				Compound Not Detected.			
90 1,3-Dichloropropane	76				Compound Not Detected.			
91 Tetrachloroethene	164				Compound Not Detected.			
92 Dibromochloromethane	129				Compound Not Detected.			
93 Tetrahydrothiophene	60				Compound Not Detected.			
94 1,2-Dibromoethane	107				Compound Not Detected.			
95 1-Chlorohexane	91				Compound Not Detected.			
97 Chlorobenzene	112				Compound Not Detected.			
98 1,1,1,2-Tetrachloroethane	131				Compound Not Detected.			
99 Ethylbenzene	106				Compound Not Detected.			
100 m and p-Xylene	106				Compound Not Detected.			
102 o-Xylene	106				Compound Not Detected.			
101 Styrene	104				Compound Not Detected.			
103 Bromoform	173				Compound Not Detected.			
104 isopropyl benzene	105				Compound Not Detected.			
105 cis-1,4-dichloro-2-butene	53				Compound Not Detected.			
106 Cyclohexanone	55				Compound Not Detected.			
108 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.			
109 t-1,4-Dichloro-2-butene	53				Compound Not Detected.			
110 1,2,3-Trichloropropane	110				Compound Not Detected.			
112 Bromobenzene	156				Compound Not Detected.			
111 n-Propylbenzene	120				Compound Not Detected.			
114 2-Chlorotoluene	126				Compound Not Detected.			
113 1,3,5-Trimethylbenzene	105				Compound Not Detected.			
115 4-Chlorotoluene	126				Compound Not Detected.			
116 tert-Butylbenzene	119				Compound Not Detected.			
117 1,2,4-Trimethylbenzene	105				Compound Not Detected.			
118 sec-Butylbenzene	134				Compound Not Detected.			
119 4-Isopropyltoluene	119				Compound Not Detected.			
120 1,3-Dichlorobenzene	146				Compound Not Detected.			
122 1,4-dichlorobenzene	146				Compound Not Detected.			
123 1,2,3-Trimethylbenzene	105				Compound Not Detected.			
124 n-Butylbenzene	91				Compound Not Detected.			
125 1,2-Dichlorobenzene	146				Compound Not Detected.			
127 1,2-Dibromo-3-chloropropane	157				Compound Not Detected.			
129 1,2,4-Trichlorobenzene	180				Compound Not Detected.			
131 Hexachlorobutadiene	225				Compound Not Detected.			
132 Naphthalene	128				Compound Not Detected.			
133 1,2,3-Trichlorobenzene	180				Compound Not Detected.			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: R7220.D

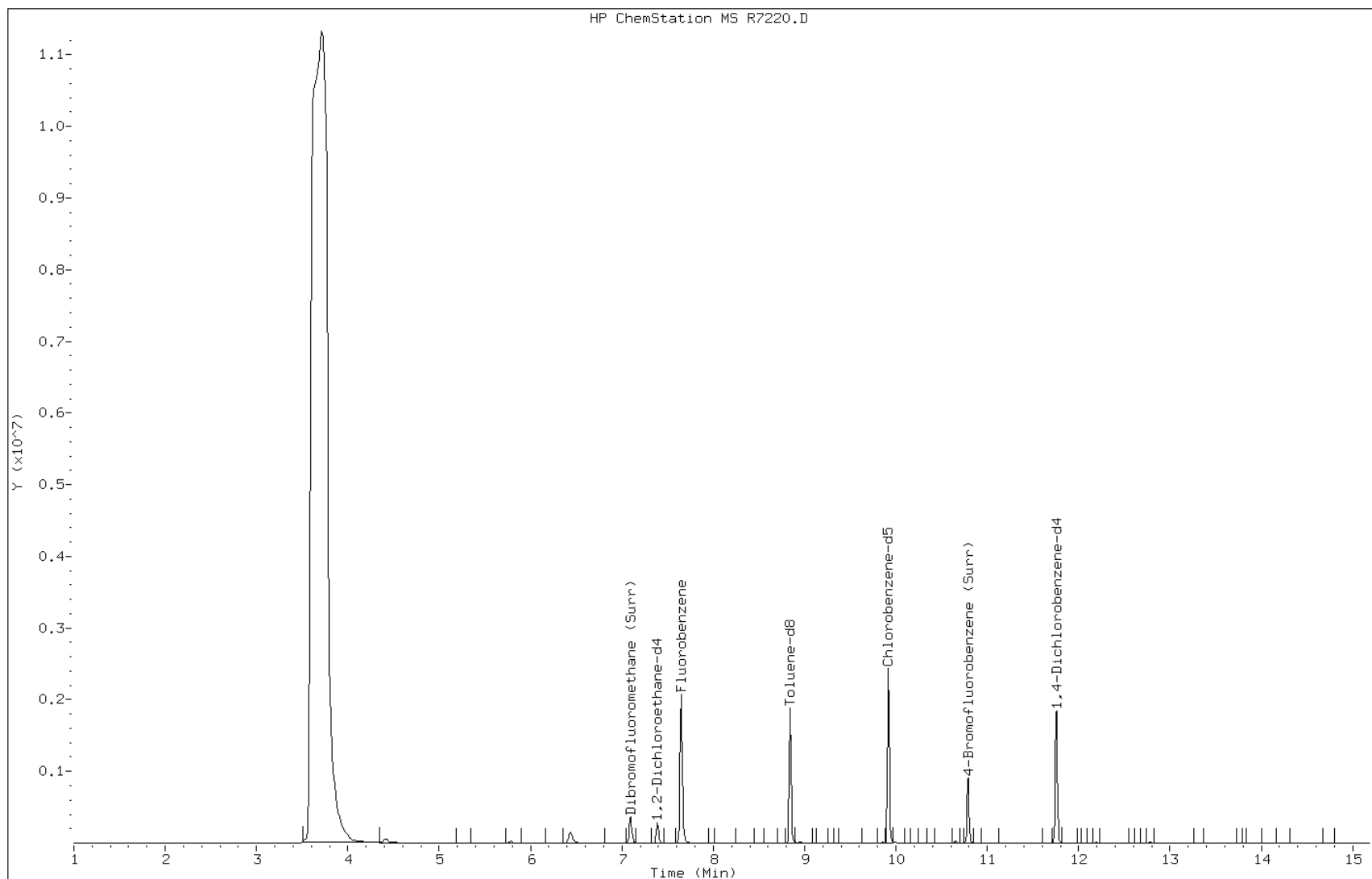
Date: 28-JUN-2012 12:57

Client ID: WELL-SCHULTZ

Instrument: R1.i

Sample Info: 280-30378-m-1,,PH<2

Operator: DOBRANSKYM



Data File: R7220.D

Date: 28-JUN-2012 12:57

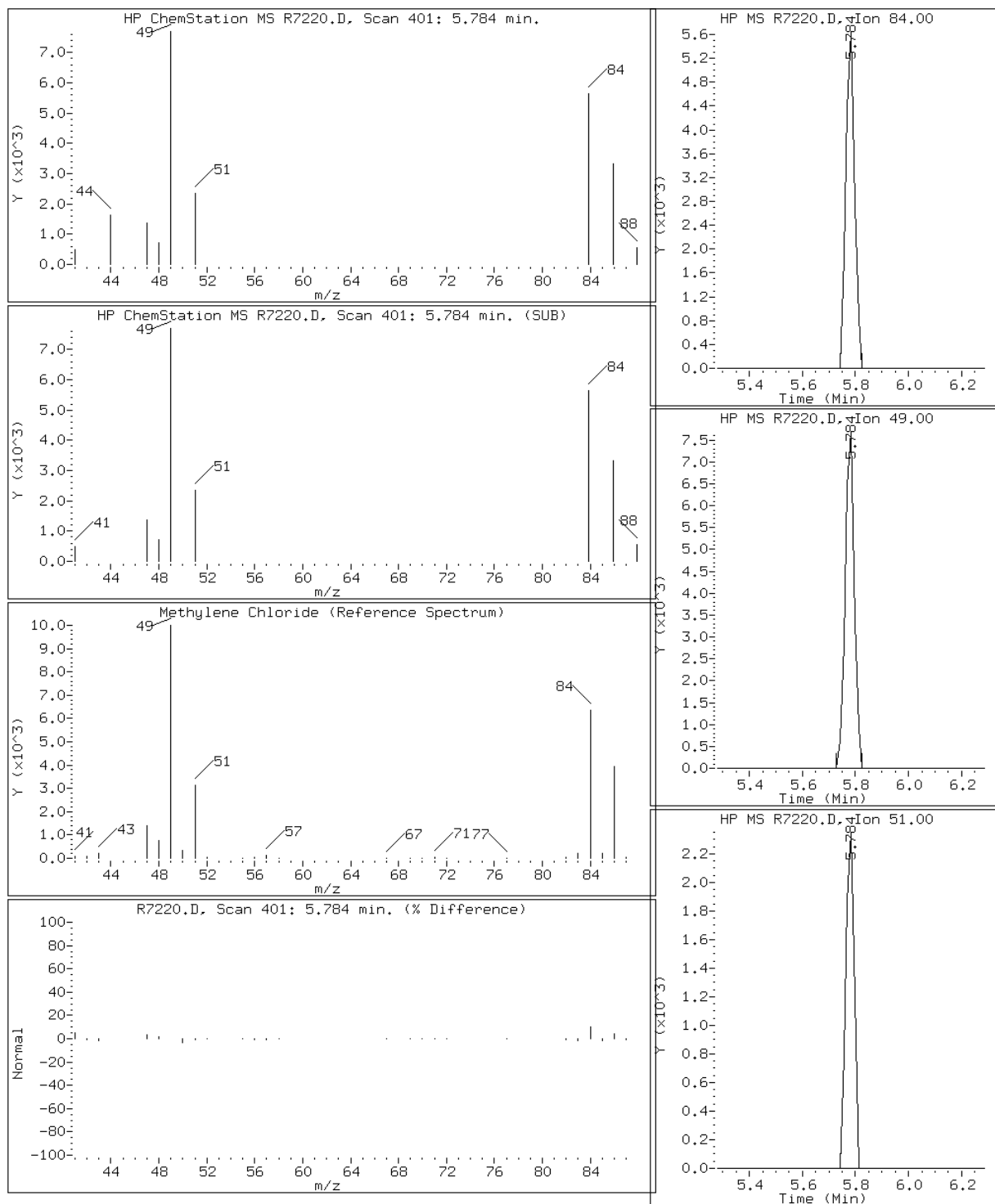
Client ID: WELL-SCHULTZ

Instrument: R1.i

Sample Info: 280-30378-m-1,,PH<2

Operator: DOBRANSKYM

30 Methylene Chloride



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1
 SDG No.: _____
 Client Sample ID: DITCH-SCHULTZ Lab Sample ID: 280-30378-2
 Matrix: Water Lab File ID: R7221.D
 Analysis Method: 8260B Date Collected: 06/22/2012 12:50
 Sample wt/vol: 20 (mL) Date Analyzed: 06/28/2012 13:17
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 (60.25) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 125949 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
95-63-6	1,2,4-Trimethylbenzene	ND		1.0	0.15
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
106-93-4	1,2-Dibromoethane	ND		1.0	0.18
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
540-59-0	1,2-Dichloroethene, Total	ND		1.0	0.24
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
108-67-8	1,3,5-Trimethylbenzene	ND		1.0	0.16
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
142-28-9	1,3-Dichloropropane	ND		1.0	0.22
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
594-20-7	2,2-Dichloropropane	ND		1.0	0.18
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
95-49-8	2-Chlorotoluene	ND		1.0	0.17
591-78-6	2-Hexanone	ND		5.0	1.7
106-43-4	4-Chlorotoluene	ND		1.0	0.21
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
67-64-1	Acetone	ND		10	1.9
71-43-2	Benzene	ND		1.0	0.16
108-86-1	Bromobenzene	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.19
74-83-9	Bromomethane	ND		2.0	0.21
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
74-97-5	Chlorobromomethane	ND		1.0	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Client Sample ID: DITCH-SCHULTZ Lab Sample ID: 280-30378-2

Matrix: Water Lab File ID: R7221.D

Analysis Method: 8260B Date Collected: 06/22/2012 12:50

Sample wt/vol: 20 (mL) Date Analyzed: 06/28/2012 13:17

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: DB-624 (60.25) ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 125949 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
74-95-3	Dibromomethane	ND		1.0	0.17
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
100-41-4	Ethylbenzene	ND		1.0	0.16
87-68-3	Hexachlorobutadiene	ND		1.0	0.36
98-82-8	Isopropylbenzene	ND		1.0	0.19
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.25
75-09-2	Methylene Chloride	0.38	J B	2.0	0.32
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.34
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.32
103-65-1	N-Propylbenzene	ND		1.0	0.16
95-47-6	o-Xylene	ND		1.0	0.19
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		1.0	0.17
98-06-6	tert-Butylbenzene	ND		1.0	0.16
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
75-01-4	Vinyl chloride	ND		1.0	0.10
1330-20-7	Xylenes, Total	ND		2.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1
SDG No.: _____
Client Sample ID: DITCH-SCHULTZ Lab Sample ID: 280-30378-2
Matrix: Water Lab File ID: R7221.D
Analysis Method: 8260B Date Collected: 06/22/2012 12:50
Sample wt/vol: 20 (mL) Date Analyzed: 06/28/2012 13:17
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 (60.25) ID: 0.25 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 125949 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
460-00-4	4-Bromofluorobenzene (Surr)	84		78-120
1868-53-7	Dibromofluoromethane (Surr)	90		77-120
2037-26-5	Toluene-d8 (Surr)	92		80-125

TestAmerica

VOLATILE REPORT SW-846

Data file : \\DenSvr03\Public\chem\MSV\R1.i\062812.b\R7221.D
Lab Smp Id: 280-30378-M-2 Client Smp ID: DITCH-SCHULTZ
Inj Date : 28-JUN-2012 13:17
Operator : DOBRANSKYM Inst ID: R1.i
Smp Info : 280-30378-m-2,,PH<2
Misc Info : 280-30378-M-2
Comment :
Method : \\DenSvr03\Public\chem\MSV\R1.i\062812.b\8260B-H2O.m
Meth Date : 29-Jun-2012 08:35 R1.i Quant Type: ISTD
Cal Date : 12-JUN-2012 13:31 Cal File: R7024.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TALS.sub
Target Version: 4.14
Processing Host: DENPC364

Concentration Formula: Amt * DF * Vp/Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Purge Volume (mL)
Vs	20.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
* 68 Fluorobenzene	96	7.647	7.647 (1.000)		1755660	12.5000	
* 96 Chlorobenzene-d5	119	9.918	9.918 (1.000)		352433	12.5000	
* 121 1,4-Dichlorobenzene-d4	152	11.752	11.752 (1.000)		429944	12.5000	
\$ 53 Dibromofluoromethane (Surr)	111	7.096	7.096 (0.928)		230642	8.58672	8.58672
\$ 62 1,2-Dichloroethane-d4	65	7.389	7.389 (0.966)		199227	9.05795	9.05795
\$ 83 Toluene-d8	98	8.844	8.836 (0.892)		1110087	8.77627	8.77627
\$ 107 4-Bromofluorobenzene (Surr)	95	10.785	10.785 (0.918)		291332	7.98203	7.98203
M 1 1,2-Dichloroethene (total)	96	Compound Not Detected.					
M 2 Xylene (total)	106	Compound Not Detected.					
5 dichlorodifluoromethane	85	Compound Not Detected.					
6 1,2-Dichlorotetrafluoroethane	85	Compound Not Detected.					
7 Chloromethane	50	Compound Not Detected.					
8 Vinyl Chloride	62	Compound Not Detected.					
9 Ethylene Oxide	43	Compound Not Detected.					
10 Bromomethane	94	Compound Not Detected.					
11 Chloroethane	64	Compound Not Detected.					
12 Dichlorofluoromethane	67	Compound Not Detected.					
14 Trichlorofluoromethane	101	Compound Not Detected.					
13 Ethanol	45	Compound Not Detected.					
15 1,2-dichloro-1,1,2-trifluoroe	117	Compound Not Detected.					
16 Ethyl Ether	59	Compound Not Detected.					
17 2,2-dichloro-1,1,1-trifluoroe	83	Compound Not Detected.					

Compounds	QUANT	SIG					CONCENTRATIONS	
			RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
19 Acrolein	56		Compound	Not	Detected.			
20 Acetone	43		Compound	Not	Detected.			
21 Trichlorotrifluoroethane	151		Compound	Not	Detected.			
22 2-propanol	45		Compound	Not	Detected.			
23 1,1-Dichloroethene	96		Compound	Not	Detected.			
26 Iodomethane	142		Compound	Not	Detected.			
25 Acetonitrile	41		Compound	Not	Detected.			
24 Methyl Acetate	43		Compound	Not	Detected.			
28 Carbon Disulfide	76		Compound	Not	Detected.			
27 Allyl Chloride	41		Compound	Not	Detected.			
29 tert-Butyl alcohol	59		Compound	Not	Detected.			
30 Methylene Chloride	84		5.783	5.783	(0.756)	12720	0.37737	0.377366(a)
31 Acrylonitrile	53		Compound	Not	Detected.			
32 Methyl t-butyl ether	73		Compound	Not	Detected.			
33 trans-1,2-Dichloroethene	96		Compound	Not	Detected.			
34 Hexane	57		Compound	Not	Detected.			
35 Vinyl acetate	43		Compound	Not	Detected.			
36 Isopropyl ether	87		Compound	Not	Detected.			
37 1,1-Dichloroethane	63		Compound	Not	Detected.			
38 Chloroprene	53		Compound	Not	Detected.			
39 ETBE	59		Compound	Not	Detected.			
42 2-Butanone	43		Compound	Not	Detected.			
41 Ethyl Acetate	43		Compound	Not	Detected.			
46 cis-1,2-Dichloroethene	96		Compound	Not	Detected.			
45 Propionitrile	54		Compound	Not	Detected.			
47 2,2-Dichloropropane	77		Compound	Not	Detected.			
48 Methacrylonitrile	41		Compound	Not	Detected.			
50 Bromochloromethane	128		Compound	Not	Detected.			
51 Chloroform	83		Compound	Not	Detected.			
52 Tetrahydrofuran	42		Compound	Not	Detected.			
55 1,1,1-Trichloroethane	97		Compound	Not	Detected.			
54 Isobutanol	41		Compound	Not	Detected.			
58 Cyclohexane	56		Compound	Not	Detected.			
59 1,1-Dichloropropene	75		Compound	Not	Detected.			
60 Carbon Tetrachloride	117		Compound	Not	Detected.			
64 1,2-Dichloroethane	62		Compound	Not	Detected.			
66 Benzene	78		Compound	Not	Detected.			
65 TAME	73		Compound	Not	Detected.			
69 n-Butanol	56		Compound	Not	Detected.			
71 Trichloroethene	130		Compound	Not	Detected.			
72 2-Pentanone	43		Compound	Not	Detected.			
73 Methyl Methacrylate	100		Compound	Not	Detected.			
74 1,2-Dichloropropane	63		Compound	Not	Detected.			
75 Methyl Cyclohexane	55		Compound	Not	Detected.			
76 1,4-Dioxane	88		Compound	Not	Detected.			
77 Dibromomethane	93		Compound	Not	Detected.			
78 Bromodichloromethane	83		Compound	Not	Detected.			
79 2-nitropropane	41		Compound	Not	Detected.			
80 2-Chloroethyl vinyl ether	63		Compound	Not	Detected.			
81 cis-1,3-Dichloropropene	75		Compound	Not	Detected.			
82 4-Methyl-2-pentanone	43		Compound	Not	Detected.			
85 Toluene	91		Compound	Not	Detected.			
87 trans-1,3-Dichloropropene	75		Compound	Not	Detected.			
86 Ethyl methacrylate	69		Compound	Not	Detected.			

Compounds	QUANT SIG						CONCENTRATIONS	
		RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/L)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
88 1,1,2-Trichloroethane	97				Compound Not Detected.			
89 2-Hexanone	43				Compound Not Detected.			
90 1,3-Dichloropropane	76				Compound Not Detected.			
91 Tetrachloroethene	164				Compound Not Detected.			
92 Dibromochloromethane	129				Compound Not Detected.			
93 Tetrahydrothiophene	60				Compound Not Detected.			
94 1,2-Dibromoethane	107				Compound Not Detected.			
95 1-Chlorohexane	91				Compound Not Detected.			
97 Chlorobenzene	112				Compound Not Detected.			
98 1,1,1,2-Tetrachloroethane	131				Compound Not Detected.			
99 Ethylbenzene	106				Compound Not Detected.			
100 m and p-Xylene	106				Compound Not Detected.			
102 o-Xylene	106				Compound Not Detected.			
101 Styrene	104				Compound Not Detected.			
103 Bromoform	173				Compound Not Detected.			
104 isopropyl benzene	105				Compound Not Detected.			
105 cis-1,4-dichloro-2-butene	53				Compound Not Detected.			
106 Cyclohexanone	55				Compound Not Detected.			
108 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.			
109 t-1,4-Dichloro-2-butene	53				Compound Not Detected.			
110 1,2,3-Trichloropropane	110				Compound Not Detected.			
112 Bromobenzene	156				Compound Not Detected.			
111 n-Propylbenzene	120				Compound Not Detected.			
114 2-Chlorotoluene	126				Compound Not Detected.			
113 1,3,5-Trimethylbenzene	105				Compound Not Detected.			
115 4-Chlorotoluene	126				Compound Not Detected.			
116 tert-Butylbenzene	119				Compound Not Detected.			
117 1,2,4-Trimethylbenzene	105				Compound Not Detected.			
118 sec-Butylbenzene	134				Compound Not Detected.			
119 4-Isopropyltoluene	119				Compound Not Detected.			
120 1,3-Dichlorobenzene	146				Compound Not Detected.			
122 1,4-dichlorobenzene	146				Compound Not Detected.			
123 1,2,3-Trimethylbenzene	105				Compound Not Detected.			
124 n-Butylbenzene	91				Compound Not Detected.			
125 1,2-Dichlorobenzene	146				Compound Not Detected.			
127 1,2-Dibromo-3-chloropropane	157				Compound Not Detected.			
129 1,2,4-Trichlorobenzene	180				Compound Not Detected.			
131 Hexachlorobutadiene	225				Compound Not Detected.			
132 Naphthalene	128				Compound Not Detected.			
133 1,2,3-Trichlorobenzene	180				Compound Not Detected.			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: R7221.D

