

May 19, 2011

Mr. & Mrs. Burkhart
P.O. Box 976
Wellington, CO 80549

RE: COGCC Complaint #200300876
Water Quality Results for Domestic Water Well (DWR Permit #256584)
SWSW Section 15, T-9-N, R-67-W
Weld County, Colorado

Dear Mr. & Mrs. Burkhart,

As you are aware, I collected a water sample from your well on March 16, 2011, to provide baseline water quality conditions prior to fracture stimulation operations at a nearby oil & gas well known as the Pawnee 2-16-1 (API 123-31432). The results were reported to you in a letter dated April 5, 2011. The sample results were consistent with those from other water well samples collected by the Colorado Oil & Gas Conservation Commission (COGCC) in the general vicinity of your home. The results indicated overall good water quality with no impacts related to oil & gas operations.

Chesapeake Operating, Inc. (Chesapeake) performed fracture stimulation operations on the Pawnee 2-16-1 during the week of March 21, 2011. COGCC Field Inspector Ed Binkley monitored the operations during the preparation and completion phases of the fracture stimulation between March 15th and March 25th. There were no problems such as reportable spills or releases, loss of well control or any down-hole problems that could have caused an impact to the Laramie-Fox Hills Aquifer.

Although there was no indication of any problems related to the fracture stimulation operation, and no noticeable changes in your water quality, COGCC collected a post-fracture sample from your water well at your request on April 13, 2011. This letter summarizes the post-fracture water quality results.

FIELD TESTING

The water sample was collected from a frost-free spigot located in front of a door to the barn on your property. At your request, hoses were used so that water would not accumulate in a low area near the door to the barn. The hoses appeared to be clean and in relatively new condition. The hoses were also used during collection of the baseline water sample. The water was turned on at approximately 09:00 and allowed to run for 40 minutes at a rate of approximately 8.1 gallons per minute prior to sample collection. The water had the same characteristics observed

during the baseline sample collection. The sample was collected at 09:40 and delivered to Test America Laboratories in Arvada, Colorado.

The water sample was collected in new, laboratory supplied containers with appropriate preservatives, also provided by the laboratory, according to the analytical method. The sample containers were transported in the laboratory supplied cooler and placed on ice after sample collection. The sample was hand delivered to Test America under chain-of-custody protocol. The sample was in my possession from the time it was collected to the time it was delivered to the laboratory. A copy of the complete laboratory report is provided in Attachment 3.

COMPARISON OF ANALYTICAL RESULTS TO THE BASELINE WATER SAMPLE

Test America provided the analytical results of the post-fracture sample in a report dated April 26, 2011. With the exception of Arsenic (As), Cadmium (Cd), Lead (Pb) and Selenium (Se), all other results were consistent with the baseline water sample results. Many of the constituents had the same result or varied by only a small percentage indicating no significant change to water quality. The post-fracture water sample results are summarized and compared to the baseline sample results in the attached Table 1.

DISCUSSION OF METALS RESULTS

Because the concentrations of As, Cd, Pb and Se were elevated compared to the baseline sample, and the results for As and Cd slightly exceeded the Colorado Department of Public Health and Environment (CDPHE) human health standard for domestic use water, the results were immediately provided to you via email on the same date of April 26, 2011.

When sampling domestic water wells, COGCC often uses total metals analysis by U.S. EPA SW-846 Method 6010. Water produced from properly constructed and developed domestic water wells is generally clear with very little turbidity or suspended solids. The total metals analysis provides a result that is inclusive for all metals in the sample including any particles as well as dissolved metals. This method provides the concentration of the total metals in the groundwater that the well owner is consuming.

The same analytical method can be used to test for only the dissolved metals in a water sample. This is accomplished by filtering the water sample to remove any particulates. The result then reflects only the concentration of dissolved metals in the water. Generally speaking, total metal and dissolved metal results from properly constructed and developed water wells producing clear water are similar. Depending on the amount of particulates removed during filtration, the dissolved concentration is sometimes less than the total metals concentration.

Due to the elevated total concentrations of the four metals, COGCC requested Test America to analyze remaining sample volume for dissolved metals by the same method. I also made arrangements with you to resample the well on April 28, 2011. Test America reported the dissolved metals results on April 29, 2011. None of the metals in question were detected above the reporting limit. As previously discussed, there is generally a relationship between total metals and dissolved metals in a sample. While the concentrations are usually similar in water

with low turbidity, the dissolved concentrations are sometimes less by a small percentage. Because the dissolved metals in question were not detected at all, it indicated that the original total metal results may have been erroneous. The cause of the error is unknown, but may be attributable to sampling and/or analysis.

I returned to your residence on April 28, 2011, to resample the well. Because there was very good repeatability between the two samples for all other analyzed constituents, the water sample was only analyzed for the list of thirteen metals. I collected the water sample from the same frost free spigot next to the door of the barn. In order to determine if cross contamination may have occurred due to use of the hoses to collect the sample, I used the same hoses to collect the first sample from the water well (sample ID – Burkhart Hose). Immediately after collecting the first sample, the hose was disconnected and a second sample was collected directly from the frost free spigot (sample ID – Burkhart Tap). Both samples were submitted to Test America for total and dissolved metals analysis using the same method. In addition, a duplicate sample was collected from the spigot (sample ID – Burkhart WW) and submitted to Accutest Mountain States Laboratory for analysis of the same list of 13 metals by the same method for both total and dissolved.

The results for As, Cd, Pb and Se in all three of the water samples collected on April 28, 2011, were non-detect for both total and dissolved metals. In addition, the concentrations of the other nine metals were very similar between the baseline results and the post-fracture water sample results indicating no significant change in metals concentrations. The metals results are summarized in Table 2. All of the laboratory reports were previously provided to you via email, but a complete copy of each report is also included in Attachment 3.

GENERAL DISCUSSION OF WATER WELL INVESTIGATION METHODS

When COGCC investigates alleged impacts to water wells related to oil & gas operations, it uses laboratory services that provide several analytical methods to check for common parameters that are indicators of contaminants related to oil & gas operations. In the case of fracture-stimulation operations, the use of acids and different products in the fracture fluids, if released into groundwater, would cause changes in the groundwater chemistry. These changes would be reflected by indicators such as, but not limited to, sodium, potassium, chloride, pH, total dissolved solids (TDS) and the electrical conductivity of the water. If there had been a problem with the fracture stimulation resulting in communication between the producing formation and the Laramie-Fox Hills Aquifer, additional indicators such as total petroleum hydrocarbons (TPH), benzene, toluene, ethyl benzene, xylenes (BTEX), methane and other hydrocarbons associated with natural gas would likely be present in the groundwater.

During water well investigations, COGCC often analyzes water well samples for additional parameters that are generally not used as indicators of oil & gas impacts, but provide an overall picture of the water quality for the water well owners information. These parameters are also useful to monitor the overall water quality in an aquifer over time, although they may not be related to oil & gas. The metals As, Cd, Pb and Se are not generally considered to be primary indicators of contaminants associated with oil & gas operations. These metals occur in the

environment in natural deposits and are sometimes associated with water quality impacts related to metals mining and/or industrial contaminants.

BIOLOGICAL ACTIVITY REACTION TEST (BART™)

The post-fracture water sample was also collected for the determination of the presence of bacteria using the Biological Activity Reaction Test (BART™) for the following: Iron Related Bacteria (IRB), Sulfate Reducing Bacteria (SRB), and Slime Forming Bacteria (SFB). The results were slightly different than those from the baseline water sample. Both the baseline and post-fracture sample indicated the presence of IRB at or slightly above background. The baseline sample also indicated the presence of SRB at or slightly above background, but it was not detected in the post-fracture water sample. The presence of SFB was not detected in either water sample.

As mentioned in the April 5, 2011, letter the overall aggressivity of the IRB population is very low. Many water wells sampled by COGCC show much more aggressive populations of bacteria. The bacteria test is meant to provide the water well owner with additional information regarding water quality. When bacterial contamination is present at high levels the well owner can properly treat the well for bacteria to improve the quality of the water. The presence of bacteria is generally not related to oil & gas impacts.

CONCLUSIONS

COGCC concludes that the original report of elevated As, Cd, Pb and Se in the post-fracture sample collected on April 13, 2011, was incorrect based on the following factors:

- The re-analysis of the post-fracture water sample collected on April 13, 2011, did not contain detectable concentrations of dissolved As, Cd, Pb or Se;
- The second post-fracture sample collected on April 28, 2011, for analysis of total and dissolved metals, as analyzed by both Test America and Accutest, did not contain detectable concentrations of the four metals;
- Results for the other nine metals analyzed for total and dissolved concentrations were consistent between sampling events.

When the results of the baseline sample and the post-fracture sample are compared, concentrations of the other water quality parameters were consistent and did not indicate any significant change in the water quality between the sampling events. Finally, there was no indication during the fracture stimulation operations that any spills, releases, or other problems had occurred that would lead to contamination of the Fox-Hills Aquifer in the vicinity of your residence.

Based on these conclusions, COGCC finds that there has been no impact to groundwater quality in the vicinity of your residence related to oil & gas operations at the Pawnee 2-16-1. As a result your complaint (COGCC #200300876) is closed with this letter.

Mr. & Mrs. Burkhart
Complaint #200300876
May 19, 2011

If you dispute the results and conclusions summarized herein, or you are unsatisfied with COGCC staff's handling and resolution of your complaint, COGCC Rule 522.a.(4) allows you as the complainant to file an application with the Commission for an Order Finding Violation.

If you have any questions or require additional information, please contact me via e-mail (John.Axelson@state.co.us) or by phone at (303) 637-7178.

Respectfully,



John Axelson, P.G.
Environmental Protection Specialist, Northeast Region
Colorado Oil and Gas Conservation Commission

Enclosures

Attachment 1 – Table 1 – Analytical Summary, Baseline Results vs. Post-fracture Results

Attachment 2 – Table 2 – Analytical Summary, Metals Results

Attachment 3 – Post-Fracture Water Sample Laboratory Reports

- Test America Report dated April 26, 2011
- Test America Report (Dissolved Metals) dated April 29, 2011
- Test America Report (Metals Only) dated May 4, 2011
- Accutest Report (Metals Only) dated May 3, 2011

cc: David Neslin – COGCC Director
Debbie Baldwin – COGCC Environmental Manager
Steve Lindblom – COGCC Environmental Supervisor
Margaret Ash – COGCC Field Inspections Manager
Andrew Kopec – Chesapeake Operating, Inc.
Greg Garrison – Chesapeake Operating, Inc.

TABLE 1
ANALYTICAL SUMMARY
Complaint #200300876
Burkhart Water Well

Parameter	Water Well Sample		CDPHE Standards			
	Sample Date					
	Baseline	Post-Fracture				
	Result 3-16-11	Result 4-13-11	Unit	Domestic	Agriculture	Units
Boron	NA	NA	mg/l	NS	0.75	mg/l
Copper	NA	NA	mg/l	1	0.2	mg/l
Arsenic	ND	0.1/ND*	mg/l	0.05	0.1	mg/l
Barium	0.033	0.032	mg/l	2.0		mg/l
Cadmium	ND	0.007/ND*	mg/l	0.005	0.01	mg/l
Calcium	68	70	mg/l	NS		
Chromium	ND	ND	mg/l	0.1	0.1	mg/l
Iron	0.81	0.83	mg/l	0.3	5	mg/l
Lead	ND	0.029/ND*	mg/l	0.05	0.1	mg/l
Magnesium	20	21	mg/l	NS		
Manganese	0.052	0.052	mg/l	0.05	0.2	mg/l
Potassium	6.7	5.9	mg/l	NS		
Selenium	ND	0.044/ND*	mg/l	0.05	0.02	mg/l
Silver	ND	ND	mg/l	0.05	NS	mg/l
Sodium	68	70	mg/l	NS		
Uranium	ND	ND	mg/l	0.03		mg/l
Chloride	11	11	mg/l	250	NS	mg/l
Nitrite	ND	ND	mg/l	1.0	10	mg/l
Nitrate	ND	ND	mg/l	10.0	100	mg/l
Total Nitrite/Nitrate	ND	ND	mg/l	10.0	100	mg/l
Fluoride	0.81	0.91	mg/l	4.0	NS	mg/l
Total Dissolved Solids	450	460	mg/l	500	*1500	mg/l
pH	7.11	7.11	No units	6.5 - 8.5	6.5 - 8.5	No units
Sulfate	140	140	mg/l	250		mg/l
Sodium Adsorption Ratio	1.8	1.8	No units	NS		
Bromide	ND	ND	mg/l	NS		
Total Alkalinity	260	250	mg/l	NS		
Bicarbonate	260	250	mg/l	NS		
Carbonate	ND	ND	mg/l	NS		
Conductivity	0.78	0.75	mmhos/cm	NS		
Methane	ND	ND	mg/l	NS		

Notes * The sample collected on 4/13/11 was reanalyzed for dissolved metals. Results were non-detect for As, Cd, Pb & Se. A second water sample was collected on 4/29/11 and analyzed for Total and Dissolved Metals. Results were also non-detect for the four metals.

CDPHE Colorado Department of Public Health and the Environment.
Domestic Standards for Domestic Water Supply, Human Health and Drinking Water Standards.
Agriculture * Standards for agriculture compiled from CDPHE and other of sources.
mg/l Milligrams per liter (equals parts per million).
CDPHE Standards Water Quality Control Commission 5 CCR 1002-41, Regulation No. 41 - The Basic Standards For Groundwater.
mmhos/cm millimhos per centimeter
NA Not analyzed.
ND Not detected.
NS No Standard.
** Health Advisory.
Human health standard.
Secondarily standard.

Table 2
Metals Analytical Summary
Complaint #200300876
Burkhart Water Well

Laboratory	Test America Laboratories, Inc.							Accutest Mountain States Laboratories	
Date	3/16/2011	4/13/2011	4/13/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011
Lab ID	Burkhart WW	Burkhart WW-2	Burkhart WW-2	Burkhart Hose	Burkhart Hose	Burkhart Tap	Burkhart Tap	Burkhart WW	Burkhart WW
Analysis	Total Metals	Total Metals	Dissolved Metals	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units	Result ug/L	Result ug/L	Result ug/L	Result ug/L	Result ug/L	Result ug/L	Result ug/L	Result ug/L	Result ug/L
Parameter									
Arsenic	ND	100	ND	ND	ND	ND	ND	ND	ND
Barium	33	32		34	32	33	35	32.5	31.9
Cadmium	ND	7	ND	ND	ND	ND	ND	ND	ND
Calcium	68000	70000		74000	69000	71000	70000	73900	70700
Chromium	ND	ND		ND	ND	ND	ND	ND	ND
Iron	810	830		970	750	930	830	934	758
Lead	ND	29	ND	ND	ND	ND	ND	ND	ND
Magnesium	20000	21000		21000	21000	20000	21000	21700	20800
Manganese	52	52		53	54	51	55	51.5	49.2
Potassium	6700	5900		5800	5800	5700	5900	5660	5400
Selenium	ND	44	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND		ND	ND	ND	ND	ND	ND
Sodium	68000	70000		66000	63000	63000	64000	65900	63100

ND - Not Detected

ug/L - parts per billion

ANALYTICAL REPORT

Job Number: 280-14533-1

Job Description: Burkhart # 200300876

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



Approved for release.
Lori A Parsons
Project Manager I
4/26/2011 3:40 PM

Lori A Parsons
Project Manager I
lori.parsons@testamericainc.com
04/26/2011

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.

TestAmerica Laboratories, Inc.

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



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CASE NARRATIVE

Client: Colorado Oil&Gas Conservation Commision

Project: Burkhart # 200300876

Report Number: 280-14533-1

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 04/13/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.4 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples BURKHART-WW-2 (280-14533-1) and TRIP BLANK (280-14533-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/19/2011.

TestAmerica Denver's practice for the reporting of dual column data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

No difficulties were encountered during the volatiles analyses.

All quality control parameters were within the acceptance limits.

GAS RANGE ORGANICS

Sample BURKHART-WW-2 (280-14533-1) was analyzed for gas range organics in accordance with EPA SW-846 Method 8015B - GRO. The samples were analyzed on 04/15/2011.

No difficulties were encountered during the GRO analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED GASES

Sample BURKHART-WW-2 (280-14533-1) was analyzed for dissolved gases in accordance with RSK_175. The samples were analyzed on 04/19/2011.

TestAmerica Denver's practice for the reporting of dual column data is to report the results from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes are reported as PRIMARY on the Sample Datasheets.

The Method required MS/MSD could not be performed for analytical batch 63215, due to insufficient sample volume submitted. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data.

No difficulties were encountered during the dissolved gases analysis.

All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS

Sample BURKHART-WW-2 (280-14533-1) was analyzed for Diesel Range Organics in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 04/14/2011 and analyzed on 04/18/2011.

The Method required MS/MSD could not be performed for analytical batch 62977, due to insufficient sample volume submitted. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data.

No difficulties were encountered during the DRO analysis.

All quality control parameters were within the acceptance limits.

TOTAL METALS

Sample BURKHART-WW-2 (280-14533-1) was analyzed for total metals in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 04/15/2011.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

TOTAL METALS - URANIUM

Sample BURKHART-WW-2 (280-14533-1) was analyzed for total metals in accordance with EPA SW-846 Method 6020. The samples were prepared on 04/15/2011 and analyzed on 04/16/2011.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

CATION ANION BALANCE

Sample BURKHART-WW-2 (280-14533-1) was analyzed for Cation Anion Balance in accordance with Cation Anion Balance. The samples were analyzed on 04/22/2011.

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

All other quality control parameters were within the acceptance limits.

SODIUM ABSORPTION RATIO

Sample BURKHART-WW-2 (280-14533-1) was analyzed for Sodium Absorption Ratio in accordance with USDA Handbook 60 - 20B. The samples were analyzed on 04/21/2011.

No difficulties were encountered during the SAR analysis.

All quality control parameters were within the acceptance limits.

ANIONS

Sample BURKHART-WW-2 (280-14533-1) was analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 04/13/2011.

Sample BURKHART-WW-2 (280-14533-1)[5X] required dilution prior to analysis for sulfate. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the anions analysis.

All quality control parameters were within the acceptance limits.

ALKALINITY

Sample BURKHART-WW-2 (280-14533-1) was analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 04/19/2011.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

SPECIFIC CONDUCTIVITY

Sample BURKHART-WW-2 (280-14533-1) was analyzed for specific conductivity in accordance with SM20 2510B. The samples were analyzed on 04/19/2011.

No difficulties were encountered during the conductivity analysis.

All quality control parameters were within the acceptance limits.

TOTAL DISSOLVED SOLIDS

Sample BURKHART-WW-2 (280-14533-1) was analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 04/19/2011.

No difficulties were encountered during the TDS analysis.

All quality control parameters were within the acceptance limits.

CORROSIVITY (PH)

Sample BURKHART-WW-2 (280-14533-1) was analyzed for corrosivity (pH) in accordance with SM20 4500 H+ B. The samples were analyzed on 04/13/2011.

No other difficulties were encountered during the pH analysis.

All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-14533-1

SDG No.: _____

Instrument ID: GCV_B Analysis Batch Number: 50510Lab Sample ID: IC 280-50510/3 Client Sample ID: _____Date Analyzed: 01/25/11 12:20 Lab File ID: 111F0301.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C5-C12	9.64	Baseline Event	mooret	01/26/11 14:23
C6-C12	10.09	Baseline Event	mooret	01/26/11 14:23
1-Chloro-4-fluorobenzene	11.31	Baseline Event	mooret	01/26/11 14:23
Chlorobenzene	11.52	Baseline Event	mooret	01/26/11 14:23

Lab Sample ID: IC 280-50510/4 Client Sample ID: _____Date Analyzed: 01/25/11 12:53 Lab File ID: 112F0401.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1-Chloro-4-fluorobenzene	11.30	Baseline Event	mooret	01/26/11 14:24
Chlorobenzene	11.51	Baseline Event	mooret	01/26/11 14:24

Lab Sample ID: ICRT 280-50510/5 Client Sample ID: _____Date Analyzed: 01/25/11 13:26 Lab File ID: 113F0501.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	9.15	Baseline Event	mooret	01/26/11 14:22
C5-C12	9.64	Baseline Event	mooret	01/26/11 14:22
C6-C12	10.09	Baseline Event	mooret	01/26/11 14:22
1-Chloro-4-fluorobenzene	11.30	Baseline Event	mooret	01/26/11 14:21
Chlorobenzene	11.51	Baseline Event	mooret	01/26/11 14:21

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-14533-1

SDG No.: _____

Instrument ID: GCV_B Analysis Batch Number: 50510Lab Sample ID: IC 280-50510/6 Client Sample ID: _____Date Analyzed: 01/25/11 13:59 Lab File ID: 114F0601.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	mooret	01/26/11 14:25
C5-C12	9.64	Baseline Event	mooret	01/26/11 14:25
C6-C12	10.09	Baseline Event	mooret	01/26/11 14:25
1-Chloro-4-fluorobenzene	11.30	Baseline Event	mooret	01/26/11 14:25
Chlorobenzene	11.52	Baseline Event	mooret	01/26/11 14:25

Lab Sample ID: IC 280-50510/7 Client Sample ID: _____Date Analyzed: 01/25/11 14:32 Lab File ID: 115F0701.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	7.89	Baseline Event	mooret	01/26/11 14:26
C5-C12	9.64	Baseline Event	mooret	01/26/11 14:26
C6-C12	10.09	Baseline Event	mooret	01/26/11 14:26
1-Chloro-4-fluorobenzene	11.31	Baseline Event	mooret	01/26/11 14:26
Chlorobenzene	11.52	Baseline Event	mooret	01/26/11 14:26

Lab Sample ID: IC 280-50510/8 Client Sample ID: _____Date Analyzed: 01/25/11 15:04 Lab File ID: 116F0801.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	mooret	01/26/11 14:27
C5-C12	9.64	Baseline Event	mooret	01/26/11 14:27
C6-C12	10.09	Baseline Event	mooret	01/26/11 14:27
1-Chloro-4-fluorobenzene	11.31	Baseline Event	mooret	01/26/11 14:27
Chlorobenzene	11.52	Baseline Event	mooret	01/26/11 14:27

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-14533-1

SDG No.: _____

Instrument ID: GCV_B Analysis Batch Number: 50510Lab Sample ID: ICV 280-50510/9 Client Sample ID: _____Date Analyzed: 01/25/11 17:10 Lab File ID: 202F1001.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C5-C12	9.64	Baseline Event	mooret	01/26/11 14:29
C6-C12	10.09	Baseline Event	mooret	01/26/11 14:29
Chlorobenzene	11.52	Baseline Event	mooret	01/26/11 14:29

