

ANALYTICAL REPORT

Job Number: 280-22826-1

Job Description: Peterson Complaint #200327803

For:
Colorado Oil&Gas Conservation Commision
1120 Lincoln St.
Suite 801
Denver, CO 80203
Attention: John Axelson



Approved for release.
Joseph J Egry
Project Manager I
11/30/2011 10:38 AM

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Project Manager I
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11/30/2011

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

The Lab Certification ID# is E87667.

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

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CASE NARRATIVE

Client: Colorado Oil & Gas Conservation Commission

Project: Peterson Complaint #200327803

Report Number: 280-22826-1

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 11/15/2011; the samples arrived in good condition, properly preserved, and on ice. The temperature of the coolers at receipt was 5.1°C.

Sulfuric acid preserved bottles were not received at the laboratory; therefore, Nitrate and Nitrite were performed by method 300.0.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample PETERSON WW (280-22826-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/28/2011.

No difficulties were encountered during the volatiles analysis.

All quality control parameters were within the acceptance limits.

GAS RANGE ORGANICS

Sample PETERSON WW (280-22826-1) was analyzed for gas range organics in accordance with EPA SW-846 Method 8015B - GRO. The samples were analyzed on 11/18/2011.

No difficulties were encountered during the GRO analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED GASES

Sample PETERSON WW (280-22826-1) was analyzed for dissolved gases in accordance with RSK_175. The samples were analyzed on 11/16/2011.

Analytes Acetylene/Ethane co-elute on one of the columns used for this analysis. As a result, there are no results reported for the %Difference in the concentration on the Form X.

Methane failed the recovery criteria low for the MSD of sample 280-22581-2 in batch 280-96662. The associated laboratory control sample (LCS) met acceptance criteria. The presence of the '4' qualifier in the report indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

No other difficulties were encountered during the dissolved gases analysis.

All other quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS

Sample PETERSON WW (280-22826-1) was analyzed for Diesel Range Organics in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 11/17/2011 and analyzed on 11/21/2011.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 96617. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other difficulties were encountered during the DRO analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS

Sample PETERSON WW (280-22826-1) was analyzed for dissolved metals in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 11/18/2011.

No difficulties were encountered during the dissolved metals analysis.

All quality control parameters were within the acceptance limits.

SODIUM ABSORPTION RATIO

Sample PETERSON WW (280-22826-1) was analyzed for Sodium Absorption Ratio in accordance with USDA Handbook 60 - 20B. The samples were analyzed on 11/17/2011.

No difficulties were encountered during the SAR analysis.

All quality control parameters were within the acceptance limits.

ALKALINITY

Sample PETERSON WW (280-22826-1) was analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 11/21/2011.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

SPECIFIC CONDUCTIVITY

Sample PETERSON WW (280-22826-1) was analyzed for specific conductivity in accordance with SM20 2510B. The samples were analyzed on 11/27/2011.

No difficulties were encountered during the conductivity analysis.

All quality control parameters were within the acceptance limits.

TOTAL DISSOLVED SOLIDS

Sample PETERSON WW (280-22826-1) was analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 11/21/2011.

No difficulties were encountered during the TDS analysis.

All quality control parameters were within the acceptance limits.

ANIONS (28 DAYS)

Sample PETERSON WW (280-22826-1) was analyzed for anions (28 days) in accordance with EPA Method 300.0. The samples were analyzed on 11/15/2011 and 11/16/2011.

Sample PETERSON WW (280-22826-1) [5X] required dilution prior to analysis due to the high concentration of target analytes. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the anions analysis.

All quality control parameters were within the acceptance limits.

ANIONS (48 HOURS)

Sample PETERSON WW (280-22826-1) was analyzed for anions (48 hours) in accordance with EPA Method 300.0. The samples were analyzed on 11/15/2011.

No difficulties were encountered during the anions analysis.

All quality control parameters were within the acceptance limits.

CATION ANION BALANCE

Sample PETERSON WW (280-22826-1) was analyzed for Cation Anion Balance in accordance with Cation Anion Balance. The samples were analyzed on 11/23/2011.

Several analytes were detected in method blank MB 280-97564/1 at levels exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the Cation Anion Balance analysis.

All other quality control parameters were within the acceptance limits.

CORROSIVITY (PH)

Sample PETERSON WW (280-22826-1) was analyzed for corrosivity (pH) in accordance with SM20 4500 H+ B. The samples were analyzed on 11/19/2011.

TestAmerica uses a hold time of 24 hours for pH by method SM20 4500 H+ B to allow for sample shipment. However, the analysis for pH by method SM20 4500 H+ B should be performed in the field immediately following sampling. The analysis for pH was performed outside of TestAmerica's hold time of 24 hours. Please note that the sample results should be considered estimated.

No other difficulties were encountered during the pH analysis.

All other quality control parameters were within the acceptance limits.

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: MSV_H Analysis Batch Number: 97828Lab Sample ID: CCV 280-97828/3 Client Sample ID: _____Date Analyzed: 11/28/11 10:21 Lab File ID: H8214.D GC Column: DB-624 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl acetate	5.35	Analyte Misidentified by the Data System		

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCV_B Analysis Batch Number: 90690Lab Sample ID: IC 280-90690/3 Client Sample ID: _____Date Analyzed: 10/11/11 18:19 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	7.85	Baseline Event	mooret	10/12/11 10:36
C5-C12	9.62	Baseline Event	mooret	10/12/11 10:36
C6-C12	10.07	Baseline Event	mooret	10/12/11 10:36
1-Chloro-4-fluorobenzene	11.27	Baseline Event	mooret	10/12/11 10:36
Chlorobenzene	11.48	Baseline Event	mooret	10/12/11 10:36

Lab Sample ID: IC 280-90690/4 Client Sample ID: _____Date Analyzed: 10/11/11 18:51 Lab File ID: 114F0401.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Gasoline Range Organics (GRO) -C6-C10	9.13	Baseline Event	mooret	10/12/11 10:37
C5-C12	9.62	Baseline Event	mooret	10/12/11 10:37
C6-C12	10.07	Baseline Event	mooret	10/12/11 10:37
1-Chloro-4-fluorobenzene	11.28	Baseline Event	mooret	10/12/11 10:37
Chlorobenzene	11.49	Baseline Event	mooret	10/12/11 10:37

Lab Sample ID: ICRT 280-90690/5 Client Sample ID: _____Date Analyzed: 10/11/11 19:24 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	7.85	Baseline Event	mooret	10/12/11 10:34
C5-C12	9.62	Baseline Event	mooret	10/12/11 10:34
C6-C12	10.07	Baseline Event	mooret	10/12/11 10:34
1-Chloro-4-fluorobenzene	11.27	Baseline Event	mooret	10/12/11 10:34
Chlorobenzene	11.49	Baseline Event	mooret	10/12/11 10:34

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCV_B Analysis Batch Number: 90690Lab Sample ID: IC 280-90690/6 Client Sample ID: _____Date Analyzed: 10/11/11 19:56 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	7.86	Baseline Event	mooret	10/12/11 10:37
C5-C12	9.62	Baseline Event	mooret	10/12/11 10:37
C6-C12	10.07	Baseline Event	mooret	10/12/11 10:37
1-Chloro-4-fluorobenzene	11.27	Baseline Event	mooret	10/12/11 10:37
Chlorobenzene	11.48	Baseline Event	mooret	10/12/11 10:37

Lab Sample ID: IC 280-90690/7 Client Sample ID: _____Date Analyzed: 10/11/11 20:28 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	7.86	Baseline Event	mooret	10/12/11 10:37
C5-C12	9.62	Baseline Event	mooret	10/12/11 10:37
C6-C12	10.07	Baseline Event	mooret	10/12/11 10:37
1-Chloro-4-fluorobenzene	11.27	Baseline Event	mooret	10/12/11 10:37
Chlorobenzene	11.48	Baseline Event	mooret	10/12/11 10:37

Lab Sample ID: IC 280-90690/8 Client Sample ID: _____Date Analyzed: 10/11/11 21:01 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	7.86	Baseline Event	mooret	10/12/11 10:38
C5-C12	9.62	Baseline Event	mooret	10/12/11 10:38
C6-C12	10.07	Baseline Event	mooret	10/12/11 10:38
1-Chloro-4-fluorobenzene	11.27	Baseline Event	mooret	10/12/11 10:38
Chlorobenzene	11.48	Baseline Event	mooret	10/12/11 10:38

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCV_B Analysis Batch Number: 90690Lab Sample ID: ICV 280-90690/9 Client Sample ID: _____Date Analyzed: 10/11/11 21:33 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	7.85	Baseline Event	mooret	10/12/11 10:40
C5-C12	9.62	Baseline Event	mooret	10/12/11 10:40
C6-C12	10.07	Baseline Event	mooret	10/12/11 10:40
Gasoline	10.07	Baseline Event	mooret	10/12/11 10:40
Chlorobenzene	11.47	Baseline Event	mooret	10/12/11 10:40

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCV_B Analysis Batch Number: 97151Lab Sample ID: CCVRT 280-97151/2 Client Sample ID: _____Date Analyzed: 11/18/11 14:24 Lab File ID: 103F0301.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	7.88	Baseline Event	byla	11/18/11 14:48
Gasoline Range Organics (GRO) -C6-C10	9.15	Baseline Event	byla	11/18/11 00:00
Chlorobenzene	11.51	Baseline Event	byla	11/18/11 14:48

Lab Sample ID: LCS 280-97151/3 Client Sample ID: _____Date Analyzed: 11/18/11 14:55 Lab File ID: 104F0401.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	7.88	Baseline Event	byla	11/18/11 16:21
Gasoline Range Organics (GRO) -C6-C10	9.15	Baseline Event	byla	11/18/11 00:00

Lab Sample ID: LCSD 280-97151/4 Client Sample ID: _____Date Analyzed: 11/18/11 15:27 Lab File ID: 105F0501.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	7.87	Baseline Event	byla	11/18/11 16:22
Gasoline Range Organics (GRO) -C6-C10	9.15	Baseline Event	byla	11/18/11 00:00

Lab Sample ID: 280-22826-1 MS Client Sample ID: PETERSON WW MSDate Analyzed: 11/18/11 17:38 Lab File ID: 109F0901.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	7.88	Baseline Event	byla	11/21/11 10:39
Gasoline Range Organics (GRO) -C6-C10	9.15	Baseline Event	byla	11/21/11 00:00

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCV_B Analysis Batch Number: 97151Lab Sample ID: 280-22826-1 MSD Client Sample ID: PETERSON WW MSDDate Analyzed: 11/18/11 18:11 Lab File ID: 110F1001.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	7.88	Baseline Event	byla	11/21/11 09:01
Gasoline Range Organics (GRO) -C6-C10	9.15	Baseline Event	byla	11/21/11 00:00

Lab Sample ID: CCV 280-97151/11 Client Sample ID: _____Date Analyzed: 11/18/11 20:54 Lab File ID: 115F1501.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	7.90	Baseline Event	byla	11/21/11 08:57
Gasoline Range Organics (GRO) -C6-C10	9.15	Baseline Event	byla	11/21/11 00:00
Chlorobenzene	11.53	Baseline Event	byla	11/21/11 08:57

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCV_J Analysis Batch Number: 76212Lab Sample ID: IC 280-76212/1 Client Sample ID: _____Date Analyzed: 07/12/11 10:33 Lab File ID: 003F0301.D GC Column: RT-VPLOT ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.27	Baseline Event	gilbertb	07/12/11 11:37

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCS_U Analysis Batch Number: 89736Lab Sample ID: IC 280-89736/2 Client Sample ID: _____Date Analyzed: 10/06/11 10:25 Lab File ID: 003B0301.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	3.62	Baseline Event	birdsellm	10/06/11 15:07
C10-C24	3.85	Baseline Event	birdsellm	10/06/11 15:07
C10-C25	3.95	Baseline Event	birdsellm	10/06/11 15:07
Diesel Range Organics [C10-C28]	4.26	Baseline Event	birdsellm	10/06/11 15:07
C8-C34	4.45	Baseline Event	birdsellm	10/06/11 00:00
C10-C32	4.62	Baseline Event	birdsellm	10/06/11 15:07
C10-C36	4.95	Baseline Event	birdsellm	10/06/11 15:07

Lab Sample ID: IC 280-89736/3 Client Sample ID: _____Date Analyzed: 10/06/11 10:54 Lab File ID: 004B0401.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	3.62	Baseline Event	birdsellm	10/06/11 15:08
C10-C24	3.85	Baseline Event	birdsellm	10/06/11 15:08
C10-C25	3.95	Baseline Event	birdsellm	10/06/11 15:08
Diesel Range Organics [C10-C28]	4.26	Baseline Event	birdsellm	10/06/11 15:08
C8-C34	4.45	Baseline Event	birdsellm	10/06/11 15:08
C10-C32	4.62	Baseline Event	birdsellm	10/06/11 15:08
C10-C36	4.95	Baseline Event	birdsellm	10/06/11 15:08
o-Terphenyl	5.34	Baseline Event	birdsellm	10/06/11 15:08
n-Octacosane	7.57	Baseline Event	birdsellm	10/06/11 15:08

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCS_U Analysis Batch Number: 89736Lab Sample ID: IC 280-89736/4 Client Sample ID: _____Date Analyzed: 10/06/11 11:22 Lab File ID: 005B0501.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	3.62	Baseline Event	birdsellm	10/06/11 15:08
C10-C24	3.85	Baseline Event	birdsellm	10/06/11 15:08
C10-C25	3.95	Baseline Event	birdsellm	10/06/11 15:08
Diesel Range Organics [C10-C28]	4.26	Baseline Event	birdsellm	10/06/11 15:08
C8-C34	4.45	Baseline Event	birdsellm	10/06/11 15:08
C10-C32	4.62	Baseline Event	birdsellm	10/06/11 15:08
C10-C36	4.95	Baseline Event	birdsellm	10/06/11 15:08
o-Terphenyl	5.33	Baseline Event	birdsellm	10/06/11 15:08
n-Octacosane	7.56	Baseline Event	birdsellm	10/06/11 15:08