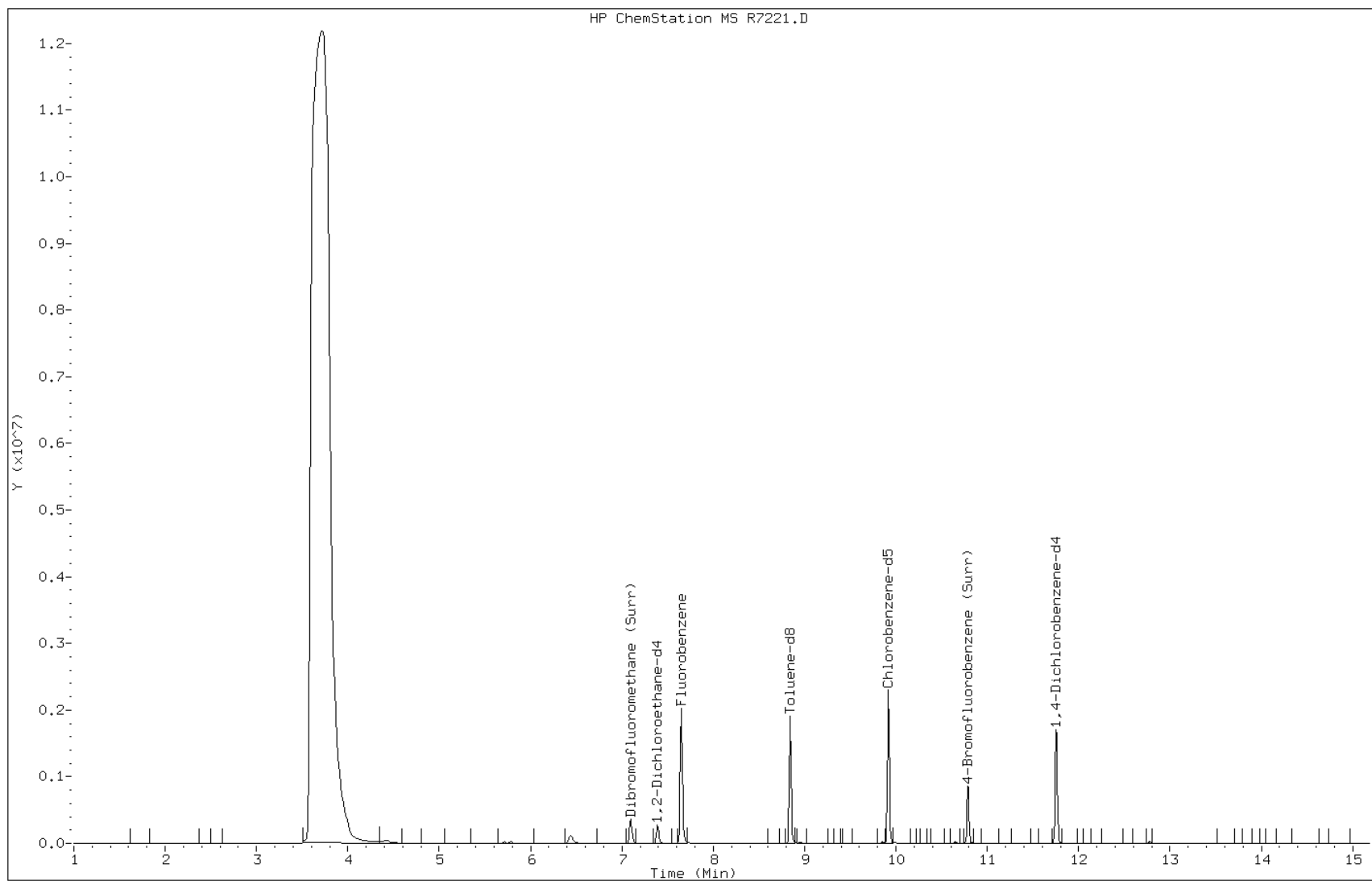
Date: 28-JUN-2012 13:17

Client ID: DITCH-SCHULTZ

Instrument: R1.i

Sample Info: 280-30378-m-2,,PH<2

Operator: DOBRANSKYM



Data File: R7221.D

Date: 28-JUN-2012 13:17

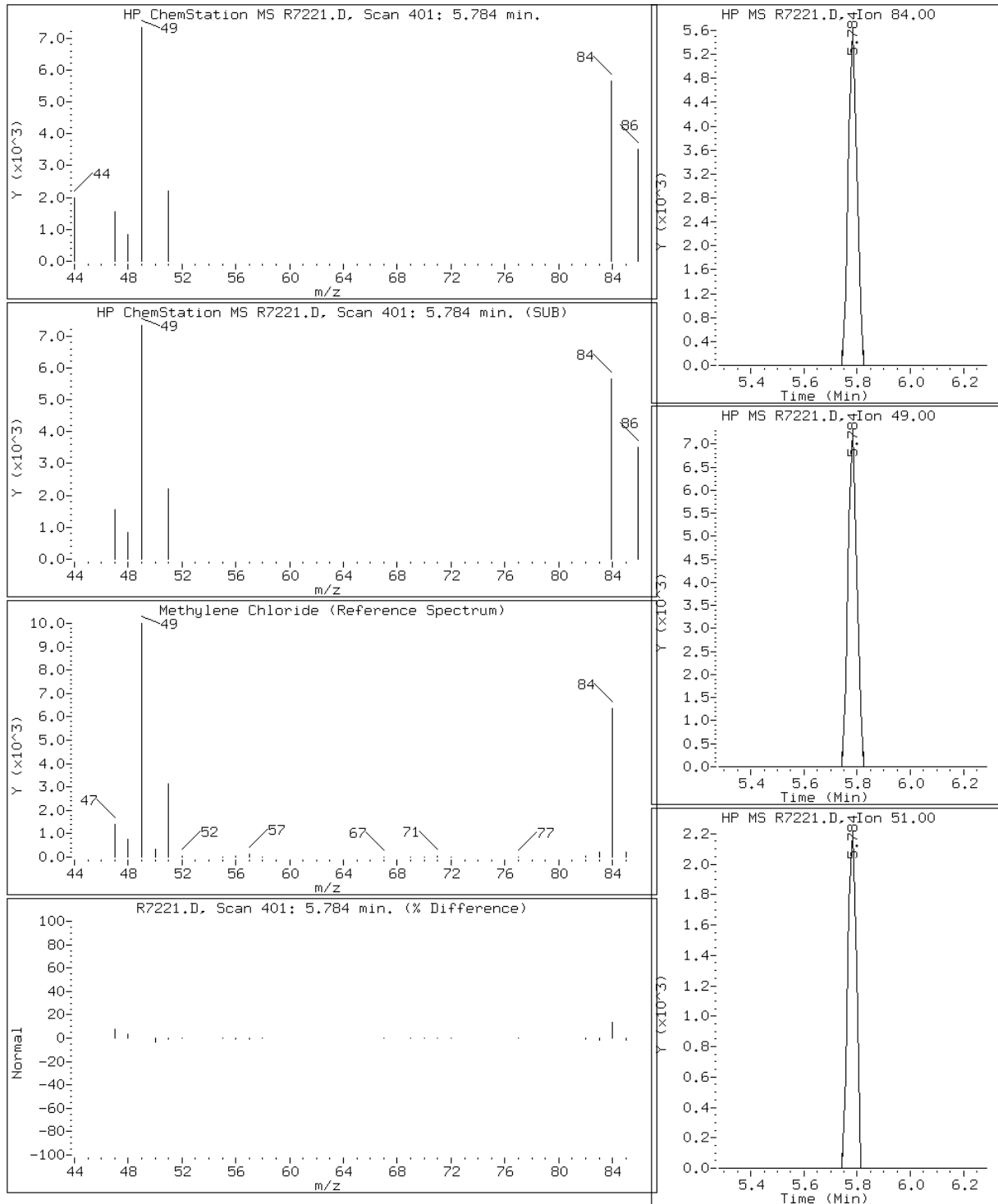
Client ID: DITCH-SCHULTZ

Instrument: R1.i

Sample Info: 280-30378-m-2,,PH<2

Operator: DOBRANSKYM

30 Methylene Chloride



Method 8270C

Semivolatile Organic Compounds
(GC/MS) by Method 8270C

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Client Sample ID: WELL-SCHULTZ Lab Sample ID: 280-30378-1

Matrix: Water Lab File ID: Y8515.D

Analysis Method: 8270C Date Collected: 06/22/2012 11:11

Extract. Method: 3520C Date Extracted: 06/24/2012 08:15

Sample wt/vol: 1058.9(mL) Date Analyzed: 06/29/2012 13:53

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 0.5(uL) Level: (low/med) Low

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 126328 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-60-1	2,2'-oxybis[1-chloropropane]	ND		9.4	0.26
95-95-4	2,4,5-Trichlorophenol	ND		9.4	0.42
88-06-2	2,4,6-Trichlorophenol	ND		9.4	0.27
120-83-2	2,4-Dichlorophenol	ND		9.4	0.60
105-67-9	2,4-Dimethylphenol	ND		9.4	0.55
51-28-5	2,4-Dinitrophenol	ND		28	9.4
121-14-2	2,4-Dinitrotoluene	ND		9.4	1.6
606-20-2	2,6-Dinitrotoluene	ND		9.4	1.8
91-58-7	2-Chloronaphthalene	ND		3.8	0.25
95-57-8	2-Chlorophenol	ND		9.4	1.9
91-57-6	2-Methylnaphthalene	ND		3.8	0.27
95-48-7	2-Methylphenol	ND		9.4	0.93
88-74-4	2-Nitroaniline	ND		9.4	1.6
88-75-5	2-Nitrophenol	ND		9.4	0.37
15831-10-4	3 & 4 Methylphenol	ND		9.4	0.24
91-94-1	3,3'-Dichlorobenzidine	ND		47	1.9
99-09-2	3-Nitroaniline	ND		9.4	1.9
534-52-1	4,6-Dinitro-2-methylphenol	ND		47	3.8
101-55-3	4-Bromophenyl phenyl ether	ND		9.4	0.41
59-50-7	4-Chloro-3-methylphenol	ND		9.4	2.3
106-47-8	4-Chloroaniline	ND		9.4	2.0
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.4	1.6
100-01-6	4-Nitroaniline	ND		9.4	1.9
100-02-7	4-Nitrophenol	ND		9.4	1.2
83-32-9	Acenaphthene	ND		3.8	0.26
208-96-8	Acenaphthylene	ND		3.8	0.46
98-86-2	Acetophenone	ND		9.4	0.23
120-12-7	Anthracene	ND		3.8	0.40
1912-24-9	Atrazine	ND		9.4	0.69
92-87-5	Benzidine	ND		94	47
56-55-3	Benzo[a]anthracene	ND		3.8	0.33
50-32-8	Benzo[a]pyrene	ND		3.8	0.29
205-99-2	Benzo[b]fluoranthene	ND		3.8	0.50
191-24-2	Benzo[g,h,i]perylene	ND		3.8	0.47

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Client Sample ID: WELL-SCHULTZ Lab Sample ID: 280-30378-1

Matrix: Water Lab File ID: Y8515.D

Analysis Method: 8270C Date Collected: 06/22/2012 11:11

Extract. Method: 3520C Date Extracted: 06/24/2012 08:15

Sample wt/vol: 1058.9(mL) Date Analyzed: 06/29/2012 13:53

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 0.5(uL) Level: (low/med) Low

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 126328 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	ND		3.8	0.43
111-91-1	Bis(2-chloroethoxy)methane	ND		9.4	0.92
111-44-4	Bis(2-chloroethyl) ether	ND		9.4	0.39
117-81-7	Bis(2-ethylhexyl) phthalate	ND		9.4	0.53
85-68-7	Butyl benzyl phthalate	ND		3.8	0.94
105-60-2	Caprolactam	ND		9.4	4.7
86-74-8	Carbazole	ND		3.8	0.41
218-01-9	Chrysene	ND		3.8	0.51
1319-77-3	Cresols, Total	ND		9.4	0.24
53-70-3	Dibenz(a,h)anthracene	ND		3.8	0.48
132-64-9	Dibenzofuran	ND		3.8	0.27
84-66-2	Diethyl phthalate	ND		3.8	0.36
131-11-3	Dimethyl phthalate	ND		3.8	0.20
84-74-2	Di-n-butyl phthalate	ND		3.8	1.1
117-84-0	Di-n-octyl phthalate	ND		3.8	0.33
206-44-0	Fluoranthene	ND		3.8	0.19
86-73-7	Fluorene	ND		3.8	0.29
118-74-1	Hexachlorobenzene	ND		9.4	0.62
87-68-3	Hexachlorobutadiene	ND		9.4	3.1
77-47-4	Hexachlorocyclopentadiene	ND		47	9.4
67-72-1	Hexachloroethane	ND		9.4	2.0
193-39-5	Indeno[1,2,3-cd]pyrene	ND		3.8	0.61
91-20-3	Naphthalene	ND		3.8	0.27
98-95-3	Nitrobenzene	ND		9.4	0.76
621-64-7	N-Nitrosodi-n-propylamine	ND		9.4	0.33
86-30-6	n-Nitrosodiphenylamine (as diphenylamine)	ND		9.4	0.42
87-86-5	Pentachlorophenol	ND		47	19
85-01-8	Phenanthrene	ND		3.8	0.25
108-95-2	Phenol	ND		9.4	1.9
129-00-0	Pyrene	ND		9.4	0.35

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1
SDG No.: _____
Client Sample ID: WELL-SCHULTZ Lab Sample ID: 280-30378-1
Matrix: Water Lab File ID: Y8515.D
Analysis Method: 8270C Date Collected: 06/22/2012 11:11
Extract. Method: 3520C Date Extracted: 06/24/2012 08:15
Sample wt/vol: 1058.9(mL) Date Analyzed: 06/29/2012 13:53
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 0.5(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 126328 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	114		57-120
321-60-8	2-Fluorobiphenyl	86		38-120
367-12-4	2-Fluorophenol	82		51-120
4165-60-0	Nitrobenzene-d5	95		48-120
4165-62-2	Phenol-d5	89		51-120
1718-51-0	Terphenyl-d14	108		50-120

TestAmerica

BNA ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\Y.i\062912a.b\Y8515.D
 Lab Smp Id: 280-30378-D-1-A Client Smp ID: WELL-SCHULTZ
 Inj Date : 29-JUN-2012 13:53
 Operator : hoffmanm Inst ID: Y.i
 Smp Info : 280-30378-d-1-a
 Misc Info : 280-30378-D-1-A
 Comment : 8270C / 625
 Method : \\DenSvr03\Public\chem\MSS\Y.i\062912a.b\8270C.m
 Meth Date : 02-Jul-2012 10:16 hoffmanm Quant Type: ISTD
 Cal Date : 27-JUN-2012 08:25 Cal File: Y8404.D
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: H.sub
 Target Version: 4.14
 Processing Host: DENPC246

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1058.900	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)
*****	=====	=====	=====	=====	=====	=====	=====
* 26 1,4-Dichlorobenzene-d4	152	4.661	4.666 (1.000)		334882	40.0000	
* 58 Naphthalene-d8	136	5.889	5.900 (1.000)		1271959	40.0000	
* 96 Acenaphthene-d10	164	7.617	7.627 (1.000)		794394	40.0000	
* 135 Phenanthrene-d10	188	8.980	8.990 (1.000)		1430960	40.0000	
* 166 Chrysene-d12	240	11.283	11.287 (1.000)		1520737	40.0000	
* 179 Perylene-d12	264	12.617	12.615 (1.000)		1489530	40.0000	
\$ 8 2-Fluorophenol	112	3.463	3.463 (0.743)		1294325	123.252	116.396
\$ 15 Phenol-d5	99	4.285	4.291 (0.919)		1816885	133.845	126.400
\$ 43 Nitrobenzene-d5	82	5.190	5.196 (0.881)		1201355	94.8486	89.5728
\$ 81 2-Fluorobiphenyl	172	6.935	6.947 (0.911)		2183653	86.1678	81.3748
\$ 118 2,4,6-Tribromophenol	330	8.351	8.369 (1.096)		674713	170.686	161.192
\$ 154 Terphenyl-d14	244	10.325	10.349 (0.915)		3317383	108.022	102.013
\$ 29 1,2-Dichlorobenzene-d4	152	4.814	4.820 (1.033)		694030	85.3748	80.6260
\$ 22 2-Chlorophenol-d4	132	4.450	4.456 (0.955)		1574340	140.398	132.588
4 1,4-Dioxane	88	Compound Not Detected.					
6 Pyridine	79	Compound Not Detected.					
5 N-Nitrosodimethylamine	74	Compound Not Detected.					
18 Aniline	93	Compound Not Detected.					
16 Phenol	94	Compound Not Detected.					
20 Bis(2-chloroethyl) ether	93	Compound Not Detected.					
23 2-Chlorophenol	128	Compound Not Detected.					
25 1,3-Dichlorobenzene	146	Compound Not Detected.					

Compounds	QUANT	SIG					CONCENTRATIONS	
			RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
27 1,4-Dichlorobenzene	146		Compound Not Detected.					
28 Benzyl alcohol	108		4.773	4.779	(1.024)	9359	1.29393	1.22196(a)
30 1,2-Dichlorobenzene	146		Compound Not Detected.					
32 2-Methylphenol	108		Compound Not Detected.					
34 2,2'-oxybis(1-chloropropane)	45		Compound Not Detected.					
138 3-Methylphenol	108		Compound Not Detected.					
36 4-Methylphenol	108		Compound Not Detected.					
139 3 & 4-Methylphenol	108		Compound Not Detected.					
37 N-nitrosodi-n-propylamine	70		Compound Not Detected.					
41 Hexachloroethane	117		Compound Not Detected.					
44 Nitrobenzene	77		Compound Not Detected.					
47 Isophorone	82		Compound Not Detected.					
49 2-Nitrophenol	139		Compound Not Detected.					
50 2,4-Dimethylphenol	107		Compound Not Detected.					
52 Bis(2-chloroethoxy)methane	93		Compound Not Detected.					
53 Benzoic acid	122		Compound Not Detected.					
54 2,4-Dichlorophenol	162		Compound Not Detected.					
57 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
59 Naphthalene	128		Compound Not Detected.					
60 4-Chloroaniline	127		Compound Not Detected.					
62 Hexachlorobutadiene	225		Compound Not Detected.					
68 4-Chloro-3-methylphenol	107		Compound Not Detected.					
71 2-Methylnaphthalene	142		Compound Not Detected.					
72 1-Methylnaphthalene	142		Compound Not Detected.					
74 Hexachlorocyclopentadiene	237		Compound Not Detected.					
78 2,4,6-Trichlorophenol	196		Compound Not Detected.					
80 2,4,5-Trichlorophenol	196		Compound Not Detected.					
86 2-Chloronaphthalene	162		Compound Not Detected.					
88 2-Nitroaniline	65		Compound Not Detected.					
91 Dimethyl phthalate	163		Compound Not Detected.					
93 2,6-Dinitrotoluene	165		Compound Not Detected.					
94 Acenaphthylene	152		Compound Not Detected.					
95 3-Nitroaniline	138		Compound Not Detected.					
97 Acenaphthene	153		Compound Not Detected.					
98 2,4-Dinitrophenol	184		Compound Not Detected.					
99 4-Nitrophenol	109		Compound Not Detected.					
101 2,4-Dinitrotoluene	165		Compound Not Detected.					
102 Dibenzofuran	168		Compound Not Detected.					
107 Diethyl phthalate	149		Compound Not Detected.					
109 4-Chlorophenyl phenyl ether	204		Compound Not Detected.					
110 Fluorene	166		Compound Not Detected.					
112 4-Nitroaniline	138		Compound Not Detected.					
113 4,6-Dinitro-2-methylphenol	198		Compound Not Detected.					
115 N-nitrosodiphenylamine	169		Compound Not Detected.					
116 Azobenzene	77		Compound Not Detected.					
234 1,2-DPH(as Azobenzene)	77		Compound Not Detected.					
124 4-Bromophenyl phenyl ether	248		Compound Not Detected.					
125 Hexachlorobenzene	284		Compound Not Detected.					
129 Pentachlorophenol	266		Compound Not Detected.					
136 Phenanthrene	178		Compound Not Detected.					
137 Anthracene	178		Compound Not Detected.					
140 Carbazole	167		Compound Not Detected.					
143 Di-n-butyl phthalate	149		Compound Not Detected.					
149 Fluoranthene	202		Compound Not Detected.					

Compounds	QUANT SIG						CONCENTRATIONS	
		RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/ml)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
151 Benzidine	184				Compound Not Detected.			
152 Pyrene	202				Compound Not Detected.			
159 Butyl benzyl phthalate	149				Compound Not Detected.			
164 3 3'-Dichlorobenzidine	252				Compound Not Detected.			
165 Benzo(a)anthracene	228				Compound Not Detected.			
167 Chrysene	228				Compound Not Detected.			
162 Bis(2-ethylhexyl) phthalate	149				Compound Not Detected.			
168 Di-n-octyl phthalate	149				Compound Not Detected.			
171 Benzo(b)fluoranthene	252				Compound Not Detected.			
172 Benzo(k)fluoranthene	252				Compound Not Detected.			
178 Benzo(a)pyrene	252				Compound Not Detected.			
186 Indeno(1,2,3-cd)pyrene	276				Compound Not Detected.			
185 Dibenz(a,h)anthracene	278				Compound Not Detected.			
188 Benzo(g,h,i)perylene	276				Compound Not Detected.			
35 1H-Indene	116				Compound Not Detected.			
38 Acetophenone	105				Compound Not Detected.			
19 Methyl Styrene	118				Compound Not Detected.			
141 Alachlor	188				Compound Not Detected.			
127 Atrazine	200				Compound Not Detected.			
67 Caprolactam	55				Compound Not Detected.			
79 2,3-Dichlorobenzeneamine	161				Compound Not Detected.			
158 Famphur	218				Compound Not Detected.			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: Y8515.D