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-14533-1

SDG No.: _____

Instrument ID: GCV_B Analysis Batch Number: 62320Lab Sample ID: CCVRT 280-62320/2 Client Sample ID: _____Date Analyzed: 04/14/11 11:46 Lab File ID: 115F0201.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorobenzene	11.48	Baseline Event	mooret	04/14/11 20:34

Lab Sample ID: LCS 280-62320/3 Client Sample ID: _____Date Analyzed: 04/14/11 12:18 Lab File ID: 116F0301.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	7.84	Baseline Event	mooret	04/14/11 20:36
Gasoline Range Organics (GRO) -C6-C10	9.12	Baseline Event	mooret	04/14/11 20:36

Lab Sample ID: LCSD 280-62320/4 Client Sample ID: _____Date Analyzed: 04/14/11 12:51 Lab File ID: 201F0401.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
a,a,a-Trifluorotoluene	7.84	Baseline Event	mooret	04/14/11 20:36
Gasoline Range Organics (GRO) -C6-C10	9.12	Baseline Event	mooret	04/14/11 20:36

Lab Sample ID: CCV 280-62320/9 Client Sample ID: _____Date Analyzed: 04/14/11 20:01 Lab File ID: 213F1601.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorobenzene	11.48	Baseline Event	mooret	04/14/11 20:42

GASOLINE RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-14533-1

SDG No.: _____

Instrument ID: GCV_B Analysis Batch Number: 62320Lab Sample ID: 280-14395-AD-1 MSD Client Sample ID: _____Date Analyzed: 04/14/11 22:11 Lab File ID: 301F2001.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	04/15/11 09:26

Lab Sample ID: CCV 280-62320/16 Client Sample ID: _____Date Analyzed: 04/14/11 23:48 Lab File ID: 304F2301.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorobenzene	11.48	Baseline Event	mooret	04/15/11 09:24

Lab Sample ID: CCV 280-62320/22 Client Sample ID: _____Date Analyzed: 04/15/11 03:03 Lab File ID: 310F2901.D GC Column: RTX 502.2 ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorobenzene	11.48	Baseline Event	mooret	04/15/11 09:24

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-14533-1

SDG No.: _____

Instrument ID: GCS_U2 Analysis Batch Number: 48528Lab Sample ID: IC 280-48528/2 Client Sample ID: _____Date Analyzed: 01/10/11 17:55 Lab File ID: 004F0401.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C24	9.56	Baseline Event	birdsellm	01/11/11 09:36
C10-C25	9.80	Baseline Event	birdsellm	01/11/11 09:36
Diesel Range Organics [C10-C28]	10.51	Baseline Event	birdsellm	01/11/11 09:36
C10-C32	11.18	Baseline Event	birdsellm	01/11/11 09:36
C10-C36	11.67	Baseline Event	birdsellm	01/11/11 09:36

Lab Sample ID: IC 280-48528/3 Client Sample ID: _____Date Analyzed: 01/10/11 18:29 Lab File ID: 005F0501.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	9.02	Baseline Event	birdsellm	01/11/11 09:36
C10-C24	9.56	Baseline Event	birdsellm	01/11/11 09:36
C10-C25	9.80	Baseline Event	birdsellm	01/11/11 09:36
C8-C34	10.00	Baseline Event	birdsellm	01/11/11 09:36
Diesel Range Organics [C10-C28]	10.51	Baseline Event	birdsellm	01/11/11 09:36
C10-C32	11.18	Baseline Event	birdsellm	01/11/11 09:36
o-Terphenyl	11.53	Baseline Event	birdsellm	01/11/11 09:36
C10-C36	11.67	Baseline Event	birdsellm	01/11/11 09:36
n-Octacosane	16.74	Baseline Event	birdsellm	01/11/11 09:36

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-14533-1

SDG No.: _____

Instrument ID: GCS_U2 Analysis Batch Number: 48528Lab Sample ID: IC 280-48528/4 Client Sample ID: _____Date Analyzed: 01/10/11 19:03 Lab File ID: 006F0601.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	9.02	Baseline Event	birdsellm	01/11/11 09:37
C10-C24	9.56	Baseline Event	birdsellm	01/11/11 09:37
C10-C25	9.80	Baseline Event	birdsellm	01/11/11 09:37
C8-C34	10.00	Baseline Event	birdsellm	01/11/11 09:37
Diesel Range Organics [C10-C28]	10.51	Baseline Event	birdsellm	01/11/11 09:37
C10-C32	11.18	Baseline Event	birdsellm	01/11/11 09:37
o-Terphenyl	11.52	Baseline Event	birdsellm	01/11/11 09:37
C10-C36	11.67	Baseline Event	birdsellm	01/11/11 09:37
n-Octacosane	16.74	Baseline Event	birdsellm	01/11/11 09:37

Lab Sample ID: ICRT 280-48528/5 Client Sample ID: _____Date Analyzed: 01/10/11 19:36 Lab File ID: 007F0701.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	9.02	Baseline Event	birdsellm	01/11/11 10:08
C10-C24	9.56	Baseline Event	birdsellm	01/11/11 10:08
C10-C25	9.80	Baseline Event	birdsellm	01/11/11 10:08
C8-C34	10.00	Baseline Event	birdsellm	01/11/11 10:08
Diesel Range Organics [C10-C28]	10.51	Baseline Event	birdsellm	01/11/11 10:08
C10-C32	11.18	Baseline Event	birdsellm	01/11/11 10:08
o-Terphenyl	11.51	Baseline Event	birdsellm	01/11/11 10:08
C10-C36	11.67	Baseline Event	birdsellm	01/11/11 10:08
n-Octacosane	16.73	Baseline Event	birdsellm	01/11/11 10:07

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-14533-1

SDG No.: _____

Instrument ID: GCS_U2 Analysis Batch Number: 48528Lab Sample ID: IC 280-48528/6 Client Sample ID: _____Date Analyzed: 01/10/11 20:10 Lab File ID: 008F0801.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	9.02	Baseline Event	birdsellm	01/11/11 09:38
C10-C24	9.56	Baseline Event	birdsellm	01/11/11 09:38
C10-C25	9.80	Baseline Event	birdsellm	01/11/11 09:38
C8-C34	10.00	Baseline Event	birdsellm	01/11/11 09:38
Diesel Range Organics [C10-C28]	10.51	Baseline Event	birdsellm	01/11/11 09:38
C10-C32	11.18	Baseline Event	birdsellm	01/11/11 09:38
o-Terphenyl	11.50	Baseline Event	birdsellm	01/11/11 09:38
C10-C36	11.67	Baseline Event	birdsellm	01/11/11 09:38

Lab Sample ID: IC 280-48528/7 Client Sample ID: _____Date Analyzed: 01/10/11 20:44 Lab File ID: 009F0901.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	9.02	Baseline Event	birdsellm	01/11/11 09:38
C10-C24	9.56	Baseline Event	birdsellm	01/11/11 09:38
C10-C25	9.80	Baseline Event	birdsellm	01/11/11 09:38
C8-C34	10.00	Baseline Event	birdsellm	01/11/11 09:38
Diesel Range Organics [C10-C28]	10.51	Baseline Event	birdsellm	01/11/11 09:38
C10-C32	11.18	Baseline Event	birdsellm	01/11/11 09:38
o-Terphenyl	11.50	Baseline Event	birdsellm	01/11/11 09:38
C10-C36	11.67	Baseline Event	birdsellm	01/11/11 09:38

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-14533-1

SDG No.: _____

Instrument ID: GCS_U2 Analysis Batch Number: 48528Lab Sample ID: IC 280-48528/8 Client Sample ID: _____Date Analyzed: 01/10/11 21:18 Lab File ID: 010F1001.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	9.02	Baseline Event	birdsellm	01/11/11 10:12
C10-C24	9.56	Baseline Event	birdsellm	01/11/11 10:12
C10-C25	9.80	Baseline Event	birdsellm	01/11/11 10:12
C8-C34	10.00	Baseline Event	birdsellm	01/11/11 10:12
Diesel Range Organics [C10-C28]	10.51	Baseline Event	birdsellm	01/11/11 10:12
C10-C32	11.18	Baseline Event	birdsellm	01/11/11 10:12
o-Terphenyl	11.50	Baseline Event	birdsellm	01/11/11 10:12
C10-C36	11.67	Baseline Event	birdsellm	01/11/11 10:12

Lab Sample ID: ICV 280-48528/9 Client Sample ID: _____Date Analyzed: 01/10/11 21:51 Lab File ID: 011F1101.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C22	9.02	Baseline Event	birdsellm	01/11/11 10:08
C10-C24	9.56	Baseline Event	birdsellm	01/11/11 10:08
C10-C25	9.80	Baseline Event	birdsellm	01/11/11 10:08
C8-C34	10.00	Baseline Event	birdsellm	01/11/11 10:08
Diesel Range Organics [C10-C28]	10.51	Baseline Event	birdsellm	01/11/11 10:08
C10-C32	11.18	Baseline Event	birdsellm	01/11/11 10:08
o-Terphenyl	11.50	Baseline Event	birdsellm	01/11/11 10:08
C10-C36	11.67	Baseline Event	birdsellm	01/11/11 10:08
n-Octacosane	16.73	Baseline Event	birdsellm	01/11/11 10:08

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-14533-1

SDG No.: _____

Instrument ID: GCS_U2 Analysis Batch Number: 62977Lab Sample ID: CCVRT 280-62977/2 Client Sample ID: _____Date Analyzed: 04/18/11 18:48 Lab File ID: 004F0401.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Diesel Range Organics [C10-C28]	10.42	Baseline Event	birdsellm	04/19/11 12:42
o-Terphenyl	11.41	Baseline Event	birdsellm	04/19/11 12:42
C10-C36	11.60	Baseline Event	birdsellm	04/19/11 12:42
n-Octacosane	16.63	Baseline Event	birdsellm	04/19/11 12:42

Lab Sample ID: LCS 280-62290/2-A Client Sample ID: _____Date Analyzed: 04/18/11 19:54 Lab File ID: 006F0601.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Terphenyl	11.40	Baseline Event	birdsellm	04/19/11 13:12
C10-C36	11.60	Baseline Event	birdsellm	04/19/11 13:12

Lab Sample ID: LCSD 280-62290/3-A Client Sample ID: _____Date Analyzed: 04/18/11 20:27 Lab File ID: 007F0701.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Terphenyl	11.40	Baseline Event	birdsellm	04/19/11 13:12
C10-C36	11.60	Baseline Event	birdsellm	04/19/11 13:12

Lab Sample ID: CCV 280-62977/13 Client Sample ID: _____Date Analyzed: 04/19/11 00:55 Lab File ID: 015F1501.D GC Column: RTX-1 (30.32) ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Diesel Range Organics [C10-C28]	10.42	Baseline Event	birdsellm	04/19/11 13:08
o-Terphenyl	11.41	Baseline Event	birdsellm	04/19/11 13:08
C10-C36	11.60	Baseline Event	birdsellm	04/19/11 13:08
n-Octacosane	16.63	Baseline Event	birdsellm	04/19/11 13:08

SAMPLE SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-14533-1	BURKHART-WW-2	Water	04/13/2011 0940	04/13/2011 1305
280-14533-2TB	TRIP BLANK	Water	04/13/2011 0940	04/13/2011 1305

EXECUTIVE SUMMARY - Detections

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
280-14533-1	BURKHART-WW-2				
Sodium Adsorption Ratio		1.8	0.40	No Unit	20B
Arsenic		100	15	ug/L	6010B
Barium		32	10	ug/L	6010B
Cadmium		7.0	5.0	ug/L	6010B
Calcium		70000	200	ug/L	6010B
Iron		830	100	ug/L	6010B
Lead		29	9.0	ug/L	6010B
Magnesium		21000	200	ug/L	6010B
Manganese		52	10	ug/L	6010B
Potassium		5900	3000	ug/L	6010B
Selenium		44	15	ug/L	6010B
Sodium		70000	1000	ug/L	6010B
Chloride		11	3.0	mg/L	300.0
Fluoride		0.91	0.50	mg/L	300.0
Sulfate		140	25	mg/L	300.0
Total Anions		8.3		meq/L	SM 1030F
Total Cations		8.5		meq/L	SM 1030F
Percent Difference		1.2		%	SM 1030F
Anion/Cation Balance		1.2		%	SM 1030F
Total Alkalinity		250	5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		250	5.0	mg/L	SM 2320B
Specific Conductance		750	2.0	umhos/cm	SM 2510B
Total Dissolved Solids		460	10	mg/L	SM 2540C
pH		7.11 HF	0.100	SU	SM 4500 H+ B

METHOD SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

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)	TAL DEN		SW846 3510C
Sodium Adsorption Ratio	TAL DEN	USDA 20B	
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Metals	TAL DEN		SW846 3010A
Metals (ICP/MS)	TAL DEN	SW846 6020	
Preparation, Total Metals	TAL DEN		SW846 3020A
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: 280-14533-1

Method	Analyst	Analyst ID
SW846 8260B	Stapp, Jennifer L	JLS
SW846 8015B	Moore, Tegan E	TEM
RSK RSK-175	Smith, Matthew P	MPS
SW846 8015B	Birdsell, Matthew R	MRB
USDA 20B	Harre, John K	JKH
SW846 6010B	Harre, John K	JKH
SW846 6020	Lill, Thomas E	TEL
MCAWW 300.0	Kudla, Ewa	EK
SM SM 1030F	Sullivan, Roxanne	RS
SM SM 2320B	Scott, Samantha J	SJS
SM SM 2510B	Plumb, Paul M	PMP
SM SM 2540C	Domnick, Brandon J	BJD
SM SM 4500 H+ B	Taylor, Juli M	JMT

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Client Sample ID: BURKHART-WW-2

Lab Sample ID: 280-14533-1

Date Sampled: 04/13/2011 0940

Client Matrix: Water

Date Received: 04/13/2011 1305

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-62873	Instrument ID:	MSV_MS1
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	ms3406.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	04/19/2011 0243			Final Weight/Volume:	20 mL
Prep Date:	04/19/2011 0243				

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)	109		70 - 127
Toluene-d8 (Surr)	99		80 - 125
4-Bromofluorobenzene (Surr)	101		78 - 120
Dibromofluoromethane (Surr)	107		77 - 120

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-14533-2TB

Date Sampled: 04/13/2011 0940

Client Matrix: Water

Date Received: 04/13/2011 1305

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-62873	Instrument ID:	MSV_MS1
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	ms3407.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	04/19/2011 0303			Final Weight/Volume:	20 mL
Prep Date:	04/19/2011 0303				

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)	105		70 - 127
Toluene-d8 (Surr)	99		80 - 125
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	100		77 - 120

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Client Sample ID: BURKHART-WW-2

Lab Sample ID: 280-14533-1

Date Sampled: 04/13/2011 0940

Client Matrix: Water

Date Received: 04/13/2011 1305

8015B Gasoline Range Organics - (GC)

Analysis Method:	8015B	Analysis Batch:	280-62320	Instrument ID:	GCV_B
Prep Method:	5030B		N/A	Initial Weight/Volume:	5 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/15/2011 0053			Injection Volume:	5 mL
Prep Date:	04/15/2011 0053			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	93		82 - 110

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Client Sample ID: BURKHART-WW-2

Lab Sample ID: 280-14533-1

Date Sampled: 04/13/2011 0940

Client Matrix: Water

Date Received: 04/13/2011 1305

RSK-175 Dissolved Gases in Water

Analysis Method: RSK-175

Analysis Batch: 280-63215

Instrument ID: GCV_J

N/A

N/A

Initial Weight/Volume: 18 mL

Dilution: 1.0

Final Weight/Volume: 18 mL

Analysis Date: 04/19/2011 1907

Injection Volume:

Prep Date: N/A

Result Type: PRIMARY

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

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Client Sample ID: BURKHART-WW-2

Lab Sample ID: 280-14533-1

Date Sampled: 04/13/2011 0940

Client Matrix: Water

Date Received: 04/13/2011 1305

RSK-175 Dissolved Gases in Water

Analysis Method:	RSK-175	Analysis Batch:	280-63215	Instrument ID:	GCV_J
	N/A		N/A	Initial Weight/Volume:	18 mL
Dilution:	1.0			Final Weight/Volume:	18 mL
Analysis Date:	04/19/2011 1907			Injection Volume:	
Prep Date:	N/A			Result Type:	SECONDARY

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

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Client Sample ID: BURKHART-WW-2

Lab Sample ID: 280-14533-1

Date Sampled: 04/13/2011 0940

Client Matrix: Water

Date Received: 04/13/2011 1305

8015B Diesel Range Organics (DRO) (GC)

Analysis Method:	8015B	Analysis Batch:	280-62977	Instrument ID:	GCS_U2
Prep Method:	3510C	Prep Batch:	280-62290	Initial Weight/Volume:	1043.6 mL
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	04/18/2011 2207			Injection Volume:	1 uL
Prep Date:	04/14/2011 1737			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	80		50 - 115

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Client Sample ID: BURKHART-WW-2

Lab Sample ID: 280-14533-1

Date Sampled: 04/13/2011 0940

Client Matrix: Water

Date Received: 04/13/2011 1305

20B Sodium Adsorption Ratio

Analysis Method:	20B	Analysis Batch:	280-63434	Instrument ID:	MT_025
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	04/21/2011 1406			Final Weight/Volume:	1.0 mL
Prep Date:	N/A				

Analyte	Result (No Unit)	Qualifier	RL
Sodium Adsorption Ratio	1.8		0.40

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-62687	Instrument ID:	MT_025
Prep Method:	3010A	Prep Batch:	280-62180	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/15/2011 1348			Final Weight/Volume:	50 mL
Prep Date:	04/15/2011 0730				

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	100		15
Barium	32		10
Cadmium	7.0		5.0
Calcium	70000		200
Chromium	ND		10
Iron	830		100
Lead	29		9.0
Magnesium	21000		200
Manganese	52		10
Potassium	5900		3000
Selenium	44		15
Silver	ND		10
Sodium	70000		1000

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-62706	Instrument ID:	MT_024
Prep Method:	3020A	Prep Batch:	280-62182	Lab File ID:	186SMPL.D
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/16/2011 0346			Final Weight/Volume:	50 mL
Prep Date:	04/15/2011 1530				

Analyte	Result (ug/L)	Qualifier	RL
Uranium	ND		1.0

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

General Chemistry

Client Sample ID: BURKHART-WW-2

Lab Sample ID: 280-14533-1

Client Matrix: Water

Date Sampled: 04/13/2011 0940

Date Received: 04/13/2011 1305

Analyte	Result	Qual	Units	RL	Dil	Method
Bromide	ND		mg/L	0.20	1.0	300.0
	Analysis Batch: 280-62260	Analysis Date: 04/13/2011 1918				
Nitrate as N	ND		mg/L	0.50	1.0	300.0
	Analysis Batch: 280-62259	Analysis Date: 04/13/2011 1918				
Chloride	11		mg/L	3.0	1.0	300.0
	Analysis Batch: 280-62260	Analysis Date: 04/13/2011 1918				
Nitrite as N	ND		mg/L	0.50	1.0	300.0
	Analysis Batch: 280-62259	Analysis Date: 04/13/2011 1918				
Fluoride	0.91		mg/L	0.50	1.0	300.0
	Analysis Batch: 280-62260	Analysis Date: 04/13/2011 1918				
Sulfate	140		mg/L	25	5.0	300.0
	Analysis Batch: 280-62260	Analysis Date: 04/13/2011 2259				
Total Alkalinity	250		mg/L	5.0	1.0	SM 2320B
	Analysis Batch: 280-63141	Analysis Date: 04/19/2011 1624				
Bicarbonate Alkalinity as CaCO3	250		mg/L	5.0	1.0	SM 2320B
	Analysis Batch: 280-63141	Analysis Date: 04/19/2011 1624				
Carbonate Alkalinity as CaCO3	ND		mg/L	5.0	1.0	SM 2320B
	Analysis Batch: 280-63141	Analysis Date: 04/19/2011 1624				
Total Dissolved Solids	460		mg/L	10	1.0	SM 2540C
	Analysis Batch: 280-62897	Analysis Date: 04/19/2011 0737				
Analyte	Result	Qual	Units		Dil	Method
Total Anions	8.3		meq/L		1.0	SM 1030F
	Analysis Batch: 280-63668	Analysis Date: 04/22/2011 1210				
Total Cations	8.5		meq/L		1.0	SM 1030F
	Analysis Batch: 280-63668	Analysis Date: 04/22/2011 1210				
Percent Difference	1.2		%		1.0	SM 1030F
	Analysis Batch: 280-63668	Analysis Date: 04/22/2011 1210				
Anion/Cation Balance	1.2		%		1.0	SM 1030F
	Analysis Batch: 280-63668	Analysis Date: 04/22/2011 1210				
Analyte	Result	Qual	Units	RL	Dil	Method
Specific Conductance	750		umhos/cm	2.0	1.0	SM 2510B
	Analysis Batch: 280-63039	Analysis Date: 04/19/2011 1720				
pH	7.11	HF	SU	0.100	1.0	SM 4500 H+ B
	Analysis Batch: 280-62100	Analysis Date: 04/13/2011 1536				

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

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
280-14533-1	BURKHART-WW-2	107	109	99	101
280-14533-2	TRIP BLANK	100	105	99	100
MB 280-62873/5		95	95	100	98
LCS 280-62873/4		98	97	98	102
280-14519-AT-1 MS		100	96	102	104
280-14519-AT-1 MSD		99	96	101	103

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

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Surrogate Recovery Report

8015B Gasoline Range Organics - (GC)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TFT1 %Rec
280-14533-1	BURKHART-WW-2	93
MB 280-62320/5		100
LCS 280-62320/3		103
LCSD 280-62320/4		96
280-14395-AD-1 MSD		91

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

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Surrogate Recovery Report

8015B Diesel Range Organics (DRO) (GC)

Client Matrix: Water

Lab Sample ID	Client Sample ID	OTPH1 %Rec
280-14533-1	BURKHART-WW-2	80
MB 280-62290/1-A		86
LCS 280-62290/2-A		84
LCSD 280-62290/3-A		87