Lab Sample ID: ICRT 280-89736/5 Client Sample ID: _____Date Analyzed: 10/06/11 11:50 Lab File ID: 006B0601.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	3.62	Baseline Event	birdsellm	10/06/11 15:08
C10-C24	3.85	Baseline Event	birdsellm	10/06/11 15:08
C10-C25	3.95	Baseline Event	birdsellm	10/06/11 15:08
Diesel Range Organics [C10-C28]	4.26	Baseline Event	birdsellm	10/06/11 15:08
C8-C34	4.45	Baseline Event	birdsellm	10/06/11 15:08
C10-C32	4.62	Baseline Event	birdsellm	10/06/11 15:08
C10-C36	4.95	Baseline Event	birdsellm	10/06/11 15:08
o-Terphenyl	5.33	Baseline Event	birdsellm	10/06/11 15:08
n-Octacosane	7.56	Baseline Event	birdsellm	10/06/11 15:08

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCS_U Analysis Batch Number: 89736Lab Sample ID: IC 280-89736/6 Client Sample ID: _____Date Analyzed: 10/06/11 12:19 Lab File ID: 007B0701.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	3.62	Baseline Event	birdsellm	10/06/11 15:09
C10-C24	3.85	Baseline Event	birdsellm	10/06/11 15:09
C10-C25	3.95	Baseline Event	birdsellm	10/06/11 15:09
Diesel Range Organics [C10-C28]	4.26	Baseline Event	birdsellm	10/06/11 15:09
C8-C34	4.45	Baseline Event	birdsellm	10/06/11 15:09
C10-C32	4.62	Baseline Event	birdsellm	10/06/11 15:09
C10-C36	4.95	Baseline Event	birdsellm	10/06/11 15:09
o-Terphenyl	5.32	Baseline Event	birdsellm	10/06/11 15:09

Lab Sample ID: IC 280-89736/7 Client Sample ID: _____Date Analyzed: 10/06/11 12:47 Lab File ID: 008B0801.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	3.62	Baseline Event	birdsellm	10/06/11 15:09
C10-C24	3.85	Baseline Event	birdsellm	10/06/11 15:09
C10-C25	3.95	Baseline Event	birdsellm	10/06/11 15:09
Diesel Range Organics [C10-C28]	4.26	Baseline Event	birdsellm	10/06/11 15:09
C8-C34	4.45	Baseline Event	birdsellm	10/06/11 15:09
C10-C32	4.62	Baseline Event	birdsellm	10/06/11 15:09
C10-C36	4.95	Baseline Event	birdsellm	10/06/11 15:09
o-Terphenyl	5.32	Baseline Event	birdsellm	10/06/11 15:09

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCS_U Analysis Batch Number: 89736Lab Sample ID: IC 280-89736/8 Client Sample ID: _____Date Analyzed: 10/06/11 13:43 Lab File ID: 009B0901.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	3.62	Baseline Event	birdsellm	10/06/11 15:10
C10-C24	3.85	Baseline Event	birdsellm	10/06/11 15:10
C10-C25	3.95	Baseline Event	birdsellm	10/06/11 15:10
Diesel Range Organics [C10-C28]	4.26	Baseline Event	birdsellm	10/06/11 15:10
C8-C34	4.45	Baseline Event	birdsellm	10/06/11 15:10
C10-C32	4.62	Baseline Event	birdsellm	10/06/11 15:10
C10-C36	4.95	Baseline Event	birdsellm	10/06/11 15:10
o-Terphenyl	5.32	Baseline Event	birdsellm	10/06/11 15:10

Lab Sample ID: ICV 280-89736/9 Client Sample ID: _____Date Analyzed: 10/06/11 14:11 Lab File ID: 010B1001.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	3.62	Baseline Event	birdsellm	10/06/11 15:13
C10-C24	3.85	Baseline Event	birdsellm	10/06/11 15:13
C10-C25	3.95	Baseline Event	birdsellm	10/06/11 15:13
Diesel Range Organics [C10-C28]	4.26	Baseline Event	birdsellm	10/06/11 15:13
C8-C34	4.45	Baseline Event	birdsellm	10/06/11 15:13
C10-C32	4.62	Baseline Event	birdsellm	10/06/11 15:13
C10-C36	4.95	Baseline Event	birdsellm	10/06/11 15:13
o-Terphenyl	5.32	Baseline Event	birdsellm	10/06/11 15:13
n-Octacosane	7.56	Baseline Event	birdsellm	10/06/11 15:12

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCS_U Analysis Batch Number: 97433Lab Sample ID: CCVRT 280-97433/2 Client Sample ID: _____Date Analyzed: 11/21/11 11:50 Lab File ID: 004B0401.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	3.50	Baseline Event	pavlakoa	11/21/11 14:13
C10-C24	3.74	Baseline Event	pavlakoa	11/21/11 14:13
C10-C25	3.85	Baseline Event	pavlakoa	11/21/11 14:13
Diesel Range Organics [C10-C28]	4.15	Baseline Event	pavlakoa	11/21/11 14:13
C10-C36	4.83	Baseline Event	pavlakoa	11/21/11 14:13
o-Terphenyl	5.25	Baseline Event	pavlakoa	11/21/11 14:13

Lab Sample ID: LCS 280-96858/2-A Client Sample ID: _____Date Analyzed: 11/21/11 18:35 Lab File ID: 018B1801.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C36	4.83	Baseline Event	pavlakoa	11/22/11 14:20
o-Terphenyl	5.26	Baseline Event	pavlakoa	11/22/11 14:20

Lab Sample ID: LCSD 280-96858/3-A Client Sample ID: _____Date Analyzed: 11/21/11 19:04 Lab File ID: 019B1901.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C36	4.83	Baseline Event	pavlakoa	11/22/11 14:20
o-Terphenyl	5.26	Baseline Event	pavlakoa	11/22/11 14:20

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-22826-1

SDG No.: _____

Instrument ID: GCS_U Analysis Batch Number: 97433Lab Sample ID: CCV 280-97433/6 Client Sample ID: _____Date Analyzed: 11/21/11 19:33 Lab File ID: 020B2001.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	3.50	Baseline Event	pavlakoa	11/22/11 08:06
C10-C24	3.74	Baseline Event	pavlakoa	11/22/11 08:06
C10-C25	3.85	Baseline Event	pavlakoa	11/22/11 08:06
Diesel Range Organics [C10-C28]	4.15	Baseline Event	pavlakoa	11/22/11 08:06
C10-C36	4.83	Baseline Event	pavlakoa	11/22/11 08:06
o-Terphenyl	5.26	Baseline Event	pavlakoa	11/22/11 08:06

Lab Sample ID: CCV 280-97433/23 Client Sample ID: _____Date Analyzed: 11/22/11 03:32 Lab File ID: 037B3701.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	3.50	Baseline Event	pavlakoa	11/22/11 08:07
C10-C24	3.74	Baseline Event	pavlakoa	11/22/11 08:07
C10-C25	3.85	Baseline Event	pavlakoa	11/22/11 08:07
Diesel Range Organics [C10-C28]	4.15	Baseline Event	pavlakoa	11/22/11 08:07
C10-C36	4.83	Baseline Event	pavlakoa	11/22/11 08:07
o-Terphenyl	5.28	Baseline Event	pavlakoa	11/22/11 08:07

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver

Job No.: 280-22826-1

SDG No.:

Instrument ID: MSV_H Analysis Batch Number: 97828

Lab Sample ID: CCV 280-97828/3 Client Sample ID:

Date Analyzed: 11/28/11 10:21 Lab File ID: H8214.D GC Column: DB-624 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST
Vinyl acetate	5.35	Analyte Misidentified by the Data System	DATE

WM 11/29/11

SAMPLE SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-22826-1	PETERSON WW	Water	11/15/2011 1025	11/15/2011 1530

EXECUTIVE SUMMARY - Detections

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-22826-1	PETERSON WW					
Methane		28		5.0	ug/L	RSK-175
Sodium Adsorption Ratio		33		0.40	No Unit	20B
Bromide		0.20		0.20	mg/L	300.0
Chloride		12		3.0	mg/L	300.0
Fluoride		0.98		0.50	mg/L	300.0
Sulfate		170		25	mg/L	300.0
Total Anions		10			meq/L	SM 1030F
Total Cations		11			meq/L	SM 1030F
Percent Difference		1.5			%	SM 1030F
Anion/Cation Balance		1.5			%	SM 1030F
Total Alkalinity		320		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		290		5.0	mg/L	SM 2320B
Carbonate Alkalinity as CaCO3		34		5.0	mg/L	SM 2320B
Specific Conductance		960		2.0	umhos/cm	SM 2510B
Total Dissolved Solids		570		10	mg/L	SM 2540C
pH		8.66	HF	0.100	SU	SM 4500 H+ B
<i>Dissolved</i>						
Barium		19		10	ug/L	6010B
Calcium		3100		200	ug/L	6010B
Magnesium		510		200	ug/L	6010B
Sodium		240000		1000	ug/L	6010B

METHOD SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Purge and Trap	TAL DEN		SW846 5030B
Gasoline Range Organics - (GC)	TAL DEN	SW846 8015B	
Purge and Trap	TAL DEN		SW846 5030B
Dissolved Gases in Water	TAL DEN	RSK RSK-175	
Diesel Range Organics (DRO) (GC)	TAL DEN	SW846 8015B	
Liquid-Liquid Extraction (Separatory Funnel)			SW846 3510C
Sodium Adsorption Ratio	TAL DEN	USDA 20B	
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals			SW846 3005A
Sample Filtration			FILTRATION
Anions, Ion Chromatography	TAL DEN	MCAWW 300.0	
Cation Anion Balance	TAL DEN	SM SM 1030F	
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	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

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: 280-22826-1

Method	Analyst	Analyst ID
SW846 8260B	Wickham, Tom	TW
SW846 8015B	Byl, Amelia M	AMB
RSK RSK-175	Gilbert, Bryan M	BMG
SW846 8015B	Pavlakovich, Adam M	AMP
USDA 20B	Harre, John K	JKH
SW846 6010B	Harre, John K	JKH
MCAWW 300.0	Phan, Thu L	TLP
SM SM 1030F	Sullivan, Roxanne	RS
SM SM 2320B	Allen, Andrew J	AJA
SM SM 2510B	Plumb, Paul M	PMP
SM SM 2540C	Domnick, Brandon J	BJD
SM SM 4500 H+ B	Ayala, Delaina	DA

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Client Sample ID: PETERSON WW

Lab Sample ID: 280-22826-1

Date Sampled: 11/15/2011 1025

Client Matrix: Water

Date Received: 11/15/2011 1530

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-97828	Instrument ID:	MSV_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H8225.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	11/28/2011 1505			Final Weight/Volume:	20 mL
Prep Date:	11/28/2011 1505				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		1.0
Ethylbenzene	ND		1.0
Toluene	ND		1.0
m-Xylene & p-Xylene	ND		2.0
o-Xylene	ND		1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 127
Toluene-d8 (Surr)	101		80 - 125
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	97		77 - 120

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Client Sample ID: PETERSON WW

Lab Sample ID: 280-22826-1

Date Sampled: 11/15/2011 1025

Client Matrix: Water

Date Received: 11/15/2011 1530

8015B Gasoline Range Organics - (GC)

Analysis Method:	8015B	Analysis Batch:	280-97151	Instrument ID:	GCV_B
Prep Method:	5030B		N/A	Initial Weight/Volume:	5 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	11/18/2011 1706			Injection Volume:	5 mL
Prep Date:	11/18/2011 1706			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	87		82 - 110

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Client Sample ID: PETERSON WW

Lab Sample ID: 280-22826-1

Date Sampled: 11/15/2011 1025

Client Matrix: Water

Date Received: 11/15/2011 1530

RSK-175 Dissolved Gases in Water

Analysis Method:	RSK-175	Analysis Batch:	280-96662	Instrument ID:	GCV_J
	N/A		N/A	Initial Weight/Volume:	18 mL
Dilution:	1.0			Final Weight/Volume:	18 mL
Analysis Date:	11/16/2011 1204			Injection Volume:	
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Methane	28		5.0

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Client Sample ID: PETERSON WW

Lab Sample ID: 280-22826-1

Date Sampled: 11/15/2011 1025

Client Matrix: Water

Date Received: 11/15/2011 1530

RSK-175 Dissolved Gases in Water

Analysis Method: RSK-175

Analysis Batch: 280-96662

Instrument ID: GCV_J

N/A

N/A

Initial Weight/Volume: 18 mL

Dilution: 1.0

Final Weight/Volume: 18 mL

Analysis Date: 11/16/2011 1204

Injection Volume:

Prep Date: N/A

Result Type: SECONDARY

Analyte

Result (ug/L)

Qualifier

RL

Methane

29

5.0

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

Client Sample ID: PETERSON WW

Lab Sample ID: 280-22826-1

Date Sampled: 11/15/2011 1025

Client Matrix: Water

Date Received: 11/15/2011 1530

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	280-97433	Instrument ID:	GCS_U
Prep Method:	3510C	Prep Batch:	280-96858	Initial Weight/Volume:	1048 mL
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	11/21/2011 2029			Injection Volume:	1 uL
Prep Date:	11/17/2011 2110			Result Type:	PRIMARY

Analyte	Result (mg/L)	Qualifier	RL
C10-C36	ND		0.48

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	104		50 - 115

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Client Sample ID: PETERSON WW

Lab Sample ID: 280-22826-1

Date Sampled: 11/15/2011 1025

Client Matrix: Water

Date Received: 11/15/2011 1530

20B Sodium Adsorption Ratio

Analysis Method:	20B	Analysis Batch:	280-96675	Instrument ID:	MT_025
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	11/17/2011 0720			Final Weight/Volume:	1.0 mL
Prep Date:	N/A				

Analyte	Result (No Unit)	Qualifier	RL
Sodium Adsorption Ratio	33		0.40

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	280-97133	Instrument ID:	MT_025
Prep Method:	3005A	Prep Batch:	280-96697	Lab File ID:	25A4111811.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/18/2011 1952			Final Weight/Volume:	50 mL
Prep Date:	11/18/2011 0600				

Analyte	Result (ug/L)	Qualifier	RL
Barium	19		10
Calcium	3100		200
Iron	ND		100
Lead	ND		9.0
Magnesium	510		200
Manganese	ND		10
Potassium	ND		3000
Sodium	240000		1000