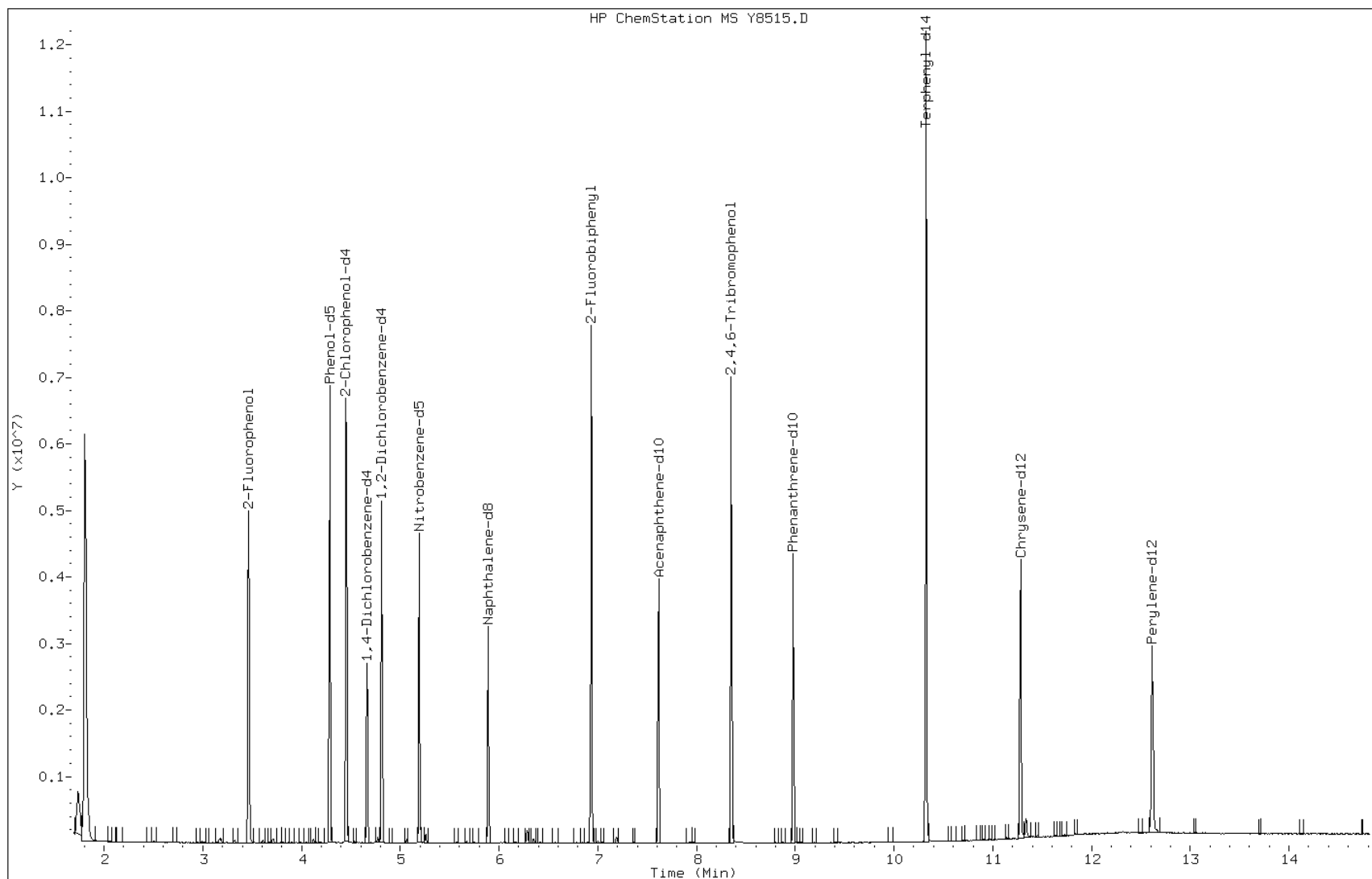
Date: 29-JUN-2012 13:53

Client ID: WELL-SCHULTZ

Instrument: Y.i

Sample Info: 280-30378-d-1-a

Operator: hoffmanm



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Denver</u>	Job No.: <u>280-30378-1</u>
SDG No.: _____	
Client Sample ID: <u>DITCH-SCHULTZ</u>	Lab Sample ID: <u>280-30378-2</u>
Matrix: <u>Water</u>	Lab File ID: <u>Y8516.D</u>
Analysis Method: <u>8270C</u>	Date Collected: <u>06/22/2012 12:50</u>
Extract. Method: <u>3520C</u>	Date Extracted: <u>06/24/2012 08:15</u>
Sample wt/vol: <u>1052(mL)</u>	Date Analyzed: <u>06/29/2012 14:13</u>
Con. Extract Vol.: <u>1000(uL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>0.5(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>126328</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-60-1	2,2'-oxybis[1-chloropropane]	ND		9.5	0.27
95-95-4	2,4,5-Trichlorophenol	ND		9.5	0.43
88-06-2	2,4,6-Trichlorophenol	ND		9.5	0.28
120-83-2	2,4-Dichlorophenol	ND		9.5	0.61
105-67-9	2,4-Dimethylphenol	ND		9.5	0.55
51-28-5	2,4-Dinitrophenol	ND		29	9.5
121-14-2	2,4-Dinitrotoluene	ND		9.5	1.6
606-20-2	2,6-Dinitrotoluene	ND		9.5	1.8
91-58-7	2-Chloronaphthalene	ND		3.8	0.25
95-57-8	2-Chlorophenol	ND		9.5	1.9
91-57-6	2-Methylnaphthalene	ND		3.8	0.28
95-48-7	2-Methylphenol	ND		9.5	0.93
88-74-4	2-Nitroaniline	ND		9.5	1.6
88-75-5	2-Nitrophenol	ND		9.5	0.37
15831-10-4	3 & 4 Methylphenol	ND		9.5	0.24
91-94-1	3,3'-Dichlorobenzidine	ND		48	1.9
99-09-2	3-Nitroaniline	ND		9.5	1.9
534-52-1	4,6-Dinitro-2-methylphenol	ND		48	3.8
101-55-3	4-Bromophenyl phenyl ether	ND		9.5	0.41
59-50-7	4-Chloro-3-methylphenol	ND		9.5	2.3
106-47-8	4-Chloroaniline	ND		9.5	2.0
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.5	1.6
100-01-6	4-Nitroaniline	ND		9.5	1.9
100-02-7	4-Nitrophenol	ND		9.5	1.2
83-32-9	Acenaphthene	ND		3.8	0.27
208-96-8	Acenaphthylene	ND		3.8	0.47
98-86-2	Acetophenone	ND		9.5	0.23
120-12-7	Anthracene	ND		3.8	0.40
1912-24-9	Atrazine	ND		9.5	0.69
92-87-5	Benzidine	ND		95	48
56-55-3	Benzo[a]anthracene	ND		3.8	0.33
50-32-8	Benzo[a]pyrene	ND		3.8	0.29
205-99-2	Benzo[b]fluoranthene	ND		3.8	0.50
191-24-2	Benzo[g,h,i]perylene	ND		3.8	0.48

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1

SDG No.: _____

Client Sample ID: DITCH-SCHULTZ Lab Sample ID: 280-30378-2

Matrix: Water Lab File ID: Y8516.D

Analysis Method: 8270C Date Collected: 06/22/2012 12:50

Extract. Method: 3520C Date Extracted: 06/24/2012 08:15

Sample wt/vol: 1052(mL) Date Analyzed: 06/29/2012 14:13

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 0.5(uL) Level: (low/med) Low

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 126328 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	ND		3.8	0.44
111-91-1	Bis(2-chloroethoxy)methane	ND		9.5	0.92
111-44-4	Bis(2-chloroethyl) ether	ND		9.5	0.39
117-81-7	Bis(2-ethylhexyl) phthalate	0.53	J	9.5	0.53
85-68-7	Butyl benzyl phthalate	ND		3.8	0.95
105-60-2	Caprolactam	ND		9.5	4.8
86-74-8	Carbazole	ND		3.8	0.41
218-01-9	Chrysene	ND		3.8	0.51
1319-77-3	Cresols, Total	ND		9.5	0.24
53-70-3	Dibenz(a,h)anthracene	ND		3.8	0.48
132-64-9	Dibenzofuran	ND		3.8	0.28
84-66-2	Diethyl phthalate	ND		3.8	0.36
131-11-3	Dimethyl phthalate	ND		3.8	0.20
84-74-2	Di-n-butyl phthalate	ND		3.8	1.1
117-84-0	Di-n-octyl phthalate	ND		3.8	0.33
206-44-0	Fluoranthene	ND		3.8	0.19
86-73-7	Fluorene	ND		3.8	0.29
118-74-1	Hexachlorobenzene	ND		9.5	0.63
87-68-3	Hexachlorobutadiene	ND		9.5	3.1
77-47-4	Hexachlorocyclopentadiene	ND		48	9.5
67-72-1	Hexachloroethane	ND		9.5	2.0
193-39-5	Indeno[1,2,3-cd]pyrene	ND		3.8	0.62
91-20-3	Naphthalene	ND		3.8	0.28
98-95-3	Nitrobenzene	ND		9.5	0.77
621-64-7	N-Nitrosodi-n-propylamine	ND		9.5	0.33
86-30-6	n-Nitrosodiphenylamine (as diphenylamine)	ND		9.5	0.42
87-86-5	Pentachlorophenol	ND		48	19
85-01-8	Phenanthrene	ND		3.8	0.25
108-95-2	Phenol	ND		9.5	1.9
129-00-0	Pyrene	ND		9.5	0.35

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1
SDG No.: _____
Client Sample ID: DITCH-SCHULTZ Lab Sample ID: 280-30378-2
Matrix: Water Lab File ID: Y8516.D
Analysis Method: 8270C Date Collected: 06/22/2012 12:50
Extract. Method: 3520C Date Extracted: 06/24/2012 08:15
Sample wt/vol: 1052(mL) Date Analyzed: 06/29/2012 14:13
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 0.5(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 126328 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	116		57-120
321-60-8	2-Fluorobiphenyl	84		38-120
367-12-4	2-Fluorophenol	84		51-120
4165-60-0	Nitrobenzene-d5	90		48-120
4165-62-2	Phenol-d5	90		51-120
1718-51-0	Terphenyl-d14	107		50-120

TestAmerica

BNA ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\Y.i\062912a.b\Y8516.D
Lab Smp Id: 280-30378-A-2-A Client Smp ID: DITCH-SCHULTZ
Inj Date : 29-JUN-2012 14:13
Operator : hoffmanm Inst ID: Y.i
Smp Info : 280-30378-a-2-a
Misc Info : 280-30378-A-2-A
Comment : 8270C / 625
Method : \\DenSvr03\Public\chem\MSS\Y.i\062912a.b\8270C.m
Meth Date : 02-Jul-2012 10:16 hoffmanm Quant Type: ISTD
Cal Date : 27-JUN-2012 08:25 Cal File: Y8404.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: H.sub
Target Version: 4.14
Processing Host: DENPC246

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1052.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)
*****	----	----	-----	-----	-----	-----	-----
* 26 1,4-Dichlorobenzene-d4	152	4.665	4.666	(1.000)	346169	40.0000	
* 58 Naphthalene-d8	136	5.893	5.900	(1.000)	1319546	40.0000	
* 96 Acenaphthene-d10	164	7.615	7.627	(1.000)	825526	40.0000	
* 135 Phenanthrene-d10	188	8.978	8.990	(1.000)	1464918	40.0000	
* 166 Chrysene-d12	240	11.281	11.287	(1.000)	1564561	40.0000	
* 179 Perylene-d12	264	12.609	12.615	(1.000)	1540089	40.0000	
\$ 8 2-Fluorophenol	112	3.461	3.463	(0.742)	1374660	126.634	120.374
\$ 15 Phenol-d5	99	4.289	4.291	(0.919)	1893159	134.916	128.247
\$ 43 Nitrobenzene-d5	82	5.188	5.196	(0.880)	1187371	90.3638	85.8972
\$ 81 2-Fluorobiphenyl	172	6.939	6.947	(0.911)	2225156	84.4942	80.3177
\$ 118 2,4,6-Tribromophenol	330	8.355	8.369	(1.097)	713349	173.654	165.070
\$ 154 Terphenyl-d14	244	10.323	10.349	(0.915)	3368396	106.610	101.341
\$ 29 1,2-Dichlorobenzene-d4	152	4.812	4.820	(1.031)	690199	82.1352	78.0753
\$ 22 2-Chlorophenol-d4	132	4.454	4.456	(0.955)	1588173	137.013	130.241
4 1,4-Dioxane	88	Compound Not Detected.					
6 Pyridine	79	Compound Not Detected.					
5 N-Nitrosodimethylamine	74	Compound Not Detected.					
18 Aniline	93	Compound Not Detected.					
16 Phenol	94	Compound Not Detected.					
20 Bis(2-chloroethyl) ether	93	Compound Not Detected.					
23 2-Chlorophenol	128	Compound Not Detected.					
25 1,3-Dichlorobenzene	146	Compound Not Detected.					

Compounds	QUANT	SIG					CONCENTRATIONS	
			RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
27 1,4-Dichlorobenzene	146		Compound Not Detected.					
28 Benzyl alcohol	108		4.777	4.779	(1.024)	16119	2.15587	2.04931(a)
30 1,2-Dichlorobenzene	146		Compound Not Detected.					
32 2-Methylphenol	108		Compound Not Detected.					
34 2,2'-oxybis(1-chloropropane)	45		Compound Not Detected.					
138 3-Methylphenol	108		Compound Not Detected.					
36 4-Methylphenol	108		Compound Not Detected.					
139 3 & 4-Methylphenol	108		Compound Not Detected.					
37 N-nitrosodi-n-propylamine	70		Compound Not Detected.					
41 Hexachloroethane	117		Compound Not Detected.					
44 Nitrobenzene	77		Compound Not Detected.					
47 Isophorone	82		Compound Not Detected.					
49 2-Nitrophenol	139		Compound Not Detected.					
50 2,4-Dimethylphenol	107		Compound Not Detected.					
52 Bis(2-chloroethoxy)methane	93		Compound Not Detected.					
53 Benzoic acid	122		Compound Not Detected.					
54 2,4-Dichlorophenol	162		Compound Not Detected.					
57 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
59 Naphthalene	128		Compound Not Detected.					
60 4-Chloroaniline	127		Compound Not Detected.					
62 Hexachlorobutadiene	225		Compound Not Detected.					
68 4-Chloro-3-methylphenol	107		Compound Not Detected.					
71 2-Methylnaphthalene	142		Compound Not Detected.					
72 1-Methylnaphthalene	142		Compound Not Detected.					
74 Hexachlorocyclopentadiene	237		Compound Not Detected.					
78 2,4,6-Trichlorophenol	196		Compound Not Detected.					
80 2,4,5-Trichlorophenol	196		Compound Not Detected.					
86 2-Chloronaphthalene	162		Compound Not Detected.					
88 2-Nitroaniline	65		Compound Not Detected.					
91 Dimethyl phthalate	163		Compound Not Detected.					
93 2,6-Dinitrotoluene	165		Compound Not Detected.					
94 Acenaphthylene	152		Compound Not Detected.					
95 3-Nitroaniline	138		Compound Not Detected.					
97 Acenaphthene	153		Compound Not Detected.					
98 2,4-Dinitrophenol	184		Compound Not Detected.					
99 4-Nitrophenol	109		Compound Not Detected.					
101 2,4-Dinitrotoluene	165		Compound Not Detected.					
102 Dibenzofuran	168		Compound Not Detected.					
107 Diethyl phthalate	149		Compound Not Detected.					
109 4-Chlorophenyl phenyl ether	204		Compound Not Detected.					
110 Fluorene	166		Compound Not Detected.					
112 4-Nitroaniline	138		Compound Not Detected.					
113 4,6-Dinitro-2-methylphenol	198		Compound Not Detected.					
115 N-nitrosodiphenylamine	169		Compound Not Detected.					
116 Azobenzene	77		Compound Not Detected.					
234 1,2-DPH(as Azobenzene)	77		Compound Not Detected.					
124 4-Bromophenyl phenyl ether	248		Compound Not Detected.					
125 Hexachlorobenzene	284		Compound Not Detected.					
129 Pentachlorophenol	266		Compound Not Detected.					
136 Phenanthrene	178		Compound Not Detected.					
137 Anthracene	178		Compound Not Detected.					
140 Carbazole	167		Compound Not Detected.					
143 Di-n-butyl phthalate	149		Compound Not Detected.					
149 Fluoranthene	202		Compound Not Detected.					

Compounds	QUANT SIG						CONCENTRATIONS	
		RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/ml)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
151 Benzidine	184				Compound Not Detected.			
152 Pyrene	202				Compound Not Detected.			
159 Butyl benzyl phthalate	149				Compound Not Detected.			
164 3 3'-Dichlorobenzidine	252				Compound Not Detected.			
165 Benzo(a)anthracene	228				Compound Not Detected.			
167 Chrysene	228				Compound Not Detected.			
162 Bis(2-ethylhexyl) phthalate	149	11.146	11.165	(0.988)	12748		0.55550	0.528040(a)
168 Di-n-octyl phthalate	149				Compound Not Detected.			
171 Benzo(b)fluoranthene	252				Compound Not Detected.			
172 Benzo(k)fluoranthene	252				Compound Not Detected.			
178 Benzo(a)pyrene	252				Compound Not Detected.			
186 Indeno(1,2,3-cd)pyrene	276				Compound Not Detected.			
185 Dibenz(a,h)anthracene	278				Compound Not Detected.			
188 Benzo(g,h,i)perylene	276				Compound Not Detected.			
35 1H-Indene	116				Compound Not Detected.			
38 Acetophenone	105				Compound Not Detected.			
19 Methyl Styrene	118				Compound Not Detected.			
141 Alachlor	188				Compound Not Detected.			
127 Atrazine	200				Compound Not Detected.			
67 Caprolactam	55				Compound Not Detected.			
79 2,3-Dichlorobenzeneamine	161				Compound Not Detected.			
158 Famphur	218				Compound Not Detected.			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: Y8516.D

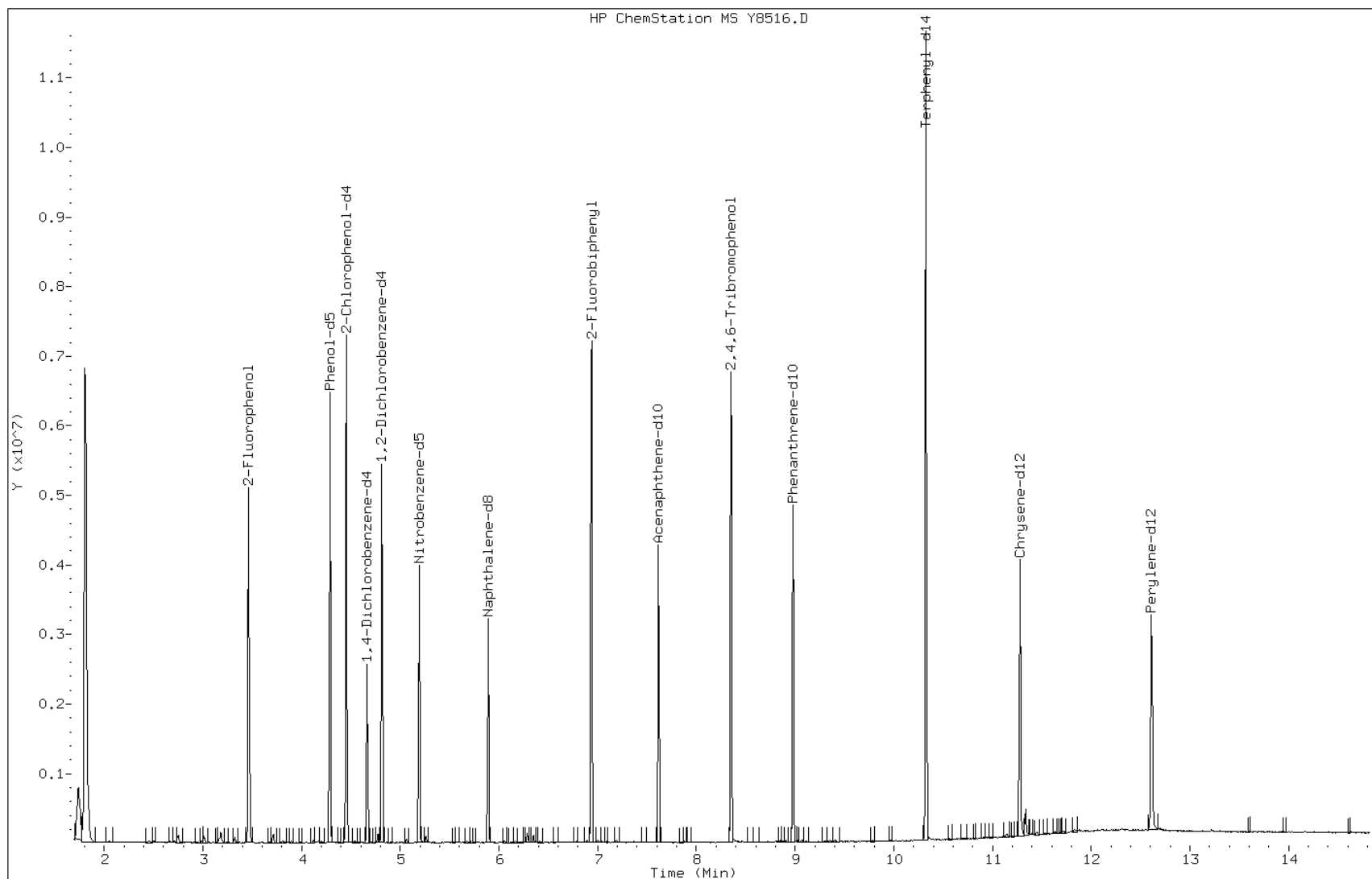
Date: 29-JUN-2012 14:13

Client ID: DITCH-SCHULTZ

Instrument: Y.i

Sample Info: 280-30378-a-2-a

Operator: hoffmanm



Data File: Y8516.D

Date: 29-JUN-2012 14:13

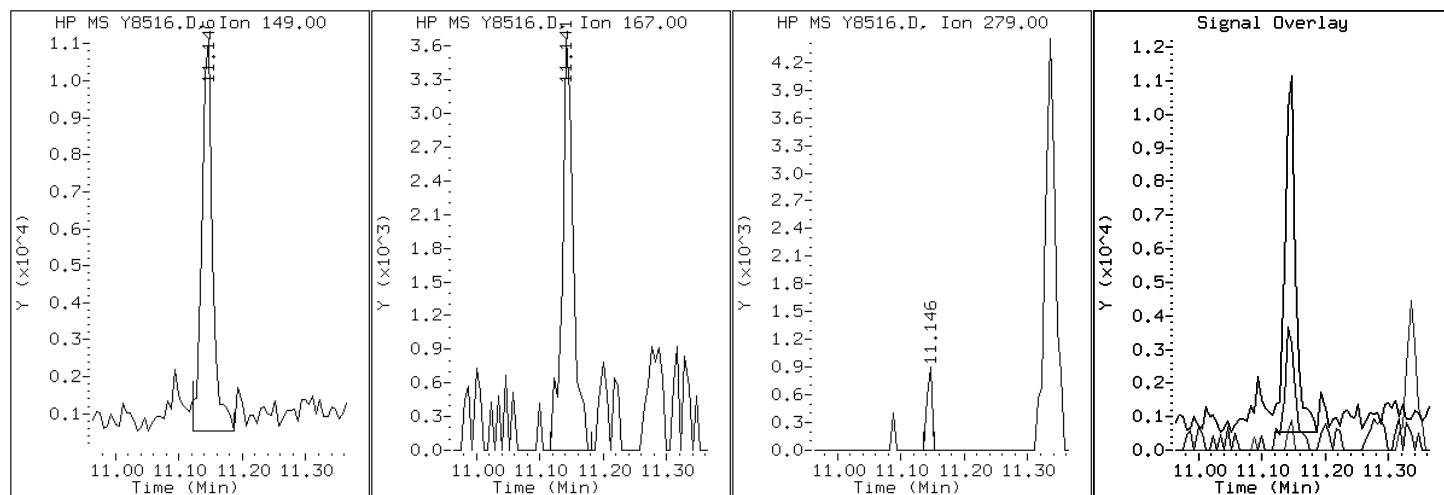
Client ID: DITCH-SCHULTZ

Instrument: Y.i

Sample Info: 280-30378-a-2-a

Operator: hoffmann

162 Bis(2-ethylhexyl) phthalate



Method 8015B – GRO

Gasoline Range Organics (GC) by
Method 8015B

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1
SDG No.: _____
Client Sample ID: WELL-SCHULTZ Lab Sample ID: 280-30378-1
Matrix: Water Lab File ID: 115F0601.D
Analysis Method: 8015B Date Collected: 06/22/2012 11:11
Sample wt/vol: 5(mL) Date Analyzed: 06/26/2012 15:41
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX 502.2 (60) ID: 0.53(mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 125760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics (GRO)-C6-C10	ND		25	10

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	a,a,a-Trifluorotoluene	90		82-110

TestAmerica

Method 8015 GRO

Data file : \\DenSvr03\Public\chem\GCV\GC_K.i\0626121.B\115F0601.D
Lab Smp Id: 280-30378-L-1 Client Smp ID: WELL-SCHULTZ
Inj Date : 26-JUN-2012 15:41
Operator : AMB Inst ID: GC_K.i
Smp Info : 280-30378-L-1
Misc Info : 280-30378-L-1
Comment : 8015 GRO
Method : \\DenSvr03\Public\chem\GCV\GC_K.i\0626121.B\8015.m
Meth Date : 26-Jun-2012 12:50 byla Quant Type: ESTD
Cal Date : 11-APR-2012 19:01 Cal File: 202F0801.D
Als bottle: 115
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: GRO.A.01.sub
Target Version: 4.14
Processing Host: DENPC382

Concentration Formula: Amt * DF * Vp/Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	final purge volume (ml)
Vs	5.000	vlm of sample added to purge vessel (ml)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
Compounds	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL
					(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====
\$ 2 Trifluorotoluene	10.586	10.566	0.020	96544	26.8544	26.8544
S 3 GRO - C6 to C10	6.477-22.423			5651	5.32295	5.32295(a)
4 1-Chloro-4-Fluorobenzene	15.393	15.370	0.023	96436	27.9155	27.9155
\$ 1 Chlorobenzene	15.730	15.706	0.024	112383	26.4131	26.4131