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	50-115

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-14533-1

Method Blank - Batch: 280-62873

Method: 8260B

Preparation: 5030B

Lab Sample ID:	MB 280-62873/5	Analysis Batch:	280-62873	Instrument ID:	MSV_MS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ms3387.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	04/18/2011 2012	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	04/18/2011 2012				
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)	95	70 - 127
Toluene-d8 (Surr)	100	80 - 125
4-Bromofluorobenzene (Surr)	98	78 - 120
Dibromofluoromethane (Surr)	95	77 - 120

Lab Control Sample - Batch: 280-62873

Method: 8260B

Preparation: 5030B

Lab Sample ID:	LCS 280-62873/4	Analysis Batch:	280-62873	Instrument ID:	MSV_MS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ms3386.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	04/18/2011 1951	Units:	ug/L	Final Weight/Volume:	20 mL
Prep Date:	04/18/2011 1951				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	4.55	91	77 - 120	
Ethylbenzene	5.00	4.63	93	78 - 120	
Toluene	5.00	4.87	97	73 - 120	
m-Xylene & p-Xylene	10.0	9.28	93	78 - 120	
o-Xylene	5.00	4.54	91	77 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97	70 - 127
Toluene-d8 (Surr)	98	80 - 125
4-Bromofluorobenzene (Surr)	102	78 - 120
Dibromofluoromethane (Surr)	98	77 - 120

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-14533-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-62873**

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

MS Lab Sample ID:	280-14519-AT-1 MS	Analysis Batch:	280-62873	Instrument ID:	MSV_MS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ms3390.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	04/18/2011 2119			Final Weight/Volume:	20 mL
Prep Date:	04/18/2011 2119				
Leach Date:	N/A				

MSD Lab Sample ID:	280-14519-AT-1 MSD	Analysis Batch:	280-62873	Instrument ID:	MSV_MS1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ms3391.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	20 mL
Analysis Date:	04/18/2011 2139			Final Weight/Volume:	20 mL
Prep Date:	04/18/2011 2139				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	100	96	77 - 120	3	20		
Ethylbenzene	100	97	78 - 120	3	26		
Toluene	104	101	73 - 120	3	20		
m-Xylene & p-Xylene	102	98	78 - 120	3	20		
o-Xylene	98	96	77 - 120	2	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	96		96		70 - 127		
Toluene-d8 (Surr)	102		101		80 - 125		
4-Bromofluorobenzene (Surr)	104		103		78 - 120		
Dibromofluoromethane (Surr)	100		99		77 - 120		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-62873**

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

MS Lab Sample ID:	280-14519-AT-1 MS	Units:	ug/L	MSD Lab Sample ID:	280-14519-AT-1 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/18/2011 2119			Analysis Date:	04/18/2011 2139
Prep Date:	04/18/2011 2119			Prep Date:	04/18/2011 2139
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	4.99	4.82
Ethylbenzene	ND	5.00	5.00	5.02	4.86
Toluene	ND	5.00	5.00	5.20	5.03
m-Xylene & p-Xylene	ND	10.0	10.0	10.2	9.82
o-Xylene	ND	5.00	5.00	4.89	4.80

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-14533-1

Method Blank - Batch: 280-62320

Method: 8015B

Preparation: 5030B

Lab Sample ID:	MB 280-62320/5	Analysis Batch:	280-62320	Instrument ID:	GCV_B
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	202F0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/14/2011 1323	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	04/14/2011 1323			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	100	82 - 110

Lab Control Sample/

Lab Control Sample Duplicate Recovery Report - Batch: 280-62320

Method: 8015B

Preparation: 5030B

LCS Lab Sample ID:	LCS 280-62320/3	Analysis Batch:	280-62320	Instrument ID:	GCV_B
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	116F0301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/14/2011 1218	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	04/14/2011 1218			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 280-62320/4	Analysis Batch:	280-62320	Instrument ID:	GCV_B
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	201F0401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/14/2011 1251	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	04/14/2011 1251			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	107	79 - 149	10	27		
Surrogate	LCS % Rec		LCSD % Rec	Acceptance Limits			
a,a,a-Trifluorotoluene	103		96	82 - 110			

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-62320**

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

LCS Lab Sample ID: LCS 280-62320/3 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/14/2011 1218
Prep Date: 04/14/2011 1218
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-62320/4
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/14/2011 1251
Prep Date: 04/14/2011 1251
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	108

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Method Blank - Batch: 280-63215

Method: RSK-175

Preparation: N/A

Lab Sample ID:	MB 280-63215/4	Analysis Batch:	280-63215	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	006F0601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	04/19/2011 1621	Units:	ug/L	Final Weight/Volume:	18 mL
Prep Date:	N/A			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	RL
Methane	ND		5.0

Method Blank - Batch: 280-63215

Method: RSK-175

Preparation: N/A

Lab Sample ID:	MB 280-63215/4	Analysis Batch:	280-63215	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	006F0601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	04/19/2011 1621	Units:	ug/L	Final Weight/Volume:	18 mL
Prep Date:	N/A			Injection Volume:	
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Result	Qual	RL
Methane	ND		5.0

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-63215**

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

LCS Lab Sample ID:	LCS 280-63215/2	Analysis Batch:	280-63215	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	004F0401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	04/19/2011 1613	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 280-63215/3	Analysis Batch:	280-63215	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	005F0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	04/19/2011 1617	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	97	95	75 - 125	2	20		

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-63215**

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

LCS Lab Sample ID:	LCS 280-63215/2	Analysis Batch:	280-63215	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	004F0401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	04/19/2011 1613	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 280-63215/3	Analysis Batch:	280-63215	Instrument ID:	GCV_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	005F0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	04/19/2011 1617	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	103	101	75 - 125	2	20		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-63215**

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

LCS Lab Sample ID: LCS 280-63215/2 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/19/2011 1613
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-63215/3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/19/2011 1617
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	70.9	69.7

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-63215**

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

LCS Lab Sample ID: LCS 280-63215/2 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/19/2011 1613
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-63215/3
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/19/2011 1617
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	75.5	74.2

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-14533-1

Method Blank - Batch: 280-62290

Method: 8015B
Preparation: 3510C

Lab Sample ID:	MB 280-62290/1-A	Analysis Batch:	280-62977	Instrument ID:	GCS_U2
Client Matrix:	Water	Prep Batch:	280-62290	Lab File ID:	005F0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/18/2011 1921	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	04/14/2011 1737			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	RL
C10-C36	ND		0.50

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	86	50 - 115

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 280-62290

Method: 8015B
Preparation: 3510C

LCS Lab Sample ID:	LCS 280-62290/2-A	Analysis Batch:	280-62977	Instrument ID:	GCS_U2
Client Matrix:	Water	Prep Batch:	280-62290	Lab File ID:	006F0601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/18/2011 1954	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	04/14/2011 1737			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 280-62290/3-A	Analysis Batch:	280-62977	Instrument ID:	GCS_U2
Client Matrix:	Water	Prep Batch:	280-62290	Lab File ID:	007F0701.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/18/2011 2027	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	04/14/2011 1737			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
C10-C36	86	88	57 - 115	1	31		
Surrogate	LCS % Rec		LCSD % Rec	Acceptance Limits			
o-Terphenyl	84		87	50 - 115			

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-62290**

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

LCS Lab Sample ID: LCS 280-62290/2-A Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/18/2011 1954
Prep Date: 04/14/2011 1737
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-62290/3-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/18/2011 2027
Prep Date: 04/14/2011 1737
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
C10-C36	2.00	2.00	1.73	1.75

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Method Blank - Batch: 280-63434

Method: 20B Preparation: N/A

Lab Sample ID:	MB 280-63434/1	Analysis Batch:	280-63434	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:	04/21/2011 1406	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 Commision

Job Number: 280-14533-1

Method Blank - Batch: 280-62180

Method: 6010B

Preparation: 3010A

Lab Sample ID: MB 280-62180/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/15/2011 1344
Prep Date: 04/15/2011 0730
Leach Date: N/A

Analysis Batch: 280-62687
Prep Batch: 280-62180
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_025
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Arsenic	ND		15
Barium	ND		10
Cadmium	ND		5.0
Calcium	ND		200
Chromium	ND		10
Iron	ND		100
Lead	ND		9.0
Magnesium	ND		200
Manganese	ND		10
Potassium	ND		3000
Selenium	ND		15
Silver	ND		10
Sodium	ND		1000

Lab Control Sample - Batch: 280-62180

Method: 6010B

Preparation: 3010A

Lab Sample ID: LCS 280-62180/2-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/15/2011 1346
Prep Date: 04/15/2011 0730
Leach Date: N/A

Analysis Batch: 280-62687
Prep Batch: 280-62180
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_025
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	1000	1050	105	88 - 110	
Barium	2000	2030	101	90 - 112	
Cadmium	100	108	108	88 - 111	
Calcium	50000	49200	98	90 - 111	
Chromium	200	204	102	90 - 113	
Iron	1000	974	97	89 - 115	
Lead	500	506	101	89 - 110	
Magnesium	50000	50300	101	90 - 113	
Manganese	500	496	99	90 - 110	
Potassium	50000	51000	102	89 - 114	
Selenium	2000	2080	104	85 - 112	
Silver	50.0	53.8	108	86 - 115	
Sodium	50000	53700	107	90 - 115	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-62180

Method: 6010B
Preparation: 3010A

MS Lab Sample ID:	280-14542-C-1-B MS	Analysis Batch:	280-62687	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-62180	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/15/2011 1416			Final Weight/Volume:	50 mL
Prep Date:	04/15/2011 0730				
Leach Date:	N/A				

MSD Lab Sample ID:	280-14542-C-1-C MSD	Analysis Batch:	280-62687	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-62180	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/15/2011 1418			Final Weight/Volume:	50 mL
Prep Date:	04/15/2011 0730				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Arsenic	101	100	84 - 124	1	25		
Barium	99	99	85 - 120	0	25		
Cadmium	106	105	82 - 119	1	25		
Calcium	97	96	48 - 153	1	25		
Chromium	100	99	73 - 135	1	25		
Iron	96	96	52 - 155	0	25		
Lead	99	99	89 - 121	0	25		
Magnesium	99	97	62 - 146	1	25		
Manganese	97	97	79 - 121	0	25		
Potassium	100	100	76 - 132	0	25		
Selenium	100	100	71 - 140	0	25		
Silver	105	105	75 - 141	0	25		
Sodium	104	104	70 - 203	0	40		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-62180

Method: 6010B
Preparation: 3010A

MS Lab Sample ID: 280-14542-C-1-B MS Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/15/2011 1416
Prep Date: 04/15/2011 0730
Leach Date: N/A

MSD Lab Sample ID: 280-14542-C-1-C MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/15/2011 1418
Prep Date: 04/15/2011 0730
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Arsenic	ND	1000	1000	1010	1000
Barium	ND	2000	2000	1990	1990
Cadmium	ND	100	100	106	105
Calcium	ND	50000	50000	48300	48000
Chromium	ND	200	200	200	199
Iron	ND	1000	1000	960	958
Lead	ND	500	500	495	493
Magnesium	ND	50000	50000	49300	48700
Manganese	ND	500	500	487	485
Potassium	ND	50000	50000	49900	49800
Selenium	ND	2000	2000	2000	2010
Silver	ND	50.0	50.0	52.5	52.6
Sodium	ND	50000	50000	52400	52100

Serial Dilution - Batch: 280-62180

Method: 6010B
Preparation: 3010A

Lab Sample ID: 280-14542-C-1-A SD ^5
Client Matrix: Water
Dilution: 5.0
Analysis Date: 04/15/2011 1413
Prep Date: 04/15/2011 0730
Leach Date: N/A

Analysis Batch: 280-62687
Prep Batch: 280-62180
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_025
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Arsenic	ND	ND	NC	10	
Barium	ND	ND	NC	10	
Cadmium	ND	ND	NC	10	
Calcium	ND	ND	NC	10	
Chromium	ND	ND	NC	10	
Iron	ND	ND	NC	10	
Lead	ND	ND	NC	10	
Magnesium	ND	ND	NC	10	
Manganese	ND	ND	NC	10	
Potassium	ND	ND	NC	10	
Selenium	ND	ND	NC	10	
Silver	ND	ND	NC	10	
Sodium	ND	ND	NC	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Method Blank - Batch: 280-62182

Method: 6020

Preparation: 3020A

Lab Sample ID: MB 280-62182/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/16/2011 0340
Prep Date: 04/15/2011 1530
Leach Date: N/A

Analysis Batch: 280-62706
Prep Batch: 280-62182
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_024
Lab File ID: 184_BLK.D
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Uranium	ND		1.0

Lab Control Sample - Batch: 280-62182

Method: 6020

Preparation: 3020A

Lab Sample ID: LCS 280-62182/2-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/16/2011 0343
Prep Date: 04/15/2011 1530
Leach Date: N/A

Analysis Batch: 280-62706
Prep Batch: 280-62182
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_024
Lab File ID: 185_LCS.D
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Uranium	40.0	41.7	104	85 - 119	

Post Digestion Spike - Batch: 280-62182

Method: 6020

Preparation: 3020A

Lab Sample ID: 280-14517-A-2-B PDS
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/16/2011 0354
Prep Date: 04/15/2011 1530
Leach Date: N/A

Analysis Batch: 280-62706
Prep Batch: 280-62182
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_024
Lab File ID: 189PDS.D
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Uranium	10	200	197	93	75 - 125	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-14533-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-62182

Method: 6020
Preparation: 3020A

MS Lab Sample ID: 280-14517-A-2-C MS
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/16/2011 0402
Prep Date: 04/15/2011 1530
Leach Date: N/A

Analysis Batch: 280-62706
Prep Batch: 280-62182
Leach Batch: N/A

Instrument ID: MT_024
Lab File ID: 192_MS.D
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 280-14517-A-2-D MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/16/2011 0405
Prep Date: 04/15/2011 1530
Leach Date: N/A

Analysis Batch: 280-62706
Prep Batch: 280-62182
Leach Batch: N/A

Instrument ID: MT_024
Lab File ID: 193_MS.D
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Uranium	104	100	85 - 119	4	20		

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-62182

Method: 6020
Preparation: 3020A

MS Lab Sample ID: 280-14517-A-2-C MS
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/16/2011 0402
Prep Date: 04/15/2011 1530
Leach Date: N/A

Units: ug/L

MSD Lab Sample ID: 280-14517-A-2-D MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/16/2011 0405
Prep Date: 04/15/2011 1530
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Uranium	10	40.0	40.0	52.1	50.2

Serial Dilution - Batch: 280-62182

Method: 6020
Preparation: 3020A

Lab Sample ID: 280-14517-A-2-B SD ^5
Client Matrix: Water
Dilution: 5.0
Analysis Date: 04/16/2011 0351
Prep Date: 04/15/2011 1530
Leach Date: N/A

Analysis Batch: 280-62706
Prep Batch: 280-62182
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_024
Lab File ID: 188SDIL.D
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Uranium	10	10.6	2.8	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Method Blank - Batch: 280-62259

Method: 300.0

Preparation: N/A

Lab Sample ID:	MB 280-62259/6	Analysis Batch:	280-62259	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:	04/13/2011 1339	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

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

Method Reporting Limit Check - Batch: 280-62259

Method: 300.0

Preparation: N/A

Lab Sample ID:	MRL 280-62259/3	Analysis Batch:	280-62259	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:	04/13/2011 1252	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	0.200	ND	96	50 - 150	
Nitrite as N	0.200	ND	94	50 - 150	

Lab Control Sample/

Method: 300.0

Lab Control Sample Duplicate Recovery Report - Batch: 280-62259

Preparation: N/A

LCS Lab Sample ID:	LCS 280-62259/4	Analysis Batch:	280-62259	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:	04/13/2011 1307	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-62259/5	Analysis Batch:	280-62259	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:	04/13/2011 1323	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Nitrate as N	101	101	90 - 110	0	10		
Nitrite as N	100	100	90 - 110	0	10		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-14533-1

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-62259

Method: 300.0
Preparation: N/A

LCS Lab Sample ID: LCS 280-62259/4 Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/13/2011 1307
Prep Date: N/A
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-62259/5
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/13/2011 1323
Prep Date: N/A
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Nitrate as N	5.00	5.00	5.05	5.04
Nitrite as N	5.00	5.00	5.02	5.00

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-62259

Method: 300.0
Preparation: N/A

MS Lab Sample ID: 280-14518-Z-3 MS
Client Matrix: Water
Dilution: 50
Analysis Date: 04/13/2011 1505
Prep Date: N/A
Leach Date: N/A

Instrument ID: WC_IC7
Lab File ID: 120.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 280-14518-Z-3 MSD
Client Matrix: Water
Dilution: 50
Analysis Date: 04/13/2011 1521
Prep Date: N/A
Leach Date: N/A

Instrument ID: WC_IC7
Lab File ID: 121.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Nitrate as N	103	104	80 - 120	1	20		
Nitrite as N	115	114	80 - 120	1	20		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-62259

Method: 300.0
Preparation: N/A

MS Lab Sample ID: 280-14518-Z-3 MS Units: mg/L
Client Matrix: Water
Dilution: 50
Analysis Date: 04/13/2011 1505
Prep Date: N/A
Leach Date: N/A

MSD Lab Sample ID: 280-14518-Z-3 MSD
Client Matrix: Water
Dilution: 50
Analysis Date: 04/13/2011 1521
Prep Date: N/A
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Nitrate as N	ND	250	250	264	267
Nitrite as N	ND	250	250	286	285

Duplicate - Batch: 280-62259

Method: 300.0
Preparation: N/A

Lab Sample ID: 280-14518-Z-3 DU
Client Matrix: Water
Dilution: 50
Analysis Date: 04/13/2011 1449
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-62259
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC_IC7
Lab File ID: 119.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

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

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Method Blank - Batch: 280-62260

Method: 300.0

Preparation: N/A

Lab Sample ID:	MB 280-62260/6	Analysis Batch:	280-62260	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:	04/13/2011 1339	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: 280-62260

Method: 300.0

Preparation: N/A

Lab Sample ID:	MRL 280-62260/3	Analysis Batch:	280-62260	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:	04/13/2011 1252	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	ND	97	50 - 150	
Chloride	1.00	ND	98	50 - 150	
Fluoride	0.200	ND	90	50 - 150	
Sulfate	1.00	ND	93	50 - 150	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-14533-1

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 280-62260

Method: 300.0
Preparation: N/A

LCS Lab Sample ID:	LCS 280-62260/4	Analysis Batch:	280-62260	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:	04/13/2011 1307	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-62260/5	Analysis Batch:	280-62260	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:	04/13/2011 1323	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	100	100	90 - 110	0	10		
Chloride	100	99	90 - 110	1	10		
Fluoride	105	105	90 - 110	0	10		
Sulfate	102	101	90 - 110	0	10		

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-62260

Method: 300.0
Preparation: N/A

LCS Lab Sample ID:	LCS 280-62260/4	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-62260/5
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2011 1307			Analysis Date:	04/13/2011 1323
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Bromide	5.00	5.00	5.01	5.00
Chloride	25.0	25.0	25.0	24.8
Fluoride	5.00	5.00	5.25	5.25
Sulfate	25.0	25.0	25.5	25.4

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-62260

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-14518-Z-3 MS	Analysis Batch:	280-62260	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	142.TXT
Dilution:	2000	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/13/2011 2124			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-14518-Z-3 MSD	Analysis Batch:	280-62260	Instrument ID:	WC_IC7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	143.TXT
Dilution:	2000	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/13/2011 2140			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	101	102	80 - 120	1	20		
Chloride	101	102	80 - 120	1	20	E	E
Fluoride	105	107	80 - 120	1	20		
Sulfate	106	106	80 - 120	1	20		

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-62260

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-14518-Z-3 MS	Units:	mg/L	MSD Lab Sample ID:	280-14518-Z-3 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	2000			Dilution:	2000
Analysis Date:	04/13/2011 2124			Analysis Date:	04/13/2011 2140
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		MSD	
				Result/Qual		Result/Qual	
Bromide	ND	10000	10000	10400		10400	
Chloride	55000	50000	50000	106000	E	106000	E
Fluoride	ND	10000	10000	10500		10700	
Sulfate	ND	50000	50000	55600		56000	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Duplicate - Batch: 280-62260

Method: 300.0
Preparation: N/A

Lab Sample ID: 280-14518-Z-3 DU
Client Matrix: Water
Dilution: 2000
Analysis Date: 04/13/2011 2108
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-62260
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC_IC7
Lab File ID: 141.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Bromide	ND	ND	NC	15	
Chloride	55000	54900	0.2	15	
Fluoride	ND	ND	NC	15	
Sulfate	ND	ND	NC	15	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Method Blank - Batch: 280-63668

Method: SM 1030F

Preparation: N/A

Lab Sample ID:	MB 280-63668/1	Analysis Batch:	280-63668	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:	04/22/2011 1210	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: 280-63668

Method: SM 1030F

Preparation: N/A

Lab Sample ID:	MB 280-63668/1	Analysis Batch:	280-63668	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:	04/22/2011 1210	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: 280-14533-1

Method Blank - Batch: 280-63141

Method: SM 2320B

Preparation: N/A

Lab Sample ID:	MB 280-63141/6	Analysis Batch:	280-63141	Instrument ID:	WC_AT2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	041911b.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/19/2011 1318	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

Lab Control Sample/

Method: SM 2320B

Lab Control Sample Duplicate Recovery Report - Batch: 280-63141

Preparation: N/A

LCS Lab Sample ID:	LCS 280-63141/4	Analysis Batch:	280-63141	Instrument ID:	WC_AT2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	041911b.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/19/2011 1301	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-63141/5	Analysis Batch:	280-63141	Instrument ID:	WC_AT2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	041911b.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/19/2011 1310	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	102	103	90 - 110	1	10		

Laboratory Control/

Method: SM 2320B

Laboratory Duplicate Data Report - Batch: 280-63141

Preparation: N/A

LCS Lab Sample ID:	LCS 280-63141/4	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-63141/5
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/19/2011 1301			Analysis Date:	04/19/2011 1310
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 Alkalinity	200	200	204	205

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Duplicate - Batch: 280-63141

Method: SM 2320B

Preparation: N/A

Lab Sample ID: 280-14473-F-1 DU
Client Matrix: Water
Dilution: 1.0
Analysis Date: 04/19/2011 1416
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-63141
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: WC_AT2
Lab File ID: 041911b.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Alkalinity	350	348	0.6	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Method Blank - Batch: 280-63039

Method: SM 2510B

Preparation: N/A

Lab Sample ID:	MB 280-63039/5	Analysis Batch:	280-63039	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:	04/19/2011 1720	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: 280-63039