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

General Chemistry**Client Sample ID: PETERSON WW**

Lab Sample ID: 280-22826-1

Date Sampled: 11/15/2011 1025

Client Matrix: Water

Date Received: 11/15/2011 1530

Analyte	Result	Qual	Units	RL	Dil	Method
Bromide	0.20		mg/L	0.20	1.0	300.0
	Analysis Batch: 280-96646	Analysis Date: 11/15/2011 2114				
Chloride	12		mg/L	3.0	1.0	300.0
	Analysis Batch: 280-96646	Analysis Date: 11/15/2011 2114				
Nitrite as N	ND		mg/L	0.50	1.0	300.0
	Analysis Batch: 280-96594	Analysis Date: 11/15/2011 2114				
Fluoride	0.98		mg/L	0.50	1.0	300.0
	Analysis Batch: 280-96646	Analysis Date: 11/15/2011 2114				
Sulfate	170		mg/L	25	5.0	300.0
	Analysis Batch: 280-96646	Analysis Date: 11/16/2011 0452				
Nitrate as N	ND		mg/L	0.50	1.0	300.0
	Analysis Batch: 280-96594	Analysis Date: 11/15/2011 2114				
Total Alkalinity	320		mg/L	5.0	1.0	SM 2320B
	Analysis Batch: 280-97305	Analysis Date: 11/21/2011 1712				
Bicarbonate Alkalinity as CaCO3	290		mg/L	5.0	1.0	SM 2320B
	Analysis Batch: 280-97305	Analysis Date: 11/21/2011 1712				
Carbonate Alkalinity as CaCO3	34		mg/L	5.0	1.0	SM 2320B
	Analysis Batch: 280-97305	Analysis Date: 11/21/2011 1712				
Hydroxide Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
	Analysis Batch: 280-97305	Analysis Date: 11/21/2011 1712				
Total Dissolved Solids	570		mg/L	10	1.0	SM 2540C
	Analysis Batch: 280-97109	Analysis Date: 11/21/2011 0712				
Analyte	Result	Qual	Units		Dil	Method
Total Anions	10		meq/L		1.0	SM 1030F
	Analysis Batch: 280-97564	Analysis Date: 11/23/2011 1044				
Total Cations	11		meq/L		1.0	SM 1030F
	Analysis Batch: 280-97564	Analysis Date: 11/23/2011 1044				
Percent Difference	1.5		%		1.0	SM 1030F
	Analysis Batch: 280-97564	Analysis Date: 11/23/2011 1044				
Anion/Cation Balance	1.5		%		1.0	SM 1030F
	Analysis Batch: 280-97564	Analysis Date: 11/23/2011 1044				
Analyte	Result	Qual	Units	RL	Dil	Method
Specific Conductance	960		umhos/cm	2.0	1.0	SM 2510B
	Analysis Batch: 280-97665	Analysis Date: 11/27/2011 1340				
pH	8.66	HF	SU	0.100	1.0	SM 4500 H+ B
	Analysis Batch: 280-97082	Analysis Date: 11/19/2011 1204				

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

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
280-22826-1	PETERSON WW	97	92	101	100
MB 280-97828/5		97	93	98	95
LCS 280-97828/6		105	103	121	103
280-22970-G-1 MS		98	97	111	99
280-22970-G-1 MSD		107	109	123	106

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: 280-22826-1

Surrogate Recovery Report

8015B Gasoline Range Organics - (GC)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TFT1 %Rec
280-22826-1	PETERSON WW	87
MB 280-97151/5		82
LCS 280-97151/3		95
LCSD 280-97151/4		88
280-22826-1 MS	PETERSON WW MS	82
280-22826-1 MSD	PETERSON WW MSD	84

Surrogate	Acceptance Limits
TFT = a,a,a-Trifluorotoluene	82-110

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Surrogate Recovery Report

8015B Diesel Range Organics (DRO) (GC)

Client Matrix: Water

Lab Sample ID	Client Sample ID	OTPH1 %Rec
280-22826-1	PETERSON WW	104
MB 280-96858/1-A		112
LCS 280-96858/2-A		110
LCSD 280-96858/3-A		109

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	50-115

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Method Blank - Batch: 280-97828

Method: 8260B

Preparation: 5030B

Lab Sample ID:	MB 280-97828/5	Analysis Batch:	280-97828	Instrument ID:	MSV_H
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	H8218.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	11/28/2011 1155	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	11/28/2011 1155				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Benzene	ND		1.0
Ethylbenzene	ND		1.0
Toluene	ND		1.0
m-Xylene & p-Xylene	ND		2.0
o-Xylene	ND		1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93	70 - 127
Toluene-d8 (Surr)	98	80 - 125
4-Bromofluorobenzene (Surr)	95	78 - 120
Dibromofluoromethane (Surr)	97	77 - 120

Lab Control Sample - Batch: 280-97828

Method: 8260B

Preparation: 5030B

Lab Sample ID:	LCS 280-97828/6	Analysis Batch:	280-97828	Instrument ID:	MSV_H
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	H8219.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	11/28/2011 1219	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	11/28/2011 1219				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	5.16	103	77 - 120	
Ethylbenzene	5.00	4.62	92	78 - 120	
Toluene	5.00	4.79	96	73 - 120	
m-Xylene & p-Xylene	10.0	9.12	91	78 - 120	
o-Xylene	5.00	4.51	90	77 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103	70 - 127
Toluene-d8 (Surr)	121	80 - 125
4-Bromofluorobenzene (Surr)	103	78 - 120
Dibromofluoromethane (Surr)	105	77 - 120

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-97828**

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

MS Lab Sample ID:	280-22970-G-1 MS	Analysis Batch:	280-97828	Instrument ID:	MSV_H
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	H8221.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	11/28/2011 1332			Final Weight/Volume:	20 mL
Prep Date:	11/28/2011 1332				
Leach Date:	N/A				

MSD Lab Sample ID:	280-22970-G-1 MSD	Analysis Batch:	280-97828	Instrument ID:	MSV_H
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	H8222.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	11/28/2011 1355			Final Weight/Volume:	20 mL
Prep Date:	11/28/2011 1355				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	104	110	77 - 120	6	20		
Ethylbenzene	90	98	78 - 120	9	26		
Toluene	94	99	73 - 120	5	20		
m-Xylene & p-Xylene	87	97	78 - 120	11	20		
o-Xylene	89	97	77 - 120	9	20		
Surrogate	MS % Rec		MSD % Rec	Acceptance Limits			
1,2-Dichloroethane-d4 (Surr)	97		109	70 - 127			
Toluene-d8 (Surr)	111		123	80 - 125			
4-Bromofluorobenzene (Surr)	99		106	78 - 120			
Dibromofluoromethane (Surr)	98		107	77 - 120			

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-97828**

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

MS Lab Sample ID:	280-22970-G-1 MS	Units:	ug/L	MSD Lab Sample ID:	280-22970-G-1 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	11/28/2011 1332			Analysis Date:	11/28/2011 1355
Prep Date:	11/28/2011 1332			Prep Date:	11/28/2011 1355
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	ND	5.00	5.00	5.19	5.52
Ethylbenzene	ND	5.00	5.00	4.52	4.92
Toluene	ND	5.00	5.00	4.71	4.96
m-Xylene & p-Xylene	ND	10.0	10.0	8.67	9.69
o-Xylene	ND	5.00	5.00	4.44	4.83

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Method Blank - Batch: 280-97151

Method: 8015B
Preparation: 5030B

Lab Sample ID:	MB 280-97151/5	Analysis Batch:	280-97151	Instrument ID:	GCV_B
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	106F0601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/18/2011 1558	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	11/18/2011 1558			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

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

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

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 280-97151

Method: 8015B
Preparation: 5030B

LCS Lab Sample ID:	LCS 280-97151/3	Analysis Batch:	280-97151	Instrument ID:	GCV_B
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	104F0401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/18/2011 1455	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	11/18/2011 1455			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 280-97151/4	Analysis Batch:	280-97151	Instrument ID:	GCV_B
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	105F0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/18/2011 1527	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	11/18/2011 1527			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	119	111	79 - 149	8	27		
Surrogate	LCS % Rec		LCSD % Rec	Acceptance Limits			
a,a,a-Trifluorotoluene	95		88	82 - 110			

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-97151

Method: 8015B
Preparation: 5030B

LCS Lab Sample ID: LCS 280-97151/3 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/18/2011 1455
Prep Date: 11/18/2011 1455
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-97151/4
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/18/2011 1527
Prep Date: 11/18/2011 1527
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	120	112

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-97151

Method: 8015B
Preparation: 5030B

MS Lab Sample ID: 280-22826-1 Analysis Batch: 280-97151
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0 Leach Batch: N/A
Analysis Date: 11/18/2011 1738
Prep Date: 11/18/2011 1738
Leach Date: N/A

Instrument ID: GCV_B
Lab File ID: 109F0901.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL
Injection Volume: 5 mL
Column ID: PRIMARY

MSD Lab Sample ID: 280-22826-1 Analysis Batch: 280-97151
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0 Leach Batch: N/A
Analysis Date: 11/18/2011 1811
Prep Date: 11/18/2011 1811
Leach Date: N/A

Instrument ID: GCV_B
Lab File ID: 110F1001.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	105	106	79 - 149	1	27		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
a,a,a-Trifluorotoluene	82		84		82 - 110		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 280-97151

Method: 8015B

Preparation: 5030B

MS Lab Sample ID: 280-22826-1 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/18/2011 1738
Prep Date: 11/18/2011 1738
Leach Date: N/A

MSD Lab Sample ID: 280-22826-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/18/2011 1811
Prep Date: 11/18/2011 1811
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	106	107

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Method Blank - Batch: 280-96662

Method: RSK-175

Preparation: N/A

Lab Sample ID: MB 280-96662/4
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/16/2011 1200
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-96662
Prep Batch: N/A
Leach Batch: N/A
Units: ug/L

Instrument ID: GCV_J
Lab File ID: 006F0401.D
Initial Weight/Volume: 18 mL
Final Weight/Volume: 18 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Methane	ND		5.0

Method Blank - Batch: 280-96662

Method: RSK-175

Preparation: N/A

Lab Sample ID: MB 280-96662/4
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/16/2011 1200
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-96662
Prep Batch: N/A
Leach Batch: N/A
Units: ug/L

Instrument ID: GCV_J
Lab File ID: 006F0401.D
Initial Weight/Volume: 18 mL
Final Weight/Volume: 18 mL
Injection Volume:
Column ID: SECONDARY

Analyte	Result	Qual	RL
Methane	ND		5.0

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-96662**

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

LCS Lab Sample ID:	LCS 280-96662/2	Analysis Batch:	280-96662	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	004F0201.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	11/16/2011 1151	Units:	ug/L	Final Weight/Volume:	18 mL
Prep Date:	N/A			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 280-96662/3	Analysis Batch:	280-96662	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	005F0301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	11/16/2011 1156	Units:	ug/L	Final Weight/Volume:	18 mL
Prep Date:	N/A			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Methane	102	103	75 - 125	2	20		

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-96662**

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

LCS Lab Sample ID:	LCS 280-96662/2	Analysis Batch:	280-96662	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	004F0201.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	11/16/2011 1151	Units:	ug/L	Final Weight/Volume:	18 mL
Prep Date:	N/A			Injection Volume:	
Leach Date:	N/A			Column ID:	SECONDARY

LCSD Lab Sample ID:	LCSD 280-96662/3	Analysis Batch:	280-96662	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	005F0301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	11/16/2011 1156	Units:	ug/L	Final Weight/Volume:	18 mL
Prep Date:	N/A			Injection Volume:	
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Methane	101	103	75 - 125	2	20		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-96662**

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

LCS Lab Sample ID: LCS 280-96662/2 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/16/2011 1151
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-96662/3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/16/2011 1156
Prep Date: N/A
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Methane	73.2	73.2	74.4	75.7

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-96662**

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

LCS Lab Sample ID: LCS 280-96662/2 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/16/2011 1151
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-96662/3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/16/2011 1156
Prep Date: N/A
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Methane	73.2	73.2	74.2	75.5

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-96662**

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

MS Lab Sample ID:	280-22581-V-2 MS	Analysis Batch:	280-96662	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	011F0901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	11/16/2011 1222			Final Weight/Volume:	18 mL
Prep Date:	N/A			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-22581-V-2 MSD	Analysis Batch:	280-96662	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	012F1001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	11/16/2011 1226			Final Weight/Volume:	18 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					
Methane	144	14	52 - 145	13	20	4	4

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-96662**

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

MS Lab Sample ID:	280-22581-V-2 MS	Units:	ug/L	MSD Lab Sample ID:	280-22581-V-2 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	11/16/2011 1222			Analysis Date:	11/16/2011 1226
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
Methane	690	73.2	73.2	792 4	697 4

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

Duplicate - Batch: 280-96662

Method: RSK-175

Preparation: N/A

Lab Sample ID: 280-22581-W-2 DU
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/16/2011 1218
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-96662
Prep Batch: N/A
Leach Batch: N/A
Units: ug/L

Instrument ID: GCV_J
Lab File ID: 010F0801.D
Initial Weight/Volume: 18 mL
Final Weight/Volume: 18 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Methane	690	610	12	20	

Duplicate - Batch: 280-96662

Method: RSK-175

Preparation: N/A

Lab Sample ID: 280-22581-W-2 DU
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/16/2011 1218
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-96662
Prep Batch: N/A
Leach Batch: N/A
Units: ug/L

Instrument ID: GCV_J
Lab File ID: 010F0801.D
Initial Weight/Volume: 18 mL
Final Weight/Volume: 18 mL
Injection Volume:
Column ID: SECONDARY

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Methane	680	607	12	20	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Method Blank - Batch: 280-96858

Method: 8015B
Preparation: 3510C

Lab Sample ID: MB 280-96858/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2011 1807
Prep Date: 11/17/2011 2110
Leach Date: N/A

Analysis Batch: 280-97433
Prep Batch: 280-96858
Leach Batch: N/A
Units: mg/L

Instrument ID: GCS_U
Lab File ID: 017B1701.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1000 uL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	Result	Qual	RL
C10-C36	ND		0.50

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	112	50 - 115

Lab Control Sample/

Lab Control Sample Duplicate Recovery Report - Batch: 280-96858

Method: 8015B
Preparation: 3510C

LCS Lab Sample ID: LCS 280-96858/2-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2011 1835
Prep Date: 11/17/2011 2110
Leach Date: N/A

Analysis Batch: 280-97433
Prep Batch: 280-96858
Leach Batch: N/A
Units: mg/L

Instrument ID: GCS_U
Lab File ID: 018B1801.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1000 uL
Injection Volume: 1 uL
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 280-96858/3-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2011 1904
Prep Date: 11/17/2011 2110
Leach Date: N/A