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: 115F0601.D

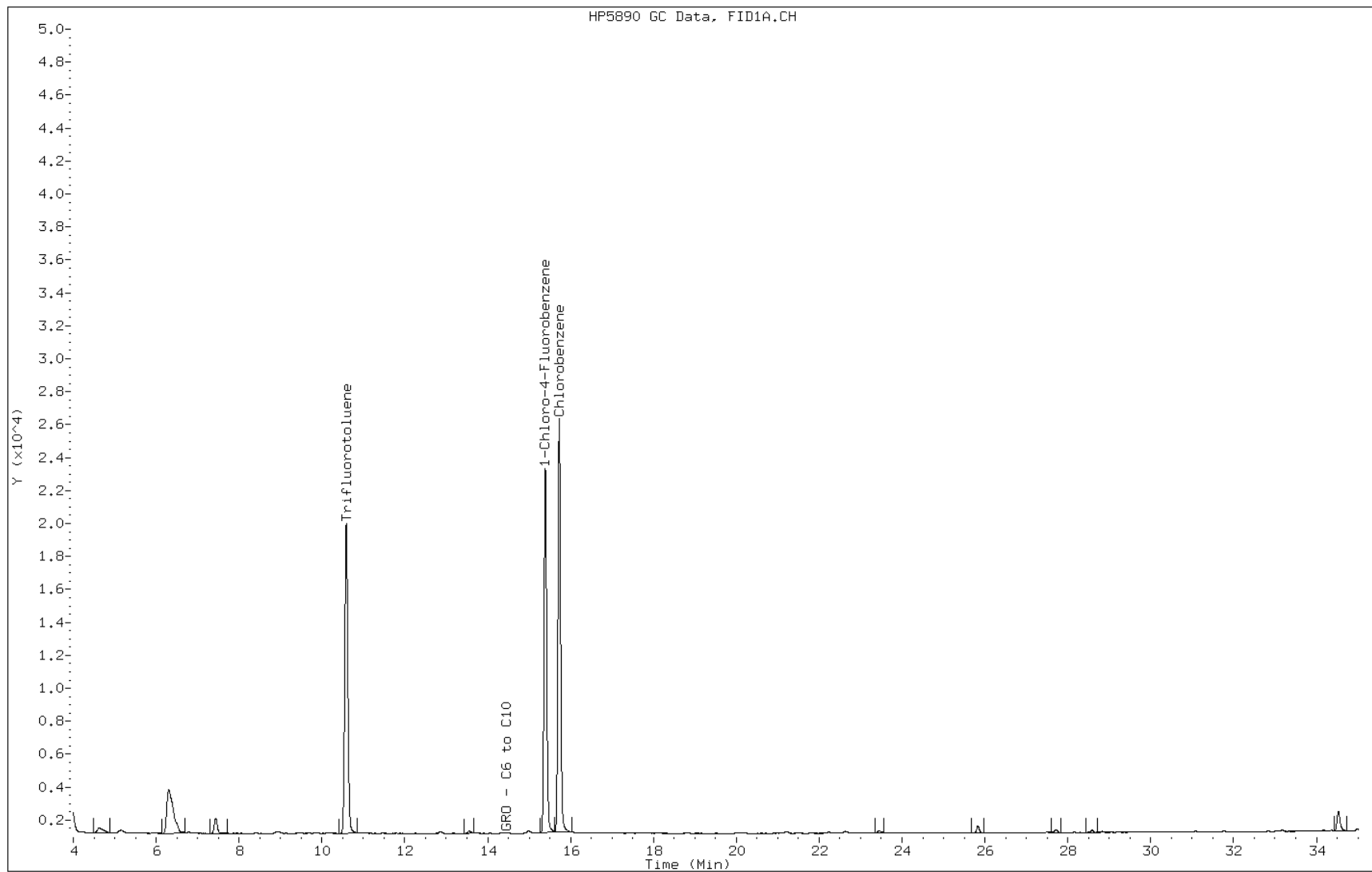
Date: 26-JUN-2012 15:41

Client ID: WELL-SCHULTZ

Instrument: GC_K.i

Sample Info: 280-30378-L-1

Operator: AMB



FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1
SDG No.: _____
Client Sample ID: DITCH-SCHULTZ Lab Sample ID: 280-30378-2
Matrix: Water Lab File ID: 210F1701.D
Analysis Method: 8015B Date Collected: 06/22/2012 12:50
Sample wt/vol: 5(mL) Date Analyzed: 06/26/2012 23:29
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX 502.2 (60) ID: 0.53(mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 125760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Gasoline Range Organics (GRO)-C6-C10	ND		25	10

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	a,a,a-Trifluorotoluene	95		82-110

TestAmerica

Method 8015 GRO

Data file : \\DenSvr03\Public\chem\GCV\GC_K.i\0626121.B\210F1701.D
Lab Smp Id: 280-30378-K-2 Client Smp ID: DITCH-SCHULTZ
Inj Date : 26-JUN-2012 23:29
Operator : AMB Inst ID: GC_K.i
Smp Info : 280-30378-K-2
Misc Info : 280-30378-K-2
Comment : 8015 GRO
Method : \\DenSvr03\Public\chem\GCV\GC_K.i\0626121.B\8015.m
Meth Date : 26-Jun-2012 12:50 byla Quant Type: ESTD
Cal Date : 11-APR-2012 19:01 Cal File: 202F0801.D
Als bottle: 210
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: GRO.A.01.sub
Target Version: 4.14
Processing Host: DENPC382

Concentration Formula: Amt * DF * Vp/Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	final purge volume (ml)
Vs	5.000	vlm of sample added to purge vessel (ml)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
Compounds	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL
					(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====
\$ 2 Trifluorotoluene	10.540	10.566	-0.026	102212	28.4389	28.4389
S 3 GRO - C6 to C10	6.477-22.423			3794	4.67471	4.67471(a)
4 1-Chloro-4-Fluorobenzene	15.343	15.370	-0.027	97984	28.3595	28.3595
\$ 1 Chlorobenzene	15.680	15.706	-0.026	116832	27.4436	27.4436

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: 210F1701.D

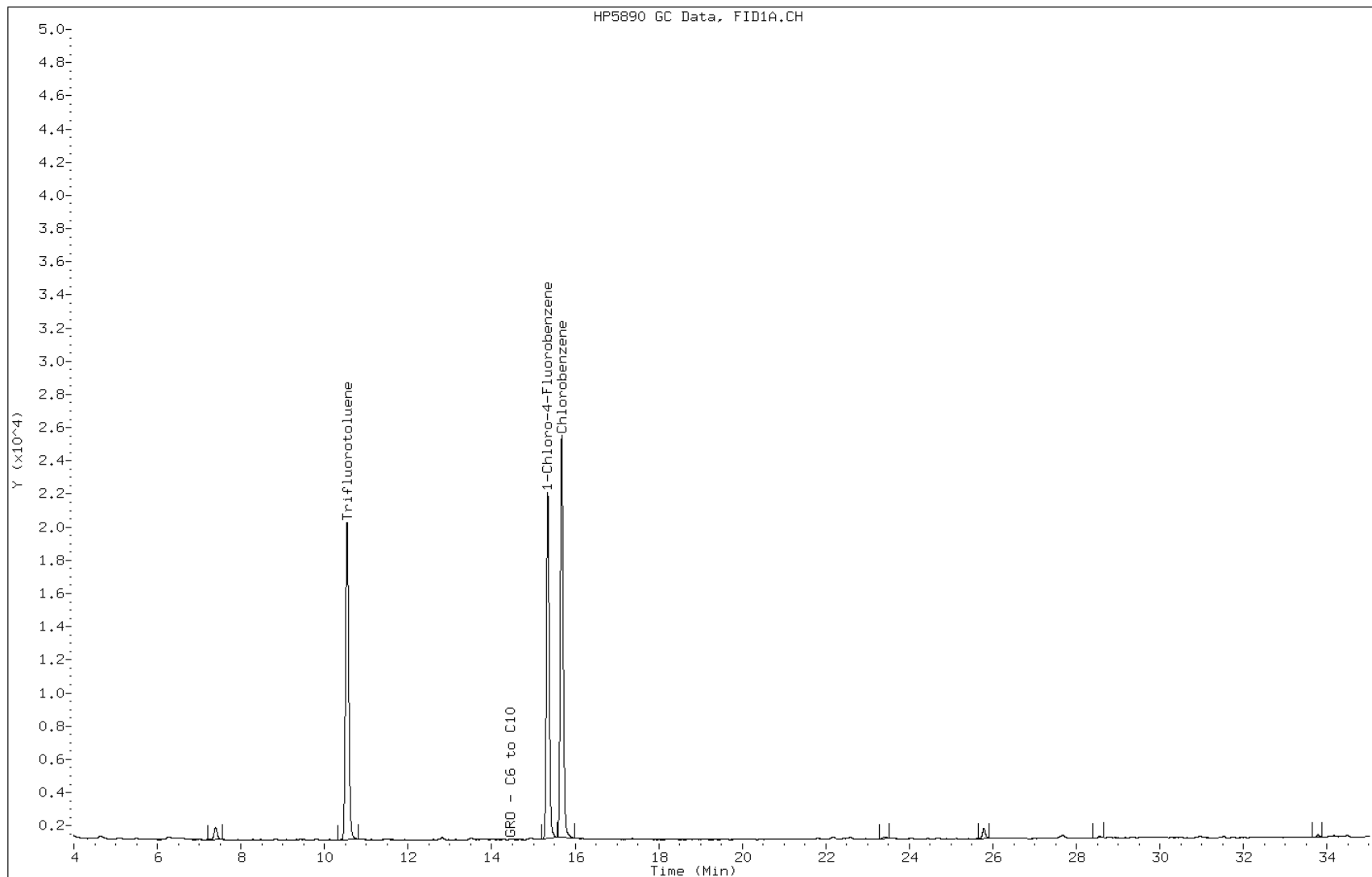
Date: 26-JUN-2012 23:29

Client ID: DITCH-SCHULTZ

Instrument: GC_K.i

Sample Info: 280-30378-K-2

Operator: AMB



Method RSK-175

Dissolved Gases (GC) by Method
RSK_175

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 280-30378-1
SDG No.: _____
Client Sample ID: WELL-SCHULTZ Lab Sample ID: 280-30378-1
Matrix: Water Lab File ID: rsk070212_009.d
Analysis Method: RSK-175 Date Collected: 06/22/2012 11:11
Sample wt/vol: 1(mL) Date Analyzed: 07/02/2012 16:25
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.53(mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 83033 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-84-0	Ethane	0.40	J	2.0	0.30
74-82-8	Methane	2.0		1.0	0.36
74-98-6	Propane	ND		2.0	0.75

TestAmerica Houston

Data file : \\housvr4\chem\FID14.i\070212.b\rsk070212_009.d
Lab Smp Id: 280-30378-P-1 Client Smp ID: WELL-SCHULTZ
Inj Date : 02-JUL-2012 16:25
Operator : lamj Inst ID: FID14.i
Smp Info : 280-30378-P-1
Misc Info : 280-30378-P-1
Comment :
Method : \\housvr4\chem\FID14.i\070212.b\RSK175.m
Meth Date : 14-Jun-2012 17:10 Quant Type: ESTD
Cal Date : 28-MAR-2012 15:34 Cal File: rsk032812_006.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: HOUSVR3

Concentration Formula: Amt * DF * Vt/Va * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Final Volume
Va	10.000	Aliquot Volume
Cpnd Variable		Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (mg/L)
1 Methane	0.966	0.914	0.052	22981	1.98223	1.98(M)
2 Ethane	1.150	1.097	0.053	2816	0.39512	0.395(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: rsk070212_009.d

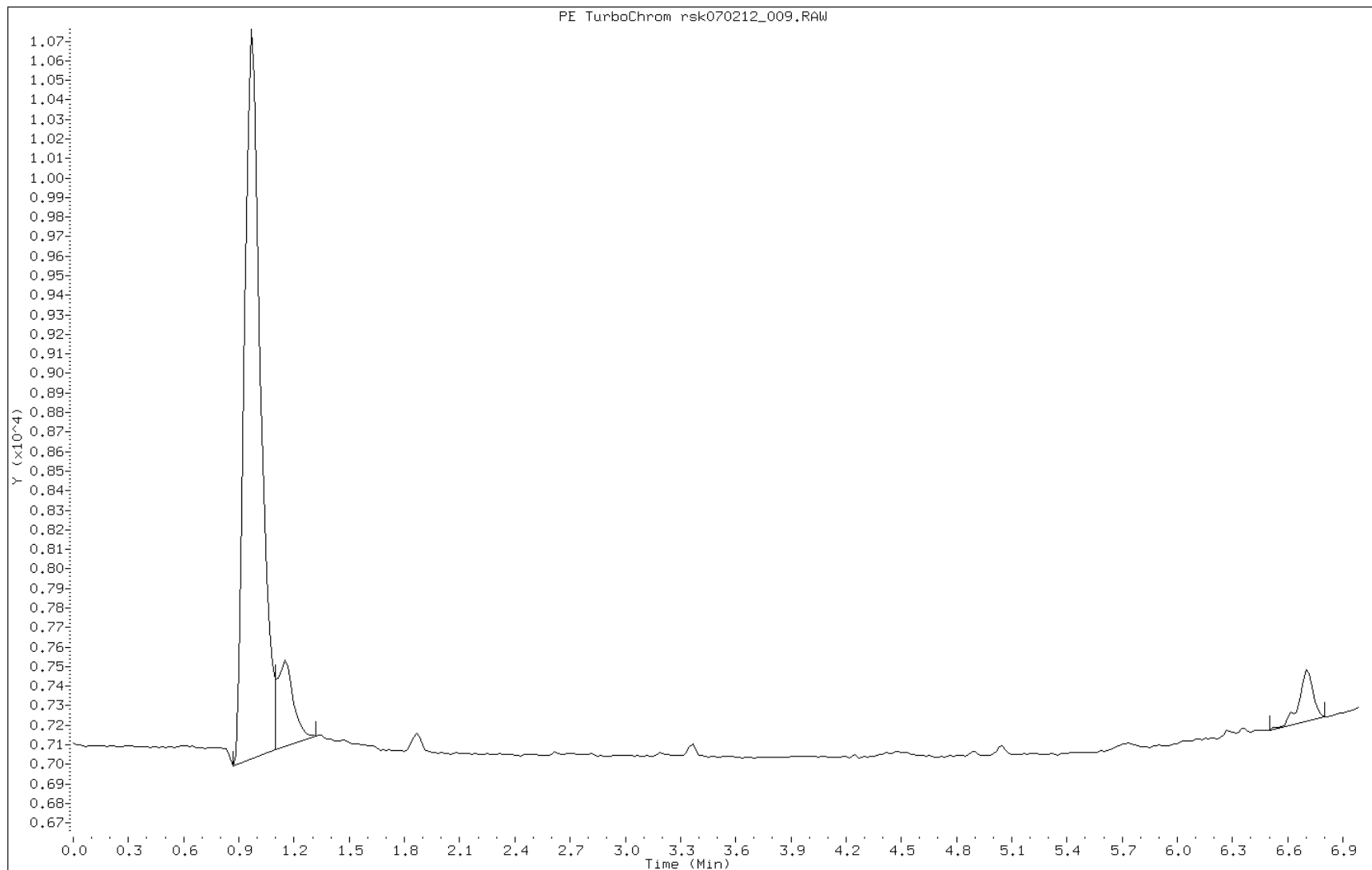
Date: 02-JUL-2012 16:25

Client ID: WELL-SCHULTZ

Instrument: FID14.i

Sample Info: 280-30378-P-1

Operator: lamj



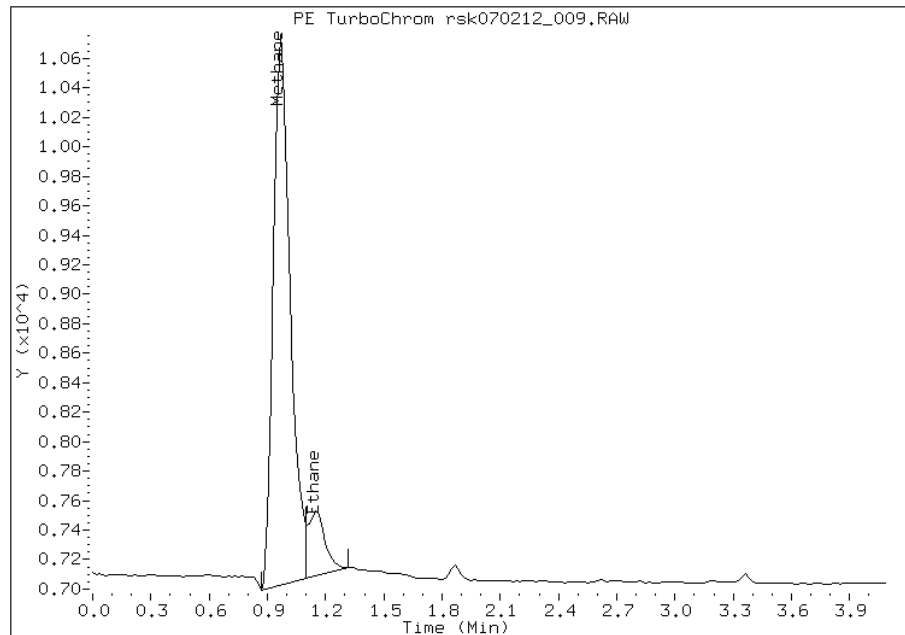
Manual Integration Report

Data File: rsk070212_009.d
Inj. Date and Time: 02-JUL-2012 16:25
Instrument ID: FID14.i
Client ID: WELL-SCHULTZ
Compound: 2 Ethane
CAS #: 74-84-0
Report Date: 07/03/2012

Processing Integration Results

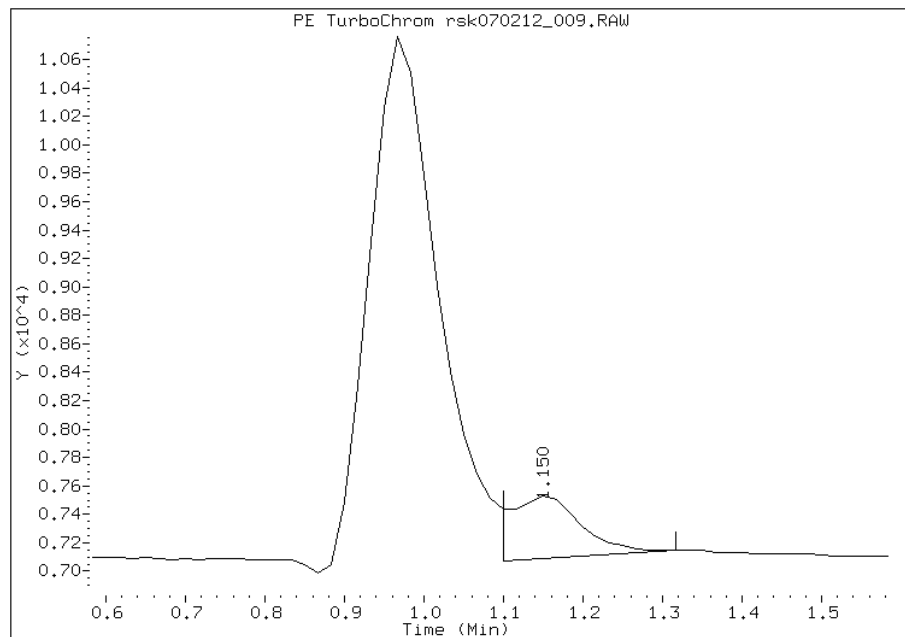
Not Detected

Expected RT: 1.10



Manual Integration Results

RT: 1.15
Response: 2816
Amount: 0.40
Conc: 0.40



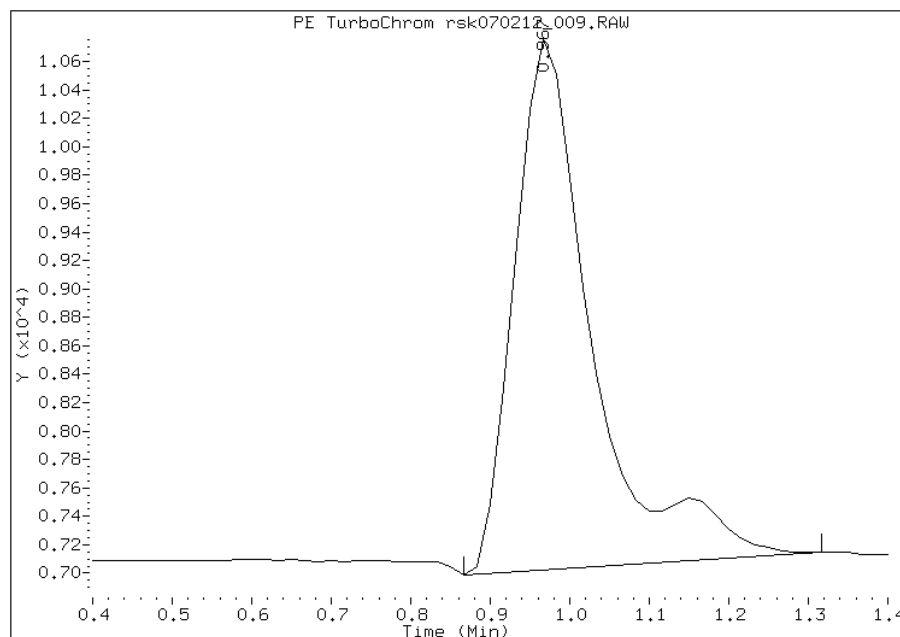
Manually Integrated By: lamj
Modification Date:
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: rsk070212_009.d
Inj. Date and Time: 02-JUL-2012 16:25
Instrument ID: FID14.i
Client ID: WELL-SCHULTZ
Compound: 1 Methane
CAS #: 74-82-8
Report Date: 07/03/2012

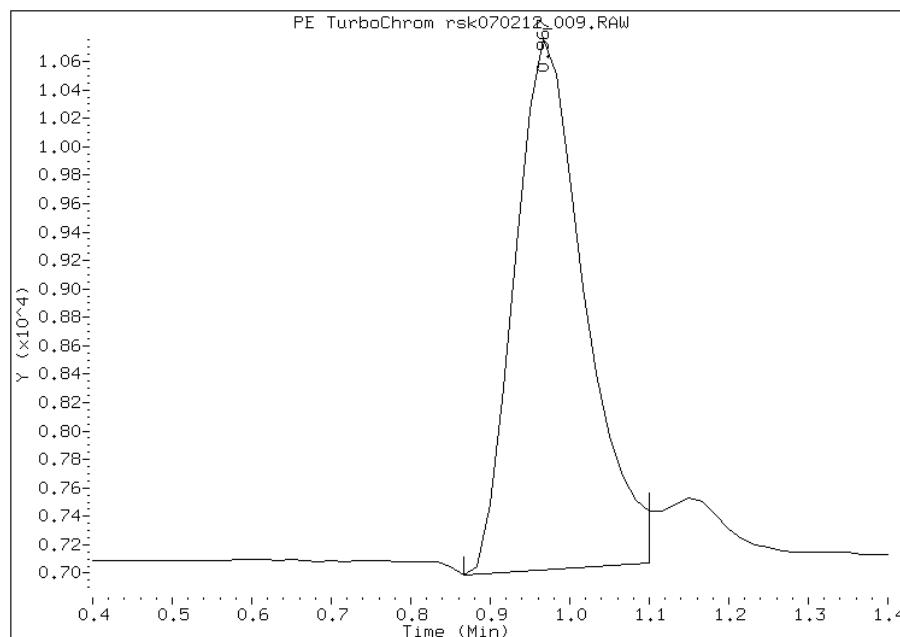
Processing Integration Results

RT: 0.97
Response: 25473
Amount: 2.38
Conc: 2.38



Manual Integration Results

RT: 0.97
Response: 22981
Amount: 1.98
Conc: 1.98



Manually Integrated By: lamj
Modification Date: 03-Jul-2012 15:59
Manual Integration Reason: Peak Integrated Incorrectly