Preparation: N/A

LCS Lab Sample ID:	LCS 280-63039/3	Analysis Batch:	280-63039	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:	04/19/2011 1720	Units:	umhos/cm	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-63039/4	Analysis Batch:	280-63039	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:	04/19/2011 1720	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: 280-63039

Preparation: N/A

LCS Lab Sample ID:	LCS 280-63039/3	Units:	umhos/cm	LCSD Lab Sample ID:	LCSD 280-63039/4
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/19/2011 1720			Analysis Date:	04/19/2011 1720
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	1450	1450

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Duplicate - Batch: 280-63039

Method: SM 2510B

Preparation: N/A

Lab Sample ID:	280-14519-M-19 DU	Analysis Batch:	280-63039	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:	04/19/2011 1720	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	1300	1340	0.2	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Method Blank - Batch: 280-62897

Method: SM 2540C

Preparation: N/A

Lab Sample ID:	MB 280-62897/1	Analysis Batch:	280-62897	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:	04/19/2011 0737	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: 280-62897

Preparation: N/A

LCS Lab Sample ID:	LCS 280-62897/2	Analysis Batch:	280-62897	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:	04/19/2011 0737	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-62897/3	Analysis Batch:	280-62897	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:	04/19/2011 0737	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	100	99	86 - 110	1	20		

Laboratory Control/

Method: SM 2540C

Laboratory Duplicate Data Report - Batch: 280-62897

Preparation: N/A

LCS Lab Sample ID:	LCS 280-62897/2	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-62897/3
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/19/2011 0737			Analysis Date:	04/19/2011 0737
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	499	495

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Duplicate - Batch: 280-62897

Method: SM 2540C

Preparation: N/A

Lab Sample ID:	280-14533-1	Analysis Batch:	280-62897	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:	04/19/2011 0737	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	460	457	0.2	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-14533-1

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 280-62100

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

LCS Lab Sample ID:	LCS 280-62100/4	Analysis Batch:	280-62100	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	041311.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/13/2011 1003	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-62100/5	Analysis Batch:	280-62100	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	041311.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/13/2011 1004	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: 280-62100

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

LCS Lab Sample ID:	LCS 280-62100/4	Units:	SU	LCSD Lab Sample ID:	LCSD 280-62100/5
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2011 1003			Analysis Date:	04/13/2011 1004
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	7.030	7.020

Duplicate - Batch: 280-62100

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

Lab Sample ID:	280-14514-B-1 DU	Analysis Batch:	280-62100	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	041311.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/13/2011 1230	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
pH	8.30	8.290	0.1	5	HF

DATA REPORTING QUALIFIERS

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Lab Section	Qualifier	Description
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 Commission

Job Number: 280-14533-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:280-62873					
LCS 280-62873/4	Lab Control Sample	T	Water	8260B	
MB 280-62873/5	Method Blank	T	Water	8260B	
280-14519-AT-1 MS	Matrix Spike	T	Water	8260B	
280-14519-AT-1 MSD	Matrix Spike Duplicate	T	Water	8260B	
280-14533-1	BURKHART-WW-2	T	Water	8260B	
280-14533-2TB	TRIP BLANK	T	Water	8260B	

Report Basis

T = Total

GC VOA

Analysis Batch:280-62320					
LCS 280-62320/3	Lab Control Sample	T	Water	8015B	
LCSD 280-62320/4	Lab Control Sample Duplicate	T	Water	8015B	
MB 280-62320/5	Method Blank	T	Water	8015B	
280-14395-AD-1 MSD	Matrix Spike Duplicate	T	Water	8015B	
280-14533-1	BURKHART-WW-2	T	Water	8015B	
Analysis Batch:280-63215					
LCS 280-63215/2	Lab Control Sample	T	Water	RSK-175	
LCSD 280-63215/3	Lab Control Sample Duplicate	T	Water	RSK-175	
MB 280-63215/4	Method Blank	T	Water	RSK-175	
280-14533-1	BURKHART-WW-2	T	Water	RSK-175	

Report Basis

T = Total

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-62290					
LCS 280-62290/2-A	Lab Control Sample	T	Water	3510C	
LCSD 280-62290/3-A	Lab Control Sample Duplicate	T	Water	3510C	
MB 280-62290/1-A	Method Blank	T	Water	3510C	
280-14533-1	BURKHART-WW-2	T	Water	3510C	
Analysis Batch:280-62977					
LCS 280-62290/2-A	Lab Control Sample	T	Water	8015B	280-62290
LCSD 280-62290/3-A	Lab Control Sample Duplicate	T	Water	8015B	280-62290
MB 280-62290/1-A	Method Blank	T	Water	8015B	280-62290
280-14533-1	BURKHART-WW-2	T	Water	8015B	280-62290

Report Basis

T = Total

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-14533-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-62180					
LCS 280-62180/2-A	Lab Control Sample	T	Water	3010A	
MB 280-62180/1-A	Method Blank	T	Water	3010A	
280-14533-1	BURKHART-WW-2	T	Water	3010A	
280-14542-C-1-B MS	Matrix Spike	T	Water	3010A	
280-14542-C-1-C MSD	Matrix Spike Duplicate	T	Water	3010A	
Prep Batch: 280-62182					
LCS 280-62182/2-A	Lab Control Sample	T	Water	3020A	
MB 280-62182/1-A	Method Blank	T	Water	3020A	
280-14517-A-2-C MS	Matrix Spike	T	Water	3020A	
280-14517-A-2-D MSD	Matrix Spike Duplicate	T	Water	3020A	
280-14533-1	BURKHART-WW-2	T	Water	3020A	
Analysis Batch:280-62687					
LCS 280-62180/2-A	Lab Control Sample	T	Water	6010B	280-62180
MB 280-62180/1-A	Method Blank	T	Water	6010B	280-62180
280-14533-1	BURKHART-WW-2	T	Water	6010B	280-62180
280-14542-C-1-B MS	Matrix Spike	T	Water	6010B	280-62180
280-14542-C-1-C MSD	Matrix Spike Duplicate	T	Water	6010B	280-62180
Analysis Batch:280-62706					
LCS 280-62182/2-A	Lab Control Sample	T	Water	6020	280-62182
MB 280-62182/1-A	Method Blank	T	Water	6020	280-62182
280-14517-A-2-C MS	Matrix Spike	T	Water	6020	280-62182
280-14517-A-2-D MSD	Matrix Spike Duplicate	T	Water	6020	280-62182
280-14533-1	BURKHART-WW-2	T	Water	6020	280-62182
Analysis Batch:280-63434					
MB 280-63434/1	Method Blank	T	Water	20B	
280-14533-1	BURKHART-WW-2	T	Water	20B	

Report Basis

T = Total

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-62100					
LCS 280-62100/4	Lab Control Sample	T	Water	SM 4500 H+ B	
LCSD 280-62100/5	Lab Control Sample Duplicate	T	Water	SM 4500 H+ B	
280-14514-B-1 DU	Duplicate	T	Water	SM 4500 H+ B	
280-14533-1	BURKHART-WW-2	T	Water	SM 4500 H+ B	
Analysis Batch:280-62259					
LCS 280-62259/4	Lab Control Sample	T	Water	300.0	
LCSD 280-62259/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-62259/6	Method Blank	T	Water	300.0	
280-14518-Z-3 DU	Duplicate	T	Water	300.0	
280-14518-Z-3 MS	Matrix Spike	T	Water	300.0	
280-14518-Z-3 MSD	Matrix Spike Duplicate	T	Water	300.0	
280-14533-1	BURKHART-WW-2	T	Water	300.0	
Analysis Batch:280-62260					
LCS 280-62260/4	Lab Control Sample	T	Water	300.0	
LCSD 280-62260/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-62260/6	Method Blank	T	Water	300.0	
280-14518-Z-3 DU	Duplicate	T	Water	300.0	
280-14518-Z-3 MS	Matrix Spike	T	Water	300.0	
280-14518-Z-3 MSD	Matrix Spike Duplicate	T	Water	300.0	
280-14533-1	BURKHART-WW-2	T	Water	300.0	
Analysis Batch:280-62897					
LCS 280-62897/2	Lab Control Sample	T	Water	SM 2540C	
LCSD 280-62897/3	Lab Control Sample Duplicate	T	Water	SM 2540C	
MB 280-62897/1	Method Blank	T	Water	SM 2540C	
280-14533-1	BURKHART-WW-2	T	Water	SM 2540C	
280-14533-1DU	Duplicate	T	Water	SM 2540C	
Analysis Batch:280-63039					
LCS 280-63039/3	Lab Control Sample	T	Water	SM 2510B	
LCSD 280-63039/4	Lab Control Sample Duplicate	T	Water	SM 2510B	
MB 280-63039/5	Method Blank	T	Water	SM 2510B	
280-14519-M-19 DU	Duplicate	T	Water	SM 2510B	
280-14533-1	BURKHART-WW-2	T	Water	SM 2510B	
Analysis Batch:280-63141					
LCS 280-63141/4	Lab Control Sample	T	Water	SM 2320B	
LCSD 280-63141/5	Lab Control Sample Duplicate	T	Water	SM 2320B	
MB 280-63141/6	Method Blank	T	Water	SM 2320B	
280-14473-F-1 DU	Duplicate	T	Water	SM 2320B	
280-14533-1	BURKHART-WW-2	T	Water	SM 2320B	

TestAmerica Denver

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-63668					
MB 280-63668/1	Method Blank	T	Water	SM 1030F	
280-14533-1	BURKHART-WW-2	T	Water	SM 1030F	

Report Basis

T = Total

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Laboratory Chronicle

Lab ID: 280-14533-1

Client ID: BURKHART-WW-2

Sample Date/Time: 04/13/2011 09:40

Received Date/Time: 04/13/2011 13:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-14533-K-1		280-62873		04/19/2011 02:43	1	TAL DEN	JLS
A:8260B	280-14533-K-1		280-62873		04/19/2011 02:43	1	TAL DEN	JLS
P:5030B	280-14533-N-1		280-62320		04/15/2011 00:53	1	TAL DEN	TEM
A:8015B	280-14533-N-1		280-62320		04/15/2011 00:53	1	TAL DEN	TEM
A:RSK-175	280-14533-H-1		280-63215		04/19/2011 19:07	1	TAL DEN	MPS
P:3510C	280-14533-D-1-A		280-62977	280-62290	04/14/2011 17:37	1	TAL DEN	JJW
A:8015B	280-14533-D-1-A		280-62977	280-62290	04/18/2011 22:07	1	TAL DEN	MRB
A:20B	280-14533-F-1		280-63434		04/21/2011 14:06	1	TAL DEN	JKH
P:3010A	280-14533-F-1-A		280-62687	280-62180	04/15/2011 07:30	1	TAL DEN	KMN
A:6010B	280-14533-F-1-A		280-62687	280-62180	04/15/2011 13:48	1	TAL DEN	JKH
P:3020A	280-14533-F-1-B		280-62706	280-62182	04/15/2011 15:30	1	TAL DEN	JM
A:6020	280-14533-F-1-B		280-62706	280-62182	04/16/2011 03:46	1	TAL DEN	TEL
A:300.0	280-14533-A-1		280-62259		04/13/2011 19:18	1	TAL DEN	EK
A:300.0	280-14533-A-1		280-62260		04/13/2011 19:18	1	TAL DEN	EK
A:300.0	280-14533-A-1		280-62260		04/13/2011 22:59	5	TAL DEN	EK
A:SM 1030F	280-14533-A-1		280-63668		04/22/2011 12:10	1	TAL DEN	RS
A:SM 2320B	280-14533-B-1		280-63141		04/19/2011 16:24	1	TAL DEN	SJS
A:SM 2510B	280-14533-B-1		280-63039		04/19/2011 17:20	1	TAL DEN	PMP
A:SM 2540C	280-14533-A-1		280-62897		04/19/2011 07:37	1	TAL DEN	BJD
A:SM 4500 H+ B	280-14533-A-1		280-62100		04/13/2011 15:36	1	TAL DEN	JMT

Lab ID: 280-14533-1 DU

Client ID: BURKHART-WW-2

Sample Date/Time: 04/13/2011 09:40

Received Date/Time: 04/13/2011 13:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2540C	280-14533-A-1 DU		280-62897		04/19/2011 07:37	1	TAL DEN	BJD

Lab ID: 280-14533-2

Client ID: TRIP BLANK

Sample Date/Time: 04/13/2011 09:40

Received Date/Time: 04/13/2011 13:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-14533-A-2		280-62873		04/19/2011 03:03	1	TAL DEN	JLS
A:8260B	280-14533-A-2		280-62873		04/19/2011 03:03	1	TAL DEN	JLS

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Laboratory Chronicle

Lab ID: MB

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	MB 280-62873/5		280-62873		04/18/2011 20:12	1	TAL DEN	JLS
A:8260B	MB 280-62873/5		280-62873		04/18/2011 20:12	1	TAL DEN	JLS
P:5030B	MB 280-62320/5		280-62320		04/14/2011 13:23	1	TAL DEN	TEM
A:8015B	MB 280-62320/5		280-62320		04/14/2011 13:23	1	TAL DEN	TEM
A:RSK-175	MB 280-63215/4		280-63215		04/19/2011 16:21	1	TAL DEN	MPS
P:3510C	MB 280-62290/1-A		280-62977	280-62290	04/14/2011 17:37	1	TAL DEN	JJW
A:8015B	MB 280-62290/1-A		280-62977	280-62290	04/18/2011 19:21	1	TAL DEN	MRB
A:20B	MB 280-63434/1		280-63434		04/21/2011 14:06	1	TAL DEN	JKH
P:3010A	MB 280-62180/1-A		280-62687	280-62180	04/15/2011 07:30	1	TAL DEN	KMN
A:6010B	MB 280-62180/1-A		280-62687	280-62180	04/15/2011 13:44	1	TAL DEN	JKH
P:3020A	MB 280-62182/1-A		280-62706	280-62182	04/15/2011 15:30	1	TAL DEN	JM
A:6020	MB 280-62182/1-A		280-62706	280-62182	04/16/2011 03:40	1	TAL DEN	TEL
A:300.0	MB 280-62259/6		280-62259		04/13/2011 13:39	1	TAL DEN	EK
A:300.0	MB 280-62260/6		280-62260		04/13/2011 13:39	1	TAL DEN	EK
A:SM 1030F	MB 280-63668/1		280-63668		04/22/2011 12:10	1	TAL DEN	RS
A:SM 2320B	MB 280-63141/6		280-63141		04/19/2011 13:18	1	TAL DEN	SJS
A:SM 2510B	MB 280-63039/5		280-63039		04/19/2011 17:20	1	TAL DEN	PMP
A:SM 2540C	MB 280-62897/1		280-62897		04/19/2011 07:37	1	TAL DEN	BJD

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 280-62873/4		280-62873		04/18/2011 19:51	1	TAL DEN	JLS
A:8260B	LCS 280-62873/4		280-62873		04/18/2011 19:51	1	TAL DEN	JLS
P:5030B	LCS 280-62320/3		280-62320		04/14/2011 12:18	1	TAL DEN	TEM
A:8015B	LCS 280-62320/3		280-62320		04/14/2011 12:18	1	TAL DEN	TEM
A:RSK-175	LCS 280-63215/2		280-63215		04/19/2011 16:13	1	TAL DEN	MPS
P:3510C	LCS 280-62290/2-A		280-62977	280-62290	04/14/2011 17:37	1	TAL DEN	JJW
A:8015B	LCS 280-62290/2-A		280-62977	280-62290	04/18/2011 19:54	1	TAL DEN	MRB
P:3010A	LCS 280-62180/2-A		280-62687	280-62180	04/15/2011 07:30	1	TAL DEN	KMN
A:6010B	LCS 280-62180/2-A		280-62687	280-62180	04/15/2011 13:46	1	TAL DEN	JKH
P:3020A	LCS 280-62182/2-A		280-62706	280-62182	04/15/2011 15:30	1	TAL DEN	JM
A:6020	LCS 280-62182/2-A		280-62706	280-62182	04/16/2011 03:43	1	TAL DEN	TEL
A:300.0	LCS 280-62259/4		280-62259		04/13/2011 13:07	1	TAL DEN	EK
A:300.0	LCS 280-62260/4		280-62260		04/13/2011 13:07	1	TAL DEN	EK
A:SM 2320B	LCS 280-63141/4		280-63141		04/19/2011 13:01	1	TAL DEN	SJS
A:SM 2510B	LCS 280-63039/3		280-63039		04/19/2011 17:20	1	TAL DEN	PMP
A:SM 2540C	LCS 280-62897/2		280-62897		04/19/2011 07:37	1	TAL DEN	BJD
A:SM 4500 H+ B	LCS 280-62100/4		280-62100		04/13/2011 10:03	1	TAL DEN	JMT

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Laboratory Chronicle

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 280-62320/4		280-62320		04/14/2011 12:51	1	TAL DEN	TEM
A:8015B	LCSD 280-62320/4		280-62320		04/14/2011 12:51	1	TAL DEN	TEM
A:RSK-175	LCSD 280-63215/3		280-63215		04/19/2011 16:17	1	TAL DEN	MPS
P:3510C	LCSD 280-62290/3-A		280-62977	280-62290	04/14/2011 17:37	1	TAL DEN	JJW
A:8015B	LCSD 280-62290/3-A		280-62977	280-62290	04/18/2011 20:27	1	TAL DEN	MRB
A:300.0	LCSD 280-62259/5		280-62259		04/13/2011 13:23	1	TAL DEN	EK
A:300.0	LCSD 280-62260/5		280-62260		04/13/2011 13:23	1	TAL DEN	EK
A:SM 2320B	LCSD 280-63141/5		280-63141		04/19/2011 13:10	1	TAL DEN	SJS
A:SM 2510B	LCSD 280-63039/4		280-63039		04/19/2011 17:20	1	TAL DEN	PMP
A:SM 2540C	LCSD 280-62897/3		280-62897		04/19/2011 07:37	1	TAL DEN	BJD
A:SM 4500 H+ B	LCSD 280-62100/5		280-62100		04/13/2011 10:04	1	TAL DEN	JMT

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 280-62259/3		280-62259		04/13/2011 12:52	1	TAL DEN	EK
A:300.0	MRL 280-62260/3		280-62260		04/13/2011 12:52	1	TAL DEN	EK

Lab ID: MS

Client ID: N/A

Sample Date/Time: 04/12/2011 09:05

Received Date/Time: 04/13/2011 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-14519-AT-1 MS		280-62873		04/18/2011 21:19	1	TAL DEN	JLS
A:8260B	280-14519-AT-1 MS		280-62873		04/18/2011 21:19	1	TAL DEN	JLS
P:3010A	280-14542-C-1-B MS		280-62687	280-62180	04/15/2011 07:30	1	TAL DEN	KMN
A:6010B	280-14542-C-1-B MS		280-62687	280-62180	04/15/2011 14:16	1	TAL DEN	JKH
P:3020A	280-14517-A-2-C MS		280-62706	280-62182	04/15/2011 15:30	1	TAL DEN	JM
A:6020	280-14517-A-2-C MS		280-62706	280-62182	04/16/2011 04:02	1	TAL DEN	TEL
A:300.0	280-14518-Z-3 MS		280-62259		04/13/2011 15:05	50	TAL DEN	EK
A:300.0	280-14518-Z-3 MS		280-62260		04/13/2011 21:24	2000	TAL DEN	EK

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Laboratory Chronicle

Lab ID: MSD

Client ID: N/A

Sample Date/Time: 04/12/2011 09:05

Received Date/Time: 04/13/2011 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	280-14519-AT-1 MSD		280-62873		04/18/2011 21:39	1	TAL DEN	JLS
A:8260B	280-14519-AT-1 MSD		280-62873		04/18/2011 21:39	1	TAL DEN	JLS
P:5030B	280-14395-AD-1 MSD		280-62320		04/14/2011 22:11	1	TAL DEN	TEM
A:8015B	280-14395-AD-1 MSD		280-62320		04/14/2011 22:11	1	TAL DEN	TEM
P:3010A	280-14542-C-1-C MSD		280-62687	280-62180	04/15/2011 07:30	1	TAL DEN	KMN
A:6010B	280-14542-C-1-C MSD		280-62687	280-62180	04/15/2011 14:18	1	TAL DEN	JKH
P:3020A	280-14517-A-2-D MSD		280-62706	280-62182	04/15/2011 15:30	1	TAL DEN	JM
A:6020	280-14517-A-2-D MSD		280-62706	280-62182	04/16/2011 04:05	1	TAL DEN	TEL
A:300.0	280-14518-Z-3 MSD		280-62259		04/13/2011 15:21	50	TAL DEN	EK
A:300.0	280-14518-Z-3 MSD		280-62260		04/13/2011 21:40	2000	TAL DEN	EK

Lab ID: DU

Client ID: N/A

Sample Date/Time: 04/12/2011 02:15

Received Date/Time: 04/13/2011 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-14518-Z-3 DU		280-62259		04/13/2011 14:49	50	TAL DEN	EK
A:300.0	280-14518-Z-3 DU		280-62260		04/13/2011 21:08	2000	TAL DEN	EK
A:SM 2320B	280-14473-F-1 DU		280-63141		04/19/2011 14:16	1	TAL DEN	SJS
A:SM 2510B	280-14519-M-19 DU		280-63039		04/19/2011 17:20	1	TAL DEN	PMP
A:SM 4500 H+ B	280-14514-B-1 DU		280-62100		04/13/2011 12:30	1	TAL DEN	JMT

Lab ID: SD

Client ID: N/A

Sample Date/Time: 04/12/2011 09:15

Received Date/Time: 04/13/2011 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	280-14542-C-1-A SD ^5		280-62687	280-62180	04/15/2011 07:30	5	TAL DEN	KMN
A:6010B	280-14542-C-1-A SD ^5		280-62687	280-62180	04/15/2011 14:13	5	TAL DEN	JKH
P:3020A	280-14517-A-2-B SD ^5		280-62706	280-62182	04/15/2011 15:30	5	TAL DEN	JM
A:6020	280-14517-A-2-B SD ^5		280-62706	280-62182	04/16/2011 03:51	5	TAL DEN	TEL
P:3020A	280-14517-A-2-B PDS		280-62706	280-62182	04/15/2011 15:30	1	TAL DEN	JM
A:6020	280-14517-A-2-B PDS		280-62706	280-62182	04/16/2011 03:54	1	TAL DEN	TEL

Lab References:

TAL DEN = TestAmerica Denver

Certification Summary

Client: Colorado Oil&Gas Conservation Commission
Project/Site: Burkhart # 200300876