Analysis Batch: 280-97433
Prep Batch: 280-96858
Leach Batch: N/A
Units: mg/L

Instrument ID: GCS_U
Lab File ID: 019B1901.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1000 uL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
C10-C36	103	108	57 - 115	5	31		
Surrogate	LCS % Rec		LCSD % Rec	Acceptance Limits			
o-Terphenyl	110		109	50 - 115			

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-96858**

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

LCS Lab Sample ID: LCS 280-96858/2-A Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2011 1835
Prep Date: 11/17/2011 2110
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-96858/3-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2011 1904
Prep Date: 11/17/2011 2110
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
C10-C36	2.00	2.00	2.06	2.15

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Method Blank - Batch: 280-96675

Method: 20B Preparation: N/A

Lab Sample ID:	MB 280-96675/1	Analysis Batch:	280-96675	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	11/17/2011 0720	Units:	No Unit	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Sodium Adsorption Ratio	ND		0.40

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

Method Blank - Batch: 280-96697

Lab Sample ID: MB 280-96444/1-B
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/18/2011 1947
 Prep Date: 11/18/2011 0600
 Leach Date: N/A

Analysis Batch: 280-97133
 Prep Batch: 280-96697
 Leach Batch: N/A
 Units: ug/L

Method: 6010B Preparation: 3005A Dissolved

Instrument ID: MT_025
 Lab File ID: 25A4111811.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Barium	ND		10
Calcium	ND		200
Iron	ND		100
Lead	ND		9.0
Magnesium	ND		200
Manganese	ND		10
Potassium	ND		3000
Sodium	ND		1000

Lab Control Sample - Batch: 280-96697

Lab Sample ID: LCS 280-96444/2-B
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 11/18/2011 1949
 Prep Date: 11/18/2011 0600
 Leach Date: N/A

Analysis Batch: 280-97133
 Prep Batch: 280-96697
 Leach Batch: N/A
 Units: ug/L

Method: 6010B Preparation: 3005A Dissolved

Instrument ID: MT_025
 Lab File ID: 25A4111811.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Barium	2000	1930	97	90 - 112	
Calcium	50000	49900	100	90 - 111	
Iron	1000	963	96	89 - 115	
Lead	500	472	94	89 - 110	
Magnesium	50000	50400	101	90 - 113	
Manganese	500	535	107	90 - 110	
Potassium	50000	52800	106	89 - 114	
Sodium	50000	54000	108	90 - 115	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-96697

Method: 6010B
Preparation: 3005A
Dissolved

MS Lab Sample ID: 280-22826-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/18/2011 1957
Prep Date: 11/18/2011 0600
Leach Date: N/A

Analysis Batch: 280-97133
Prep Batch: 280-96697
Leach Batch: N/A

Instrument ID: MT_025
Lab File ID: 25A4111811.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-22826-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/18/2011 1959
Prep Date: 11/18/2011 0600
Leach Date: N/A

Analysis Batch: 280-97133
Prep Batch: 280-96697
Leach Batch: N/A

Instrument ID: MT_025
Lab File ID: 25A4111811.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Barium	96	97	85 - 120	1	20		
Calcium	98	99	48 - 153	1	20		
Iron	96	97	52 - 155	1	20		
Lead	92	93	89 - 121	1	20		
Magnesium	98	98	62 - 146	0	20		
Manganese	105	106	79 - 121	1	20		
Potassium	104	105	76 - 132	1	20		
Sodium	92	103	70 - 203	2	20	4	4

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-96697

Method: 6010B
Preparation: 3005A
Dissolved

MS Lab Sample ID: 280-22826-1 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/18/2011 1957
Prep Date: 11/18/2011 0600
Leach Date: N/A

MSD Lab Sample ID: 280-22826-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/18/2011 1959
Prep Date: 11/18/2011 0600
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Barium	19	2000	2000	1940	1950
Calcium	3100	50000	50000	52300	52800
Iron	ND	1000	1000	963	967
Lead	ND	500	500	461	466
Magnesium	510	50000	50000	49500	49400
Manganese	ND	500	500	532	536
Potassium	ND	50000	50000	53300	53800
Sodium	240000	50000	50000	286000 4	292000 4

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Serial Dilution - Batch: 280-96697

Method: 6010B
Preparation: 3005A
Dissolved

Lab Sample ID: 280-22826-1

Analysis Batch: 280-97133

Instrument ID: MT_025

Client Matrix: Water

Prep Batch: 280-96697

Lab File ID: 25A4111811.asc

Dilution: 5.0

Leach Batch: N/A

Initial Weight/Volume: 50 mL

Analysis Date: 11/18/2011 1954

Units: ug/L

Final Weight/Volume: 50 mL

Prep Date: 11/18/2011 0600

Leach Date: N/A

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Barium	19	ND	NC	10	
Calcium	3100	3110	0.70	10	
Iron	ND	ND	NC	10	
Lead	ND	ND	NC	10	
Magnesium	510	ND	NC	10	
Manganese	ND	ND	NC	10	
Potassium	ND	ND	NC	10	
Sodium	240000	244000	1.6	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Method Blank - Batch: 280-96594

Method: 300.0

Preparation: N/A

Lab Sample ID:	MB 280-96594/6	Analysis Batch:	280-96594	Instrument ID:	WC_IC7
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:	11/15/2011 1526	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Nitrite as N	ND		0.50
Nitrate as N	ND		0.50

Method Reporting Limit Check - Batch: 280-96594

Method: 300.0

Preparation: N/A

Lab Sample ID:	MRL 280-96594/3	Analysis Batch:	280-96594	Instrument ID:	WC_IC7
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:	11/15/2011 1438	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrite as N	0.200	ND	103	50 - 150	
Nitrate as N	0.200	ND	108	50 - 150	

Lab Control Sample/

Method: 300.0

Lab Control Sample Duplicate Recovery Report - Batch: 280-96594

Preparation: N/A

LCS Lab Sample ID:	LCS 280-96594/4	Analysis Batch:	280-96594	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	113.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/15/2011 1454	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-96594/5	Analysis Batch:	280-96594	Instrument ID:	WC_IC7
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:	11/15/2011 1510	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					
Nitrite as N	105	105	90 - 110	1	10		
Nitrate as N	99	99	90 - 110	0	10		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-96594

Method: 300.0
Preparation: N/A

LCS Lab Sample ID: LCS 280-96594/4 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 1454
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-96594/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 1510
Prep Date: N/A
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Nitrite as N	5.00	5.00	5.27	5.24
Nitrate as N	5.00	5.00	4.93	4.94

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-96594

Method: 300.0
Preparation: N/A

MS Lab Sample ID: 280-22800-B-10 MS
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 1923
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-96594
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_IC7
Lab File ID: 130.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 280-22800-C-10 MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 1939
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-96594
Prep Batch: N/A
Leach Batch: N/A

Instrument ID: WC_IC7
Lab File ID: 131.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Nitrite as N	105	106	80 - 120	2	20		
Nitrate as N	105	107	80 - 120	2	20		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-96594

Method: 300.0
Preparation: N/A

MS Lab Sample ID: 280-22800-B-10 MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 1923
Prep Date: N/A
Leach Date: N/A

MSD Lab Sample ID: 280-22800-C-10 MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 1939
Prep Date: N/A
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Nitrite as N	ND	5.00	5.00	5.23	5.32
Nitrate as N	0.77	5.00	5.00	6.01	6.12

Duplicate - Batch: 280-96594

Method: 300.0
Preparation: N/A

Lab Sample ID: 280-22800-A-10 DU
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 1907
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-96594
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC_IC7
Lab File ID: 129.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Nitrite as N	ND	ND	NC	15	
Nitrate as N	0.77	0.790	3	15	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Method Blank - Batch: 280-96646

Method: 300.0

Preparation: N/A

Lab Sample ID:	MB 280-96646/6	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
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:	11/15/2011 1526	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Bromide	ND		0.20
Chloride	ND		3.0
Fluoride	ND		0.50
Sulfate	ND		5.0

Method Blank - Batch: 280-96646

Method: 300.0

Preparation: N/A

Lab Sample ID:	MB 280-96646/35	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	144.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/15/2011 2304	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Bromide	ND		0.20
Chloride	ND		3.0
Fluoride	ND		0.50
Sulfate	ND		5.0

Method Reporting Limit Check - Batch: 280-96646

Method: 300.0

Preparation: N/A

Lab Sample ID:	MRL 280-96646/3	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
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:	11/15/2011 1438	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	0.210	105	50 - 150	
Chloride	1.00	ND	105	50 - 150	
Fluoride	0.200	ND	97	50 - 150	
Sulfate	1.00	ND	98	50 - 150	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-96646**

**Method: 300.0
Preparation: N/A**

LCS Lab Sample ID:	LCS 280-96646/4	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	113.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/15/2011 1454	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-96646/5	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
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:	11/15/2011 1510	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	98	98	90 - 110	0	10		
Chloride	95	95	90 - 110	0	10		
Fluoride	98	98	90 - 110	1	10		
Sulfate	100	100	90 - 110	0	10		

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-96646**

**Method: 300.0
Preparation: N/A**

LCS Lab Sample ID:	LCS 280-96646/33	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	142.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/15/2011 2233	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-96646/34	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	143.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/15/2011 2248	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	99	99	90 - 110	0	10		
Chloride	96	96	90 - 110	0	10		
Fluoride	101	100	90 - 110	0	10		
Sulfate	100	99	90 - 110	1	10		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-96646**

**Method: 300.0
Preparation: N/A**

LCS Lab Sample ID: LCS 280-96646/4 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 1454
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-96646/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 1510
Prep 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	4.88	4.89
Chloride	25.0	25.0	23.8	23.8
Fluoride	5.00	5.00	4.89	4.91
Sulfate	25.0	25.0	25.0	24.9

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-96646**

**Method: 300.0
Preparation: N/A**

LCS Lab Sample ID: LCS 280-96646/33 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 2233
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-96646/34
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 2248
Prep 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	4.93	4.93
Chloride	25.0	25.0	24.0	24.0
Fluoride	5.00	5.00	5.03	5.01
Sulfate	25.0	25.0	24.9	24.7

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-96646**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID:	280-22800-B-10 MS	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	130.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/15/2011 1923			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-22800-C-10 MSD	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	131.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/15/2011 1939			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	104	107	80 - 120	2	20		
Chloride	105	107	80 - 120	2	20		
Fluoride	101	103	80 - 120	2	20		
Sulfate	103	106	80 - 120	2	20		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-96646**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID:	280-22831-C-1 MS	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	171.TXT
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/16/2011 0633			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-22831-C-1 MSD	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	172.TXT
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/16/2011 0649			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					
Sulfate	97	97	80 - 120	0	20	E	E

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-96646**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-22800-B-10 MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 1923
Prep Date: N/A
Leach Date: N/A

MSD Lab Sample ID: 280-22800-C-10 MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/15/2011 1939
Prep Date: N/A
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Bromide	ND	5.00	5.00	5.21	5.33
Chloride	ND	25.0	25.0	27.3	27.9
Fluoride	ND	5.00	5.00	5.06	5.17
Sulfate	11	25.0	25.0	36.5	37.2

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-96646**

**Method: 300.0
Preparation: N/A**

MS Lab Sample ID: 280-22831-C-1 MS Units: mg/L
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/16/2011 0633
Prep Date: N/A
Leach Date: N/A

MSD Lab Sample ID: 280-22831-C-1 MSD
Client Matrix: Water
Dilution: 5.0
Analysis Date: 11/16/2011 0649
Prep Date: N/A
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Sulfate	170	125	125	295 E	295 E

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Duplicate - Batch: 280-96646

Method: 300.0
Preparation: N/A

Lab Sample ID:	280-22800-A-10 DU	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	129.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/15/2011 1907	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Bromide	ND	ND	NC	15	
Chloride	ND	ND	NC	15	
Fluoride	ND	ND	NC	15	
Sulfate	11	10.9	1	15	

Duplicate - Batch: 280-96646

Method: 300.0
Preparation: N/A

Lab Sample ID:	280-22831-C-1 DU	Analysis Batch:	280-96646	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	170.TXT
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/16/2011 0616	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Sulfate	170	170	2	15	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Method Blank - Batch: 280-97564

Method: SM 1030F

Preparation: N/A

Lab Sample ID:	MB 280-97564/1	Analysis Batch:	280-97564	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:	11/23/2011 1044	Units:	%	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	NONE
Percent Difference	NC		
Anion/Cation Balance	NC		

Method Blank - Batch: 280-97564

Method: SM 1030F

Preparation: N/A

Lab Sample ID:	MB 280-97564/1	Analysis Batch:	280-97564	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:	11/23/2011 1044	Units:	meq/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	NONE
Total Anions	0.000		
Total Cations	0.000		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Method Blank - Batch: 280-97305

Method: SM 2320B

Preparation: N/A

Lab Sample ID:	MB 280-97305/33	Analysis Batch:	280-97305	Instrument ID:	WC_AT2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112111.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/21/2011 1516	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

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

Lab Control Sample/

Method: SM 2320B

Lab Control Sample Duplicate Recovery Report - Batch: 280-97305

Preparation: N/A

LCS Lab Sample ID:	LCS 280-97305/31	Analysis Batch:	280-97305	Instrument ID:	WC_AT2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112111.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/21/2011 1458	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-97305/32	Analysis Batch:	280-97305	Instrument ID:	WC_AT2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112111.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	11/21/2011 1509	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	103	103	90 - 110	0	10		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-97305

Method: SM 2320B
Preparation: N/A

LCS Lab Sample ID: LCS 280-97305/31 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2011 1458
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-97305/32
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2011 1509
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	207	207

Duplicate - Batch: 280-97305

Method: SM 2320B
Preparation: N/A

Lab Sample ID: 280-22704-A-1 DU
Client Matrix: Water
Dilution: 1.0
Analysis Date: 11/21/2011 1531
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-97305
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC_AT2
Lab File ID: 112111.txt
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Alkalinity	400	402	0.5	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Method Blank - Batch: 280-97665

Method: SM 2510B

Preparation: N/A

Lab Sample ID:	MB 280-97665/5	Analysis Batch:	280-97665	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:	11/27/2011 1340	Units:	umhos/cm	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Specific Conductance	ND		2.0

Lab Control Sample/

Method: SM 2510B

Lab Control Sample Duplicate Recovery Report - Batch: 280-97665

Preparation: N/A

LCS Lab Sample ID:	LCS 280-97665/3	Analysis Batch:	280-97665	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:	11/27/2011 1340	Units:	umhos/cm	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-97665/4	Analysis Batch:	280-97665	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:	11/27/2011 1340	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	103	103	90 - 110	0	10		