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 280-30378-1
SDG No.: _____
Client Sample ID: DITCH-SCHULTZ Lab Sample ID: 280-30378-2
Matrix: Water Lab File ID: rsk070212_010.d
Analysis Method: RSK-175 Date Collected: 06/22/2012 12:50
Sample wt/vol: 1(mL) Date Analyzed: 07/02/2012 16:37
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.53(mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 83033 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-84-0	Ethane	ND		2.0	0.30
74-82-8	Methane	2.9		1.0	0.36
74-98-6	Propane	ND		2.0	0.75

TestAmerica Houston

Data file : \\housvr4\chem\FID14.i\070212.b\rsk070212_010.d
Lab Smp Id: 280-30378-P-2 Client Smp ID: DITCH-SCHULTZ
Inj Date : 02-JUL-2012 16:37
Operator : lamj Inst ID: FID14.i
Smp Info : 280-30378-P-2
Misc Info : 280-30378-P-2
Comment :
Method : \\housvr4\chem\FID14.i\070212.b\RSK175.m
Meth Date : 14-Jun-2012 17:10 Quant Type: ESTD
Cal Date : 28-MAR-2012 15:34 Cal File: rsk032812_006.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: HOUSVR3

Concentration Formula: Amt * DF * Vt/Va * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Final Volume
Va	10.000	Aliquot Volume
Cpnd Variable		Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (mg/L)
1 Methane	0.916	0.914	0.002	28707	2.89774	2.90(M)
2 Ethane	1.116	1.097	0.019	2000	0.28062	0.281(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: rsk070212_010.d

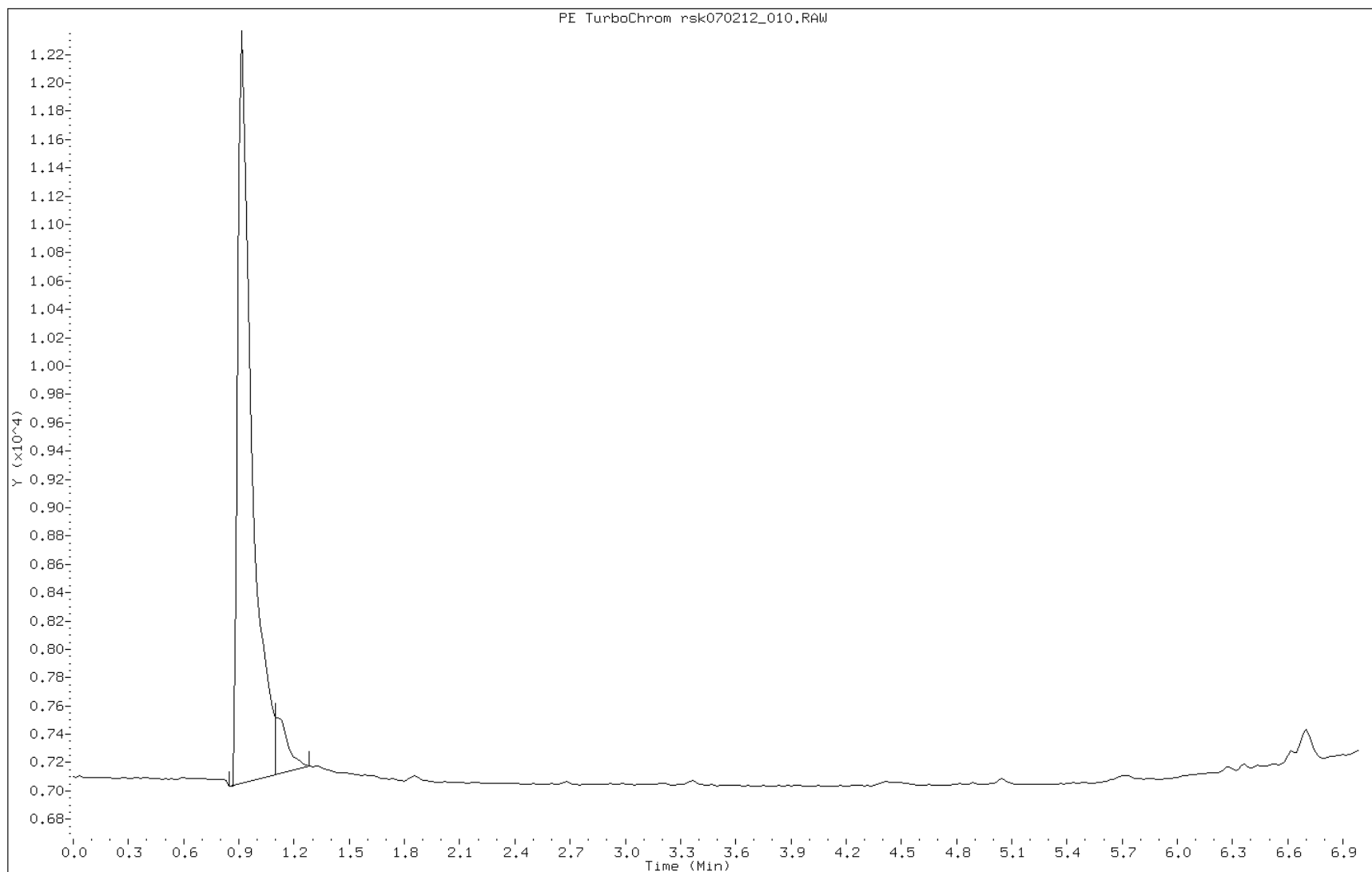
Date: 02-JUL-2012 16:37

Client ID: DITCH-SCHULTZ

Instrument: FID14.i

Sample Info: 280-30378-P-2

Operator: lamj



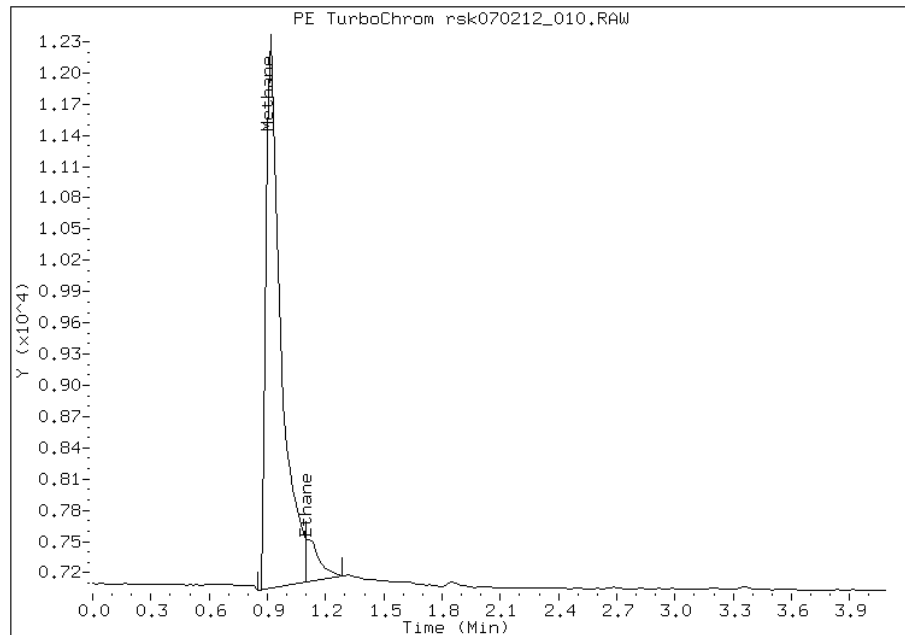
Manual Integration Report

Data File: rsk070212_010.d
Inj. Date and Time: 02-JUL-2012 16:37
Instrument ID: FID14.i
Client ID: DITCH-SCHULTZ
Compound: 2 Ethane
CAS #: 74-84-0
Report Date: 07/03/2012

Processing Integration Results

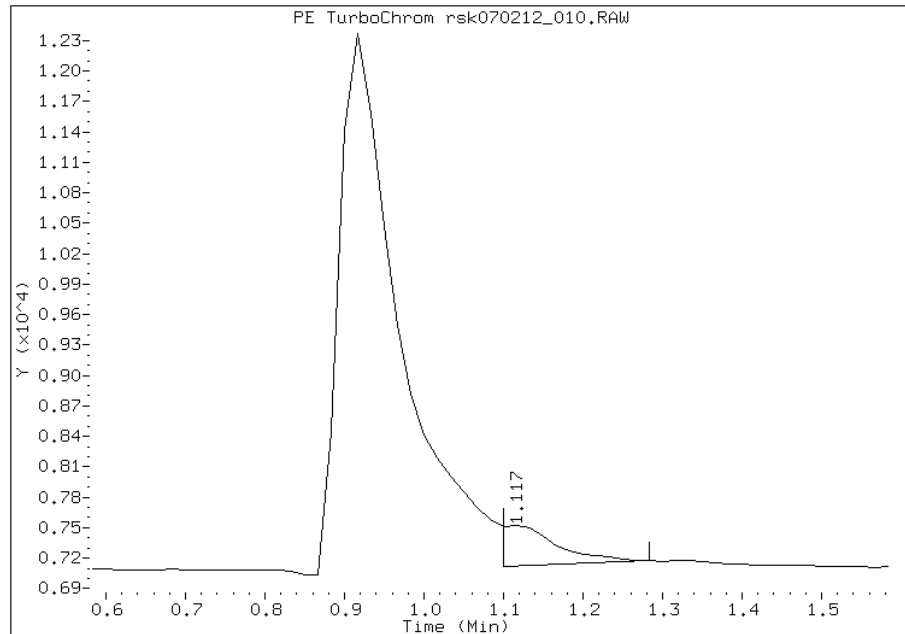
Not Detected

Expected RT: 1.10



Manual Integration Results

RT: 1.12
Response: 2000
Amount: 0.28
Conc: 0.28



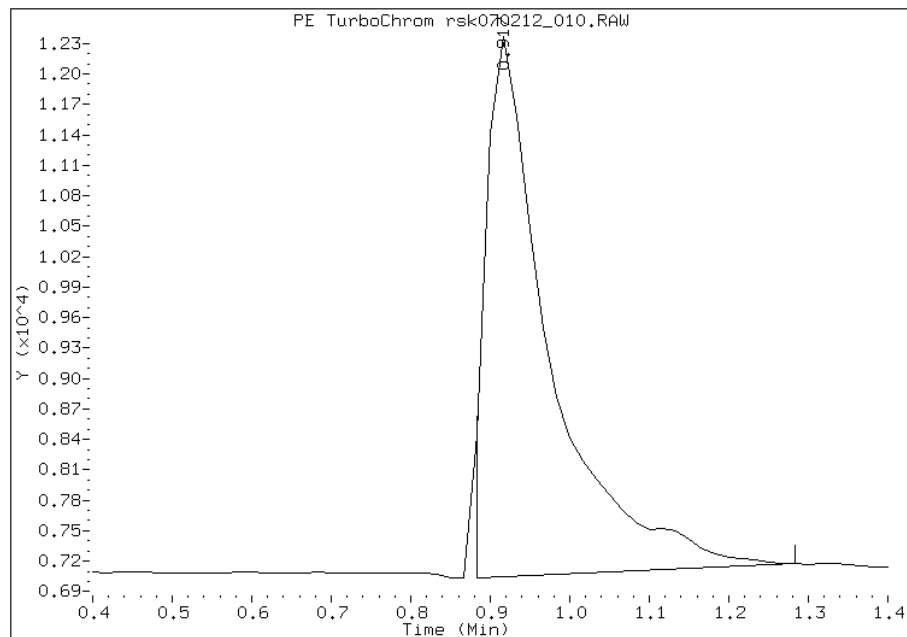
Manually Integrated By: lamj
Modification Date:
Manual Integration Reason: Peak Integrated Incorrectly

Manual Integration Report

Data File: rsk070212_010.d
Inj. Date and Time: 02-JUL-2012 16:37
Instrument ID: FID14.i
Client ID: DITCH-SCHULTZ
Compound: 1 Methane
CAS #: 74-82-8
Report Date: 07/03/2012

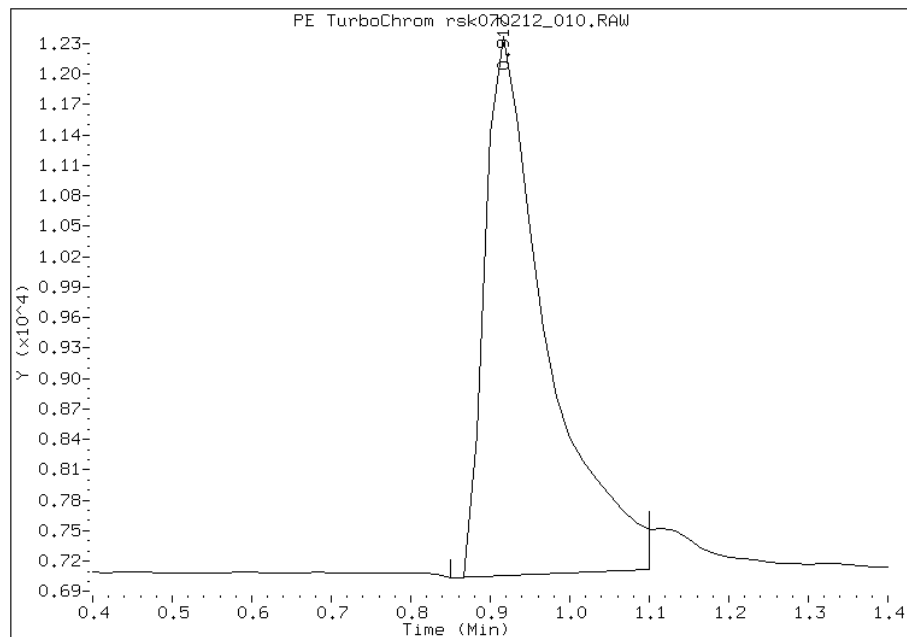
Processing Integration Results

RT: 0.92
Response: 29757
Amount: 3.07
Conc: 3.07



Manual Integration Results

RT: 0.92
Response: 28707
Amount: 2.90
Conc: 2.90



Manually Integrated By: lamj
Modification Date: 03-Jul-2012 15:59
Manual Integration Reason: Peak Integrated Incorrectly

Method 8015B – DRO

Diesel Range Organics (DRO) (GC) by
Method 8015B

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1
SDG No.: _____
Client Sample ID: WELL-SCHULTZ Lab Sample ID: 280-30378-1
Matrix: Water Lab File ID: 018F1801.D
Analysis Method: 8015B Date Collected: 06/22/2012 11:11
Extraction Method: 3510C Date Extracted: 06/25/2012 19:06
Sample wt/vol: 1055.3(mL) Date Analyzed: 06/27/2012 20:18
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 125910 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00255	C10-C36	ND		0.47	0.053

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	76		50-115
630-02-4	n-Octacosane	97		26-152

Data File: \\DenSvr03\Public\chem\GCS\GC_U2.i\0627121.B\018F1801.D
 Report Date: 28-Jun-2012 08:29

TestAmerica

SW846 8015 mod.

Data file : \\DenSvr03\Public\chem\GCS\GC_U2.i\0627121.B\018F1801.D
 Lab Smp Id: 280-30378-C-1-A Client Smp ID: WELL-SCHULTZ
 Inj Date : 27-JUN-2012 20:18
 Operator : MB Inst ID: GC_U2.i
 Smp Info : 280-1486354,78-1
 Misc Info : 280-30378-C-1-A
 Comment : DEN-GC-0002
 Method : \\DenSvr03\Public\chem\GCS\GC_U2.i\0627121.B\DR01.m
 Meth Date : 27-Jun-2012 16:55 pavlakoa Quant Type: ESTD
 Cal Date : 26-APR-2012 17:36 Cal File: 010F1001.D
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: C10-C36sub.sub
 Target Version: 4.14
 Processing Host: DENPC064

Concentration Formula: Amt * DF * Vf / Vs * * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	Final Extract Volume (uL)
Vs	1055.300	Volume of Sample Extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ug/ml)	FINAL (ug/L)
\$ 1 o-Terphenyl	8.174	8.180	-0.006	35363	15.2030	14.41
S 9 C10-C36	3.390-13.340			22913	14.9859	14.20
S 8 C10-C28	3.390-11.360			22099	14.4636	13.70
\$ 11 n-Octacosane	11.344	11.349	-0.005	33197	19.4665	18.45

Data File: 018F1801.D

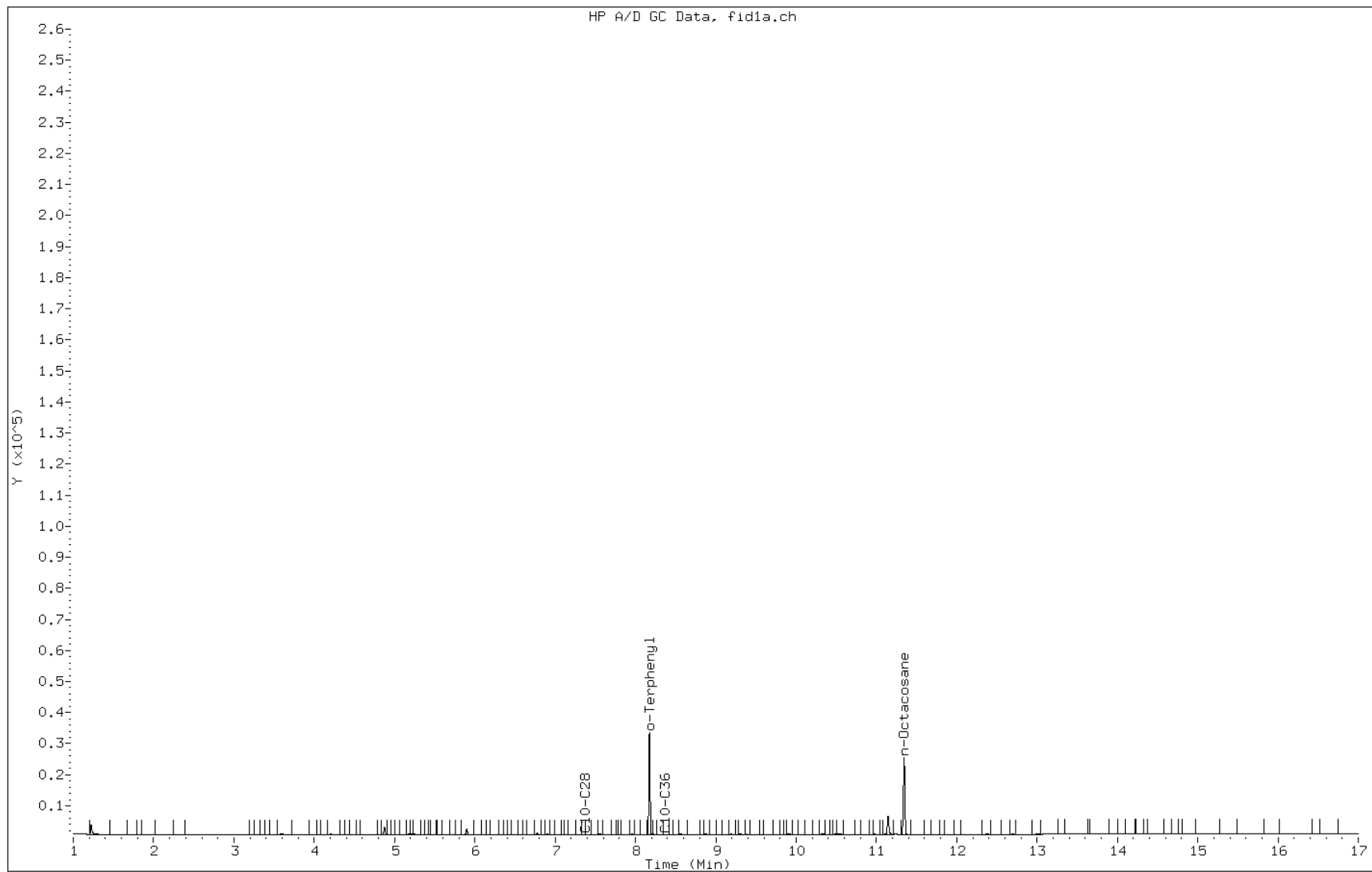
Date: 27-JUN-2012 20:18

Client ID: WELL-SCHULTZ

Instrument: GC_U2.i

Sample Info: 280-1486354,78-1

Operator: MB



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-30378-1
SDG No.: _____
Client Sample ID: DITCH-SCHULTZ Lab Sample ID: 280-30378-2
Matrix: Water Lab File ID: 019F1901.D
Analysis Method: 8015B Date Collected: 06/22/2012 12:50
Extraction Method: 3510C Date Extracted: 06/25/2012 19:06
Sample wt/vol: 1052.7 (mL) Date Analyzed: 06/27/2012 20:42
Con. Extract Vol.: 1000 (uL) Dilution Factor: 1
Injection Volume: 1 (uL) GC Column: RTX-1 (30.32) ID: 0.25 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 125910 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00255	C10-C36	ND		0.47	0.053

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	74		50-115
630-02-4	n-Octacosane	98		26-152

Data File: \\DenSvr03\Public\chem\GCS\GC_U2.i\0627121.B\019F1901.D
Report Date: 28-Jun-2012 08:37

TestAmerica

SW846 8015 mod.