TestAmerica Job ID: 280-14533-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver		USDA		P330-08-00036
TestAmerica Denver	A2LA	DoD ELAP	0	2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025	0	2907.01
TestAmerica Denver	Alabama	State Program	4	
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	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.: 280-14533-1
 SDG No.: _____
 Client Sample ID: BURKHART-WW-2 Lab Sample ID: 280-14533-1
 Matrix: Water Lab File ID: ms3406.D
 Analysis Method: 8260B Date Collected: 04/13/2011 09:40
 Sample wt/vol: 20 (mL) Date Analyzed: 04/19/2011 02:43
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 (60.25) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 62873 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)	109		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	101		78-120
1868-53-7	Dibromofluoromethane (Surr)	107		77-120

TestAmerica

VOLATILE REPORT SW-846

Data file : \\DenSvr03\Public\chem\MSV\GCMS1.i\041811P.b\ms3406.D
 Lab Smp Id: 280-14533-K-1 Client Smp ID: BURKHART-WW-2
 Inj Date : 19-APR-2011 02:43
 Operator : stappj Inst ID: GCMS1.i
 Smp Info : 280-14533-k-1,,PH<2
 Misc Info : 280-14533-K-1
 Comment :
 Method : \\DenSvr03\Public\chem\MSV\GCMS1.i\041811P.b\8260B-H2O.m
 Meth Date : 18-Apr-2011 20:01 stappj Quant Type: ISTD
 Cal Date : 16-APR-2011 00:44 Cal File: ms3302.D
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: TALS.sub
 Target Version: 4.14
 Processing Host: DENPC346

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)
=====	=====	=====	=====	=====	=====	=====	=====
* 69 Fluorobenzene	96	8.354	8.354 (1.000)		2226281	12.5000	
* 95 Chlorobenzene-d5	119	10.602	10.602 (1.000)		540195	12.5000	
* 121 1,4-Dichlorobenzene-d4	152	12.544	12.543 (1.000)		749287	12.5000	
\$ 58 Dibromofluoromethane (Surr)	111	7.809	7.809 (0.935)		554854	11.9871	11.9871
\$ 64 1,2-Dichloroethane-d4	65	8.102	8.102 (0.970)		447947	12.3159	12.3159
\$ 83 Toluene-d8	98	9.499	9.499 (0.896)		2761824	11.1159	11.1159
\$ 106 4-Bromofluorobenzene (Surr)	95	11.510	11.510 (0.918)		941415	11.3908	11.3908
M 1 1,2-Dichloroethene (total)	96	Compound Not Detected.					
M 2 Xylene (total)	106	Compound Not Detected.					
5 dichlorodifluoromethane	85	Compound Not Detected.					
6 1,2-Dichlorotetrafluoroethane	85	Compound Not Detected.					
7 Chloromethane	50	Compound Not Detected.					
8 Vinyl Chloride	62	Compound Not Detected.					
9 Ethylene Oxide	43	Compound Not Detected.					
10 Bromomethane	94	Compound Not Detected.					
11 Chloroethane	64	Compound Not Detected.					
12 Dichlorofluoromethane	67	Compound Not Detected.					
14 Trichlorofluoromethane	101	Compound Not Detected.					
13 Ethanol	45	Compound Not Detected.					
15 1,2-dichloro-1,1,2-trifluoroe	117	Compound Not Detected.					
17 Ethyl Ether	59	Compound Not Detected.					
16 2,2-dichloro-1,1,1-trifluoroe	83	Compound Not Detected.					

Compounds	QUANT	SIG					CONCENTRATIONS	
			RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
18 Propylene Oxide	58		Compound	Not	Detected.			
19 Acrolein	56		Compound	Not	Detected.			
20 Acetone	43		Compound	Not	Detected.			
21 Trichlorotrifluoroethane	151		Compound	Not	Detected.			
22 2-propanol	45		Compound	Not	Detected.			
23 1,1-Dichloroethene	96		Compound	Not	Detected.			
27 Iodomethane	142		Compound	Not	Detected.			
26 Acetonitrile	41		Compound	Not	Detected.			
28 Methyl Acetate	43		Compound	Not	Detected.			
31 Carbon Disulfide	76		Compound	Not	Detected.			
29 Allyl Chloride	41		Compound	Not	Detected.			
30 tert-Butyl alcohol	59		Compound	Not	Detected.			
33 Methylene Chloride	84		Compound	Not	Detected.			
34 Acrylonitrile	53		Compound	Not	Detected.			
35 Methyl t-butyl ether	73		Compound	Not	Detected.			
36 trans-1,2-Dichloroethene	96		Compound	Not	Detected.			
40 Hexane	57		Compound	Not	Detected.			
42 Vinyl acetate	43		Compound	Not	Detected.			
43 Isopropyl ether	87		Compound	Not	Detected.			
44 1,1-Dichloroethane	63		Compound	Not	Detected.			
46 Chloroprene	53		Compound	Not	Detected.			
48 ETBE	59		Compound	Not	Detected.			
50 2-Butanone	43		Compound	Not	Detected.			
49 Ethyl Acetate	43		Compound	Not	Detected.			
52 cis-1,2-Dichloroethene	96		Compound	Not	Detected.			
51 Propionitrile	54		Compound	Not	Detected.			
53 2,2-Dichloropropane	77		Compound	Not	Detected.			
54 Methacrylonitrile	41		Compound	Not	Detected.			
55 Bromochloromethane	128		Compound	Not	Detected.			
56 Chloroform	83		Compound	Not	Detected.			
57 Tetrahydrofuran	42		Compound	Not	Detected.			
60 1,1,1-Trichloroethane	97		Compound	Not	Detected.			
59 Isobutanol	41		Compound	Not	Detected.			
61 Cyclohexane	56		Compound	Not	Detected.			
62 1,1-Dichloropropene	75		Compound	Not	Detected.			
63 Carbon Tetrachloride	117		Compound	Not	Detected.			
65 1,2-Dichloroethane	62		Compound	Not	Detected.			
67 Benzene	78		Compound	Not	Detected.			
66 TAME	73		Compound	Not	Detected.			
68 n-Butanol	56		Compound	Not	Detected.			
71 Trichloroethene	130		Compound	Not	Detected.			
72 2-Pentanone	43		Compound	Not	Detected.			
73 Methyl Methacrylate	100		Compound	Not	Detected.			
74 1,2-Dichloropropane	63		Compound	Not	Detected.			
75 Methyl Cyclohexane	55		Compound	Not	Detected.			
76 1,4-Dioxane	88		Compound	Not	Detected.			
77 Dibromomethane	93		Compound	Not	Detected.			
78 Bromodichloromethane	83		Compound	Not	Detected.			
79 2-nitropropane	41		Compound	Not	Detected.			
80 2-Chloroethyl vinyl ether	63		Compound	Not	Detected.			
81 cis-1,3-Dichloropropene	75		Compound	Not	Detected.			
82 4-Methyl-2-pentanone	43		Compound	Not	Detected.			
84 Toluene	91		Compound	Not	Detected.			
86 trans-1,3-Dichloropropene	75		Compound	Not	Detected.			

Compounds	QUANT SIG						CONCENTRATIONS	
		RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/L)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
85 Ethyl methacrylate	69				Compound Not Detected.			
87 1,1,2-Trichloroethane	97				Compound Not Detected.			
88 2-Hexanone	43				Compound Not Detected.			
89 1,3-Dichloropropane	76				Compound Not Detected.			
90 Tetrachloroethene	164				Compound Not Detected.			
91 Dibromochloromethane	129				Compound Not Detected.			
92 Tetrahydrothiophene	60				Compound Not Detected.			
93 1,2-Dibromoethane	107				Compound Not Detected.			
94 1-Chlorohexane	91				Compound Not Detected.			
96 Chlorobenzene	112				Compound Not Detected.			
97 1,1,1,2-Tetrachloroethane	131				Compound Not Detected.			
98 Ethylbenzene	106				Compound Not Detected.			
99 m and p-Xylene	106				Compound Not Detected.			
101 o-Xylene	106				Compound Not Detected.			
100 Styrene	104				Compound Not Detected.			
102 Bromoform	173				Compound Not Detected.			
103 isopropyl benzene	105				Compound Not Detected.			
104 cis-1,4-dichloro-2-butene	53				Compound Not Detected.			
105 Cyclohexanone	55				Compound Not Detected.			
107 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.			
108 t-1,4-Dichloro-2-butene	53				Compound Not Detected.			
109 1,2,3-Trichloropropane	110				Compound Not Detected.			
111 Bromobenzene	156				Compound Not Detected.			
110 n-Propylbenzene	120				Compound Not Detected.			
113 2-Chlorotoluene	126				Compound Not Detected.			
112 1,3,5-Trimethylbenzene	105				Compound Not Detected.			
114 4-Chlorotoluene	126				Compound Not Detected.			
115 tert-Butylbenzene	119				Compound Not Detected.			
116 1,2,4-Trimethylbenzene	105				Compound Not Detected.			
118 sec-Butylbenzene	134				Compound Not Detected.			
119 4-Isopropyltoluene	119				Compound Not Detected.			
120 1,3-Dichlorobenzene	146				Compound Not Detected.			
122 1,4-dichlorobenzene	146				Compound Not Detected.			
123 1,2,3-Trimethylbenzene	105				Compound Not Detected.			
124 n-Butylbenzene	91				Compound Not Detected.			
126 1,2-Dichlorobenzene	146				Compound Not Detected.			
127 1,2-Dibromo-3-chloropropane	157				Compound Not Detected.			
129 1,2,4-Trichlorobenzene	180				Compound Not Detected.			
130 Hexachlorobutadiene	225				Compound Not Detected.			
131 Naphthalene	128				Compound Not Detected.			
132 1,2,3-Trichlorobenzene	180				Compound Not Detected.			
144 Dichloroacetonitrile tic	74				Compound Not Detected.			
145 2,3-Dichloro-1-propene tic	75				Compound Not Detected.			

Data File: ms3406.D

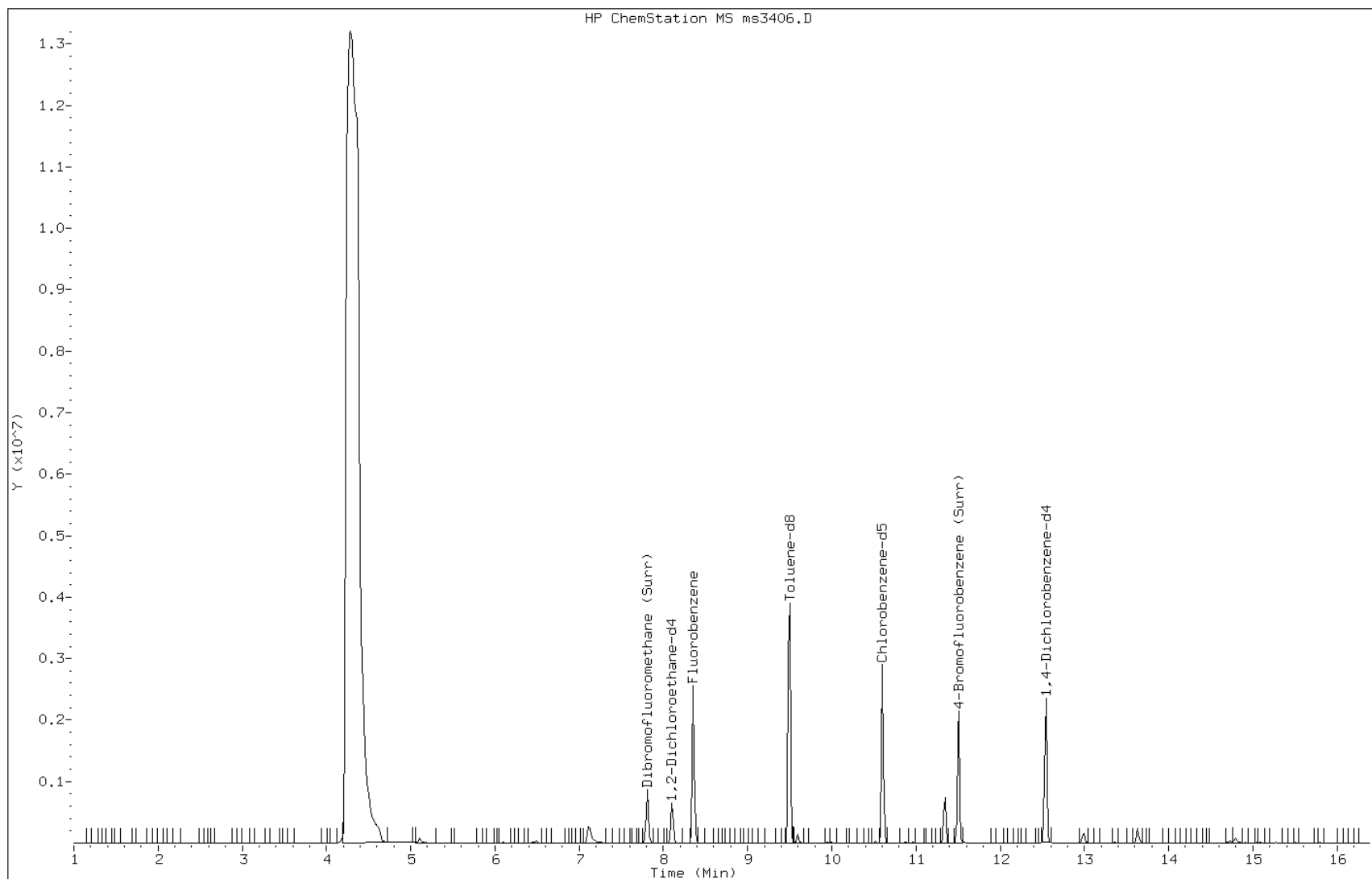
Date: 19-APR-2011 02:43

Client ID: BURKHART-WW-2

Instrument: GCMS1.i

Sample Info: 280-14533-k-1,,PH<2

Operator: stappj



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-14533-1
 SDG No.: _____
 Client Sample ID: TRIP BLANK Lab Sample ID: 280-14533-2
 Matrix: Water Lab File ID: ms3407.D
 Analysis Method: 8260B Date Collected: 04/13/2011 09:40
 Sample wt/vol: 20 (mL) Date Analyzed: 04/19/2011 03:03
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 (60.25) ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 62873 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)	105		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	100		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

TestAmerica

VOLATILE REPORT SW-846

Data file : \\DenSvr03\Public\chem\MSV\GCMS1.i\041811P.b\ms3407.D
Lab Smp Id: 280-14533-A-2 Client Smp ID: TRIP BLANK
Inj Date : 19-APR-2011 03:03
Operator : stappj Inst ID: GCMS1.i
Smp Info : 280-14533-a-2,,PH<2
Misc Info : 280-14533-A-2
Comment :
Method : \\DenSvr03\Public\chem\MSV\GCMS1.i\041811P.b\8260B-H2O.m
Meth Date : 18-Apr-2011 20:01 stappj Quant Type: ISTD
Cal Date : 16-APR-2011 00:44 Cal File: ms3302.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TALS.sub
Target Version: 4.14
Processing Host: DENPC346

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

						CONCENTRATIONS	
		QUANT	SIG			ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	----	----	-----	-----	-----	-----	-----
* 69 Fluorobenzene	96	8.354	8.354	(1.000)	2366603	12.5000	
* 95 Chlorobenzene-d5	119	10.602	10.602	(1.000)	549808	12.5000	
* 121 1,4-Dichlorobenzene-d4	152	12.543	12.543	(1.000)	758007	12.5000	
\$ 58 Dibromofluoromethane (Surr)	111	7.809	7.809	(0.935)	553615	11.2512	11.2512
\$ 64 1,2-Dichloroethane-d4	65	8.102	8.102	(0.970)	454573	11.7571	11.7570
\$ 83 Toluene-d8	98	9.499	9.499	(0.896)	2806598	11.0986	11.0986
\$ 106 4-Bromofluorobenzene (Surr)	95	11.510	11.510	(0.918)	937779	11.2163	11.2163
M 1 1,2-Dichloroethene (total)	96	Compound Not Detected.					
M 2 Xylene (total)	106	Compound Not Detected.					
5 dichlorodifluoromethane	85	Compound Not Detected.					
6 1,2-Dichlorotetrafluoroethane	85	Compound Not Detected.					
7 Chloromethane	50	Compound Not Detected.					
8 Vinyl Chloride	62	Compound Not Detected.					
9 Ethylene Oxide	43	Compound Not Detected.					
10 Bromomethane	94	Compound Not Detected.					
11 Chloroethane	64	Compound Not Detected.					
12 Dichlorofluoromethane	67	Compound Not Detected.					
14 Trichlorofluoromethane	101	Compound Not Detected.					
13 Ethanol	45	Compound Not Detected.					
15 1,2-dichloro-1,1,2-trifluoroe	117	Compound Not Detected.					
17 Ethyl Ether	59	Compound Not Detected.					
16 2,2-dichloro-1,1,1-trifluoroe	83	Compound Not Detected.					

Compounds	QUANT	SIG					CONCENTRATIONS	
			RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
18 Propylene Oxide	58					Compound Not Detected.		
19 Acrolein	56					Compound Not Detected.		
20 Acetone	43					Compound Not Detected.		
21 Trichlorotrifluoroethane	151					Compound Not Detected.		
22 2-propanol	45					Compound Not Detected.		
23 1,1-Dichloroethene	96					Compound Not Detected.		
27 Iodomethane	142					Compound Not Detected.		
26 Acetonitrile	41					Compound Not Detected.		
28 Methyl Acetate	43					Compound Not Detected.		
31 Carbon Disulfide	76					Compound Not Detected.		
29 Allyl Chloride	41					Compound Not Detected.		
30 tert-Butyl alcohol	59					Compound Not Detected.		
33 Methylene Chloride	84					Compound Not Detected.		
34 Acrylonitrile	53					Compound Not Detected.		
35 Methyl t-butyl ether	73					Compound Not Detected.		
36 trans-1,2-Dichloroethene	96					Compound Not Detected.		
40 Hexane	57					Compound Not Detected.		
42 Vinyl acetate	43					Compound Not Detected.		
43 Isopropyl ether	87					Compound Not Detected.		
44 1,1-Dichloroethane	63					Compound Not Detected.		
46 Chloroprene	53					Compound Not Detected.		
48 ETBE	59					Compound Not Detected.		
50 2-Butanone	43					Compound Not Detected.		
49 Ethyl Acetate	43					Compound Not Detected.		
52 cis-1,2-Dichloroethene	96					Compound Not Detected.		
51 Propionitrile	54					Compound Not Detected.		
53 2,2-Dichloropropane	77					Compound Not Detected.		
54 Methacrylonitrile	41					Compound Not Detected.		
55 Bromochloromethane	128					Compound Not Detected.		
56 Chloroform	83					Compound Not Detected.		
57 Tetrahydrofuran	42					Compound Not Detected.		
60 1,1,1-Trichloroethane	97					Compound Not Detected.		
59 Isobutanol	41					Compound Not Detected.		
61 Cyclohexane	56					Compound Not Detected.		
62 1,1-Dichloropropene	75					Compound Not Detected.		
63 Carbon Tetrachloride	117					Compound Not Detected.		
65 1,2-Dichloroethane	62					Compound Not Detected.		
67 Benzene	78					Compound Not Detected.		
66 TAME	73					Compound Not Detected.		
68 n-Butanol	56					Compound Not Detected.		
71 Trichloroethene	130					Compound Not Detected.		
72 2-Pentanone	43					Compound Not Detected.		
73 Methyl Methacrylate	100					Compound Not Detected.		
74 1,2-Dichloropropane	63					Compound Not Detected.		
75 Methyl Cyclohexane	55					Compound Not Detected.		
76 1,4-Dioxane	88					Compound Not Detected.		
77 Dibromomethane	93					Compound Not Detected.		
78 Bromodichloromethane	83					Compound Not Detected.		
79 2-nitropropane	41					Compound Not Detected.		
80 2-Chloroethyl vinyl ether	63					Compound Not Detected.		
81 cis-1,3-Dichloropropene	75					Compound Not Detected.		
82 4-Methyl-2-pentanone	43					Compound Not Detected.		
84 Toluene	91					Compound Not Detected.		
86 trans-1,3-Dichloropropene	75					Compound Not Detected.		

Compounds	QUANT SIG						CONCENTRATIONS	
		RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/L)	FINAL (ug/L)
=====	=====	----	-----	-----	-----		-----	-----
85 Ethyl methacrylate	69				Compound Not Detected.			
87 1,1,2-Trichloroethane	97				Compound Not Detected.			
88 2-Hexanone	43				Compound Not Detected.			
89 1,3-Dichloropropane	76				Compound Not Detected.			
90 Tetrachloroethene	164				Compound Not Detected.			
91 Dibromochloromethane	129				Compound Not Detected.			
92 Tetrahydrothiophene	60				Compound Not Detected.			
93 1,2-Dibromoethane	107				Compound Not Detected.			
94 1-Chlorohexane	91				Compound Not Detected.			
96 Chlorobenzene	112				Compound Not Detected.			
97 1,1,1,2-Tetrachloroethane	131				Compound Not Detected.			
98 Ethylbenzene	106				Compound Not Detected.			
99 m and p-Xylene	106				Compound Not Detected.			
101 o-Xylene	106				Compound Not Detected.			
100 Styrene	104				Compound Not Detected.			
102 Bromoform	173				Compound Not Detected.			
103 isopropyl benzene	105				Compound Not Detected.			
104 cis-1,4-dichloro-2-butene	53				Compound Not Detected.			
105 Cyclohexanone	55				Compound Not Detected.			
107 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.			
108 t-1,4-Dichloro-2-butene	53				Compound Not Detected.			
109 1,2,3-Trichloropropane	110				Compound Not Detected.			
111 Bromobenzene	156				Compound Not Detected.			
110 n-Propylbenzene	120				Compound Not Detected.			
113 2-Chlorotoluene	126				Compound Not Detected.			
112 1,3,5-Trimethylbenzene	105				Compound Not Detected.			
114 4-Chlorotoluene	126				Compound Not Detected.			
115 tert-Butylbenzene	119				Compound Not Detected.			
116 1,2,4-Trimethylbenzene	105				Compound Not Detected.			
118 sec-Butylbenzene	134				Compound Not Detected.			
119 4-Isopropyltoluene	119				Compound Not Detected.			
120 1,3-Dichlorobenzene	146				Compound Not Detected.			
122 1,4-dichlorobenzene	146				Compound Not Detected.			
123 1,2,3-Trimethylbenzene	105				Compound Not Detected.			
124 n-Butylbenzene	91				Compound Not Detected.			
126 1,2-Dichlorobenzene	146				Compound Not Detected.			
127 1,2-Dibromo-3-chloropropane	157				Compound Not Detected.			
129 1,2,4-Trichlorobenzene	180				Compound Not Detected.			
130 Hexachlorobutadiene	225				Compound Not Detected.			
131 Naphthalene	128				Compound Not Detected.			
132 1,2,3-Trichlorobenzene	180				Compound Not Detected.			
144 Dichloroacetonitrile tic	74				Compound Not Detected.			
145 2,3-Dichloro-1-propene tic	75				Compound Not Detected.			