Laboratory Control/

Method: SM 2510B

Laboratory Duplicate Data Report - Batch: 280-97665

Preparation: N/A

LCS Lab Sample ID:	LCS 280-97665/3	Units:	umhos/cm	LCSD Lab Sample ID:	LCSD 280-97665/4
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	11/27/2011 1340			Analysis Date:	11/27/2011 1340
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	1410	1410	1460	1450

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Duplicate - Batch: 280-97665

Method: SM 2510B

Preparation: N/A

Lab Sample ID:	280-22804-B-1 DU	Analysis Batch:	280-97665	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:	11/27/2011 1340	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	780	790	0.8	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

Method Blank - Batch: 280-97109

Method: SM 2540C

Preparation: N/A

Lab Sample ID:	MB 280-97109/1	Analysis Batch:	280-97109	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:	11/21/2011 0712	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Total Dissolved Solids	ND		10

Lab Control Sample/

Method: SM 2540C

Lab Control Sample Duplicate Recovery Report - Batch: 280-97109

Preparation: N/A

LCS Lab Sample ID:	LCS 280-97109/2	Analysis Batch:	280-97109	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:	11/21/2011 0712	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-97109/3	Analysis Batch:	280-97109	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:	11/21/2011 0712	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	98	98	86 - 110	1	20		

Laboratory Control/

Method: SM 2540C

Laboratory Duplicate Data Report - Batch: 280-97109

Preparation: N/A

LCS Lab Sample ID:	LCS 280-97109/2	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-97109/3
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	11/21/2011 0712			Analysis Date:	11/21/2011 0712
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	500	500	488	491

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Duplicate - Batch: 280-97109

Method: SM 2540C

Preparation: N/A

Lab Sample ID:	280-22869-A-9 DU	Analysis Batch:	280-97109	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:	11/21/2011 0712	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	540	543	0.7	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-22826-1

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 280-97082

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

LCS Lab Sample ID:	LCS 280-97082/4	Analysis Batch:	280-97082	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	111911A.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	11/19/2011 1144	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-97082/5	Analysis Batch:	280-97082	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	111911A.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	11/19/2011 1145	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	0	5		

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-97082

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

LCS Lab Sample ID:	LCS 280-97082/4	Units:	SU	LCSD Lab Sample ID:	LCSD 280-97082/5
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	11/19/2011 1144			Analysis Date:	11/19/2011 1145
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	7.020	7.020

Duplicate - Batch: 280-97082

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

Lab Sample ID:	280-22885-D-1 DU	Analysis Batch:	280-97082	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	111911A.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	11/19/2011 1155	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	7.37	7.430	0.8	5	HF

DATA REPORTING QUALIFIERS

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Lab Section	Qualifier	Description
GC VOA		
	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.
Metals		
	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.
General Chemistry		
	HF	Field parameter with a holding time of 15 minutes
	E	Result exceeded calibration range.

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:280-97828					
LCS 280-97828/6	Lab Control Sample	T	Water	8260B	
MB 280-97828/5	Method Blank	T	Water	8260B	
280-22826-1	PETERSON WW	T	Water	8260B	
280-22970-G-1 MS	Matrix Spike	T	Water	8260B	
280-22970-G-1 MSD	Matrix Spike Duplicate	T	Water	8260B	

Report Basis

T = Total

GC VOA

Analysis Batch:280-96662					
LCS 280-96662/2	Lab Control Sample	T	Water	RSK-175	
LCSD 280-96662/3	Lab Control Sample Duplicate	T	Water	RSK-175	
MB 280-96662/4	Method Blank	T	Water	RSK-175	
280-22581-W-2 DU	Duplicate	T	Water	RSK-175	
280-22581-V-2 MS	Matrix Spike	T	Water	RSK-175	
280-22581-V-2 MSD	Matrix Spike Duplicate	T	Water	RSK-175	
280-22826-1	PETERSON WW	T	Water	RSK-175	
Analysis Batch:280-97151					
LCS 280-97151/3	Lab Control Sample	T	Water	8015B	
LCSD 280-97151/4	Lab Control Sample Duplicate	T	Water	8015B	
MB 280-97151/5	Method Blank	T	Water	8015B	
280-22826-1	PETERSON WW	T	Water	8015B	
280-22826-1MS	Matrix Spike	T	Water	8015B	
280-22826-1MSD	Matrix Spike Duplicate	T	Water	8015B	

Report Basis

T = Total

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-96858					
LCS 280-96858/2-A	Lab Control Sample	T	Water	3510C	
LCSD 280-96858/3-A	Lab Control Sample Duplicate	T	Water	3510C	
MB 280-96858/1-A	Method Blank	T	Water	3510C	
280-22826-1	PETERSON WW	T	Water	3510C	
Analysis Batch:280-97433					
LCS 280-96858/2-A	Lab Control Sample	T	Water	8015B	280-96858
LCSD 280-96858/3-A	Lab Control Sample Duplicate	T	Water	8015B	280-96858
MB 280-96858/1-A	Method Blank	T	Water	8015B	280-96858
280-22826-1	PETERSON WW	T	Water	8015B	280-96858

Report Basis

T = Total

Metals

Analysis Batch:280-96675					
MB 280-96675/1	Method Blank	T	Water	20B	
280-22826-1	PETERSON WW	T	Water	20B	
Prep Batch: 280-96697					
LCS 280-96444/2-B	Lab Control Sample	D	Water	3005A	
MB 280-96444/1-B	Method Blank	D	Water	3005A	
280-22826-1	PETERSON WW	D	Water	3005A	
280-22826-1MS	Matrix Spike	D	Water	3005A	
280-22826-1MSD	Matrix Spike Duplicate	D	Water	3005A	
Analysis Batch:280-97133					
LCS 280-96444/2-B	Lab Control Sample	D	Water	6010B	280-96697
MB 280-96444/1-B	Method Blank	D	Water	6010B	280-96697
280-22826-1	PETERSON WW	D	Water	6010B	280-96697
280-22826-1MS	Matrix Spike	D	Water	6010B	280-96697
280-22826-1MSD	Matrix Spike Duplicate	D	Water	6010B	280-96697

Report Basis

D = Dissolved

T = Total

TestAmerica Denver

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-96594					
LCS 280-96594/4	Lab Control Sample	T	Water	300.0	
LCSD 280-96594/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-96594/6	Method Blank	T	Water	300.0	
280-22800-A-10 DU	Duplicate	T	Water	300.0	
280-22800-B-10 MS	Matrix Spike	T	Water	300.0	
280-22800-C-10 MSD	Matrix Spike Duplicate	T	Water	300.0	
280-22826-1	PETERSON WW	T	Water	300.0	
Analysis Batch:280-96646					
LCS 280-96646/33	Lab Control Sample	T	Water	300.0	
LCS 280-96646/4	Lab Control Sample	T	Water	300.0	
LCSD 280-96646/34	Lab Control Sample Duplicate	T	Water	300.0	
LCSD 280-96646/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-96646/35	Method Blank	T	Water	300.0	
MB 280-96646/6	Method Blank	T	Water	300.0	
280-22800-A-10 DU	Duplicate	T	Water	300.0	
280-22800-B-10 MS	Matrix Spike	T	Water	300.0	
280-22800-C-10 MSD	Matrix Spike Duplicate	T	Water	300.0	
280-22826-1	PETERSON WW	T	Water	300.0	
280-22831-C-1 DU	Duplicate	T	Water	300.0	
280-22831-C-1 MS	Matrix Spike	T	Water	300.0	
280-22831-C-1 MSD	Matrix Spike Duplicate	T	Water	300.0	
Analysis Batch:280-97082					
LCS 280-97082/4	Lab Control Sample	T	Water	SM 4500 H+ B	
LCSD 280-97082/5	Lab Control Sample Duplicate	T	Water	SM 4500 H+ B	
280-22826-1	PETERSON WW	T	Water	SM 4500 H+ B	
280-22885-D-1 DU	Duplicate	T	Water	SM 4500 H+ B	
Analysis Batch:280-97109					
LCS 280-97109/2	Lab Control Sample	T	Water	SM 2540C	
LCSD 280-97109/3	Lab Control Sample Duplicate	T	Water	SM 2540C	
MB 280-97109/1	Method Blank	T	Water	SM 2540C	
280-22826-1	PETERSON WW	T	Water	SM 2540C	
280-22869-A-9 DU	Duplicate	T	Water	SM 2540C	
Analysis Batch:280-97305					
LCS 280-97305/31	Lab Control Sample	T	Water	SM 2320B	
LCSD 280-97305/32	Lab Control Sample Duplicate	T	Water	SM 2320B	
MB 280-97305/33	Method Blank	T	Water	SM 2320B	
280-22704-A-1 DU	Duplicate	T	Water	SM 2320B	
280-22826-1	PETERSON WW	T	Water	SM 2320B	

TestAmerica Denver

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-97564					
MB 280-97564/1	Method Blank	T	Water	SM 1030F	
280-22826-1	PETERSON WW	T	Water	SM 1030F	
Analysis Batch:280-97665					
LCS 280-97665/3	Lab Control Sample	T	Water	SM 2510B	
LCSD 280-97665/4	Lab Control Sample Duplicate	T	Water	SM 2510B	
MB 280-97665/5	Method Blank	T	Water	SM 2510B	
280-22804-B-1 DU	Duplicate	T	Water	SM 2510B	
280-22826-1	PETERSON WW	T	Water	SM 2510B	

Report Basis

T = Total

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Laboratory Chronicle

Lab ID: 280-22826-1

Client ID: PETERSON WW

Sample Date/Time: 11/15/2011 10:25

Received Date/Time: 11/15/2011 15:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-22826-M-1		280-97828		11/28/2011 15:05	1	TAL DEN	TW
A:8260B	280-22826-M-1		280-97828		11/28/2011 15:05	1	TAL DEN	TW
P:5030B	280-22826-F-1		280-97151		11/18/2011 17:06	1	TAL DEN	AMB
A:8015B	280-22826-F-1		280-97151		11/18/2011 17:06	1	TAL DEN	AMB
A:RSK-175	280-22826-I-1		280-96662		11/16/2011 12:04	1	TAL DEN	BMG
P:3510C	280-22826-B-1-A		280-97433	280-96858	11/17/2011 21:10	1	TAL DEN	MRM
A:8015B	280-22826-B-1-A		280-97433	280-96858	11/21/2011 20:29	1	TAL DEN	AMP
A:20B	280-22826-E-1		280-96675		11/17/2011 07:20	1	TAL DEN	JKH
P:3005A	280-22826-E-1-B		280-97133	280-96697	11/18/2011 06:00	1	TAL DEN	CLI
A:6010B	280-22826-E-1-B		280-97133	280-96697	11/18/2011 19:52	1	TAL DEN	JKH
A:300.0	280-22826-C-1		280-96594		11/15/2011 21:14	1	TAL DEN	TLP
A:300.0	280-22826-C-1		280-96646		11/15/2011 21:14	1	TAL DEN	TLP
A:300.0	280-22826-C-1		280-96646		11/16/2011 04:52	5	TAL DEN	TLP
A:SM 1030F	280-22826-A-1		280-97564		11/23/2011 10:44	1	TAL DEN	RS
A:SM 2320B	280-22826-C-1		280-97305		11/21/2011 17:12	1	TAL DEN	AJA
A:SM 2510B	280-22826-D-1		280-97665		11/27/2011 13:40	1	TAL DEN	PMP
A:SM 2540C	280-22826-D-1		280-97109		11/21/2011 07:12	1	TAL DEN	BJD
A:SM 4500 H+ B	280-22826-D-1		280-97082		11/19/2011 12:04	1	TAL DEN	DA

Lab ID: 280-22826-1 MS

Client ID: PETERSON WW

Sample Date/Time: 11/15/2011 10:25

Received Date/Time: 11/15/2011 15:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-22826-F-1 MS		280-97151		11/18/2011 17:38	1	TAL DEN	AMB
A:8015B	280-22826-F-1 MS		280-97151		11/18/2011 17:38	1	TAL DEN	AMB
P:3005A	280-22826-E-1-C MS		280-97133	280-96697	11/18/2011 06:00	1	TAL DEN	CLI
A:6010B	280-22826-E-1-C MS		280-97133	280-96697	11/18/2011 19:57	1	TAL DEN	JKH

Lab ID: 280-22826-1 MSD

Client ID: PETERSON WW

Sample Date/Time: 11/15/2011 10:25

Received Date/Time: 11/15/2011 15:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-22826-F-1 MSD		280-97151		11/18/2011 18:11	1	TAL DEN	AMB
A:8015B	280-22826-F-1 MSD		280-97151		11/18/2011 18:11	1	TAL DEN	AMB
P:3005A	280-22826-E-1-D MSD		280-97133	280-96697	11/18/2011 06:00	1	TAL DEN	CLI
A:6010B	280-22826-E-1-D MSD		280-97133	280-96697	11/18/2011 19:59	1	TAL DEN	JKH

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Laboratory Chronicle

Lab ID: 280-22826-1 SD

Client ID: PETERSON WW

Sample Date/Time: 11/15/2011 10:25

Received Date/Time: 11/15/2011 15:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-22826-E-1-B SD ^5		280-97133	280-96697	11/18/2011 06:00	5	TAL DEN	CLI
A:6010B	280-22826-E-1-B SD ^5		280-97133	280-96697	11/18/2011 19:54	5	TAL DEN	JKH