Data file : \\DenSvr03\Public\chem\GCS\GC_U2.i\0627121.B\019F1901.D
Lab Smp Id: 280-30378-B-2-A Client Smp ID: DITCH-SCHULTZ
Inj Date : 27-JUN-2012 20:42
Operator : MB Inst ID: GC_U2.i
Smp Info : 280-1486355,2
Misc Info : 280-30378-B-2-A
Comment : DEN-GC-0002
Method : \\DenSvr03\Public\chem\GCS\GC_U2.i\0627121.B\DR01.m
Meth Date : 28-Jun-2012 08:29 target Quant Type: ESTD
Cal Date : 26-APR-2012 17:36 Cal File: 010F1001.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: C10-C36sub.sub
Target Version: 4.14
Processing Host: DENPC064

Concentration Formula: $\text{Amt} * \text{DF} * \text{Vf} / \text{Vs} * * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	Final Extract Volume (uL)
Vs	1052.700	Volume of Sample Extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)
\$ 1 o-Terphenyl	8.174	8.180	-0.006	34510	14.8363	14.09(M)
S 9 C10-C36	3.390-13.340			68321	44.6844	42.45(M)
S 8 C10-C28	3.390-11.360			42379	27.7367	26.35(M)
\$ 11 n-Octacosane	11.344	11.349	-0.005	33414	19.5937	18.61(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: 019F1901.D

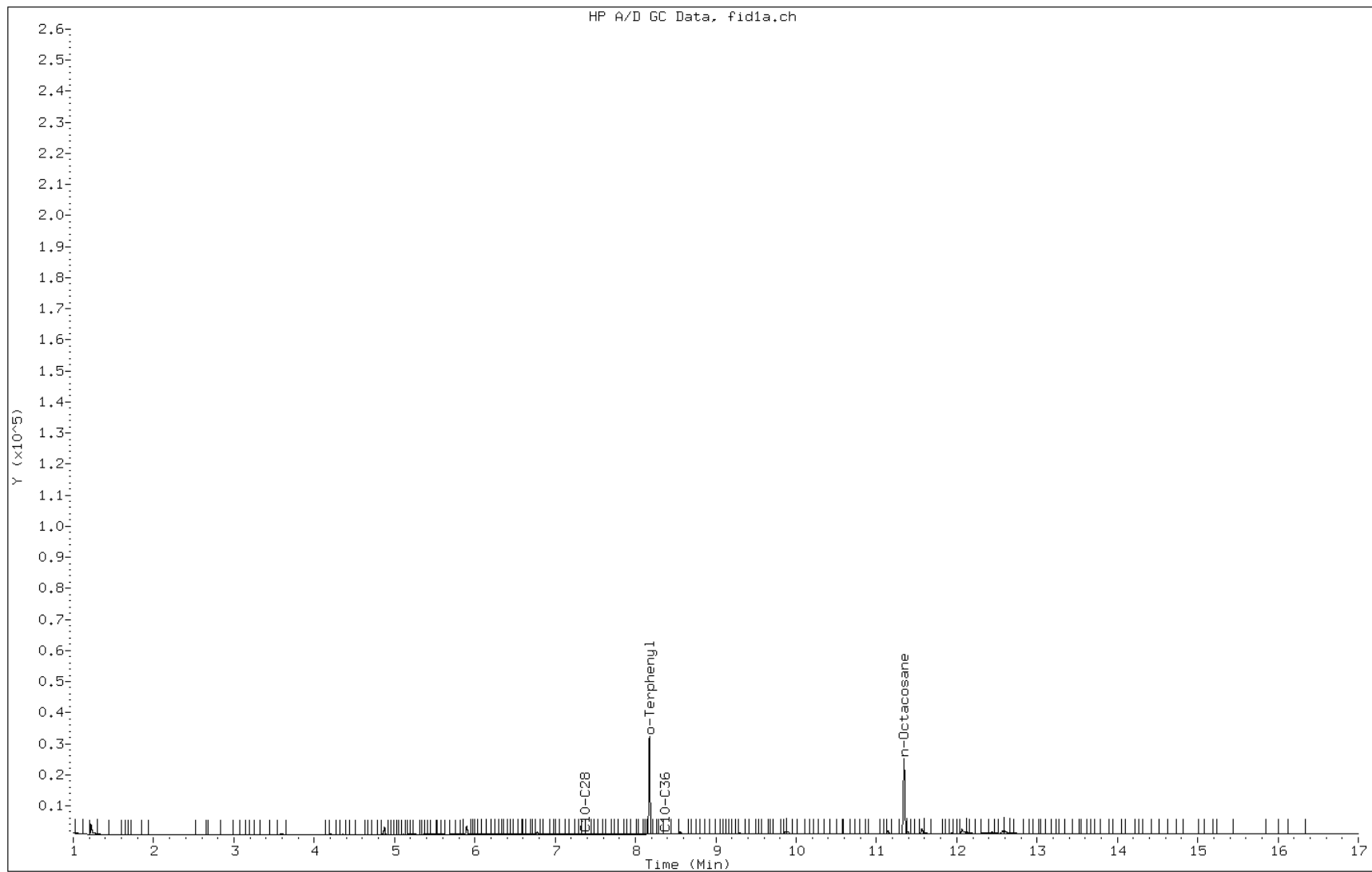
Date: 27-JUN-2012 20:42

Client ID: DITCH-SCHULTZ

Instrument: GC_U2.i

Sample Info: 280-1486355,2

Operator: MB

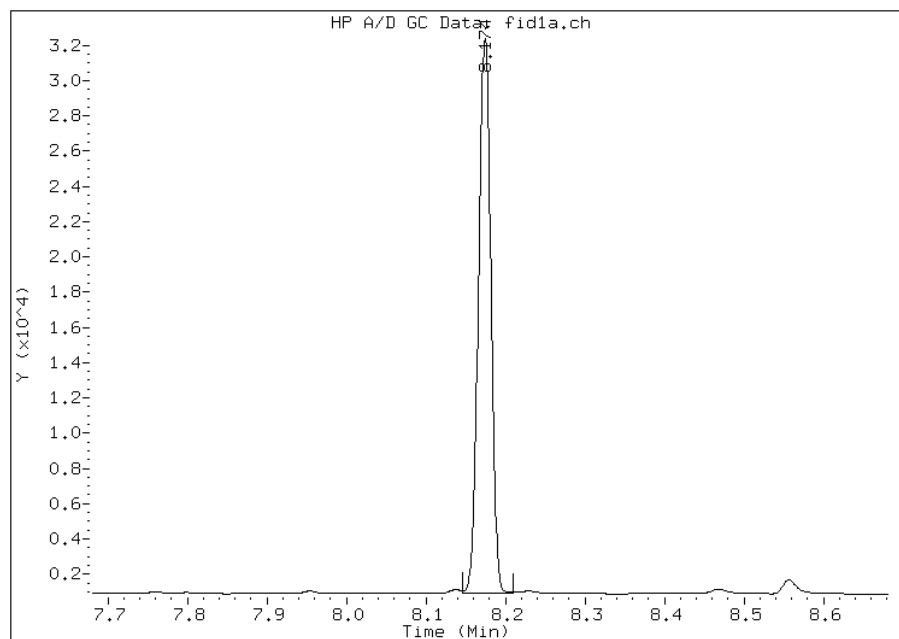


Manual Integration Report

Data File: 019F1901.D
Inj. Date and Time: 27-JUN-2012 20:42
Instrument ID: GC_U2.i
Client ID: DITCH-SCHULTZ
Compound: 1 o-Terphenyl
CAS #: 84-15-1
Report Date: 06/28/2012

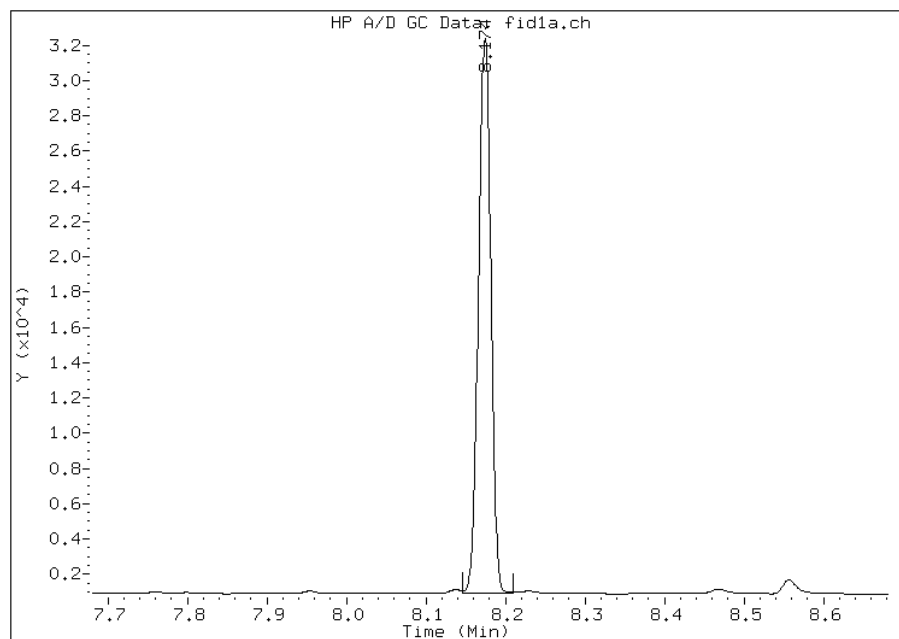
Processing Integration Results

RT: 8.17
Response: 34694
Amount: 14.92
Conc: 14.17



Manual Integration Results

RT: 8.17
Response: 34510
Amount: 14.84
Conc: 14.09



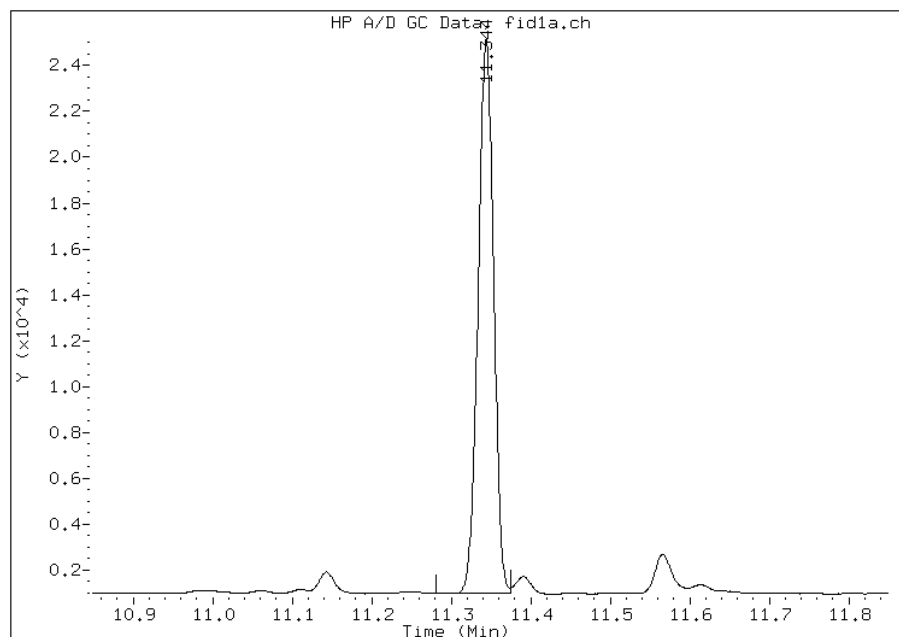
Manually Integrated By: pavlakoa
Modification Date: 28-Jun-2012 08:37
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 019F1901.D
Inj. Date and Time: 27-JUN-2012 20:42
Instrument ID: GC_U2.i
Client ID: DITCH-SCHULTZ
Compound: 11 n-Octacosane
CAS #: 630-02-4
Report Date: 06/28/2012

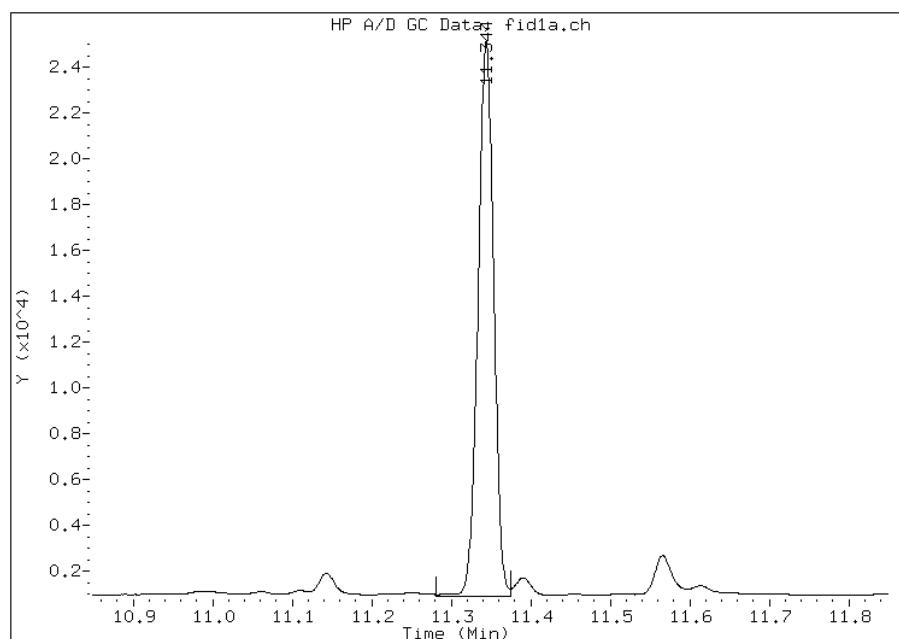
Processing Integration Results

RT: 11.34
Response: 33045
Amount: 19.38
Conc: 18.41



Manual Integration Results

RT: 11.34
Response: 33414
Amount: 19.59
Conc: 18.61



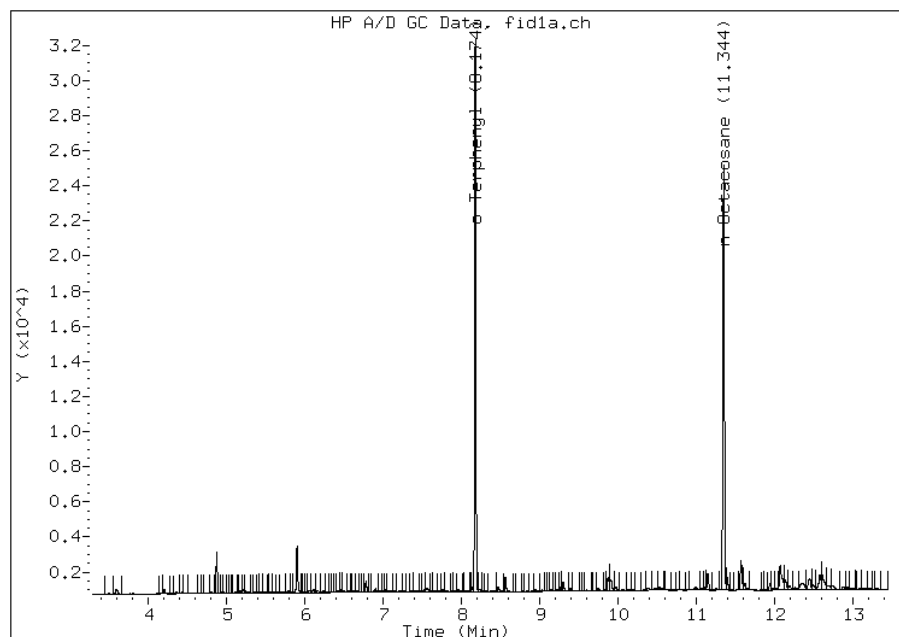
Manually Integrated By: pavlakoa
Modification Date: 28-Jun-2012 08:37
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: 019F1901.D
Inj. Date and Time: 27-JUN-2012 20:42
Instrument ID: GC_U2.i
Client ID: DITCH-SCHULTZ
Compound: 9 C10-C36
CAS #: STL00255
Report Date: 06/28/2012

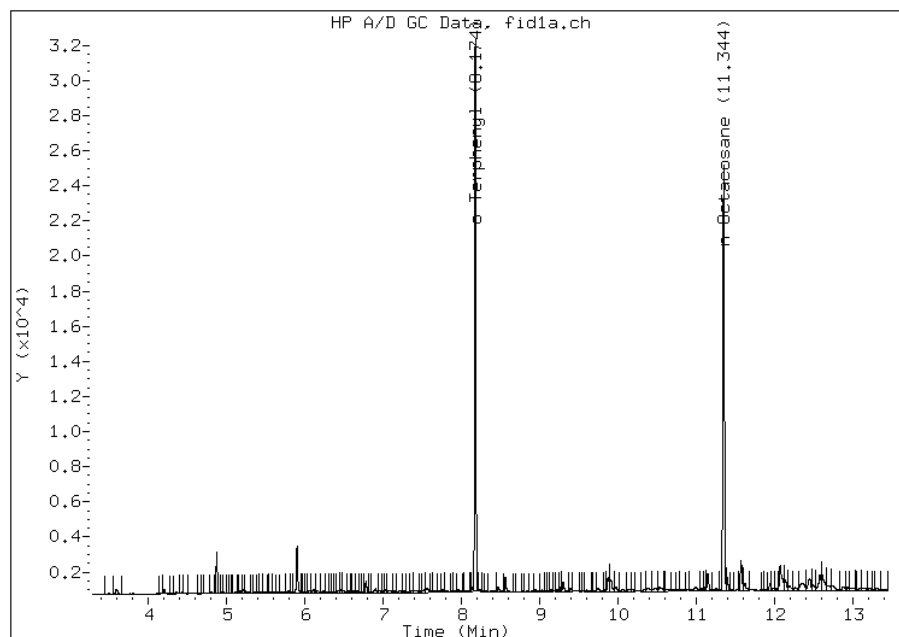
Processing Integration Results

RT: 8.37
Response: 49182
Amount: 32.17
Conc: 30.56



Manual Integration Results

RT: 8.37
Response: 68321
Amount: 44.68
Conc: 42.45



Manually Integrated By: pavlakoa
Modification Date: 28-Jun-2012 08:37
Manual Integration Reason: Baseline Event

Subcontract Data

Shipping and Receiving Documents

Sampler ID DC4

TestAmerica

Chain of Custody Record

Revised COC

Temperatures on Receipt 2.4 6/23

Drinking Water? Yes ☐ No ☒ FP

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0509)

Client	<u>COGCC</u>	Project Manager	<u>Linda Spyr O'Rourke</u>	Date	<u>June 22, 2012</u>	Chain of Custody Number	<u>1611156</u>
Address	<u>707 Wapiti Court</u>	Telephone Number (Area Code)/Fax Number	<u>(970) 625-2491</u>	Lab Number			
City	<u>Rifle</u>	State	<u>CO</u>	Zip Code	<u>81650</u>		

Project Name and Location (State)	<u>Kent Schultz Silt, CO</u>	Site Contact	<u>Joe Egly</u>	Lab Contact	<u>Joe Egly</u>
Contract/Purchase Order/Quote No.	<u>17802</u>	Carrier/Vehicle Number	<u>Red EX</u>		

Contract/Purchase Order/Quote No.			17802		Matrix					Containers & Preservatives					Conditions of Receipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)			Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	
Well -Schultz			6/23/12	11:11					81	1		9			TOC
Ditch -Schultz			6/22/12	12:50					81	1		9			TOC
Laboratory, please modify sample name to reflect well owner, as indicated above. Thanks															
Linda Spyr O'Rourke			2012.06.25		10:55:11 -06'00'										

Possible Hazard Identification	<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	Months	(A fee may be assessed if samples are retained longer than 1 month)
--------------------------------	-------------------------------------	------------------------------------	--	-----------------------------------	---	---	--	--------------------------------------	--------	---

Turn Around Time Required	<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input type="checkbox"/> Other	<u>Standard</u>				
1. Relinquished By	<u>DC4</u>	Date	<u>6/22/12</u>	Time	<u>16:00</u>	1. Received By	<u>[Signature]</u>	Date	<u>6/23/12</u>	Time	<u>0900</u>
2. Relinquished By		Date		Time		2. Received By	<u>[Signature]</u>	Date		Time	
3. Relinquished By		Date		Time		3. Received By		Date		Time	

Comments	
----------	--

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Slays with the Sample; PINK - Field Copy

Sampler ID DC11
 Temperature on Receipt 2.4
 Drinking Water? Yes ☐ No ☐

6/23/2006
 41.8
 22
 FID

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Number
161156

Page 1 of 1

[illegible]Special Instructions/
Conditions of Receipt[illegible]

Possible Hazard Identification	<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input checked="" type="checkbox"/> Poison B <input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	(A fee may be assessed if samples are retained longer than 1 month)
Sample Disposal			

Turn Around Time Required	QC Requirements (Specify)

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other Standard

1. Relinquished By Date Time

1. Received By Date Time

2. Relinquished By	Date	Time	2. Received By	Date	Time
DCY	6/22/12	16:00	[Signature]	6/23/12	0900

3. Relinquished By	Date	Time	3. Received By	Date	Time

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Login Number: 30378

List Source: TestAmerica Denver

List Number: 1

Creator: Paulsen, Lindsay T

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

Login Sample Receipt Checklist

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-30378-1

Login Number: 30378

List Number: 1

Creator: Capps, Dana

List Source: TestAmerica Houston

List Creation: 06/26/12 10:03 AM

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

Attachment 4

Interpretations of Drinking Water Quality for Colorado

Test Name	Lab Result	Interpretation	Excellent	Satisfactory	Additional Comments
1) Routine Water Analysis					
Alkalinity as CaCO ₃	210 mg/L	Satisfactory	<= 120.0 mg/L ***	120.0 <= 300.0 mg/L ***	<p>This water is considered satisfactory because it meets the recommended health guideline of 300 mg/L for hardness. Hardness and alkalinity are closely related because the counter-ion's to the primary anions that contribute to alkalinity (carbonate and bicarbonate) are with the primary source of water hardness (calcium and magnesium). High water hardness can result in scaling of bathtubs, water heaters, pipes, and other plumbing fixtures as well as soap not lathering well. The National Environmental Services Center (NESC) recommends hardness less than 120 mg/L to prevent scaling. Most in home water softeners exchange calcium and magnesium ions for sodium ions so softened water should not be used for drinking or watering plants. If softening is needed, it may be advantageous to only soften the water supply to the water heater, or use a filtration system such as reverse osmosis for drinking water if all of the house's water is softened. Chemical softening, reverse osmosis, electrodialysis, and ion exchange are also applicable treatments. For more information on hardness of drinking water, please visit:</p> <ul style="list-style-type: none">⌄ CSU Extension: Drinking Water Quality and Health⌄ Well Educated Fact Sheet - Alkalinity, pH and Total Dissolved Solids⌄ NESC: Water Softeners
Bicarbonate	210 mg/L	No Guideline			
Boron (B)	0.081 mg/L	No Guideline			
Calcium (Ca)	35 mg/L	No Guideline			

Carbonate (CO ₃)	1.1 mg/L	No Guideline			<p>general information on drinking water quality, please visit:</p> <p>ε CSU Fact Sheet 0.513 - Domestic Water Quality Criteria</p>
Chloride (Cl ⁻)	91 mg/L	Satisfactory	<= 20.0 mg/L **	<= 250.0 mg/L **	<p>This water is considered satisfactory because it is less than the secondary standard of 250 mg/L. Chloride tends to affect the taste of water and can cause corrosion in water distribution systems. Demineralization processes such as reverse osmosis or electro dialysis can be used to remove chloride from drinking water. For more information on chloride in drinking water please visit:</p> <p>ε BC Ministry of Environment: Ambient Water Quality Guidelines for Chloride</p> <p>ε EPA Drinking Water Criteria</p>
Electrical Conductivity (EC)	3200 umhos/cm	No Guideline			<p>At this time, there is no drinking water quality guideline for electrical conductivity because no documented threshold of injury has been shown to occur. For general information on drinking water quality, please visit:</p> <p>ε CSU Fact Sheet 0.513 - Domestic Water Quality Criteria</p>
Magnesium (Mg)	2.3 mg/L	No Guideline			<p>At this time, there is no drinking water quality guideline for magnesium because no documented threshold of injury has been shown to occur. Magnesium is a primary constituent of water hardness. Treatment can be accomplished with a cation exchange water softener. For general information on drinking water quality please visit:</p> <p>ε CSU Fact Sheet 0.513 - Domestic Water Quality Criteria</p>
Nitrate as Nitrogen (NO ₃ -N)	0.17 mg/L	Excellent	<= 1.0 mg/L *	<= 10.0 mg/L *	<p>This water is considered excellent because it is less than the primary excellence standard of 1.0 mg/L as nitrate-nitrogen (NO₃-N). In drinking water, high nitrate concentrations can have serious effects on the health of infants. These consequences occur when nitrate is converted to nitrite and then combines with hemoglobin in the blood to form methemoglobin. Since methemoglobin does not absorb oxygen, the reduced capacity of the blood to absorb oxygen can be fatal. Nitrate problems in drinking water are usually seen when groundwater is the water source. Nitrate is best removed by reverse osmosis. Biological denitrification and anion exchange are also potential methods of removal. Elimination of the nitrogen source is often the best solution. For more information on nitrate in drinking water please visit:</p> <p>ε EPA: Basic Information About Nitrate in Drinking Water</p> <p>ε Well Educated Fact Sheet - Nitrate & Nitrite</p>
Nitrite as Nitrogen (NO ₂ -N)	0.098 mg/L	Excellent	<= 1.0 mg/L *	<= 1.0 mg/L *	<p>This water is considered excellent because it is less than the primary excellence standard of 1.0 mg/L. Like nitrate, nitrite may also harm the oxygen-carrying capacity of the blood by reducing hemoglobin to methemoglobin. Its presence is an indicator of high concentrations of either nitrate or ammonia. Treatment can be accomplished with chemical oxidation, anion exchange, reverse osmosis, or distillation. For more information on nitrite in drinking water, please visit:</p>