Data File: ms3407.D

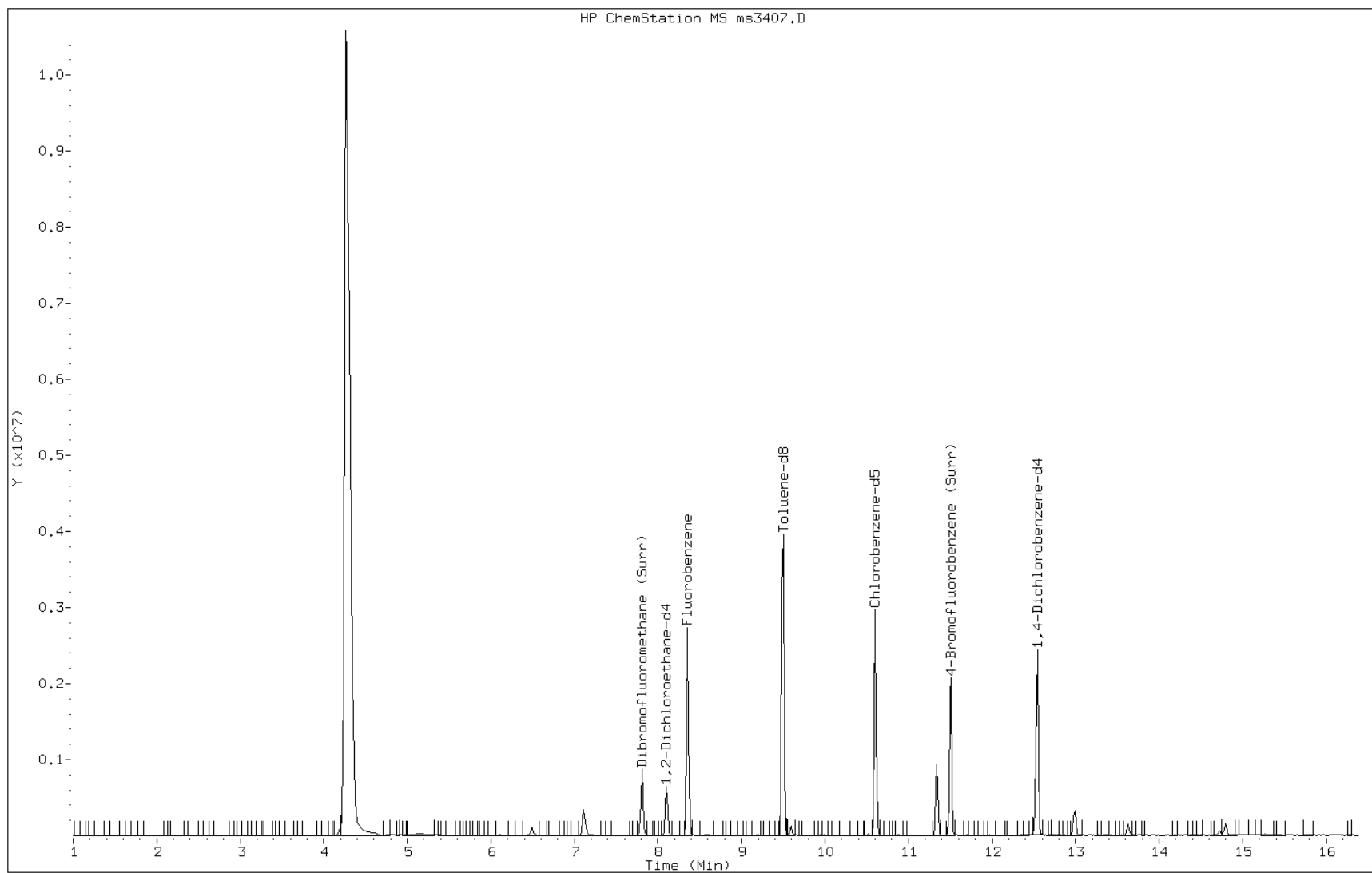
Date: 19-APR-2011 03:03

Client ID: TRIP BLANK

Instrument: GCMS1.i

Sample Info: 280-14533-a-2,,PH<2

Operator: stappj



Method 8015B – GRO

Gasoline Range Organics (GC) by
Method 8015B

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-14533-1
SDG No.: _____
Client Sample ID: BURKHART-WW-2 Lab Sample ID: 280-14533-1
Matrix: Water Lab File ID: 306F2501.D
Analysis Method: 8015B Date Collected: 04/13/2011 09:40
Sample wt/vol: 5(mL) Date Analyzed: 04/15/2011 00:53
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.: 62320 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	93		82-110

TestAmerica

VOLATILE REPORT SOW 3/90

Data file : \\DenSvr03\Public\chem\GCV\GC_B.i\0414111.B\306F2501.D
 Lab Smp Id: 280-14533-N-1 Client Smp ID: BURKHART-WW-2
 Inj Date : 15-APR-2011 00:53
 Operator : TM Inst ID: GC_B.i
 Smp Info : 280-14533-N-1
 Misc Info : 280-14533-N-1
 Comment : REV. OLMO1.1.1
 Method : \\DenSvr03\Public\chem\GCV\GC_B.i\0414111.B\8015.m
 Meth Date : 14-Apr-2011 20:33 GC_B.i Quant Type: ESTD
 Cal Date : 25-JAN-2011 13:26 Cal File: 113F0501.D
 Als bottle: 306
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: GRO.A.01.sub
 Target Version: 4.14
 Processing Host: DENPC369

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	CONCENTRATIONS					
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====
\$ 1 Trifluorotoluene	7.836	7.843	-0.007	282870	28.0032	28.0032
S 2 GRO - C6 to C10	4.397-13.847			45613	10.0156	10.0156(a)
4 1-Chloro-4-Fluorobenzene	11.263	11.263	0.000	260440	26.6361	26.6361
\$ 5 Chlorobenzene	11.476	11.476	0.000	326848	27.3267	27.3267

QC Flag Legend

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

Data File: 306F2501.D

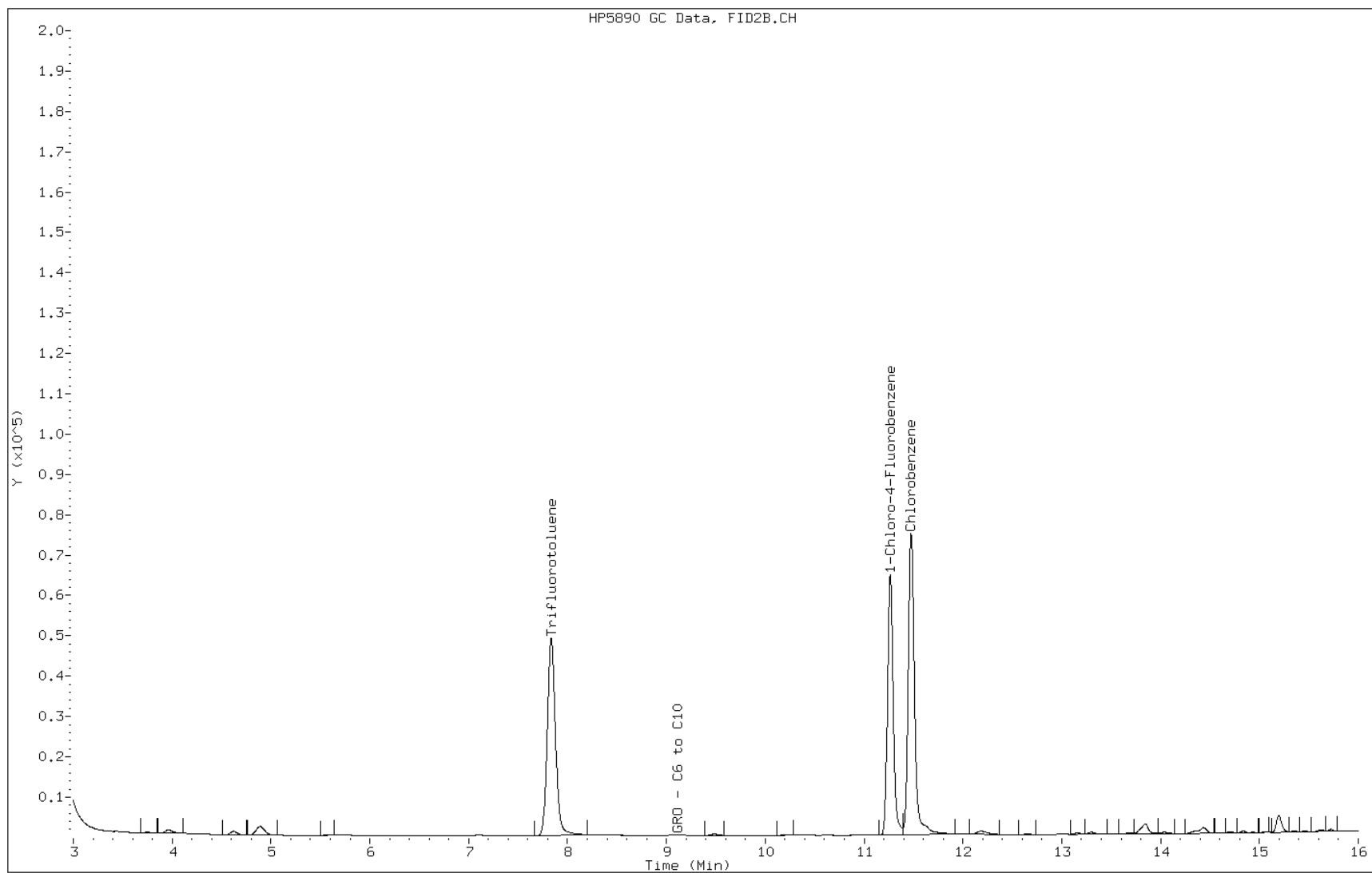
Date: 15-APR-2011 00:53

Client ID: BURKHART-WW-2

Instrument: GC_B.i

Sample Info: 280-14533-N-1

Operator: TM



Method RSK-175

Dissolved Gases (GC) by Method
RSK_175

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-14533-1
SDG No.: _____
Client Sample ID: BURKHART-WW-2 Lab Sample ID: 280-14533-1
Matrix: Water Lab File ID: 032F1901.D
Analysis Method: RSK-175 Date Collected: 04/13/2011 09:40
Sample wt/vol: 18 (mL) Date Analyzed: 04/19/2011 19:07
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.: 63215 Units: ug/L

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

TestAmerica

RSK-175 Dissolved Gasses in Water

Data file : \\DenSvr03\Public\chem\GCV\GC_J.i\0419111.B\032F1901.D
Lab Smp Id: 280-14533-H-1 Client Smp ID: BURKHART-WW-2
Inj Date : 19-APR-2011 19:07
Operator : mps Inst ID: GC_J.i
Smp Info : 280-14533-H-1
Misc Info : 280-14533-H-1
Comment : SOP: DV-GC-0025
Method : \\DenSvr03\Public\chem\GCV\GC_J.i\0419111.B\RSK-1_8PT.m
Meth Date : 19-Apr-2011 16:21 SmithM Quant Type: ESTD
Cal Date : 08-FEB-2011 18:28 Cal File: 035F3501.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175_8pt.sub
Target Version: 4.14
Processing Host: DENPC064

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	1.226	1.232	-0.006	1855	1.48604	1.486(a)
2 Ethene	Compound Not Detected.					
3 Ethane	Compound Not Detected.					
4 Acetylene	Compound Not Detected.					

QC Flag Legend

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

Data File: 032F1901.D

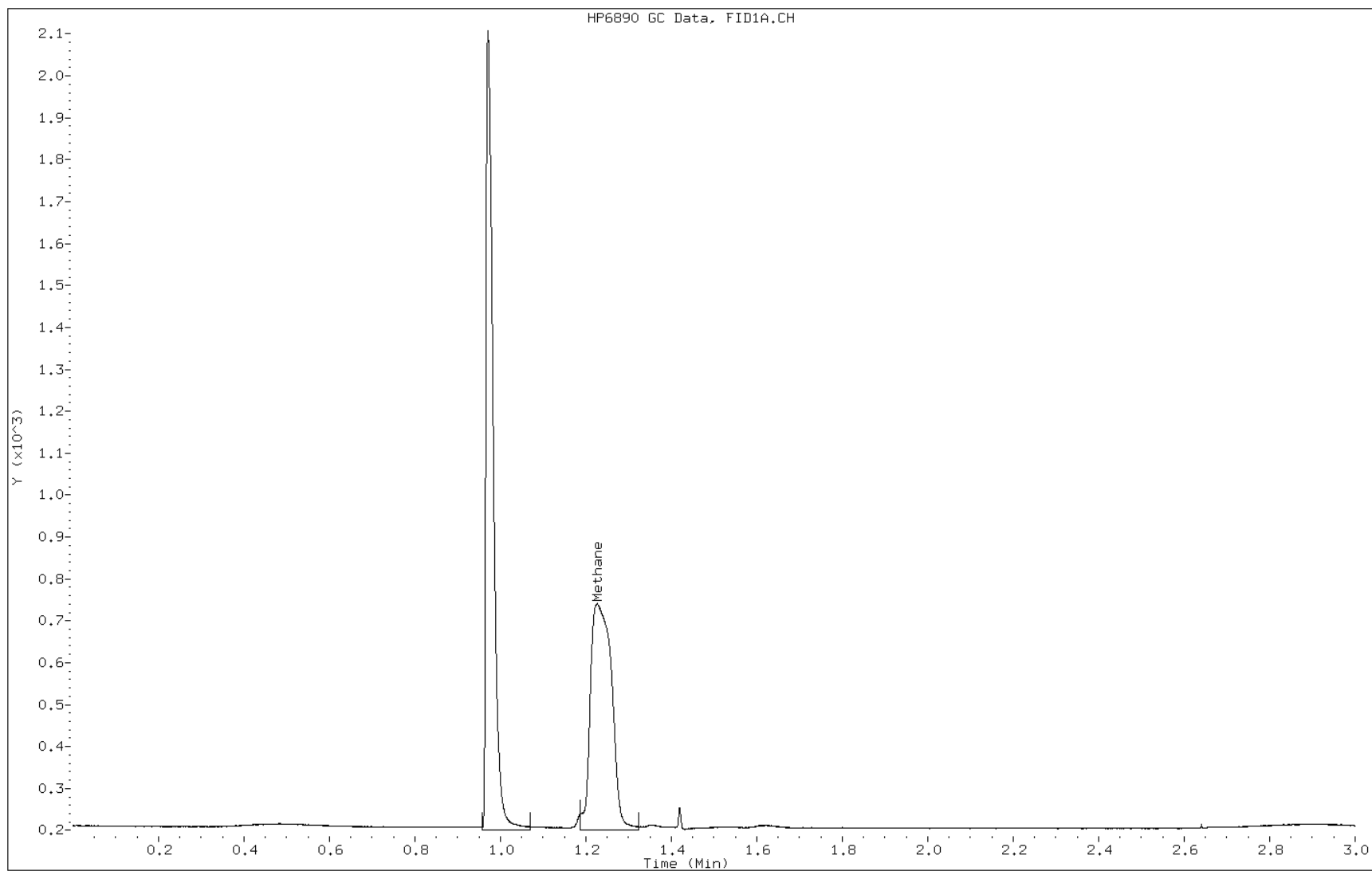
Date: 19-APR-2011 19:07

Client ID: BURKHART-WW-2

Instrument: GC_J.i

Sample Info: 280-14533-H-1

Operator: mps



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-14533-1
SDG No.: _____
Client Sample ID: BURKHART-WW-2 Lab Sample ID: 280-14533-1
Matrix: Water Lab File ID: 032F1901.D
Analysis Method: RSK-175 Date Collected: 04/13/2011 09:40
Sample wt/vol: 18 (mL) Date Analyzed: 04/19/2011 19:07
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.: 63215 Units: ug/L

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

TestAmerica

RSK-175 Dissolved Gasses in Water

Data file : \\DenSvr03\Public\chem\GCV\GC_J.i\0419112.B\032F1901.D
Lab Smp Id: 280-14533-H-1 Client Smp ID: BURKHART-WW-2
Inj Date : 19-APR-2011 19:07
Operator : mps Inst ID: GC_J.i
Smp Info : 280-14533-H-1
Misc Info : 280-14533-H-1
Comment : SOP: DV-GC-0025
Method : \\DenSvr03\Public\chem\GCV\GC_J.i\0419112.B\RSK-2_8PT.m
Meth Date : 20-Apr-2011 13:56 SmithM Quant Type: ESTD
Cal Date : 08-FEB-2011 18:28 Cal File: 035F3501.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175_8pt.sub
Target Version: 4.14
Processing Host: DENPC290

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	1.605	1.606	-0.001	1034	1.08585	1.086(a)
2 Ethene	Compound Not Detected.					
3 AcetyleneEthane	Compound Not Detected.					

QC Flag Legend

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

Data File: 032F1901.D

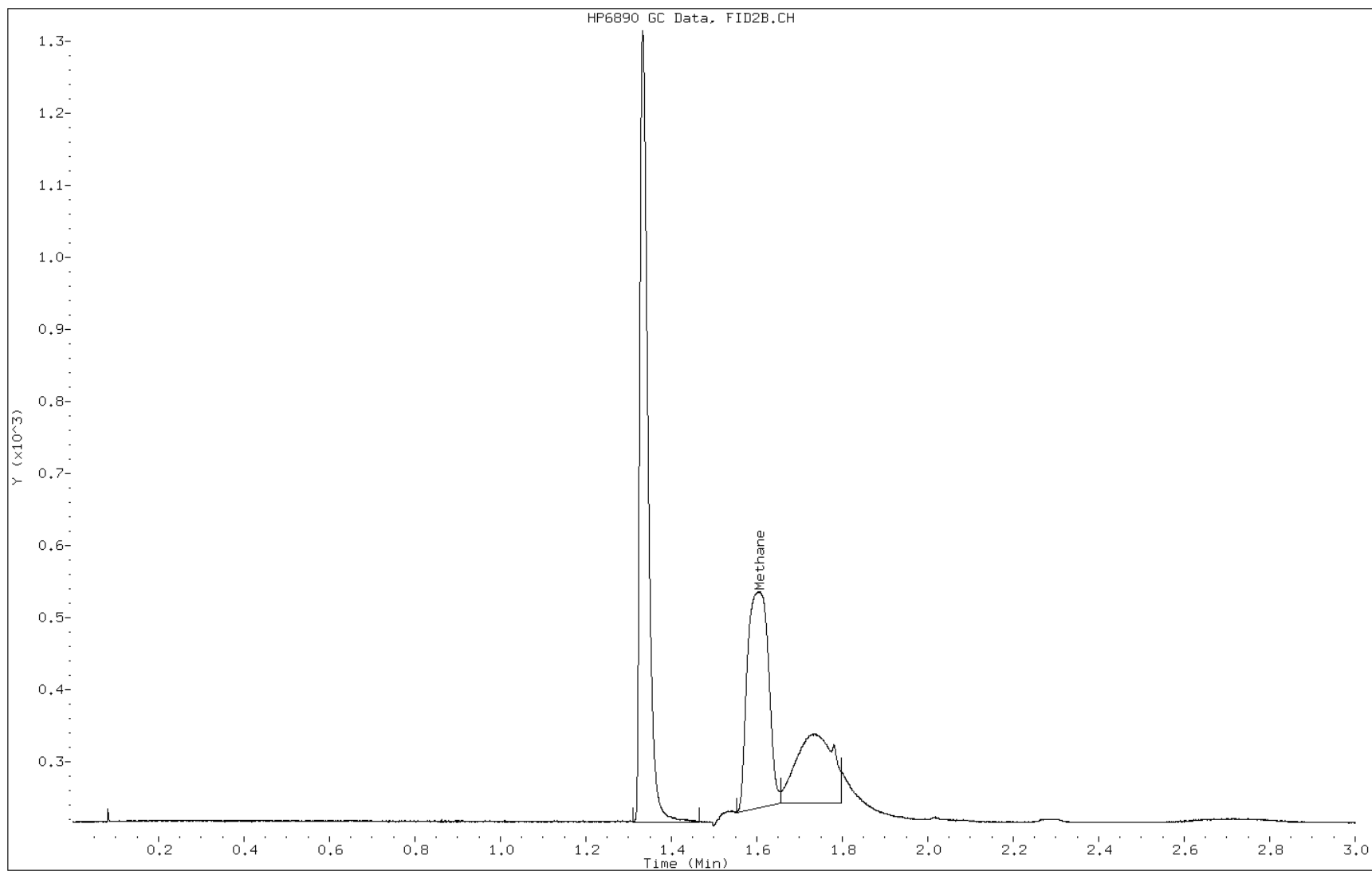
Date: 19-APR-2011 19:07

Client ID: BURKHART-WW-2

Instrument: GC_J.i

Sample Info: 280-14533-H-1

Operator: mps



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.: 280-14533-1
SDG No.: _____
Client Sample ID: BURKHART-WW-2 Lab Sample ID: 280-14533-1
Matrix: Water Lab File ID: 010F1001.D
Analysis Method: 8015B Date Collected: 04/13/2011 09:40
Extraction Method: 3510C Date Extracted: 04/14/2011 17:37
Sample wt/vol: 1043.6 (mL) Date Analyzed: 04/18/2011 22:07
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.: 62977 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	80		50-115

Data File: \\DenSvr03\Public\chem\GCS\GC_U2.i\0418111.B\010F1001.D
Report Date: 19-Apr-2011 13:11

TestAmerica

SW846 8015 mod.