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 280-97828/5		280-97828		11/28/2011 11:55	1	TAL DEN	TW
A:8260B	MB 280-97828/5		280-97828		11/28/2011 11:55	1	TAL DEN	TW
P:5030B	MB 280-97151/5		280-97151		11/18/2011 15:58	1	TAL DEN	AMB
A:8015B	MB 280-97151/5		280-97151		11/18/2011 15:58	1	TAL DEN	AMB
A:RSK-175	MB 280-96662/4		280-96662		11/16/2011 12:00	1	TAL DEN	BMG
P:3510C	MB 280-96858/1-A		280-97433	280-96858	11/17/2011 21:10	1	TAL DEN	MRM
A:8015B	MB 280-96858/1-A		280-97433	280-96858	11/21/2011 18:07	1	TAL DEN	AMP
A:20B	MB 280-96675/1		280-96675		11/17/2011 07:20	1	TAL DEN	JKH
P:3005A	MB 280-96444/1-B		280-97133	280-96697	11/18/2011 06:00	1	TAL DEN	CLI
A:6010B	MB 280-96444/1-B		280-97133	280-96697	11/18/2011 19:47	1	TAL DEN	JKH
A:300.0	MB 280-96594/6		280-96594		11/15/2011 15:26	1	TAL DEN	TLP
A:300.0	MB 280-96646/6		280-96646		11/15/2011 15:26	1	TAL DEN	TLP
A:300.0	MB 280-96646/35		280-96646		11/15/2011 23:04	1	TAL DEN	TLP
A:SM 1030F	MB 280-97564/1		280-97564		11/23/2011 10:44	1	TAL DEN	RS
A:SM 2320B	MB 280-97305/33		280-97305		11/21/2011 15:16	1	TAL DEN	AJA
A:SM 2510B	MB 280-97665/5		280-97665		11/27/2011 13:40	1	TAL DEN	PMP
A:SM 2540C	MB 280-97109/1		280-97109		11/21/2011 07:12	1	TAL DEN	BJD

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

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 280-97828/6		280-97828		11/28/2011 12:19	1	TAL DEN	TW
A:8260B	LCS 280-97828/6		280-97828		11/28/2011 12:19	1	TAL DEN	TW
P:5030B	LCS 280-97151/3		280-97151		11/18/2011 14:55	1	TAL DEN	AMB
A:8015B	LCS 280-97151/3		280-97151		11/18/2011 14:55	1	TAL DEN	AMB
A:RSK-175	LCS 280-96662/2		280-96662		11/16/2011 11:51	1	TAL DEN	BMG
P:3510C	LCS 280-96858/2-A		280-97433	280-96858	11/17/2011 21:10	1	TAL DEN	MRM
A:8015B	LCS 280-96858/2-A		280-97433	280-96858	11/21/2011 18:35	1	TAL DEN	AMP
P:3005A	LCS 280-96444/2-B		280-97133	280-96697	11/18/2011 06:00	1	TAL DEN	CLI
A:6010B	LCS 280-96444/2-B		280-97133	280-96697	11/18/2011 19:49	1	TAL DEN	JKH
A:300.0	LCS 280-96594/4		280-96594		11/15/2011 14:54	1	TAL DEN	TLP
A:300.0	LCS 280-96646/4		280-96646		11/15/2011 14:54	1	TAL DEN	TLP
A:300.0	LCS 280-96646/33		280-96646		11/15/2011 22:33	1	TAL DEN	TLP
A:SM 2320B	LCS 280-97305/31		280-97305		11/21/2011 14:58	1	TAL DEN	AJA
A:SM 2510B	LCS 280-97665/3		280-97665		11/27/2011 13:40	1	TAL DEN	PMP
A:SM 2540C	LCS 280-97109/2		280-97109		11/21/2011 07:12	1	TAL DEN	BJD
A:SM 4500 H+ B	LCS 280-97082/4		280-97082		11/19/2011 11:44	1	TAL DEN	DA

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:5030B	LCSD 280-97151/4		280-97151		11/18/2011 15:27	1	TAL DEN	AMB
A:8015B	LCSD 280-97151/4		280-97151		11/18/2011 15:27	1	TAL DEN	AMB
A:RSK-175	LCSD 280-96662/3		280-96662		11/16/2011 11:56	1	TAL DEN	BMG
P:3510C	LCSD 280-96858/3-A		280-97433	280-96858	11/17/2011 21:10	1	TAL DEN	MRM
A:8015B	LCSD 280-96858/3-A		280-97433	280-96858	11/21/2011 19:04	1	TAL DEN	AMP
A:300.0	LCSD 280-96594/5		280-96594		11/15/2011 15:10	1	TAL DEN	TLP
A:300.0	LCSD 280-96646/5		280-96646		11/15/2011 15:10	1	TAL DEN	TLP
A:300.0	LCSD 280-96646/34		280-96646		11/15/2011 22:48	1	TAL DEN	TLP
A:SM 2320B	LCSD 280-97305/32		280-97305		11/21/2011 15:09	1	TAL DEN	AJA
A:SM 2510B	LCSD 280-97665/4		280-97665		11/27/2011 13:40	1	TAL DEN	PMP
A:SM 2540C	LCSD 280-97109/3		280-97109		11/21/2011 07:12	1	TAL DEN	BJD
A:SM 4500 H+ B	LCSD 280-97082/5		280-97082		11/19/2011 11:45	1	TAL DEN	DA

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 280-96594/3		280-96594		11/15/2011 14:38	1	TAL DEN	TLP
A:300.0	MRL 280-96646/3		280-96646		11/15/2011 14:38	1	TAL DEN	TLP

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Laboratory Chronicle

Lab ID: MS

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-22970-G-1 MS		280-97828		11/28/2011 13:32	1	TAL DEN	TW
A:8260B	280-22970-G-1 MS		280-97828		11/28/2011 13:32	1	TAL DEN	TW
A:RSK-175	280-22581-V-2 MS		280-96662		11/16/2011 12:22	1	TAL DEN	BMG
A:300.0	280-22800-B-10 MS		280-96594		11/15/2011 19:23	1	TAL DEN	TLP
A:300.0	280-22800-B-10 MS		280-96646		11/15/2011 19:23	1	TAL DEN	TLP
A:300.0	280-22831-C-1 MS		280-96646		11/16/2011 06:33	5	TAL DEN	TLP

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	280-22970-G-1 MSD		280-97828		11/28/2011 13:55	1	TAL DEN	TW
A:8260B	280-22970-G-1 MSD		280-97828		11/28/2011 13:55	1	TAL DEN	TW
A:RSK-175	280-22581-V-2 MSD		280-96662		11/16/2011 12:26	1	TAL DEN	BMG
A:300.0	280-22800-C-10 MSD		280-96594		11/15/2011 19:39	1	TAL DEN	TLP
A:300.0	280-22800-C-10 MSD		280-96646		11/15/2011 19:39	1	TAL DEN	TLP
A:300.0	280-22831-C-1 MSD		280-96646		11/16/2011 06:49	5	TAL DEN	TLP

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:RSK-175	280-22581-W-2 DU		280-96662		11/16/2011 12:18	1	TAL DEN	BMG
A:300.0	280-22800-A-10 DU		280-96594		11/15/2011 19:07	1	TAL DEN	TLP
A:300.0	280-22800-A-10 DU		280-96646		11/15/2011 19:07	1	TAL DEN	TLP
A:300.0	280-22831-C-1 DU		280-96646		11/16/2011 06:16	5	TAL DEN	TLP
A:SM 2320B	280-22704-A-1 DU		280-97305		11/21/2011 15:31	1	TAL DEN	AJA
A:SM 2510B	280-22804-B-1 DU		280-97665		11/27/2011 13:40	1	TAL DEN	PMP
A:SM 2540C	280-22869-A-9 DU		280-97109		11/21/2011 07:12	1	TAL DEN	BJD
A:SM 4500 H+ B	280-22885-D-1 DU		280-97082		11/19/2011 11:55	1	TAL DEN	DA

Lab References:

TAL DEN = TestAmerica Denver

Certification Summary

Client: Colorado Oil&Gas Conservation Commision
Project/Site: Peterson Complaint #200327803

TestAmerica Job ID: 280-22826-1

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	Alaska UST	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas	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 Hampshire	NELAC	1	205310
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	North Carolina DENR	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	USDA		P330-08-00036
TestAmerica Denver	Utah	NELAC	8	QUAN5
TestAmerica Denver	Washington	State Program	10	C1284
TestAmerica Denver	West Virginia	West Virginia DEP	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430

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.: 280-22826-1
 SDG No.: _____
 Client Sample ID: PETERSON WW Lab Sample ID: 280-22826-1
 Matrix: Water Lab File ID: H8225.D
 Analysis Method: 8260B Date Collected: 11/15/2011 10:25
 Sample wt/vol: 20 (mL) Date Analyzed: 11/28/2011 15:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 (75.53) ID: 0.53 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 97828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		1.0	0.16
100-41-4	Ethylbenzene	ND		1.0	0.16
108-88-3	Toluene	ND		1.0	0.17
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.34
95-47-6	o-Xylene	ND		1.0	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		70-127
2037-26-5	Toluene-d8 (Surr)	101		80-125
460-00-4	4-Bromofluorobenzene (Surr)	100		78-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-120

TestAmerica

VOLATILE REPORT SW-846

Data file : \\DenSvr03\Public\chem\MSV\H.i\112811A\H8225.D
 Lab Smp Id: 280-22826-M-1 Client Smp ID: PETERSON WW
 Inj Date : 28-NOV-2011 15:05
 Operator : WICKHAMT Inst ID: H.i
 Smp Info : 280-22826-m-1,,PH<2
 Misc Info : 280-22826-M-1
 Comment :
 Method : \\DenSvr03\Public\chem\MSV\H.i\112811A\8260B-H2O.m
 Meth Date : 28-Nov-2011 15:09 wickhamt Quant Type: ISTD
 Cal Date : 14-NOV-2011 14:34 Cal File: H7780.D
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: TALS.sub
 Target Version: 4.14
 Processing Host: DENPC211

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)
*****	****	----	-----	-----	-----	-----	-----
* 59 Fluorobenzene	96	7.558	7.560	(1.000)	1218085	12.5000	
* 84 Chlorobenzene-d5	119	12.155	12.156	(1.000)	264871	12.5000	
* 110 1,4-Dichlorobenzene-d4	152	16.124	16.142	(1.000)	414073	12.5000	
\$ 49 Dibromofluoromethane (Surr)	111	6.636	6.638	(0.878)	542636	9.49301	9.49300
\$ 55 1,2-Dichloroethane-d4	65	7.106	7.091	(0.940)	257005	8.93011	8.93011
\$ 73 Toluene-d8	98	9.839	9.859	(0.810)	1071895	9.82689	9.82689
\$ 96 4-Bromofluorobenzene (Surr)	95	14.139	14.142	(0.877)	582938	9.72309	9.72309
M 1 1,2-Dichloroethene (total)	96	Compound Not Detected.					
M 2 Xylene (total)	106	Compound Not Detected.					
4 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.					
13 Trichlorofluoromethane	101	Compound Not Detected.					
14 Ethanol	45	Compound Not Detected.					
15 Ethyl Ether	59	Compound Not Detected.					
16 1,2-dichloro-1,1,2-trifluoro	117	Compound Not Detected.					
17 2,2-dichloro-1,1,1-trifluoro	83	Compound Not Detected.					

Compounds	QUANT SIG	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
18 Acrolein	56				Compound Not Detected.		
19 1,1-Dichloroethene	96				Compound Not Detected.		
21 Trichlorotrifluoroethane	151				Compound Not Detected.		
20 Acetone	43	4.042	4.029 (0.535)		7230	2.16325	2.16325(a)
23 Iodomethane	142				Compound Not Detected.		
22 2-propanol	45				Compound Not Detected.		
24 Carbon Disulfide	76				Compound Not Detected.		
27 Allyl Chloride	41				Compound Not Detected.		
26 Methyl Acetate	43				Compound Not Detected.		
25 Acetonitrile	41				Compound Not Detected.		
28 Methylene Chloride	84				Compound Not Detected.		
29 tert-Butyl alcohol	59				Compound Not Detected.		
30 Acrylonitrile	53				Compound Not Detected.		
31 Methyl t-butyl ether	73				Compound Not Detected.		
32 trans-1,2-Dichloroethene	96				Compound Not Detected.		
33 Hexane	57				Compound Not Detected.		
34 1,1-Dichloroethane	63				Compound Not Detected.		
35 Vinyl Acetate	43				Compound Not Detected.		
36 Isopropyl ether	87				Compound Not Detected.		
37 Chloroprene	53				Compound Not Detected.		
38 ETBE	59				Compound Not Detected.		
40 cis-1,2-Dichloroethene	96				Compound Not Detected.		
41 2,2-Dichloropropane	77				Compound Not Detected.		
39 2-Butanone	43				Compound Not Detected.		
43 Ethyl Acetate	43				Compound Not Detected.		
42 Propionitrile	54				Compound Not Detected.		
45 Methacrylonitrile	41				Compound Not Detected.		
46 Bromochloromethane	128				Compound Not Detected.		
48 Tetrahydrofuran	42				Compound Not Detected.		
47 Chloroform	83				Compound Not Detected.		
50 1,1,1-Trichloroethane	97				Compound Not Detected.		
51 Cyclohexane	56				Compound Not Detected.		
52 1,1-Dichloropropene	75				Compound Not Detected.		
53 Carbon Tetrachloride	117				Compound Not Detected.		
56 Benzene	78				Compound Not Detected.		
57 1,2-Dichloroethane	62				Compound Not Detected.		
58 TAME	73				Compound Not Detected.		
54 Isobutanol	41				Compound Not Detected.		
61 Trichloroethene	95				Compound Not Detected.		
62 2-Pentanone	43				Compound Not Detected.		
63 Methyl Cyclohexane	55				Compound Not Detected.		
64 1,2-Dichloropropane	63				Compound Not Detected.		
66 Dibromomethane	93				Compound Not Detected.		
65 Methyl Methacrylate	100				Compound Not Detected.		
67 1,4-Dioxane	88				Compound Not Detected.		
68 Bromodichloromethane	83				Compound Not Detected.		
69 2-nitropropane	41				Compound Not Detected.		
70 2-Chloroethyl vinyl ether	63				Compound Not Detected.		
71 cis-1,3-Dichloropropene	75				Compound Not Detected.		
72 4-Methyl-2-pentanone	43				Compound Not Detected.		
74 Toluene	91				Compound Not Detected.		
75 trans-1,3-Dichloropropene	75				Compound Not Detected.		
76 Ethyl methacrylate	69				Compound Not Detected.		
77 1,1,2-Trichloroethane	97				Compound Not Detected.		