					EPA: Basic Information About Nitrite in Drinking Water Well Educated Fact Sheet - Nitrate & Nitrite
NO ₃ -N + NO ₂ -N (Total)	0.268 mg/L	Excellent	<= 1.0 mg/L *	<= 10.0 mg/L *	<p>This water is considered excellent because it is less than the primary excellence standard of 1.0 mg/L. Testing labs generally analyze for nitrate and nitrite together so the results are often expressed as nitrate+nitrite as N. The drinking water standard for nitrite-N is 1.0 mg/L. However, nitrite is very uncommon in groundwater, so it is generally assumed that almost all of the nitrate plus nitrite is in the nitrate form. Natural levels of nitrate-N vary from zero to about 4 mg/L. If the value is above 4 mg/L it is possible that nitrate-N is moving into groundwater from a surface landuse or a septic system. Nitrate-N values exceeding 8 mg/L are approaching the health standard and should be monitored regularly especially if an infant under 1 year of age is using the water. Nitrate-N values over 10 mg/L are unsatisfactory and action should be taken to determine the source and discontinue use of the water for infants or people with cardiac problems. For more information please visit:</p> <p> EPA: Basic Information about Nitrate in Drinking Water Well Educated Fact Sheet - Nitrate & Nitrite CSU: Nitrates in Drinking Water </p>
pH	8.12 pH	Satisfactory	7.0 <= 7.5 pH ***	6.5 <= 8.5 pH ***	<p>This water is considered satisfactory because it falls between the recommended guideline of 6.5 to 8.5. Water outside this range can be corrosive to water systems. pH can be increased by adding soda ash. pH can be decreased by adding white vinegar or citric acid. Neutralizing filters can also be used (calcite or calcite/magnesium media). For more information on pH of drinking water please visit:</p> <p> Wellcare - pH in Drinking Water Well Educated Fact Sheet - Alkalinity, pH and Total Dissolved Solids EPA: Secondary Drinking Water Regulations </p>
Potassium (K)	2.2 mg/L	No Guideline			<p>At this time, there is no drinking water quality guideline for potassium because no documented threshold of injury has been shown to occur. Treatment can be accomplished with distillation or reverse osmosis. For general information on drinking water quality, please visit:</p> <p> CSU Fact Sheet 0.513 - Domestic Water Quality Criteria </p>
Sodium (Na)	700 mg/L	No Guideline			<p>At this time, there is no drinking water quality standard for sodium. However, sodium can contribute to hypertension and intake in drinking water should be considered by people on low sodium diets in association with reducing risk of cardiovascular disease. Sodium in drinking water supplies can range from 0.4 to 1,900 mg/L and is a commonly found in groundwater which can impart a salty taste at concentrations over 250 mg/L. Ion exchange and demineralization process can be used for sodium removal. Consumers in areas with hard water that install water softener devices, increase the concentration of sodium in their water. For additional information on sodium in drinking water quality, please visit:</p> <p> EPA: Sodium in Drinking Water </p>

Sulfate (SO ₄)	1200 mg/L	Objectionable	<= 20.0 mg/L **	<= 250.0 mg/L **	<p>This water is considered objectionable because it exceeds the secondary standard of 250 mg/L. Sulfate intake of 1000 to 2000 mg can cause diarrhea in humans. This is particularly true when a person switches from drinking water with a small concentration of sulfate to water with a high sulfate concentration. Treatment can be accomplished with anion exchange, reverse osmosis, or distillation. For more information on sulfate in drinking water please visit:</p> <ul style="list-style-type: none"> CSU Extension: Drinking Water Quality and Health EPA: Sulfate in Drinking Water
Total Dissolved Solids (TDS)	2100 mg/L	Objectionable	<= 200.0 mg/L **	<= 500.0 mg/L **	<p>This water is considered objectionable because it exceeds the secondary standard of 500 mg/L. High dissolved solids can leave deposits on glasses and fixtures. Treatment can be accomplished with reverse osmosis, distillation, and deionization by ion exchange. For more information on TDS in drinking water please visit:</p> <ul style="list-style-type: none"> Wellcare - TDS in Drinking Water EPA: Secondary Drinking Water Regulations Well Educated Fact Sheet - Alkalinity, pH and Total Dissolved Solids

Test Name	Lab Result	Interpretation	Acceptable	Additional Comments
3) Individual Metals Analysis				
Aluminum (Al)	0.018 mg/L	Acceptable	<= 0.05 mg/L **	<p>This water is considered satisfactory because it is less than the secondary standard of 0.05 mg/L. For healthy people, the gastrointestinal tract and skin are usually effective barriers against the absorption of aluminum. High tissue levels of aluminum in people may be associated with the development of brain and central nervous system disorders. Ion exchange and demineralization are potential methods for removal of aluminum from water. For more information on drinking water quality please visit:</p> <ul style="list-style-type: none"> EPA Drinking Water Criteria
Barium (Ba)	0.012 mg/L	Acceptable	<= 2.0 mg/L *	<p>This water is considered satisfactory because it is less than the primary standard of 2.0 mg/L. Acute exposure to barium results in gastrointestinal, neuromuscular, and cardiac effects including blood pressure to animals and humans. Barium does not accumulate in bones, muscles, kidneys, or other tissues. Lime softening (pH = 10 to 11) or an ion exchange softener may reduce barium by 95%. Reverse osmosis is also listed among the USEPA's best available technology. For more information on barium in drinking water please visit:</p> <ul style="list-style-type: none"> EPA Factsheet on BARIUM Well Educated Fact Sheet - Antimony, Barium and Beryllium
Cadmium (Cd)	0.000040 mg/L	Acceptable	<= 0.005 mg/L *	<p>This water is considered satisfactory because it is less than the primary standard of 0.005 mg/L. Long term consumption of water with cadmium concentrations in excess of 0.005 mg/L have been linked to kidney damage in some cases and concentrations of 15 mg/L may cause nausea and vomiting. There is no accepted, economically effective method for direct removal of cadmium at high concentrations. Lime softening may help to remove cadmium when concentrations are less than 0.5 mg/L. For more information on this constituent in drinking water, please visit:</p>

				EPA: Consumer Factsheet on: CADMIUM Well Educated Fact Sheet: Cadmium and Selenium
Chromium (Cr)	0.00066 mg/L	Acceptable	<= 0.1 mg/L *	<p>This water is considered satisfactory because it is less than the primary standard of 0.1 mg/L. Trivalent chromium may be nutritionally safe at a level of 0.20 mg/day. Hexavalent chromium has a deleterious effect on the liver, kidney, and respiratory organs with hemorrhagic effects, dermatitis, and ulceration of the skin for chronic and sub chronic exposure. Chromium can be treated by coagulation with filtration, lime softening (Cr III), and under specialized processes such as ion exchange and reverse osmosis. For more information on chromium in drinking water please visit:</p> <p> EPA Factsheet on CHROMIUM MSU: Chromium, Mercury and Thallium Fact Sheet </p>
Copper (Cu)	0.0028 mg/L	Acceptable	<= 1.3 mg/L *	<p>This water is considered satisfactory because it is less than the primary standard of 1.3 mg/L. Copper is an essential element, aiding in human metabolism. However, the ingestion of too much copper can be problematic. Ingested doses of copper, up to 100 mg, can cause symptoms of gastroenteritis, including nausea and vomiting, and long term exposure may lead to liver or kidney damage. People with Wilson's Disease should consult their doctor if the copper in their water exceeds the primary standard. Coagulation/filtration, ion exchange, lime softening, and reverse osmosis are recommended treatment methods for copper. Lime softening is the most economical, with reverse osmosis the most expensive. For more information on copper in drinking water please visit:</p> <p> EPA Factsheet on COPPER Well Educated Fact Sheet - Copper </p>
Iron (Fe)	0.022 mg/L	Acceptable	<= 0.3 mg/L **	<p>This water is considered satisfactory because it is less than the secondary standard of 0.3 mg/L. Solutions for iron include: cation exchange, distillation, chlorination, or filtration. For more information on drinking water, please visit:</p> <p> EPA Drinking Water Criteria Well Educated Fact Sheet - Total Iron </p>
Manganese (Mn)	0.0023 mg/L	Acceptable	<= 0.05 mg/L **	<p>This water is considered satisfactory because it is less than the secondary standard of 0.05 mg/L. Manganese is an essential element in trace amounts for plants and animals. It is an important component of the enzyme processes that metabolizes proteins and energy in animals. Manganese is also involved in the formation of healthy joints. In humans, manganese is an important component in the processes of digestion and food absorption. It is also involved in the synthesis of fatty acids and cholesterol, metabolizing sugars, and the utilization of thiamine, biotin, and vitamin C. Foul taste and its tendency to stain plumbing and laundry are the main problems of manganese in drinking water. Cation exchange, distillation, chlorination, and/or filtration are recommended manganese treatment technologies. For more information on drinking water quality please visit:</p> <p> EPA Drinking Water Criteria </p>
Molybdenum (Mo)	0.023 mg/L	No Guideline		<p>At this time, there is no drinking water quality standard for molybdenum because no documented threshold of injury has been shown to occur. Molybdenum interferes with the metabolism of copper. This interference can create a copper deficiency. Molybdenum has been shown to cause joint pain, similar to gout in humans. Furthermore, laboratory studies have shown that molybdenum can alter the absorption rate of calcium into the bones. For more</p>

				information on molybdenum in drinking water please visit: Water Quality Criteria for Molybdenum
Nickel (Ni)	0.0013 mg/L	Acceptable	≤ 0.1 mg/L *	This water is considered satisfactory because it is less than the primary standard of 0.1 mg/L. Nickel has a low toxicity comparable to zinc, manganese, and chromium. Nickel does not accumulate in tissues. Ion exchange, reverse osmosis, and/or lime softening are recommended treatment solutions. For more information on drinking water, please visit: EPA Drinking Water Criteria
Zinc (Zn)	0.0068 mg/L	Acceptable	≤ 5.0 mg/L **	This water is considered satisfactory because it is less than the secondary standard of 5.0 mg/L. In trace amounts, zinc is a necessary element for animals and plants. In mammals, it plays an important role in the formation of nucleic acids, RNA, and DNA. It is involved in the processes that promote healthy tissues in the body. Zinc is also necessary for hormone metabolism and immune system responsiveness. Symptoms of zinc deficiency include growth reduction, skin changes, testicular disintegration, and reduced appetite. Zinc toxicity is not common, however zinc poisoning in humans, from consumables stored in galvanized containers, has been recorded. When detected in drinking water, it is likely that corrosion of piping has increased the concentration of zinc. Control of raw water to identify possible contamination and corrosion control measures may reduce the concentrations to a reasonable level. Otherwise, lime softening or cation exchange can remove zinc. For more information on zinc drinking water please visit: EPA Drinking Water Criteria
5) Trace Elements Analysis				
Antimony (Sb)	0.0016 mg/L	Acceptable	≤ 0.006 mg/L *	This water is considered satisfactory because it is less than the primary standard of 0.006 mg/L. The health effects of antimony include decreased growth and decrease longevity of humans. Prolonged exposure can also cause an increase in blood cholesterol and a decrease in blood sugar. To remove antimony, coagulation/filtration or reverse osmosis is recommended. For more information on this constituent in drinking water, please go to this EPA link: EPA: Consumer Factsheet on ANTIMONY Well Educated Fact Sheet - Antimony, Barium and Beryllium
Arsenic (As)	0.002 mg/L	Acceptable	≤ 0.01 mg/L *	This water is considered satisfactory because it is less than the primary standard of 0.01 mg/L. Arsenic is poisonous in humans at 100 mg or more and has proven lethal at 130 mg. Studies have linked long-term exposure to arsenic in drinking water to cancer of the bladder, lungs, skin, kidney, nasal passages, liver, and prostate. Non-carcinogenic effects of arsenic include cardiovascular, pulmonary, immunological, neurological, and endocrine effects. Short-term exposure to high doses of arsenic can cause other detrimental health effects, but are unlikely to occur from public water supplies in compliance with the existing arsenic standard of 0.01 mg/L. Accumulation in the body is expected to rise progressively in humans with low intake of arsenic. By using activated alumina, reverse osmosis, ion exchange, or electro dialysis, the concentration of arsenic can be significantly lowered. For more information on arsenic in drinking water please visit: EPA Factsheet on ARSENIC Well Educated Fact Sheet- Arsenic
				This water is considered satisfactory because it is less than

Beryllium (Be)	0.00047 mg/L	Acceptable	≤ 0.004 mg/L *	<p>the primary standard of 0.004 mg/L. In some cases of long exposure to beryllium concentrations in excess of 0.004 mg/L intentional lesions were developed. Coagulation and filtration, lime softening, activated alumina, ion exchange, and reverse osmosis are recommended for removal of beryllium. For more information on beryllium in drinking water please visit:</p> <ul style="list-style-type: none"> ⌵ EPA Factsheet on BERYLLIUM ⌵ Well Educated Fact Sheet - Antimony, Barium and Beryllium
Cobalt (Co)	0.000052 mg/L	No Guideline		<p>At this time, there is no drinking water quality standard for cobalt because no documented threshold of injury has been shown to occur. For general information on drinking water quality, please visit:</p> <ul style="list-style-type: none"> ⌵ CSU Fact Sheet 0.513 - Domestic Water Quality Criteria
Fluoride (F)	1.8 mg/L	Acceptable	≤ 4.0 mg/L *	<p>This water is considered satisfactory because it is less than the primary standard of 4.0 mg/L. Fluoride accumulates in the mineralized tissues of the body, such as bones and teeth. People with diabetes and whose diets are deficient in calcium, manganese, iodine, or vitamin C are at a greater risk of fluoride toxicity. People receiving dialysis for malfunction or removal of a kidney are very susceptible to fluoride toxicity. The major source of fluoride pollution is wastewater from steel, aluminum, and phosphate fertilizer factories. Activated alumina adsorption, reverse osmosis, and modified lime softening are proven methods of fluoride concentration reduction. For more information on fluoride in drinking water please visit:</p> <ul style="list-style-type: none"> ⌵ EPA: Basic Information about Fluoride in Drinking Water ⌵ EPA: Fluoride Risk Assessment and Relative Source Contribution
Lead (Pb)	0.00014 mg/L	Acceptable	≤ 0.015 mg/L *	<p>This water is considered satisfactory because it is less than the primary standard of 0.015 mg/L. Some health effects of lead include a decrease in function of the nervous system, weakness in fingers, wrists or ankles, small increases in blood pressure, anemia, and decreased sperm production in men. Exposure to high lead levels can cause severe damage to the brain and kidneys. Small and unborn children are particularly susceptible to lead poisoning. Lead can be passed from the mother to an unborn child. Some harmful effect include: premature birth, smaller birth size, decreased mental ability, learning difficulties, and slowed growth. Lead based plumbing was common until it was banned in 1986, however some modern plumbing materials contain trace amounts of lead, this is a primary source of contamination. Treatment of water with high lead concentrations include: raising the pH of treated water to reduce corrosivity, replace old plumbing fixtures and pipes (especially when older than 1986), use only cold water for drinking and cooking, and run the faucet until it becomes cold before collecting water for drinking, cooking and making baby formula. For more information on lead in drinking water, please visit:</p> <ul style="list-style-type: none"> ⌵ EPA: Basic Information about Lead in Drinking Water ⌵ Well Educated Fact Sheet - Lead ⌵ ATSDR: Toxic Substances Portal - Lead
				<p>At this time, there is no drinking water quality standard for lithium because no documented threshold of injury has been shown to occur. For general information on drinking water</p>

Lithium (Li)	0.050 mg/L	No Guideline		quality please visit: CSU Fact Sheet 0.513 - Domestic Water Quality Criteria
Mercury (Hg)	0.000027 mg/L	Acceptable	<= 0.002 mg/L *	<p>This water is considered satisfactory because it is less than the primary standard of 0.002 mg/L. Mercury is hazardous to both animals and humans. Mercury compounds have been used in paints, drywall compounds, pharmaceuticals, and fungicides. Mercury can damage the nervous, reproductive, renal, and developmental systems of humans and animals. The chemical form of mercury and point of entry are important factors in the toxicity of mercury. Ingestion of inorganic mercury is mainly responsible for the deterioration of intestines and kidney damage in both animals and humans. Methyl mercury and short-chained organic mercury compounds kill cells in central nervous system which assist in sensory and coordination functions. The EPA has found that short-term exposure to mercury has the potential to cause kidney damage when people are exposed to it at levels above the 0.002 mg/L. The following treatment methods have been approved by EPA for removing mercury: coagulation/filtration; granular activated carbon; lime softening; reverse osmosis. For more information on mercury in drinking water please visit:</p> <p> EPA: Basic Information about Mercury in Drinking Water MSU: Chromium, Mercury and Thallium Fact Sheet </p>
Selenium (Se)	0.013 mg/L	Acceptable	<= 0.05 mg/L *	<p>This water is acceptable because it is less than the primary standard of 0.05 mg/L. Although selenium is an essential nutrient at low levels, it is toxic at high levels (such as in the case of accidental exposure). Selenium is a trace element essential for humans and animals. However, it can be toxic at higher levels of concentration. The effects of selenium in water and food depend on the amount ingested and the length of exposure. Changes in respiratory, cardiovascular, gastrointestinal, musculoskeletal, renal, dermal, endocrine, and body weight have been documented in humans and animals exposed to selenium. Skin, nail, and hair damage are important symptoms of selenium toxicity. Signs of selenium poisoning in animals and humans include excessive salivation, shallow breathing, breath odor, and diarrhea. Other signs of acute selenium poisoning are vomiting, spasms, and death from respiratory failure. Reverse osmosis, anion exchange, activated alumina, and/or distillation are recommended treatment solutions for water with high concentrations of selenium. For more information on selenium in drinking water please visit:</p> <p> EPA: Basic Information about Selenium in Drinking Water Well Educated Fact Sheet - Cadmium and Selenium </p>
Silver (Ag)	0.000023 mg/L	Acceptable	<= 0.05 mg/L *	<p>This water is considered satisfactory because it is less than the primary standard of 0.05 mg/L. Silver is removed by the liver after it combines with plasma proteins. The majority of silver is excreted in the bile of the feces. The skin and mucous tissues absorb the silver which is not excreted. People most susceptible to the toxic effects of silver are those with dietary or metabolism deficiencies of vitamin E or selenium. Also at greater risk are people with liver problems and those with high selenium levels in their diet. Treatments for removing silver are: coagulation/filtration, submicron filtration/activated carbon, ion exchange, distillation, and reverse osmosis. For more information on drinking water please visit:</p>

				EPA Drinking Water Criteria
Thallium (Tl)	0.000066 mg/L	Acceptable	<= 0.002 mg/L *	<p>This water is considered satisfactory because it is less than the primary standard of 0.002 mg/L. High levels of thallium can cause hair loss or damage to the kidney, liver, brain and intestine. Treatment can be accomplished with activated alumina, cation exchange and distillation. For more information on this constituent in drinking water, please visit:</p> <p> EPA: Basic Information About Thallium in Drinking Water MSU: Chromium, Mercury and Thallium Fact Sheet </p>
Vanadium (V)	0.0011 mg/L	No Guideline		<p>At this time, there is no drinking water quality standard for vanadium because no documented threshold of injury has been shown to occur. For general information on drinking water quality please visit:</p> <p> CSU Fact Sheet 0.513 - Domestic Water Quality Criteria </p>
6) Radionuclides				
Uranium (U)	5 ug/L	Acceptable	<= 30.0 ug/L *	<p>This water meets the primary standard of 30 ug/L for Uranium. Uranium is a radioactive atom that will very slowly decay into Radium and subsequently several other radioactive isotopes. During each decay alpha and/or beta particles are emitted. These radioactive particles can cause damage to cells and molecules in the body such as DNA. Prolonged exposure to radiation may cause cancer and consumption of water containing Uranium in excess of 30 ug/L may be toxic to the kidneys. Effective treatments for Uranium are ion exchange, reverse osmosis, lime softening, and coagulation/filtration. For more information on Uranium and other Radionuclides please visit:</p> <p> EPA Information on Radionuclides in Water </p>
8) Volatile Contaminants				
benzene	0.16 ug/L	Acceptable	<= 5.0 ug/L *	<p>This water is considered satisfactory because it is less than the primary standard of 5.0 ug/L. The potential health consequences associated with drinking water that exceeds this standard over a prolonged period of time are anemia, decrease in blood platelets, and an increased risk of cancer. Treatment can be accomplished with activated carbon. Also, this compound is a potential indicator of activity related to oil & gas exploration and/or leaking petroleum facilities. For more information on benzene in drinking water please visit:</p> <p> EPA Factsheet on BENZENE Agency for Toxic Substances and Disease Registry </p>
o-dichlorobenzene	0.15 ug/L	Acceptable	<= 600.0 ug/L *	<p>This water is considered satisfactory because it is less than the primary standard of 600 ug/L. The potential health consequences associated with drinking water that exceeds this standard over a prolonged period of time are liver, kidney, or circulatory system problems. Treatment can be accomplished with activated carbon. Also, this compound is a potential indicator of activity related to oil & gas exploration and/or leaking petroleum facilities. For more information on this constituent in drinking water please visit:</p> <p> EPA Factsheet on ORTHO-DICHLOROBENZENE (o-DCB) Agency for Toxic Substances and Disease Registry </p>
				<p>This water is considered satisfactory because it is less than the primary standard of 75.0 ug/L. The potential health consequences associated with drinking water that exceeds</p>