Data file : \\DenSvr03\Public\chem\GCS\GC_U2.i\0418111.B\010F1001.D
Lab Smp Id: 280-14533-D-1-A Client Smp ID: BURKHART-WW-2
Inj Date : 18-APR-2011 22:07
Operator : MB Inst ID: GC_U2.i
Smp Info : 280-692454,33-1
Misc Info : 280-14533-D-1-A
Comment : DEN-GC-0002
Method : \\DenSvr03\Public\chem\GCS\GC_U2.i\0418111.B\DR01.m
Meth Date : 19-Apr-2011 13:09 birdsellm Quant Type: ESTD
Cal Date : 11-JAN-2011 05:45 Cal File: 025F2501.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: C10-C36sub.sub
Target Version: 4.14
Processing Host: DENPC248

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	1043.600	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	11.400	11.417	-0.017	32741	15.9789	15.31
S 8 C10-C28	4.184-16.658			9471	5.84231	5.598
S 9 C10-C36	4.184-19.015			9837	6.06712	5.814
\$ 11 n-Octacosane	16.633	16.641	-0.008	31736	18.7439	17.96

Data File: 010F1001.D

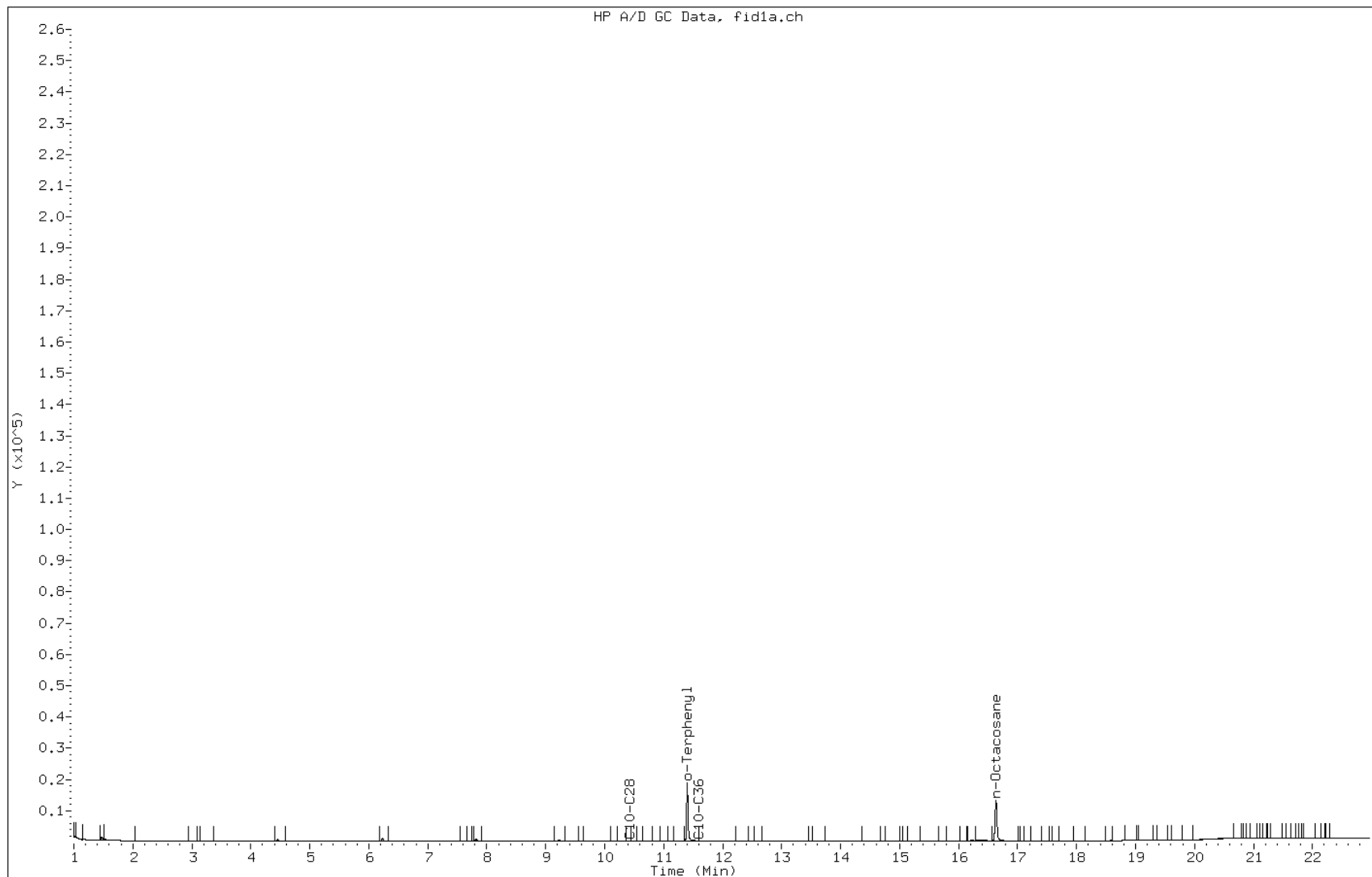
Date: 18-APR-2011 22:07

Client ID: BURKHART-WW-2

Instrument: GC_U2.i

Sample Info: 280-692454,33-1

Operator: MB



Shipping and Receiving Documents

Login Sample Receipt Checklist

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-1

Login Number: 14533

List Source: TestAmerica Denver

List Number: 1

Creator: Lazarte, Noah 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.	True	

ANALYTICAL REPORT

Job Number: 280-14533-2

Job Description: Burkhart # 200300876

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



Approved for release.
Lori A Parsons
Project Manager I
4/29/2011 1:12 PM

Lori A Parsons
Project Manager I
lori.parsons@testamericainc.com
04/29/2011

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.

TestAmerica Laboratories, Inc.

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



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CASE NARRATIVE

Client: Colorado Oil&Gas Conservation Commision

Project: Burkhart # 200300876

Report Number: 280-14533-2

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 04/13/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.4 C.

DISSOLVED METALS

Sample BURKHART-WW-2 (280-14533-1) was analyzed for dissolved metals in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/27/2011 and analyzed on 04/28/2011.

No difficulties were encountered during the dissolved metals analysis.

All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-14533-1	BURKHART-WW-2	Water	04/13/2011 0940	04/13/2011 1305

EXECUTIVE SUMMARY - Detections

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
--------------------------	------------------	--------------------	--------------------	-------	--------

No Detections

METHOD SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Sample Filtration	TAL DEN		FILTRATION

Lab References:

TAL DEN = TestAmerica Denver

Method References:

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

METHOD / ANALYST SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

Method	Analyst	Analyst ID
SW846 6010B	Harre, John K	JKH

Analytical Data

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

Client Sample ID: BURKHART-WW-2

Lab Sample ID: 280-14533-1

Date Sampled: 04/13/2011 0940

Client Matrix: Water

Date Received: 04/13/2011 1305

6010B Metals (ICP)-Dissolved

Analysis Method: 6010B

Analysis Batch: 280-64501

Instrument ID: MT_025

Prep Method: 3005A

Prep Batch: 280-64319

Lab File ID: 25A6042711.asc

Dilution: 1.0

Initial Weight/Volume: 50 mL

Analysis Date: 04/28/2011 0242

Final Weight/Volume: 50 mL

Prep Date: 04/27/2011 1500

Analyte	Result (ug/L)	Qualifier	RL
Cadmium	ND		5.0
Arsenic	ND		15
Lead	ND		9.0
Selenium	ND		15

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

Method Blank - Batch: 280-64319

Lab Sample ID: MB 280-64313/1-B
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 04/28/2011 0238
 Prep Date: 04/27/2011 1500
 Leach Date: N/A

Analysis Batch: 280-64501
 Prep Batch: 280-64319
 Leach Batch: N/A
 Units: ug/L

Method: 6010B Preparation: 3005A Dissolved

Instrument ID: MT_025
 Lab File ID: 25A6042711.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Cadmium	ND		5.0
Arsenic	ND		15
Lead	ND		9.0
Selenium	ND		15

Lab Control Sample - Batch: 280-64319

Lab Sample ID: LCS 280-64313/2-B
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 04/28/2011 0240
 Prep Date: 04/27/2011 1500
 Leach Date: N/A

Analysis Batch: 280-64501
 Prep Batch: 280-64319
 Leach Batch: N/A
 Units: ug/L

Method: 6010B Preparation: 3005A Dissolved

Instrument ID: MT_025
 Lab File ID: 25A6042711.asc
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cadmium	100	101	101	88 - 111	
Arsenic	1000	954	95	88 - 110	
Lead	500	496	99	89 - 110	
Selenium	2000	2000	100	85 - 112	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-64319**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID:	280-14533-1	Analysis Batch:	280-64501	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-64319	Lab File ID:	25A6042711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/28/2011 0247			Final Weight/Volume:	50 mL
Prep Date:	04/27/2011 1500				
Leach Date:	N/A				

MSD Lab Sample ID:	280-14533-1	Analysis Batch:	280-64501	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-64319	Lab File ID:	25A6042711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/28/2011 0249			Final Weight/Volume:	50 mL
Prep Date:	04/27/2011 1500				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Cadmium	102	103	82 - 119	1	25		
Arsenic	97	98	84 - 124	1	25		
Lead	98	100	89 - 121	2	25		
Selenium	101	102	71 - 140	1	25		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-64319**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID:	280-14533-1	Units:	ug/L	MSD Lab Sample ID:	280-14533-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/28/2011 0247			Analysis Date:	04/28/2011 0249
Prep Date:	04/27/2011 1500			Prep Date:	04/27/2011 1500
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Cadmium	ND	100	100	102	103
Arsenic	ND	1000	1000	970	982
Lead	ND	500	500	489	498
Selenium	ND	2000	2000	2010	2040

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

Serial Dilution - Batch: 280-64319

Method: 6010B
Preparation: 3005A
Dissolved

Lab Sample ID: 280-14533-1

Client Matrix: Water

Dilution: 5.0

Analysis Date: 04/28/2011 0245

Prep Date: 04/27/2011 1500

Leach Date: N/A

Analysis Batch: 280-64501

Prep Batch: 280-64319

Leach Batch: N/A

Units: ug/L

Instrument ID: MT_025

Lab File ID: 25A6042711.asc

Initial Weight/Volume: 50 mL

Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Cadmium	ND	ND	NC	10	
Arsenic	ND	ND	NC	10	
Lead	ND	ND	NC	10	
Selenium	ND	ND	NC	10	

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description
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Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-64319					
LCS 280-64313/2-B	Lab Control Sample	D	Water	3005A	
MB 280-64313/1-B	Method Blank	D	Water	3005A	
280-14533-1	BURKHART-WW-2	D	Water	3005A	
280-14533-1MS	Matrix Spike	D	Water	3005A	
280-14533-1MSD	Matrix Spike Duplicate	D	Water	3005A	
Analysis Batch:280-64501					
LCS 280-64313/2-B	Lab Control Sample	D	Water	6010B	280-64319
MB 280-64313/1-B	Method Blank	D	Water	6010B	280-64319
280-14533-1	BURKHART-WW-2	D	Water	6010B	280-64319
280-14533-1MS	Matrix Spike	D	Water	6010B	280-64319
280-14533-1MSD	Matrix Spike Duplicate	D	Water	6010B	280-64319

Report Basis

D = Dissolved

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

Laboratory Chronicle

Lab ID: 280-14533-1

Client ID: BURKHART-WW-2

Sample Date/Time: 04/13/2011 09:40

Received Date/Time: 04/13/2011 13:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-14533-B-1-B		280-64501	280-64319	04/27/2011 15:00	1	TAL DEN	JM
A:6010B	280-14533-B-1-B		280-64501	280-64319	04/28/2011 02:42	1	TAL DEN	JKH

Lab ID: 280-14533-1 MS

Client ID: BURKHART-WW-2

Sample Date/Time: 04/13/2011 09:40

Received Date/Time: 04/13/2011 13:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-14533-B-1-C MS		280-64501	280-64319	04/27/2011 15:00	1	TAL DEN	JM
A:6010B	280-14533-B-1-C MS		280-64501	280-64319	04/28/2011 02:47	1	TAL DEN	JKH

Lab ID: 280-14533-1 MSD

Client ID: BURKHART-WW-2

Sample Date/Time: 04/13/2011 09:40

Received Date/Time: 04/13/2011 13:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-14533-B-1-D MSD		280-64501	280-64319	04/27/2011 15:00	1	TAL DEN	JM
A:6010B	280-14533-B-1-D MSD		280-64501	280-64319	04/28/2011 02:49	1	TAL DEN	JKH

Lab ID: 280-14533-1 SD

Client ID: BURKHART-WW-2

Sample Date/Time: 04/13/2011 09:40

Received Date/Time: 04/13/2011 13:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-14533-B-1-B SD ^5		280-64501	280-64319	04/27/2011 15:00	5	TAL DEN	JM
A:6010B	280-14533-B-1-B SD ^5		280-64501	280-64319	04/28/2011 02:45	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:3005A	MB 280-64313/1-B		280-64501	280-64319	04/27/2011 15:00	1	TAL DEN	JM
A:6010B	MB 280-64313/1-B		280-64501	280-64319	04/28/2011 02:38	1	TAL DEN	JKH

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

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:3005A	LCS 280-64313/2-B		280-64501	280-64319	04/27/2011 15:00	1	TAL DEN	JM
A:6010B	LCS 280-64313/2-B		280-64501	280-64319	04/28/2011 02:40	1	TAL DEN	JKH

Lab References:

TAL DEN = TestAmerica Denver

Certification Summary

Client: Colorado Oil&Gas Conservation Commission
Project/Site: Burkhart # 200300876

TestAmerica Job ID: 280-14533-2

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver		USDA		P330-08-00036
TestAmerica Denver	A2LA	DoD ELAP	0	2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025	0	2907.01
TestAmerica Denver	Alabama	State Program	4	
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	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.

Shipping and Receiving Documents

Login Sample Receipt Checklist

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-14533-2

Login Number: 14533

List Source: TestAmerica Denver

List Number: 1

Creator: Lazarte, Noah 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.	True	

ANALYTICAL REPORT

Job Number: 280-15171-1

Job Description: Burkhardt #2800300876

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



Approved for release.
Lori A Parsons
Project Manager I
5/4/2011 7:31 PM

Lori A Parsons
Project Manager I
lori.parsons@testamericainc.com
05/04/2011

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The Lab Certification ID# is E87667.

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

TestAmerica Laboratories, Inc.

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CASE NARRATIVE

Client: Colorado Oil&Gas Conservation Commision

Project: Burkhart #2800300876

Report Number: 280-15171-1

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 04/28/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.0 C.

TOTAL METALS

Samples BURKHART HOSE (280-15171-1) and BURKHART TAP (280-15171-2) were analyzed for total metals in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 05/02/2011.

No difficulties were encountered during the metals analyses.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS

Samples BURKHART HOSE (280-15171-1) and BURKHART TAP (280-15171-2) were analyzed for dissolved metals in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 05/02/2011.

No difficulties were encountered during the dissolved metals analyses.

All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-15171-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-15171-1	BURKHART HOSE	Water	04/28/2011 0945	04/28/2011 1405
280-15171-2	BURKHART TAP	Water	04/28/2011 0950	04/28/2011 1405

EXECUTIVE SUMMARY - Detections

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-15171-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
280-15171-1	BURKHART HOSE				
Barium		34	10	ug/L	6010B
Calcium		74000	200	ug/L	6010B
Iron		970	100	ug/L	6010B
Magnesium		21000	200	ug/L	6010B
Manganese		53	10	ug/L	6010B
Potassium		5800	3000	ug/L	6010B
Sodium		66000	1000	ug/L	6010B
<i>Dissolved</i>					
Barium		32	10	ug/L	6010B
Calcium		69000	200	ug/L	6010B
Iron		750	100	ug/L	6010B
Magnesium		21000	200	ug/L	6010B
Manganese		54	10	ug/L	6010B
Potassium		5800	3000	ug/L	6010B
Sodium		63000	1000	ug/L	6010B
280-15171-2	BURKHART TAP				
Barium		33	10	ug/L	6010B
Calcium		71000	200	ug/L	6010B
Iron		930	100	ug/L	6010B
Magnesium		20000	200	ug/L	6010B
Manganese		51	10	ug/L	6010B
Potassium		5700	3000	ug/L	6010B
Sodium		63000	1000	ug/L	6010B
<i>Dissolved</i>					
Barium		35	10	ug/L	6010B
Calcium		70000	200	ug/L	6010B
Iron		830	100	ug/L	6010B
Magnesium		21000	200	ug/L	6010B
Manganese		55	10	ug/L	6010B
Potassium		5900	3000	ug/L	6010B
Sodium		64000	1000	ug/L	6010B

METHOD SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-15171-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Sample Filtration	TAL DEN		FILTRATION
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Total Metals	TAL DEN		SW846 3010A

Lab References:

TAL DEN = TestAmerica Denver

Method References:

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

METHOD / ANALYST SUMMARY

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-15171-1

Method	Analyst	Analyst ID
SW846 6010B	Bowen, Heidi E	HEB
SW846 6010B	Harre, John K	JKH

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-15171-1

Client Sample ID: BURKHART HOSE

Lab Sample ID: 280-15171-1

Date Sampled: 04/28/2011 0945

Client Matrix: Water

Date Received: 04/28/2011 1405

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-65273	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-64783	Lab File ID:	26b050211.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	05/02/2011 2140			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 0730				

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	ND		15
Barium	34		10
Cadmium	ND		5.0
Calcium	74000		200
Chromium	ND		10
Iron	970		100
Lead	ND		9.0
Magnesium	21000		200
Manganese	53		10
Potassium	5800		3000
Selenium	ND		15
Silver	ND		10
Sodium	66000		1000

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	280-65251	Instrument ID:	MT_025
Prep Method:	3005A	Prep Batch:	280-64784	Lab File ID:	25A4050211.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	05/02/2011 2044			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 0730				

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	ND		15
Barium	32		10
Cadmium	ND		5.0
Calcium	69000		200
Chromium	ND		10
Iron	750		100
Lead	ND		9.0
Magnesium	21000		200
Manganese	54		10
Potassium	5800		3000
Selenium	ND		15
Silver	ND		10
Sodium	63000		1000

Analytical Data

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-15171-1

Client Sample ID: BURKHART TAP

Lab Sample ID: 280-15171-2

Date Sampled: 04/28/2011 0950

Client Matrix: Water

Date Received: 04/28/2011 1405

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-65273	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-64783	Lab File ID:	26b050211.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	05/02/2011 2149			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 0730				

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	ND		15
Barium	33		10
Cadmium	ND		5.0
Calcium	71000		200
Chromium	ND		10
Iron	930		100
Lead	ND		9.0
Magnesium	20000		200
Manganese	51		10
Potassium	5700		3000
Selenium	ND		15
Silver	ND		10
Sodium	63000		1000

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	280-65251	Instrument ID:	MT_025
Prep Method:	3005A	Prep Batch:	280-64784	Lab File ID:	25A4050211.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	05/02/2011 2053			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 0730				

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	ND		15
Barium	35		10
Cadmium	ND		5.0
Calcium	70000		200
Chromium	ND		10
Iron	830		100
Lead	ND		9.0
Magnesium	21000		200
Manganese	55		10
Potassium	5900		3000
Selenium	ND		15
Silver	ND		10
Sodium	64000		1000

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-15171-1

Method Blank - Batch: 280-64783

Method: 6010B

Preparation: 3010A

Lab Sample ID: MB 280-64783/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 05/02/2011 2136
Prep Date: 05/02/2011 0730
Leach Date: N/A

Analysis Batch: 280-65273
Prep Batch: 280-64783
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_026
Lab File ID: 26b050211.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Arsenic	ND		15
Barium	ND		10
Cadmium	ND		5.0
Calcium	ND		200
Chromium	ND		10
Iron	ND		100
Lead	ND		9.0
Magnesium	ND		200
Manganese	ND		10
Potassium	ND		3000
Selenium	ND		15
Silver	ND		10
Sodium	ND		1000

Lab Control Sample - Batch: 280-64783

Method: 6010B

Preparation: 3010A

Lab Sample ID: LCS 280-64783/2-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 05/02/2011 2138
Prep Date: 05/02/2011 0730
Leach Date: N/A

Analysis Batch: 280-65273
Prep Batch: 280-64783
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_026
Lab File ID: 26b050211.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	1000	986	99	88 - 110	
Barium	2000	2130	106	90 - 112	
Cadmium	100	107	107	88 - 111	
Calcium	50000	51300	103	90 - 111	
Chromium	200	191	96	90 - 113	
Iron	1000	1080	108	89 - 115	
Lead	500	493	99	89 - 110	
Magnesium	50000	49100	98	90 - 113	
Manganese	500	496	99	90 - 110	
Potassium	50000	50800	102	89 - 114	
Selenium	2000	1960	98	85 - 112	
Silver	50.0	48.5	97	86 - 115	
Sodium	50000	51100	102	90 - 115	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-15171-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-64783**

**Method: 6010B
Preparation: 3010A**

MS Lab Sample ID:	280-15171-1	Analysis Batch:	280-65273	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-64783	Lab File ID:	26b050211.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	05/02/2011 2145			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 0730				
Leach Date:	N/A				

MSD Lab Sample ID:	280-15171-1	Analysis Batch:	280-65273	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-64783	Lab File ID:	26b050211.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	05/02/2011 2147			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 0730				
Leach Date:	N/A				

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Arsenic	100	100	84 - 124	0	25		
Barium	104	104	85 - 120	1	25		
Cadmium	108	108	82 - 119	0	25		
Calcium	96	94	48 - 153	1	25		
Chromium	96	95	73 - 135	0	25		
Iron	95	93	52 - 155	1	25		
Lead	97	97	89 - 121	0	25		
Magnesium	95	95	62 - 146	0	25		
Manganese	97	97	79 - 121	0	25		
Potassium	100	100	76 - 132	0	25		
Selenium	98	98	71 - 140	0	25		
Silver	98	98	75 - 141	0	25		
Sodium	97	98	70 - 203	0	40		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-15171-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-64783

Method: 6010B
Preparation: 3010A

MS Lab Sample ID: 280-15171-1 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 05/02/2011 2145
Prep Date: 05/02/2011 0730
Leach Date: N/A

MSD Lab Sample ID: 280-15171-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 05/02/2011 2147
Prep Date: 05/02/2011 0730
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Arsenic	ND	1000	1000	998	995
Barium	34	2000	2000	2120	2100
Cadmium	ND	100	100	108	108
Calcium	74000	50000	50000	122000	121000
Chromium	ND	200	200	191	190
Iron	970	1000	1000	1930	1910
Lead	ND	500	500	485	484
Magnesium	21000	50000	50000	68300	68100
Manganese	53	500	500	539	538
Potassium	5800	50000	50000	55900	55800
Selenium	ND	2000	2000	1960	1960
Silver	ND	50.0	50.0	49.0	49.0
Sodium	66000	50000	50000	114000	115000