Compounds	QUANT SIG						CONCENTRATIONS	
		RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/L)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
78 Tetrachloroethene	164				Compound Not Detected.			
79 1,3-Dichloropropane	76				Compound Not Detected.			
80 2-Hexanone	43				Compound Not Detected.			
82 Tetrahydrothiophene	60				Compound Not Detected.			
81 Dibromochloromethane	129				Compound Not Detected.			
83 1,2-Dibromoethane	107				Compound Not Detected.			
85 1-Chlorohexane	91				Compound Not Detected.			
86 Chlorobenzene	112				Compound Not Detected.			
87 1,1,1,2-Tetrachloroethane	131				Compound Not Detected.			
88 Ethylbenzene	106				Compound Not Detected.			
89 m and p-Xylene	106				Compound Not Detected.			
90 o-Xylene	106				Compound Not Detected.			
91 Styrene	104				Compound Not Detected.			
92 Bromoform	173				Compound Not Detected.			
93 isopropyl benzene	105				Compound Not Detected.			
94 cis-1,4-dichloro-2-butene	53				Compound Not Detected.			
95 Cyclohexanone	55				Compound Not Detected.			
98 Bromobenzene	156				Compound Not Detected.			
97 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.			
99 1,2,3-Trichloropropane	110				Compound Not Detected.			
100 t-1,4-Dichloro-2-butene	53				Compound Not Detected.			
101 n-Propylbenzene	120				Compound Not Detected.			
102 2-Chlorotoluene	126				Compound Not Detected.			
103 1,3,5-Trimethylbenzene	105				Compound Not Detected.			
105 4-Chlorotoluene	126				Compound Not Detected.			
106 tert-Butylbenzene	119				Compound Not Detected.			
104 1,2,4-Trimethylbenzene	105				Compound Not Detected.			
107 sec-Butylbenzene	134				Compound Not Detected.			
108 1,3-Dichlorobenzene	146				Compound Not Detected.			
109 4-Isopropyltoluene	119				Compound Not Detected.			
111 1,4-dichlorobenzene	146				Compound Not Detected.			
113 n-Butylbenzene	91				Compound Not Detected.			
114 1,2-Dichlorobenzene	146				Compound Not Detected.			
115 1,2-Dibromo-3-chloropropane	157				Compound Not Detected.			
116 1,2,4-Trichlorobenzene	180				Compound Not Detected.			
117 Hexachlorobutadiene	225				Compound Not Detected.			
118 Naphthalene	128				Compound Not Detected.			
119 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: H8225.D

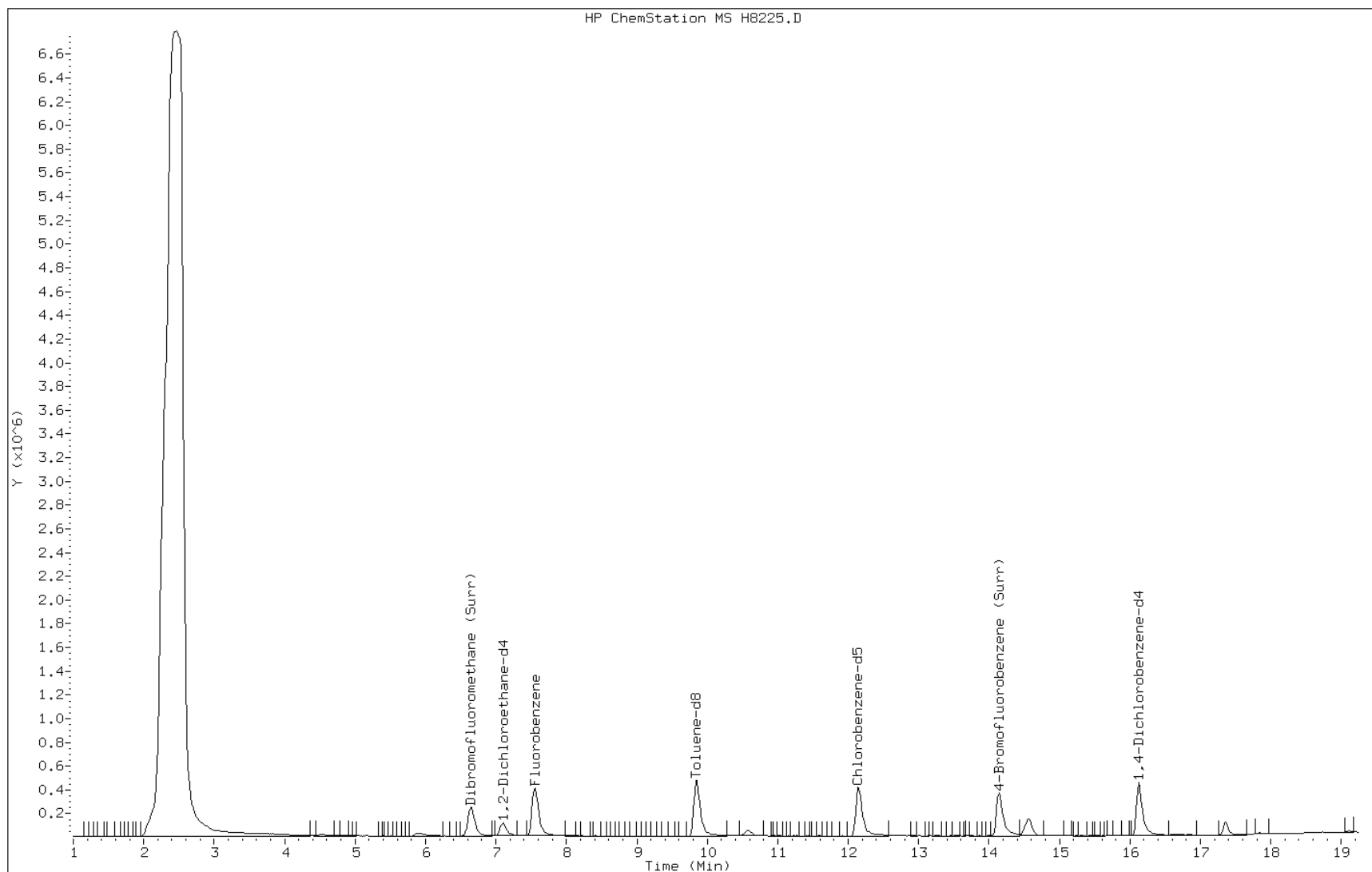
Date: 28-NOV-2011 15:05

Client ID: PETERSON WW

Instrument: H.i

Sample Info: 280-22826-m-1,,PH<2

Operator: WICKHAMT



Method 8015B – GRO

Gasoline Range Organics (GC) by
Method 8015B

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-22826-1
SDG No.: _____
Client Sample ID: PETERSON WW Lab Sample ID: 280-22826-1
Matrix: Water Lab File ID: 108F0801.D
Analysis Method: 8015B Date Collected: 11/15/2011 10:25
Sample wt/vol: 5(mL) Date Analyzed: 11/18/2011 17:06
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX 502.2 (105) ID: 0.53(mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 97151 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	87		82-110

TestAmerica

VOLATILE REPORT SOW 3/90

Data file : \\DenSvr03\Public\chem\GCV\GC_B.i\1118111.B\108F0801.D
 Lab Smp Id: 280-22826-F-1 Client Smp ID: PETERSON WW
 Inj Date : 18-NOV-2011 17:06
 Operator : AMB Inst ID: GC_B.i
 Smp Info : 280-22826-F-1
 Misc Info : 280-22826-F-1
 Comment : REV. OLM01.1.1
 Method : \\DenSvr03\Public\chem\GCV\GC_B.i\1118111.B\8015.m
 Meth Date : 18-Nov-2011 14:47 byla Quant Type: ESTD
 Cal Date : 11-OCT-2011 18:51 Cal File: 114F0401.D
 Als bottle: 108
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: GRO.A.01.sub
 Target Version: 4.14
 Processing Host: DENPC382

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	Default Sample Volume
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 1 Trifluorotoluene	7.873	7.883	-0.010	254500	26.1993	26.1993
S 2 GRO - C6 to C10	4.427-13.880			24251	5.01742	5.01742(a)
4 1-Chloro-4-Fluorobenzene	11.290	11.296	-0.006	238967	26.2011	26.2011
\$ 5 Chlorobenzene	11.503	11.510	-0.007	300518	27.2744	27.2744

QC Flag Legend

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

Data File: 108F0801.D

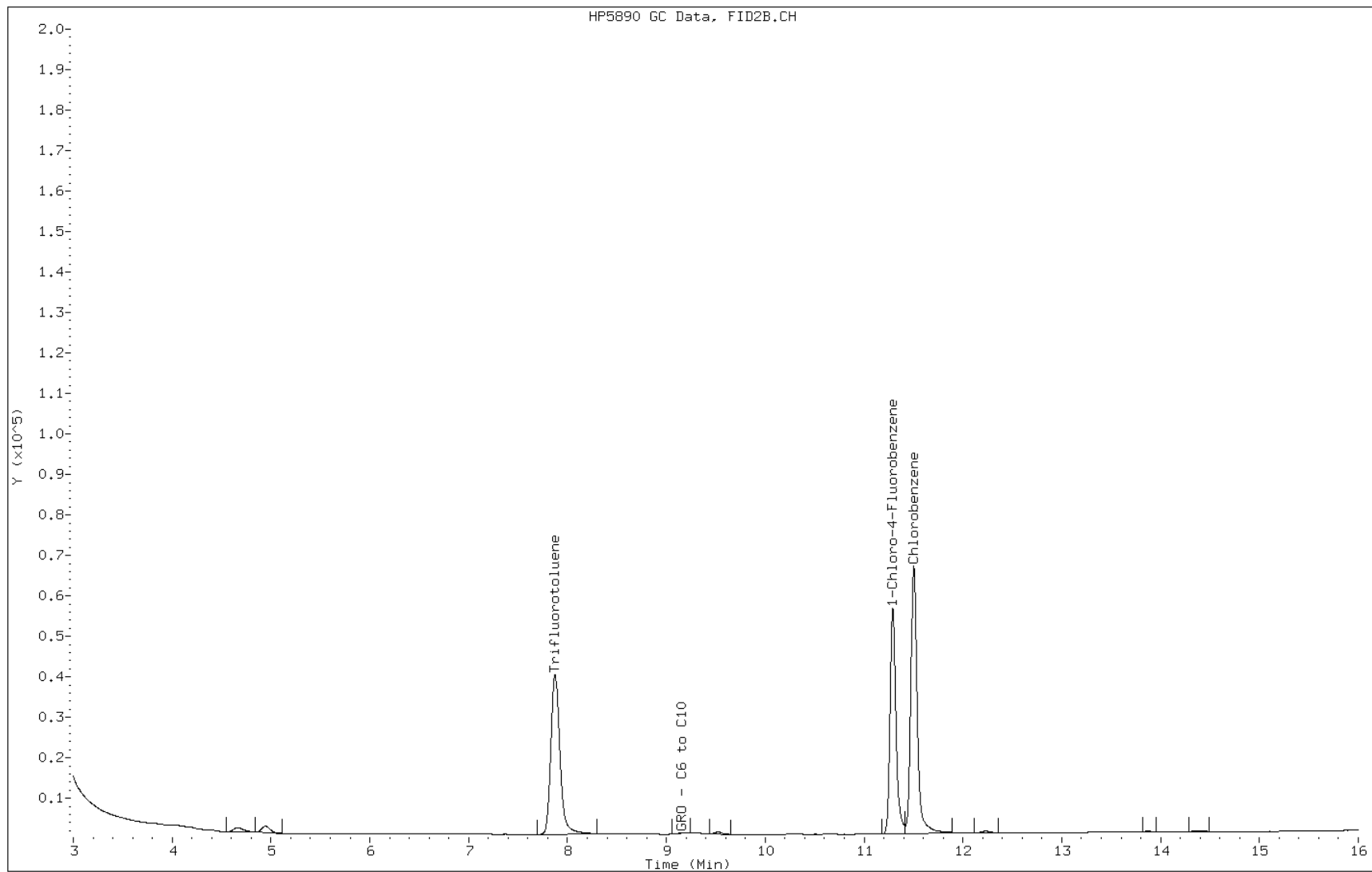
Date: 18-NOV-2011 17:06

Client ID: PETERSON WW

Instrument: GC_B.i

Sample Info: 280-22826-F-1

Operator: AMB



Method RSK-175

Dissolved Gases (GC) by Method
RSK_175

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-22826-1
SDG No.: _____
Client Sample ID: PETERSON WW Lab Sample ID: 280-22826-1
Matrix: Water Lab File ID: 007F0501.D
Analysis Method: RSK-175 Date Collected: 11/15/2011 10:25
Sample wt/vol: 18 (mL) Date Analyzed: 11/16/2011 12:04
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RT-VPLOT ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 96662 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-82-8	Methane	28		5.0	0.22

TestAmerica

RSK-175 Dissolved Gasses in Water

Data file : \\DenSvr03\Public\chem\GCV\GC_J.i\111611C1.B\007F0501.D
Lab Smp Id: 280-22826-I-1
Inj Date : 16-NOV-2011 12:04
Operator : BMG
Smp Info : 280-22826-I-1
Misc Info : RSK PCol 8pt 2011-04-27
Comment : SOP: DV-GC-0025
Method : \\DenSvr03\Public\chem\GCV\GC_J.i\111611C1.B\RSK-1_8PT.m
Meth Date : 17-Nov-2011 05:50 gilbertb Quant Type: ESTD
Cal Date : 12-JUL-2011 12:04 Cal File: 016F1601.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.14
Processing Host: DENPC025

Inst ID: GC_J.i

Compound Sublist: RSK175_8pt.sub

Concentration Formula: Amt * DF * 1 * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	CONCENTRATIONS					
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
=====	====	=====	=====	=====	=====	=====
1 Methane	1.245	1.243	0.002	40644	28.4511	28.45
2 Ethene	Compound Not Detected.					
4 Acetylene	Compound Not Detected.					