p-dichlorobenzene	0.16 ug/L	Acceptable	<= 75.0 ug/L *	<p>this standard over a prolonged period of time are anemia and may also be linked to liver, kidney or spleen damage and changes in the blood. Treatment can be accomplished with activated carbon. Also, this compound is a potential indicator of activity related to oil & gas exploration and/or leaking petroleum facilities. For more information on this constituent in drinking water, please go to this EPA link:</p> <p>⌵ EPA Factsheet on PARA-DICHLOROBENZENE (p-DCB)</p> <p>⌵ Agency for Toxic Substances and Disease Registry</p>
ethylbenzene	0.16 ug/L	Acceptable	<= 700.0 ug/L *	<p>This water is considered satisfactory because it is less than the primary standard of 700 ug/L. When humans are exposed to ethylbenzene at levels above 700 ug/L for short periods of time, the following health consequences may occur: drowsiness, fatigue, respiratory irritation, and headache. Furthermore, ethylbenzene at levels above 700 ug/L, over a person's lifetime, can cause damage to the liver, kidneys, eyes, and central nervous system. Treatment can be accomplished with activated carbon. Also, this compound is a potential indicator of activity related to oil & gas exploration and/or leaking petroleum facilities. For more information on ethylbenzene in drinking water, please visit:</p> <p>⌵ EPA Factsheet on ETHYLBENZENE</p> <p>⌵ Agency for Toxic Substances and Disease Registry</p>
monochlorobenzene	0.17 ug/L	Acceptable	<= 100.0 ug/L *	<p>This water is considered satisfactory because it is less than the primary standard of 100 ug/L. The potential health consequences associated with drinking water that exceeds this standard over a prolonged period of time are liver or kidney problems. Also, this compound is a potential indicator of activity related to oil & gas exploration and/or leaking petroleum facilities. For general information on drinking water quality please visit:</p> <p>⌵ EPA Factsheet on CHLOROBENZENE</p> <p>⌵ Agency for Toxic Substances and Disease Registry</p>
styrene	0.17 ug/L	Acceptable	<= 100.0 ug/L *	<p>This water is considered satisfactory because it is less than the primary standard of 100 ug/L. The potential health consequences associated with drinking water that exceeds this standard over a prolonged period of time are liver, kidney, and/or circulatory system problems. For more information on styrene in drinking water please visit:</p> <p>⌵ EPA Factsheet on STYRENE</p>
toluene	0.17 ug/L	Acceptable	<= 1000.0 ug/L *	<p>This water is considered satisfactory because it is less than the primary standard of 1000 ug/L. The potential health consequences associated with drinking water that exceeds this standard over a prolonged period of time are nervous system, kidney, or liver problems. Toluene is found naturally in coal and crude oil. It is also used in carpet cleaners, paints, cosmetics, upholstery, cigarettes, pesticides and gasoline. Toluene can be removed from water by biodegradation and volatilization, however does not usually hydrolyze or adsorb into sediments. Toluene is volatile, with a half-life of up to two weeks in water and may leach into groundwater when deposited onto land. Also, this compound is a potential indicator of activity related to oil & gas exploration and/or leaking petroleum facilities. For more information on toluene in drinking water please visit:</p> <p>⌵ EPA Factsheet on TOLUENE</p> <p>⌵ Agency for Toxic Substances and Disease Registry</p>
				<p>This water is considered satisfactory because it is less than the primary standard of 200 ug/L. The potential health</p>

trichloroethane	0.16 ug/L	Acceptable	<= 200.0 ug/L *	consequences associated with drinking water that exceeds this standard over a prolonged period of time are liver, nervous system, or circulatory problems. For more information on this constituent in drinking water, please visit: EPA Factsheet on 1,1,1-TRICHLOROETHANE
xylenes (total)	0.19 ug/L	Acceptable	<= 10000.0 ug/L *	This water is considered satisfactory because it is less than the primary standard of 10,000 ug/L. The potential health consequence associated with drinking water that exceeds this standard over a prolonged period of time is nervous system damage. Also, this compound is a potential indicator of activity related to oil & gas exploration and/or leaking petroleum facilities. For more information on xylene in drinking water please visit: EPA Factsheet on XYLENES Agency for Toxic Substances and Disease Registry
9) Organic Contaminants				
1,2,4-trichlorobenzene	0.21 ug/L	Acceptable	<= 70.0 ug/L *	This water is satisfactory because it contains less than the MCL of 70 ug/L for 1,2,4-trichlorobenzene. 1,2,4-trichlorobenzene is used as a dye-carrier and used to make herbicides and other organic chemicals. Consumption of water with high levels of 1,2,4-trichlorobenzene may cause changes in the adrenal glands. An effective treatment for 1,2,4-trichlorobenzene is granular activated carbon with packed tower aeration. For more information about 1,2,4-trichlorobenzene please visit: EPA: Basic Information About 1,2,4-trichlorobenzene in Drinking Water
Vinyl Chloride	0.10 ug/L	Acceptable	<= 2.0 ug/L *	This water is satisfactory because it contains less vinyl chloride than the maximum contaminate level (MCL) of 2 ug/L. Vinyl chloride is used to make many products including PVC piping that is sometimes used for plumbing. Vinyl chloride can leach into the water from PVC piping. Prolonged consumption of water containing vinyl chloride in excess of the MCL may increase the risk of cancer. For more information about vinyl chloride please visit: EPA: Basic Information About Vinyl Chloride in Drinking Water

* MCL (Primary Standard)

** SMCL (Secondary Standard)

*** Upper Limit Guideline

Interpretations of Irrigation Water Quality for Colorado

Test Name	Lab Result	Interpretation	Excellent	Satisfactory	Additional Comments
1) Routine Water Analysis					
Alkalinity as CaCO ₃	690 mg/L	No Guideline			<p>Alkalinity as CaCO₃ is not commonly used alone to evaluate irrigation water quality so there is no numeric guideline for this parameter. Alkalinity is measured as HCO₃ and CO₃ and are evaluated separately. For more information on alkalinity in irrigation water please visit:</p> <p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture </p>
Bicarbonate	600 mg/L	No Guideline			<p>High concentrations (>100 mg L⁻¹) of bicarbonate and carbonate can be detrimental to the soil and are usually associated with high pH water. There is no set irrigation water quality level for bicarbonate problems, because the problems it causes are dependent upon soil and water characteristics. When bicarbonate and carbonate enter the soil, they tie up calcium as CaCO₃ and lower its concentration in the soil solution. This process can increase the sodium hazard as measured as SAR and cause infiltration and soil physical problems. For general information on bicarbonate in irrigation water, please visit:</p> <p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture </p>
Boron (B)	0.32 mg/L	Excellent	<= 0.5 mg/L ***	<= 2.0 mg/L ***	<p>This water is suitable for irrigation use on sensitive crops because it is less than 0.50 mg/l. Boron is essential to plant growth, with optimum yields for many crops supplied with a few-tenths mg/l in nutrient solutions. However, boron toxicity is highly dependent on plant type and can be toxic to many sensitive plants (e.g., citrus) at less than 0.5 mg/L. Most grasses are relatively tolerant to boron at 2.0 to 10 mg/L. North Dakota soils and irrigation waters contain enough boron that additional application is not required in most situations. Fertilization may cause toxicity if boron is present in the water. Boron toxicity is closely associated with problems of salinity in regions that are hot and arid. Boron in irrigation water is one of the main causes of boron toxicity in plants. Symptoms of boron toxicity in plants include stunted growth, leaf browning, chlorosis, wilting, mildew, and germination problems.</p> <p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture </p>
Calcium (Ca)	41 mg/L	No Guideline			<p>At this time, there is no irrigation water quality guideline for calcium because no documented threshold of crop injury has been shown to occur. For general information on irrigation water quality please visit:</p> <p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture </p>
					<p>High concentrations (>100 mg L⁻¹) of carbonate and bicarbonate can be detrimental to the soil and are usually associated with high pH water. There is no set irrigation water quality level for bicarbonate problems,</p>

Carbonate (CO ₃)	92 mg/L	No Guideline			<p>because the problems it causes are dependent upon soil and water characteristics. When bicarbonate and carbonate enter the soil, they tie up calcium as CaCO₃ and lower its concentration in the soil solution. This process can increase the sodium hazard as measured as SAR and cause infiltration and soil physical problems. For more information on irrigation water quality please visit:</p> <p>ε CSU Pub 0.506 Irrigation Water Quality Criteria</p> <p>ε Water Quality for Agriculture</p>
Chloride (Cl ⁻)	21 mg/L	Satisfactory	<= 20.0 mg/L **	<= 350.0 mg/L **	<p>This water may be suitable for irrigation use because it is less than the guideline of 350 mg/l. Although chloride is essential to plants in low amounts, it will cause toxicity to plants when levels exceed 350 mg/l. Like sodium, high chloride concentrations cause more problems when applied with sprinkler irrigation. Leaf burn under sprinkler from both sodium and chloride can be reduced by night time irrigation or application on cool, cloudy days. For more information on chloride in irrigation water please visit:</p> <p>ε CSU Pub 0.506 Irrigation Water Quality Criteria</p> <p>ε Water Quality for Agriculture</p>
Electrical Conductivity (EC)	1400 umhos/cm	Objectionable		<= 0.002 umhos/cm ***	<p>The electrical conductivity (EC_w) of a water sample is a measure of the amount of minerals dissolved in the water and is proportional to the Total Dissolved Solids (TDS). The primary effect of high EC_w water on crop productivity is the inability of the plant to compete with ions in the soil solution for water (physiological drought). The higher the EC, the less water is available to plants, even though the soil may appear wet. Because plants can only transpire "pure" water, usable plant water in the soil solution decreases dramatically as EC increases. For more information on EC in irrigation water, please visit:</p> <p>ε CSU Pub 0.506 Irrigation Water Quality Criteria</p> <p>ε Assessing the Suitability of Water (Quality) for Irrigation - Salinity and Sodium</p> <p>ε Water Quality for Agriculture</p>
Magnesium (Mg)	42 mg/L	No Guideline			<p>At this time, there is no irrigation water quality guideline for magnesium because no documented threshold of crop injury has been shown to occur. For general information on irrigation water quality please visit:</p> <p>ε CSU Pub 0.506 Irrigation Water Quality Criteria</p> <p>ε Water Quality for Agriculture</p>
NO ₃ -N + NO ₂ -N (Total)	0.132 mg/L	No Guideline			None
pH	8.68 pH	Objectionable	7.0 <= 7.5 pH ***	6.5 <= 8.5 pH ***	<p>This water quality is considered objectionable because it does not fall between the recommended pH guideline of 6.5 to 8.5. At low pH (acidic) levels, irrigation equipment may corrode. At high pH (alkaline) levels, certain nutrients may be less available to plants. For more information on irrigation water quality please visit:</p> <p>ε CSU Pub 0.506 Irrigation Water Quality</p>

				Criteria Water Quality for Agriculture
Potassium (K)	3.1 mg/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for potassium because no documented threshold of crop injury has been shown to occur. For general information on irrigation water, please visit:</p> <p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture </p>
Sodium Adsorption Ratio (SAR)	6.5 sar	Satisfactory	<= 10.0 sar	<p>This ratio quantifies the proportion of sodium (Na+) to calcium (Ca++) and magnesium (Mg++) ions in a water sample. In the soil, calcium will flocculate (hold together), while sodium disperses (pushes apart) soil particles leading to poor soil condition. Many factors including soil texture, organic matter, crop type, climate, irrigation system, and management impact how sodium in irrigation water affects soils. Sodium in irrigation water can cause toxicity problems for some crops, especially when the water is applied with a sprinkler system. SAR and ECw are interdependent and thus irrigation suitability is characterized by both values. The following is a breakdown of the general classifications of irrigation water based upon the SAR values. Course Sand to Fine Sandy Loam: maximum EC of 3000 micromhos per centimeter and maximum SAR of 12; Loam and Silt Loam: maximum EC of 3000 micromhos per centimeter and maximum SAR of 9; Very Fine Sandy Loam to Silty Clay Loam: maximum EC of 2250 micromhos per centimeter and maximum SAR of 9; Loam to Clay Loam: maximum EC of 1500 micromhos per centimeter and maximum SAR of 6. For more information on irrigation water quality please visit:</p> <p> CSU Pub 0.506 Irrigation Water Quality Criteria Assessing the Suitability of Water (Quality) for Irrigation - Salinity and Sodium Water Quality for Agriculture </p>
Sodium (Na)	250 mg/L	Satisfactory	<= 350.0 mg/L ***	<p>This water may be suitable for irrigation use because it is less than the guideline of 350 mg/l. Like chloride, high sodium concentrations cause more problems when applied with sprinkler irrigation. Leaf burn under sprinkler from both sodium and chloride can be reduced by night time irrigation or application on cool, cloudy days. High sodium water should also be evaluated in related to Ca and Mg concentrations by calculating and an SAR. For more information on sodium in irrigation water, please visit:</p> <p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture </p>
Sulfate (SO ₄)	99 mg/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for sulfate. The sulfate ion is a major contributor to salinity in many North Dakota irrigation waters sources. However, toxicity is rarely a problem, except at very high concentrations where high sulfate may interfere with uptake of other nutrients. Sulfate in irrigation water has some fertility benefits. For more information on irrigation water quality please visit:</p> <p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture </p>

Total Dissolved Solids (TDS)	880 mg/L	Excellent	<= 1000.0 mg/L ***	<= 2000.0 mg/L ***	<p>This water is recommended for irrigation use because it is less than the excellence guideline of 1000 mg/l. Water with high levels of TDS are saline and can harm crops. TDS is a direct measurement of the quantity of dissolved cations and anions in the irrigation water. EC is an indirect measure of the quantity of ions in the water. For long term irrigation of the same of land with sprinklers, the TDS should not exceed 2500 for the coarse soils (sand to fine sandy loams), 1800 for finer soils (very fine sandy loam to silty clay loams) and 1000 for the finest soils that are irrigable (loams to clay loams). For more information on irrigation water, please visit:</p> <ul style="list-style-type: none"> ε CSU Pub 0.506_Irrigation Water Quality Criteria ε Assessing the Suitability of Water (Quality) for Irrigation - Salinity and Sodium ε Water Quality for Agriculture
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Test Name	Lab Result	Interpretation	Suitable	Additional Comments
3) Individual Metals Analysis				
Aluminum (Al)	0.030 mg/L	Acceptable	<= 5.0 mg/L ***	<p>This water may be suitable for irrigation use because it is less than the guideline of 5.0 mg/l. Aluminum can cause plants to not be productive in acidic soils, but soils at pH 5.5 to 8.0 will precipitate the ion and eliminate toxicity. The effects of aluminum toxicity can be similar to phosphorus deficiency with plants having small leaves, stunting, and purple coloring. The effects of aluminum toxicity may also be similar to calcium deficiency with symptoms of leaf curl. For more information on aluminum in irrigation water please visit:</p> <ul style="list-style-type: none"> ε Water Quality for Agriculture
Barium (Ba)	0.099 mg/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for barium. For more information on irrigation water quality please visit:</p> <ul style="list-style-type: none"> ε CSU Pub 0.506_Irrigation Water Quality Criteria ε Water Quality for Agriculture
Cadmium (Cd)	0.000040 mg/L	Acceptable	<= 0.01 mg/L ***	<p>This water is recommended for irrigation use because it is less than the guideline of 0.01 mg/l. Cadmium can be toxic to beans, beets, and turnips at concentrations as low as 0.1 mg/L in nutrient solution. Low limits for cadmium are recommended because cadmium can accumulate in plant tissue and become harmful for humans consuming the crop. For more information on cadmium in irrigation water, please visit:</p> <ul style="list-style-type: none"> ε Water Quality for Agriculture
Chromium (Cr)	0.00066 mg/L	Acceptable	<= 0.1 mg/L ***	<p>This water may be suitable for irrigation use because it is less than the guideline of 0.1 mg/l. Chromium is not generally recognized as an essential growth element and conservative limits are recommended due to lack of research data on toxicity to plants. For more information on chromium in irrigation water please visit:</p> <ul style="list-style-type: none"> ε Water Quality for Agriculture
Copper (Cu)	0.0013 mg/L	Acceptable	<= 0.2 mg/L ***	<p>This water may be suitable for irrigation use because it is less than the guideline of 0.2 mg/l. Copper is an important nutrient for plants. However, copper is toxic to a number of plants at 0.1 to 1.0 mg/L in nutrient solution. The amount of copper available to plants depends on numerous soil factors, including soil texture, composition, and type. Its availability also depends on soil microbiology, pH, moisture, and species of plant/crop. Typically, copper has the least availability in soils with an elevated pH and/or a high content of organic materials.</p>

				For more information on copper in irrigation water please visit: Water Quality for Agriculture
Iron (Fe)	0.023 mg/L	Acceptable	<= 5.0 mg/L ***	This water may be suitable for irrigation use because it is less than the guideline of 5.0 mg/l. Iron is not toxic to plants in aerated soils, but can contribute to soil acidification and reduced plant availability of essential phosphorus and molybdenum. Sprinkler irrigation may cause staining on plants and wetted objects. For more information on iron in irrigation water, please visit: Water Quality for Agriculture
Manganese (Mn)	0.0024 mg/L	Acceptable	<= 0.2 mg/L ***	This water may be suitable for irrigation use because it is less than the guideline of 0.2 mg/l. Manganese is toxic to a number of crops at a few-tenths to a few mg/l in acid soils. For more information on manganese in irrigation water, please visit: Water Quality for Agriculture
Molybdenum (Mo)	0.0068 mg/L	Acceptable	<= 0.01 mg/L ***	This water may be suitable for irrigation use because it is less than the guideline of 0.01 mg/l. Molybdenum is nontoxic to plants at normal concentrations in soil and water. The main problem related to irrigating with water which has high molybdenum concentrations is that molybdenum is absorbed and concentrated by plants. Although plant growth is rarely affected by high molybdenum concentrations, high concentrations in the plants can be toxic to ruminant animals that feed on the plants. For more information on molybdenum in irrigation water please visit: Water Quality for Agriculture
Nickel (Ni)	0.0013 mg/L	Acceptable	<= 0.2 mg/L ***	This water may be suitable for irrigation use because it is less than the guideline of 0.2 mg/l. Nickel is toxic to a number of plants in the 0.5 to 1.0 mg/l range. Its toxicity is reduced in neutral or alkaline soils. For more information on nickel in irrigation water, please visit: Water Quality for Agriculture
Zinc (Zn)	0.0045 mg/L	Acceptable	<= 2.0 mg/L ***	This water may be suitable for irrigation use because it is less than the guideline of 2.0 mg/l. Zinc is toxic to many plants at widely varying concentrations. Zinc toxicity is reduced with increased pH (6 or above) and in fine-textured or organic soils. For more information on zinc in irrigation water please visit: Water Quality for Agriculture

5) Trace Elements Analysis

Antimony (Sb)	0.00016 mg/L	No Guideline		At this time, there is no irrigation water quality guideline for antimony. For more information on irrigation water quality please visit: CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture
Arsenic (As)	0.0026 mg/L	Acceptable	<= 0.1 mg/L ***	This water may be suitable for irrigation use because it is less than the guideline of 0.1 mg/l. Arsenic toxicity to plants varies widely, ranging from 12 mg/l for sudan grass to less than 0.05 mg/l for rice. Arsenic has also been shown to reduce growth in green beans. For more information on arsenic in irrigation water please visit: Water Quality for Agriculture
Beryllium (Be)	0.00047 mg/L	Acceptable	<= 0.1 mg/L ***	This water may be suitable for irrigation use because it is less than the guideline of 0.1 mg/l. Beryllium toxicity to plants varies widely, ranging from 5 mg/L for kale to 0.5 mg/L for bush beans. For more information on beryllium in irrigation water quality please visit:

				Water Quality for Agriculture
Cobalt (Co)	0.00016 mg/L	Acceptable	≤ 0.05 mg/L ***	This water may be suitable for irrigation use because it is less than the guideline of 0.05 mg/l. Cobalt is toxic to tomato plants at 0.1 mg/L in nutrient solution. It also has the tendency to be inactivated by neutral and alkaline soils. For more information on cobalt in irrigation water, please visit: Water Quality for Agriculture
Fluoride (F)	1.8 mg/L	Objectionable	≤ 1.0 mg/L	This water may not be suitable for irrigation use because it exceeds the guideline of 1.0 mg/l. This concentration is designed to protect crops grown in acid soils since Fluoride is inactivated by neutral and alkaline soils. For more information on fluoride in irrigation water please visit: Water Quality for Agriculture
Lead (Pb)	0.00010 mg/L	Acceptable	≤ 5.0 mg/L ***	This water may be suitable for irrigation use because it is less than the guideline of 5.0 mg/l. Generally, lead is retained in soils by sorption and/or by forming with organic and inorganic constituents in soils. Lead enters plants through the leaves and root system. The following conditions determine the amount of lead a plant will absorb: lead concentration and form, soil (pH, texture, moisture, cation exchange capacity, and content of organic matter), species of crop, rooting depth, and climate. Furthermore, lead in irrigation water can inhibit plant cell growth at very high concentrations. For more information on lead in irrigation water please visit: Water Quality for Agriculture
Lithium (Li)	0.059 mg/L	Acceptable	≤ 2.5 mg/L ***	This water may be suitable for irrigation use because it is less than the guideline of 2.5 mg/l. However, lithium can be tolerated by most crops at up to 5 mg/L and is mobile in soil. It is toxic to citrus plants at low doses and the recommended limit for citrus crops is 0.075 mg/l. For more information on lithium in irrigation water, please visit: Water Quality for Agriculture
Mercury (Hg)	0.000027 mg/L	No Guideline		At this time, there is no irrigation water quality guideline for mercury. For more information on irrigation water, please visit: CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture
Selenium (Se)	0.0076 mg/L	Acceptable	≤ 0.02 mg/L ***	This water may be suitable for irrigation use because it is less than the guideline of 0.02 mg/l. Selenium is toxic to some plants at low concentrations and to livestock if forage is grown in soils with high levels of available selenium. Selenium poisoning of animals has been documented in areas where soils have high selenium concentrations. Conversely, plants and animals cultivated in areas with low selenium concentrations have the potential to develop diseases as a result of selenium deficiency. For more information on selenium in irrigation water please visit: Water Quality for Agriculture
Silver (Ag)	0.000047 mg/L	No Guideline		At this time, there is no irrigation water quality guideline for silver. For more information on irrigation water quality please visit: CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture
Thallium (Tl)	0.000066 mg/L	No Guideline		At this time, there is no irrigation water quality guideline for thallium. For more information on irrigation water, please visit:

				CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture
Vanadium (V)	0.004 mg/L	Acceptable	<= 0.1 mg/L	<p>This water may be suitable for irrigation use because it is less than the guideline of 0.1 mg/l. Vanadium is toxic to many plants at relatively low concentrations. For more information on Vanadium in irrigation water please visit:</p> Water Quality for Agriculture
8) Volatile Contaminants				
benzene	0.16 ug/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for benzene. However, crop injury could occur but, these levels would be plant specific and at concentrations not typically found in irrigation water. For more information on irrigation water quality please visit:</p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture
o-dichlorobenzene	0.15 ug/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for o-dichlorobenzene. However, crop injury could occur but, these levels would be plant specific and at concentrations not typically found in irrigation water. For more information on irrigation water, please visit:</p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture
p-dichlorobenzene	0.16 ug/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for p-dichlorobenzene. However, crop injury could occur but, these levels would be plant specific and at concentrations not typically found in irrigation water. For more information on irrigation water quality please visit:</p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture
ethylbenzene	0.16 ug/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for ethylbenzene. However, crop injury could occur but, these levels would be plant specific and at concentrations not typically found in irrigation water. For more information on irrigation water quality please visit:</p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture
monochlorobenzene	0.17 ug/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for monochlorobenzene. However, crop injury could occur but, these levels would be plant specific and at concentrations not typically found in irrigation water. For more information on irrigation water, please visit:</p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture
styrene	0.17 ug/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for styrene. However, crop injury could occur but, these levels would be plant specific and at concentrations not typically found in irrigation water. For more information on irrigation water quality please visit:</p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture
toluene	0.17 ug/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for toluene. However, crop injury could occur but, these levels would be plant specific and at concentrations not typically found in irrigation water. For more information on irrigation water quality please visit:</p> CSU Pub 0.506 Irrigation Water Quality Criteria

				Water Quality for Agriculture
trichloroethane	0.16 ug/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for trichloroethane. However, crop injury could occur but, these levels would be plant specific and at concentrations not typically found in irrigation water. For more information on irrigation water, please visit:</p> <p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture </p>
xylenes (total)	0.19 ug/L	No Guideline		<p>At this time, there is no irrigation water quality guideline for xylenes. However, crop injury could occur but these levels would be plant specific and at concentrations not typically found in irrigation water. For more information on irrigation water quality please visit:</p> <p> CSU Pub 0.506 Irrigation Water Quality Criteria Water Quality for Agriculture </p>

* MCL (Primary Standard)
 ** SMCL (Secondary Standard)
 *** Upper Limit Guideline