Serial Dilution - Batch: 280-64783

Method: 6010B
Preparation: 3010A

Lab Sample ID: 280-15171-1
Client Matrix: Water
Dilution: 5.0
Analysis Date: 05/02/2011 2142
Prep Date: 05/02/2011 0730
Leach Date: N/A

Analysis Batch: 280-65273
Prep Batch: 280-64783
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_026
Lab File ID: 26b050211.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Arsenic	ND	ND	NC	10	
Barium	34	ND	3.0	10	
Cadmium	ND	ND	NC	10	
Calcium	74000	73000	1.5	10	
Chromium	ND	ND	NC	10	
Iron	970	1210	NC	10	
Lead	ND	ND	NC	10	
Magnesium	21000	21100	2.1	10	
Manganese	53	57.4	8.2	10	
Potassium	5800	ND	NC	10	
Selenium	ND	ND	NC	10	
Silver	ND	ND	NC	10	
Sodium	66000	67300	2.3	10	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-15171-1

Method Blank - Batch: 280-64784

Lab Sample ID: MB 280-64715/1-B
Client Matrix: Water
Dilution: 1.0
Analysis Date: 05/02/2011 2040
Prep Date: 05/02/2011 0730
Leach Date: N/A

Analysis Batch: 280-65251
Prep Batch: 280-64784
Leach Batch: N/A
Units: ug/L

Method: 6010B Preparation: 3005A Dissolved

Instrument ID: MT_025
Lab File ID: 25A4050211.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Arsenic	ND		15
Barium	ND		10
Cadmium	ND		5.0
Calcium	ND		200
Chromium	ND		10
Iron	ND		100
Lead	ND		9.0
Magnesium	ND		200
Manganese	ND		10
Potassium	ND		3000
Selenium	ND		15
Silver	ND		10
Sodium	ND		1000

Lab Control Sample - Batch: 280-64784

Lab Sample ID: LCS 280-64715/2-B
Client Matrix: Water
Dilution: 1.0
Analysis Date: 05/02/2011 2042
Prep Date: 05/02/2011 0730
Leach Date: N/A

Analysis Batch: 280-65251
Prep Batch: 280-64784
Leach Batch: N/A
Units: ug/L

Method: 6010B Preparation: 3005A Dissolved

Instrument ID: MT_025
Lab File ID: 25A4050211.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	1000	938	94	88 - 110	
Barium	2000	2090	105	90 - 112	
Cadmium	100	102	102	88 - 111	
Calcium	50000	49600	99	90 - 111	
Chromium	200	201	100	90 - 113	
Iron	1000	940	94	89 - 115	
Lead	500	503	101	89 - 110	
Magnesium	50000	50500	101	90 - 113	
Manganese	500	517	103	90 - 110	
Potassium	50000	52400	105	89 - 114	
Selenium	2000	2000	100	85 - 112	
Silver	50.0	53.8	108	86 - 115	
Sodium	50000	51600	103	90 - 115	

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-15171-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-64784**

**Method: 6010B
Preparation: 3005A
Dissolved**

MS Lab Sample ID:	280-15171-1	Analysis Batch:	280-65251	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-64784	Lab File ID:	25A4050211.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	05/02/2011 2049			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 0730				
Leach Date:	N/A				

MSD Lab Sample ID:	280-15171-1	Analysis Batch:	280-65251	Instrument ID:	MT_025
Client Matrix:	Water	Prep Batch:	280-64784	Lab File ID:	25A4050211.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	05/02/2011 2051			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 0730				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Arsenic	98	97	84 - 124	2	25		
Barium	108	106	85 - 120	1	25		
Cadmium	107	106	82 - 119	2	25		
Calcium	102	98	48 - 153	1	25		
Chromium	103	102	73 - 135	2	25		
Iron	97	94	52 - 155	2	25		
Lead	102	101	89 - 121	1	25		
Magnesium	103	101	62 - 146	1	25		
Manganese	106	105	79 - 121	1	25		
Potassium	108	107	76 - 132	1	25		
Selenium	104	103	71 - 140	1	25		
Silver	113	112	75 - 141	2	25		
Sodium	107	104	70 - 203	1	40		

Quality Control Results

Client: Colorado Oil&Gas Conservation Commission

Job Number: 280-15171-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-64784

Method: 6010B
Preparation: 3005A
Dissolved

MS Lab Sample ID: 280-15171-1 Units: ug/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 05/02/2011 2049
Prep Date: 05/02/2011 0730
Leach Date: N/A

MSD Lab Sample ID: 280-15171-1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 05/02/2011 2051
Prep Date: 05/02/2011 0730
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Arsenic	ND	1000	1000	982	967
Barium	32	2000	2000	2180	2160
Cadmium	ND	100	100	107	106
Calcium	69000	50000	50000	120000	118000
Chromium	ND	200	200	207	204
Iron	750	1000	1000	1720	1690
Lead	ND	500	500	510	504
Magnesium	21000	50000	50000	72000	71200
Manganese	54	500	500	583	577
Potassium	5800	50000	50000	59800	59100
Selenium	ND	2000	2000	2090	2070
Silver	ND	50.0	50.0	56.6	55.8
Sodium	63000	50000	50000	116000	115000

Serial Dilution - Batch: 280-64784

Method: 6010B
Preparation: 3005A
Dissolved

Lab Sample ID: 280-15171-1
Client Matrix: Water
Dilution: 5.0
Analysis Date: 05/02/2011 2046
Prep Date: 05/02/2011 0730
Leach Date: N/A

Analysis Batch: 280-65251
Prep Batch: 280-64784
Leach Batch: N/A
Units: ug/L

Instrument ID: MT_025
Lab File ID: 25A4050211.asc
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Arsenic	ND	ND	NC	10	
Barium	32	ND	0.09	10	
Cadmium	ND	ND	NC	10	
Calcium	69000	68900	0.02	10	
Chromium	ND	ND	NC	10	
Iron	750	768	NC	10	
Lead	ND	ND	NC	10	
Magnesium	21000	20600	0.32	10	
Manganese	54	53.9	0.52	10	
Potassium	5800	ND	NC	10	
Selenium	ND	ND	NC	10	
Silver	ND	ND	NC	10	
Sodium	63000	63600	1.2	10	

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description
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Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-15171-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-64783					
LCS 280-64783/2-A	Lab Control Sample	T	Water	3010A	
MB 280-64783/1-A	Method Blank	T	Water	3010A	
280-15171-1	BURKHART HOSE	T	Water	3010A	
280-15171-1MS	Matrix Spike	T	Water	3010A	
280-15171-1MSD	Matrix Spike Duplicate	T	Water	3010A	
280-15171-2	BURKHART TAP	T	Water	3010A	
Prep Batch: 280-64784					
LCS 280-64715/2-B	Lab Control Sample	D	Water	3005A	
MB 280-64715/1-B	Method Blank	D	Water	3005A	
280-15171-1	BURKHART HOSE	D	Water	3005A	
280-15171-1MS	Matrix Spike	D	Water	3005A	
280-15171-1MSD	Matrix Spike Duplicate	D	Water	3005A	
280-15171-2	BURKHART TAP	D	Water	3005A	
Analysis Batch:280-65251					
LCS 280-64715/2-B	Lab Control Sample	D	Water	6010B	280-64784
MB 280-64715/1-B	Method Blank	D	Water	6010B	280-64784
280-15171-1	BURKHART HOSE	D	Water	6010B	280-64784
280-15171-1MS	Matrix Spike	D	Water	6010B	280-64784
280-15171-1MSD	Matrix Spike Duplicate	D	Water	6010B	280-64784
280-15171-2	BURKHART TAP	D	Water	6010B	280-64784
Analysis Batch:280-65273					
LCS 280-64783/2-A	Lab Control Sample	T	Water	6010B	280-64783
MB 280-64783/1-A	Method Blank	T	Water	6010B	280-64783
280-15171-1	BURKHART HOSE	T	Water	6010B	280-64783
280-15171-1MS	Matrix Spike	T	Water	6010B	280-64783
280-15171-1MSD	Matrix Spike Duplicate	T	Water	6010B	280-64783
280-15171-2	BURKHART TAP	T	Water	6010B	280-64783

Report Basis

D = Dissolved

T = Total

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-15171-1

Laboratory Chronicle

Lab ID: 280-15171-1

Client ID: BURKHART HOSE

Sample Date/Time: 04/28/2011 09:45

Received Date/Time: 04/28/2011 14:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-15171-B-1-B		280-65251	280-64784	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	280-15171-B-1-B		280-65251	280-64784	05/02/2011 20:44	1	TAL DEN	JKH
P:3010A	280-15171-A-1-A		280-65273	280-64783	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	280-15171-A-1-A		280-65273	280-64783	05/02/2011 21:40	1	TAL DEN	HEB

Lab ID: 280-15171-1 MS

Client ID: BURKHART HOSE

Sample Date/Time: 04/28/2011 09:45

Received Date/Time: 04/28/2011 14:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-15171-B-1-C MS		280-65251	280-64784	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	280-15171-B-1-C MS		280-65251	280-64784	05/02/2011 20:49	1	TAL DEN	JKH
P:3010A	280-15171-A-1-B MS		280-65273	280-64783	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	280-15171-A-1-B MS		280-65273	280-64783	05/02/2011 21:45	1	TAL DEN	HEB

Lab ID: 280-15171-1 MSD

Client ID: BURKHART HOSE

Sample Date/Time: 04/28/2011 09:45

Received Date/Time: 04/28/2011 14:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-15171-B-1-D MSD		280-65251	280-64784	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	280-15171-B-1-D MSD		280-65251	280-64784	05/02/2011 20:51	1	TAL DEN	JKH
P:3010A	280-15171-A-1-C MSD		280-65273	280-64783	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	280-15171-A-1-C MSD		280-65273	280-64783	05/02/2011 21:47	1	TAL DEN	HEB

Lab ID: 280-15171-1 SD

Client ID: BURKHART HOSE

Sample Date/Time: 04/28/2011 09:45

Received Date/Time: 04/28/2011 14:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-15171-B-1-B SD		280-65251	280-64784	05/02/2011 07:30	5	TAL DEN	KMN
A:6010B	280-15171-B-1-B SD		280-65251	280-64784	05/02/2011 20:46	5	TAL DEN	JKH
P:3010A	280-15171-A-1-A SD		280-65273	280-64783	05/02/2011 07:30	5	TAL DEN	KMN
A:6010B	280-15171-A-1-A SD		280-65273	280-64783	05/02/2011 21:42	5	TAL DEN	HEB

Quality Control Results

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-15171-1

Laboratory Chronicle

Lab ID: 280-15171-2

Client ID: BURKHART TAP

Sample Date/Time: 04/28/2011 09:50

Received Date/Time: 04/28/2011 14:05

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-15171-B-2-B		280-65251	280-64784	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	280-15171-B-2-B		280-65251	280-64784	05/02/2011 20:53	1	TAL DEN	JKH
P:3010A	280-15171-A-2-A		280-65273	280-64783	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	280-15171-A-2-A		280-65273	280-64783	05/02/2011 21:49	1	TAL DEN	HEB

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:3005A	MB 280-64715/1-B		280-65251	280-64784	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	MB 280-64715/1-B		280-65251	280-64784	05/02/2011 20:40	1	TAL DEN	JKH
P:3010A	MB 280-64783/1-A		280-65273	280-64783	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	MB 280-64783/1-A		280-65273	280-64783	05/02/2011 21:36	1	TAL DEN	HEB

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:3005A	LCS 280-64715/2-B		280-65251	280-64784	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	LCS 280-64715/2-B		280-65251	280-64784	05/02/2011 20:42	1	TAL DEN	JKH
P:3010A	LCS 280-64783/2-A		280-65273	280-64783	05/02/2011 07:30	1	TAL DEN	KMN
A:6010B	LCS 280-64783/2-A		280-65273	280-64783	05/02/2011 21:38	1	TAL DEN	HEB

Lab References:

TAL DEN = TestAmerica Denver

Certification Summary

Client: Colorado Oil&Gas Conservation Commission
Project/Site: Burkhart #2800300876

TestAmerica Job ID: 280-15171-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver		USDA		P330-08-00036
TestAmerica Denver	A2LA	DoD ELAP	0	2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025	0	2907.01
TestAmerica Denver	Alabama	State Program	4	
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	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.

Shipping and Receiving Documents

Login Sample Receipt Checklist

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-15171-1

Login Number: 15171

List Source: TestAmerica Denver

List Number: 1

Creator: Cofoid, Stephen T

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



05/03/11

Technical Report for

Colorado Oil & Gas, Brighton

Burkhart 200300876

Accutest Job Number: D23015

Sampling Date: 04/28/11

Report to:

Colorado Oil & Gas, Brighton
9203 East 155th Drive
Brighton, CO 80602
john.axelson@state.co.us

ATTN: John Axelson

Total number of pages in report: 19



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'J. Hamilton'.

John Hamilton
Laboratory Director

Client Service contact: Shea Greiner 303-425-6021

Certifications: CO, ID, NE, NM, ND (R-027) (PW) UT (NELAP CO00049)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

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Sample Summary

Colorado Oil & Gas, Brighton
Burkhart 200300876

Job No: D23015

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
D23015-1	04/28/11	09:53 JA	04/28/11	AQ Ground Water	BURKHART WW
D23015-1F	04/28/11	09:53 JA	04/28/11	AQ Groundwater Filtered	BURKHART WW

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Colorado Oil & Gas, Brighton

Job No D23015

Site: Burkhart 200300876

Report Dat 5/3/2011 1:29:18 PM

On 04/28/2011, one (1) sample, 0 Trip Blanks, and 0 Field Blanks were received at Accutest Mountain States (AMS) at a temperature of 4.0°C. The sample was intact and properly preserved, unless noted below. An AMS Job Number of D23015 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method SW846 6010B

Matrix AQ

Batch ID: MP4586

- The sample was digested and analyzed within the recommended method holding time.
- The method blank for this batch meets method specific criteria.
- Samples D22956-1MS and D22956-1MSD were used as the QC samples for the metals analysis.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: BURKHART WW
Lab Sample ID: D23015-1
Matrix: AQ - Ground Water
Project: Burkhart 200300876

Date Sampled: 04/28/11
Date Received: 04/28/11
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 25	25	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Barium	32.5	10	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Cadmium	< 10	10	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Calcium	73900	400	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Chromium	< 10	10	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Iron	934	70	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Lead	< 50	50	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Magnesium	21700	200	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Manganese	51.5	5.0	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Potassium	5660	1000	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Selenium	< 50	50	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Silver	< 30	30	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Sodium	65900	400	ug/l	1	04/29/11	05/02/11 GJ	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA1494

(2) Instrument QC Batch: MA1495

(3) Prep QC Batch: MP4586

RL = Reporting Limit

Report of Analysis

Client Sample ID: BURKHART WW
Lab Sample ID: D23015-1F
Matrix: AQ - Groundwater Filtered
Project: Burkhart 200300876

Date Sampled: 04/28/11
Date Received: 04/28/11
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 25	25	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Barium	31.9	10	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Cadmium	< 10	10	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Calcium	70700	400	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Chromium	< 10	10	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Iron	758	70	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Lead	< 50	50	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Magnesium	20800	200	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Manganese	49.2	5.0	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Potassium	5400	1000	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Selenium	< 50	50	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Silver	< 30	30	ug/l	1	04/29/11	04/30/11 JM	SW846 6010B ¹	SW846 3010A ³
Sodium	63100	400	ug/l	1	04/29/11	05/02/11 GJ	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA1494

(2) Instrument QC Batch: MA1495

(3) Prep QC Batch: MP4586

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D23015

Client: COGCC

Immediate Client Services Action Required: No

Date / Time Received: 4/28/2011 2:20:00 PM

No. Coolers: 1

Client Service Action Required at Login: No

Project: BURKHART 200300876

Airbill #'s: HD

<u>Cooler Security</u>	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Cooler temp verification:			Infrared gun
3. Cooler media:			Ice (bag)

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:			Intact

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume rec'd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

 Accutest Laboratories
 V:(303) 425-6021

 4036 Youngfield Street
 F: (303) 425-6854

 Wheat Ridge, CO
 www.accutest.com

Metals Analysis

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D23015
Account: COGCCOB - Colorado Oil & Gas, Brighton
Project: Burkhardt 200300876

QC Batch ID: MP4586
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 04/29/11

Metal	RL	IDL	MDL	MB raw	final
Aluminum	100	5.9	5.9		
Antimony	30	3.1	3.1		
Arsenic	25	5.9	5.9	-5.5	<25
Barium	10	1.1	1.1	0.20	<10
Beryllium	10	.44	.5		
Boron	50	4.8	4.8		
Cadmium	10	.27	.27	0.60	<10
Calcium	400	9.6	15	20.0	<400
Chromium	10	.18	.79	0.30	<10
Cobalt	5.0	.35	.35		
Copper	10	.85	2.8		
Iron	70	3.4	13	6.3	<70
Lead	50	1.6	2.1	1.0	<50
Lithium	4.0	.28	1.2		
Magnesium	200	5.8	10	2.1	<200
Manganese	5.0	.053	.31	0.90	<5.0
Molybdenum	10	.45	.87		
Nickel	30	.43	1		
Phosphorus	100	11	20		
Potassium	1000	55	55	42.4	<1000
Selenium	50	3.8	3.8	2.0	<50
Silicon	50	3.8	3.8		
Silver	30	.18	.31	0.20	<30
Sodium	400	110	110	160	<400
Strontium	5.0		.25		
Thallium	10	2.9	2.9		
Tin	50	5.5	9.9		
Titanium	10	.11	.31		
Uranium	50	1.5	3.5		
Vanadium	10	.16	.22		
Zinc	30	.28	1.8		

Associated samples MP4586: D23015-1, D23015-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D23015
Account: COGCCOB - Colorado Oil & Gas, Brighton
Project: Burkhardt 200300876

QC Batch ID: MP4586
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested

5.1.1

5

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D23015
Account: COGCCOB - Colorado Oil & Gas, Brighton
Project: Burkhardt 200300876

QC Batch ID: MP4586
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 04/29/11

Metal	D22956-1 Original MS		SpikeLot MPICPALL % Rec		QC Limits
Aluminum	anr				
Antimony	anr				
Arsenic	0.0	998	1000	99.8	75-125
Barium	73.7	2080	2000	100.3	75-125
Beryllium	anr				
Boron	anr				
Cadmium	0.70	488	500	97.5	75-125
Calcium	3530	29400	25000	103.5	75-125
Chromium	0.40	486	500	97.1	75-125
Cobalt	anr				
Copper	anr				
Iron	12.9	4900	5000	97.7	75-125
Lead	0.0	1010	1000	101.0	75-125
Lithium	anr				
Magnesium	1100	26600	25000	102.0	75-125
Manganese	84.5	566	500	96.3	75-125
Molybdenum	anr				
Nickel	anr				
Phosphorus					
Potassium	122	26500	25000	105.5	75-125
Selenium	0.0	956	1000	95.6	75-125
Silicon					
Silver	0.0	203	200	101.5	75-125
Sodium	288000	309000	25000	84.0	75-125
Strontium	anr				
Thallium	anr				
Tin					
Titanium	anr				
Uranium					
Vanadium	anr				
Zinc	anr				

Associated samples MP4586: D23015-1, D23015-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D23015
Account: COGCCOB - Colorado Oil & Gas, Brighton
Project: Burkhart 200300876

QC Batch ID: MP4586
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

5.1.2

5

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D23015
Account: COGCCOB - Colorado Oil & Gas, Brighton
Project: Burkhart 200300876

QC Batch ID: MP4586
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 04/29/11

Metal	D22956-1 Original	MSD	Spikelot MPICPAL	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	0.0	1010	1000	101.0	1.2	20
Barium	73.7	2100	2000	101.3	1.0	20
Beryllium	anr					
Boron	anr					
Cadmium	0.70	494	500	98.7	1.2	20
Calcium	3530	30000	25000	105.9	2.0	20
Chromium	0.40	495	500	98.9	1.8	20
Cobalt	anr					
Copper	anr					
Iron	12.9	4980	5000	99.3	1.6	20
Lead	0.0	1020	1000	102.0	1.0	20
Lithium	anr					
Magnesium	1100	27100	25000	104.0	1.9	20
Manganese	84.5	576	500	98.3	1.8	20
Molybdenum	anr					
Nickel	anr					
Phosphorus						
Potassium	122	26900	25000	107.1	1.5	20
Selenium	0.0	966	1000	96.6	1.0	20
Silicon						
Silver	0.0	207	200	103.5	2.0	20
Sodium	288000	313000	25000	100.0	1.3	20
Strontium	anr					
Thallium	anr					
Tin						
Titanium	anr					
Uranium						
Vanadium	anr					
Zinc	anr					

Associated samples MP4586: D23015-1, D23015-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D23015
Account: COGCCOB - Colorado Oil & Gas, Brighton
Project: Burkhart 200300876

QC Batch ID: MP4586
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

5.1.2

5

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D23015
 Account: COGCCCCOB - Colorado Oil & Gas, Brighton
 Project: Burkhardt 200300876

QC Batch ID: MP4586
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 04/29/11

Metal	BSP Result	Spikelot MPICPALL	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	953	1000	95.3	80-120
Barium	1930	2000	96.5	80-120
Beryllium	anr			
Boron	anr			
Cadmium	469	500	93.8	80-120
Calcium	25700	25000	102.8	80-120
Chromium	483	500	96.6	80-120
Cobalt	anr			
Copper	anr			
Iron	4770	5000	95.4	80-120
Lead	1010	1000	101.0	80-120
Lithium	anr			
Magnesium	25200	25000	100.8	80-120
Manganese	484	500	96.8	80-120
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium	25600	25000	102.4	80-120
Selenium	930	1000	93.0	80-120
Silicon				
Silver	196	200	98.0	80-120
Sodium	25700	25000	102.8	80-120
Strontium	anr			
Thallium	anr			
Tin				
Titanium	anr			
Uranium				
Vanadium	anr			
Zinc	anr			

Associated samples MP4586: D23015-1, D23015-1F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D23015
Account: COGCCOB - Colorado Oil & Gas, Brighton
Project: Burkhart 200300876

QC Batch ID: MP4586
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested

5.1.3

5