Data File: 007F0501.D

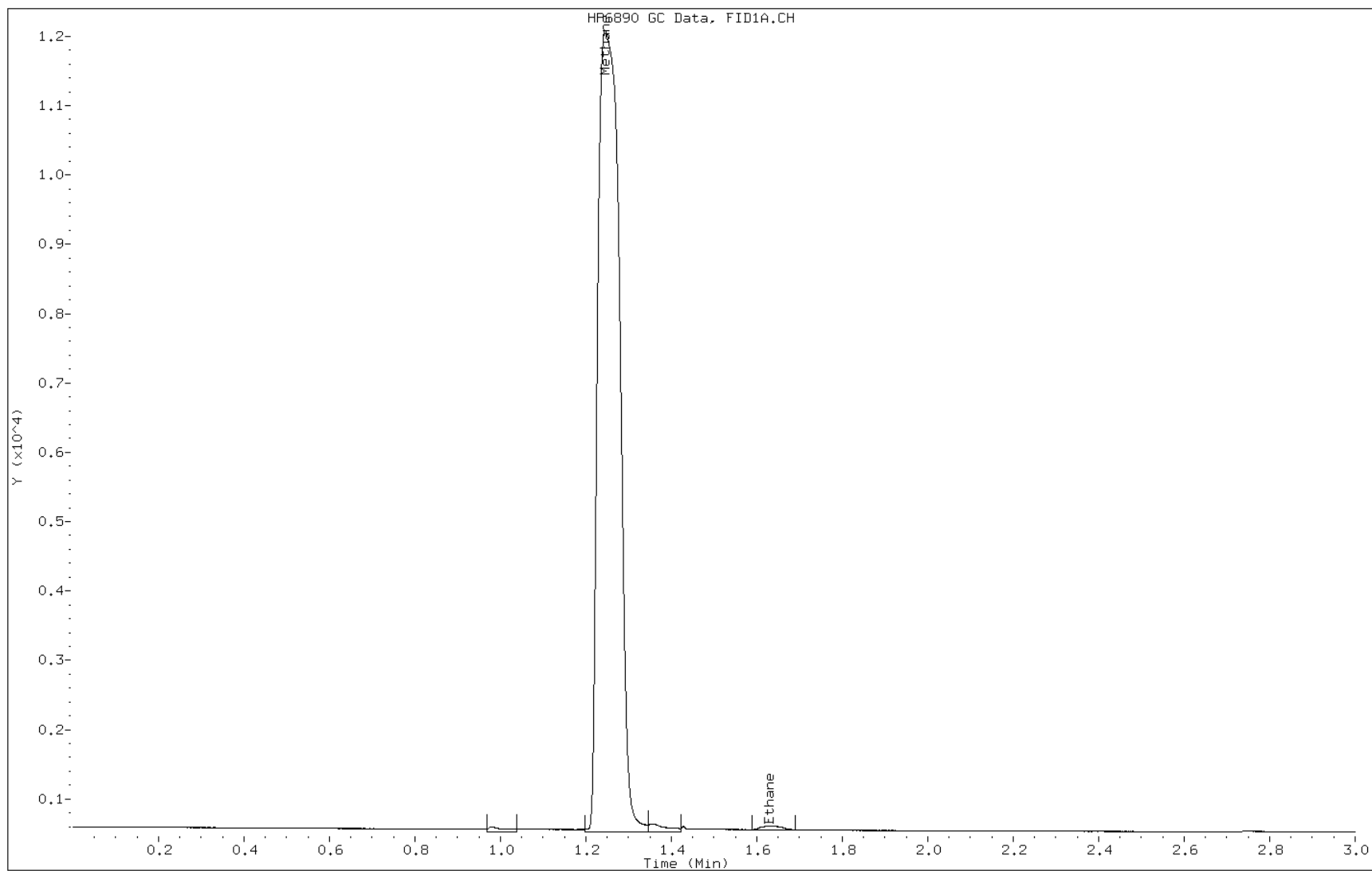
Date: 16-NOV-2011 12:04

Client ID:

Instrument: GC_J.i

Sample Info: 280-22826-I-1

Operator: BMG



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-22826-1
SDG No.: _____
Client Sample ID: PETERSON WW Lab Sample ID: 280-22826-1
Matrix: Water Lab File ID: 007F0501.D
Analysis Method: RSK-175 Date Collected: 11/15/2011 10:25
Sample wt/vol: 18 (mL) Date Analyzed: 11/16/2011 12:04
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RT-3PLOT ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 96662 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-82-8	Methane	29		5.0	0.22

TestAmerica

RSK-175 Dissolved Gasses in Water

Data file : \\DenSvr03\Public\chem\GCV\GC_J.i\111611C2.B\007F0501.D
Lab Smp Id: 280-22826-I-1
Inj Date : 16-NOV-2011 12:04
Operator : BMG
Smp Info : 280-22826-I-1
Misc Info : RSK CCol 8pt 2011-04-27
Comment : SOP: DV-GC-0025
Method : \\DenSvr03\Public\chem\GCV\GC_J.i\111611C2.B\RSK-2_8PT.m
Meth Date : 17-Nov-2011 06:09 gilbertb Quant Type: ESTD
Cal Date : 12-JUL-2011 12:04 Cal File: 016F1601.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.14
Processing Host: DENPC025

Inst ID: GC_J.i

Compound Sublist: RSK175_8pt.sub

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	CONCENTRATIONS					
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	1.677	1.675	0.002	24164	28.5160	28.52
2 Ethene	Compound Not Detected.					
3 AcetyleneEthane	2.390	2.387	0.003	107	0.18526	0.1852(a)

QC Flag Legend

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

Data File: 007F0501.D

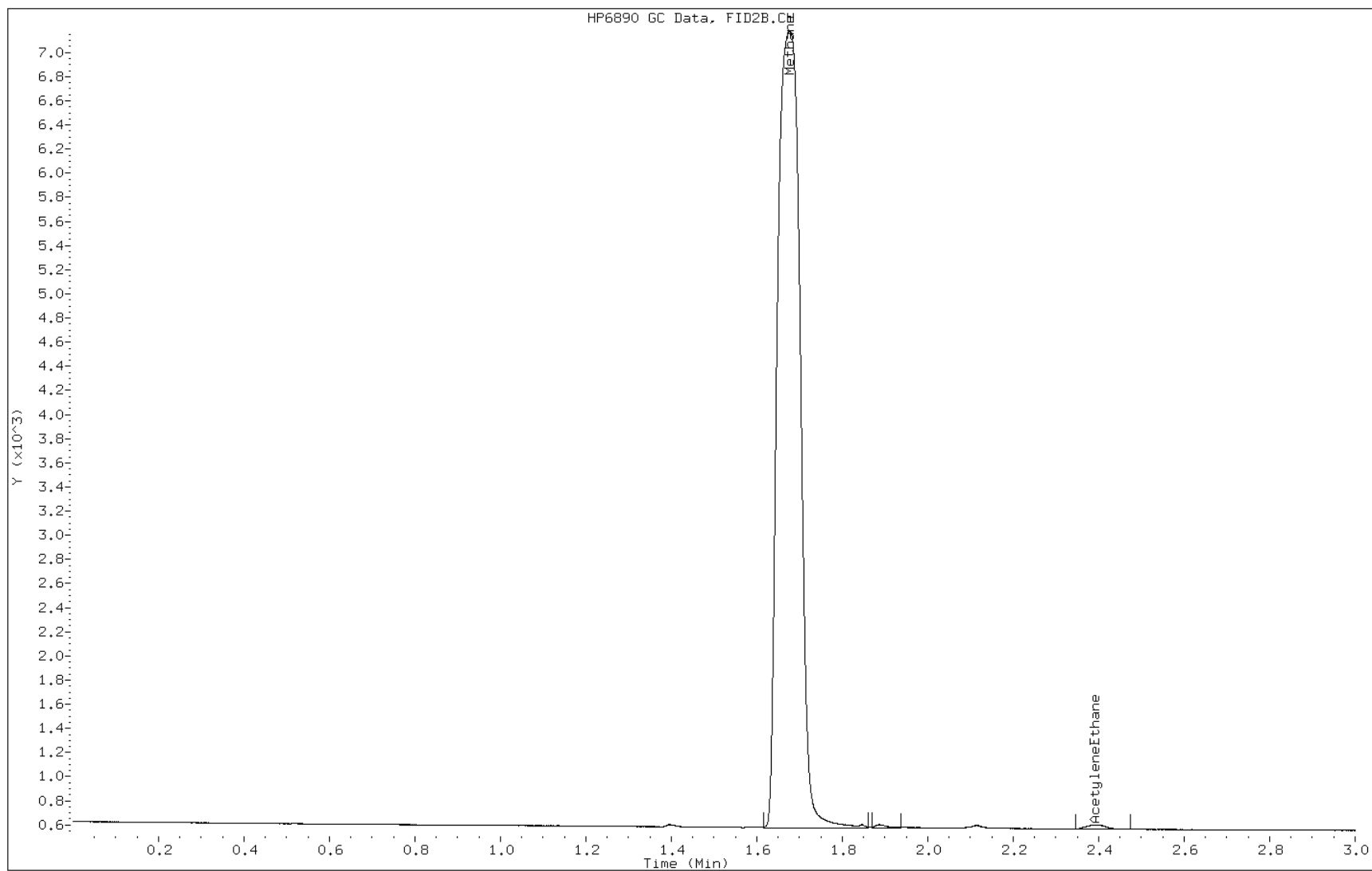
Date: 16-NOV-2011 12:04

Client ID:

Instrument: GC_J.i

Sample Info: 280-22826-I-1

Operator: BMG



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.: 280-22826-1
SDG No.: _____
Client Sample ID: PETERSON WW Lab Sample ID: 280-22826-1
Matrix: Water Lab File ID: 022B2201.D
Analysis Method: 8015B Date Collected: 11/15/2011 10:25
Extraction Method: 3510C Date Extracted: 11/17/2011 21:10
Sample wt/vol: 1048 (mL) Date Analyzed: 11/21/2011 20:29
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.: 97433 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00255	C10-C36	ND		0.48	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	104		50-115

Data File: \\DenSvr03\Public\chem\GCS\GC_U.i\112111b1.B\022B2201.D
Report Date: 22-Nov-2011 15:48

TestAmerica

SW846 8015 mod.

Data file : \\DenSvr03\Public\chem\GCS\GC_U.i\112111b1.B\022B2201.D
Lab Smp Id: 280-22826-B-1-A Client Smp ID: PETERSON WW
Inj Date : 21-NOV-2011 20:29
Operator : MB Inst ID: GC_U.i
Smp Info : 280-1136832,26-1
Misc Info : 280-22826-B-1-A
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_U.i\112111b1.B\DR01.m
Meth Date : 22-Nov-2011 15:48 GC_U.i Quant Type: ESTD
Cal Date : 10-NOV-2011 13:20 Cal File: 011B1101.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: C10-C36sub.sub
Target Version: 4.14
Processing Host: DENPC356

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	1048.000	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	5.256	5.280	-0.024	57061	20.7775	19.82
S 3 C10-C28	0.810-7.490			7342	3.39761	3.242
S 4 C10 - C36	0.810-8.850			8421	3.89618	3.718
\$ 6 n-Octacosane	7.480	7.486	-0.006	37945	15.2665	14.57

Data File: 022B2201.D

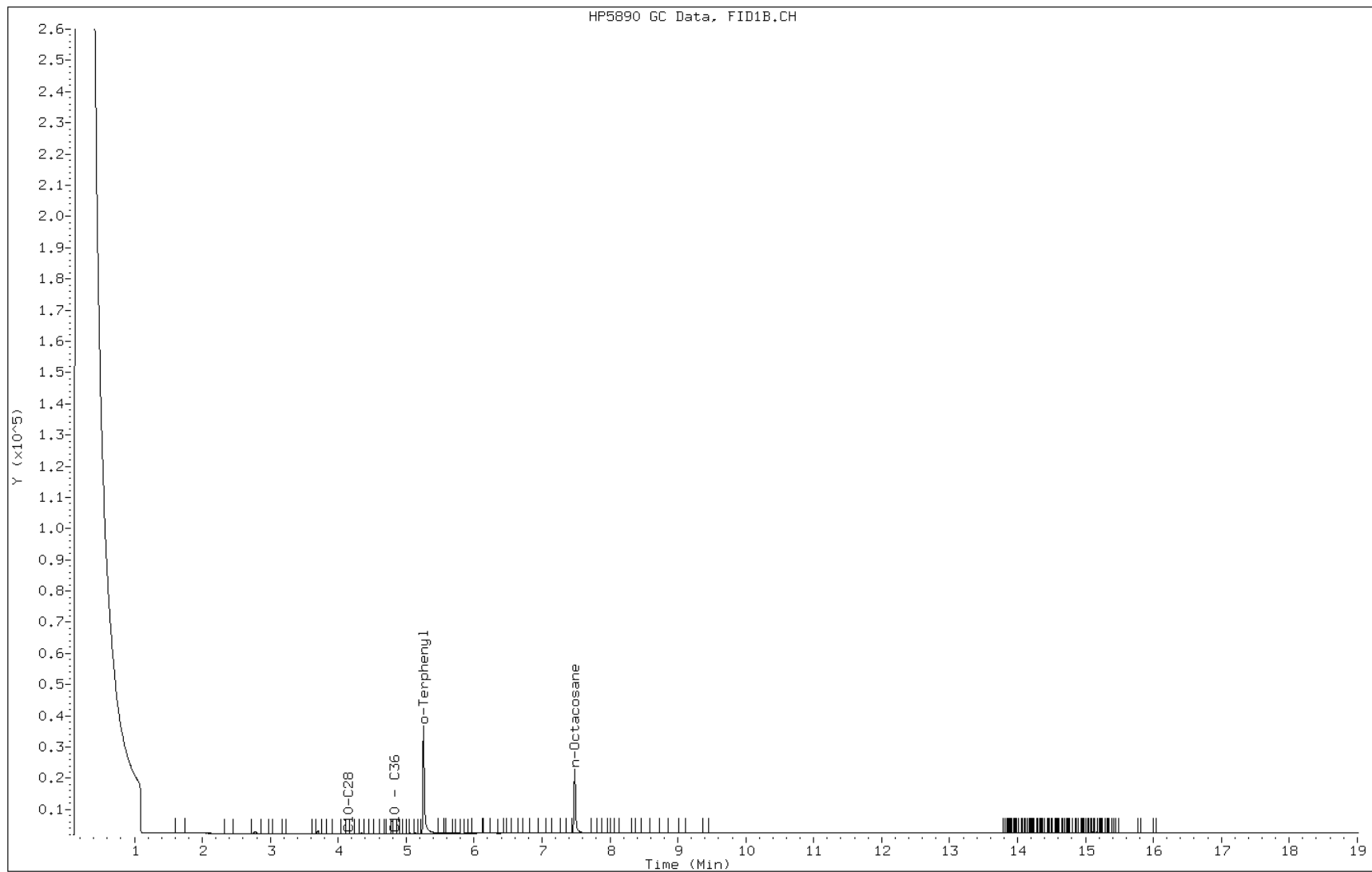
Date: 21-NOV-2011 20:29

Client ID: PETERSON WW

Instrument: GC_U.i

Sample Info: 280-1136832,26-1

Operator: MB



Shipping and Receiving Documents

Login Sample Receipt Checklist

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-22826-1

Login Number: 22826

List Source: TestAmerica Denver

List Number: 1

Creator: Bindel, Aaron M

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.	N/A	