

State of Colorado
Oil and Gas Conservation Commission



1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109

RECEIVED
NOV 02 2011
COGCC
Oil & Gas Conservation Commission
☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV
Tracking No: 2215571

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☒ Site/Facility Closure ☐ Other (describe): _____

OGCC Operator Number: 100122

Name of Operator: Gunnison Energy Corporation

Address: 1801 Broadway, Suite 1200

City: Denver State: Co Zip: 80202

Contact Name and Telephone:

Lee Fyock

No: 303-293-2913

Fax: 303-296-4555

API Number: 05-051-06074-00

County: Gunnison

Facility Name: Hotchkiss 1-34 Pit

Facility Number: 285417

Well Name: Hotchkiss 1290

Well Number: _____

Location: (QtrQtr, Sec, Twp, Rng, Meridian): SW/SE 12S 90W, 6th Latitude: _____ Longitude: _____

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Produced Water - Remediation Tracking No. - 5998, Spill Tracking No. 2215571

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☐ Y ☒ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Ranching

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Previously ID'd on Form 19

Potential receptors (water wells within 1/4 mi, surface waters, etc.): _____

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):

Extent of Impact:

How Determined:

☐

Soils

☐

Vegetation

☐

Groundwater

☐

Surface Water

REMEDIAL WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

See prior Form 27 submittal for this section.

Describe how source is to be removed:

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:



REMEDIATION WORKPLAN (Cont.)

Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

OGCC Employee: _____

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Submitted under Tracking No. 2215571.

No impacts to GW. See attached investigation report November 2, 2011, Hotchkiss 1-34 Production Pit Closure, Final Field Summary Report, Weston WO# 14798.001.003.0020.

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

See previous Form 27 submittal.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☐ Y ☒ N If yes, describe:

See attached report, November 2, 2011, Hotchkiss 1-34 Production Pit Closure, Final Field Summary Report, Weston WO# 14798.001.003.0020.

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

None to be excavated. See attached report.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 9/12/2011 Date Site Investigation Completed: 10/13/2011 Date Remediation Plan Submitted: TBD
Remediation Start Date: TBD Anticipated Completion Date: TBD Actual Completion Date: _____

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Lee Fyock

Signed:

Title: Director of Environment and Permitting

Date: 11/2/11

OGCC Approved:

Title: West Env. Supervisor

Date: 11/3/11



Weston Solutions, Inc.
1435 Garrison Street, Ste. 100
Lakewood, Colorado 80215
303-729-6100 • Fax: 303-729-6101
www.westonsolutions.com

November 2, 2011

Mr. Lee Fyock
Environmental Manager
Gunnison Energy Corp.
1801 Broadway, Suite 1200
Denver, CO 80202

Subject: Hotchkiss 1-34 Production Pit Closure
Final Field Summary Report
Weston WO# 14798.001.003.0020
COGCC Remediation No. 5998
COGCC Spill Tracking No. 2215571

Dear Lee:

On behalf of Gunnison Energy Corporation (GEC) Weston Solutions, Inc. (Weston) is pleased to provide this summary report of field activities in support of the closure of the 1-34 pit. The pit has reportedly been out of service since February 2011. GEC prepared and submitted a Form 27 Site Investigation and Remediation Workplan to the COGCC on July 20, 2011 and this report is intended to summarize the field work and analytical results referenced in the Workplan as approved August 11, 2011.

Phase I Fieldwork – Weston mobilized to the site of the 1-34 pit to collect soil and water samples as prescribed in the approved Workplan on September 12, 2011. At the time of the fieldwork, the bottom of the liner and approximately 8 inches of sediment remained in the dewatered pit. GEC personnel removed sediment and cut away the liner in the location of the proposed sample borings. When the liner was cut in locations SB-02 and SB-03, water from beneath the liner flowed into the remaining sediment and carried some of the sediment into the sampling location where grab water samples SB02-0911 and SB03-0911 were collected. Locations SB-01, SB-04, SB-05, and SB-06 did not contain water. During soil boring of locations SB-02 through SB-05, refusal was encountered at various depths due to a very hard shale layer. As a result, soil sample intervals were altered as necessary (no soil sample was collected in SB-02, the 0 to 1 ft interval was sampled in SB-03, and the 1 to 2 and 2 to 3 foot (ft.) intervals were sampled in SB-04 and SB-05). Sample locations SB-01 and SB-06 were collected as specified in the Workplan (the 1 to 2 and 3 to 4 ft intervals were sampled) as background and down gradient locations, respectively. Sample locations are shown on Figure 1.

All sample intervals were screened with a photoionization detector (PID) calibrated prior to soil boring with 100 parts per million Isobutylene. In addition, the ambient air was



screened during work activities and the peak reading recorded by the PID during all screening was 0.4 relative response units.

All samples were placed in laboratory supplied containers and placed on ice to cool to 4° C for transport to the laboratory under proper chain of custody procedures. Due to the boring refusal noted above some soil samples were submitted with less volume than requested by the laboratory but all samples were analyzed for COGCC Table 910-1 constituents by Accutest Analytical Laboratory of Wheat Ridge, CO (Accutest).

Phase I Analytical Data Summary – Based on comparison of the Analytical Data Report provided by Accutest (Attachment A) to COGCC Table 910-1 standards the water collected from beneath the liner of the pit in locations SB-02 and SB-03 exceeded the standard for Benzene (5 µg/L) at levels reported at 9.1 and 10.1 µg/L, respectively. An additional exceedance of the Sodium Adsorption Ratio standard for soil (<12) was reported at a value of 12.4 in the soil sample collected from SB-05 from the 1 to 2 ft interval. Arsenic was also detected in several soil samples above the COGCC Table 910-1 standard but due to the fact that the highest of the detections were in background and downgradient samples, the arsenic appears to be naturally occurring and not a result of the pit activities. No other exceedances of COGCC Table 910-1 standards were observed or reported. All analytical data is summarized in Table 1.

Phase II Fieldwork – As a result of the exceedances of the benzene standard in the two water samples collected on September 12, 2011 Weston returned to the 1-34 pit on October 13, 2011 with a geoprobe/solid stem auger drilling rig in order to ascertain whether or not the water samples were representative of groundwater conditions. In addition, consistent with COGCC requirements, GEC reported the possible release to Alex Fischer (COGCC) on September 20, 2011.

Two soil borings, SB-07 and SB-08, were advanced to depths of 13.5 and 22 feet below ground surface (bgs), respectively. SB-07 was installed near Phase I sample location SB-02 in the bottom of the pit. The geoprobe encountered refusal at the surface and the boring was advanced using solid stem auger preventing a representative soil sample from being collected. The auger was slowly advanced through very dry, hard, white shale until auger refusal was encountered at 13.5 ft bgs. SB-08 was installed outside of the well pad fence line southeast of the pit at a point approximately 16 ft higher in elevation than the bottom of the pit. The auger advanced relatively easily to 18.5 ft bgs through a light brown sandy clay. The hard, dry, white shale was encountered at 18.5 ft bgs and the auger advancement slowed considerably halting at 22 ft bgs. No water was encountered during drilling or when gauged for water after being allowed to remain open for approximately 30 minutes and no soil samples were collected.

The shale encountered in boring SB-07 appears to form the bottom of the pit and acts as an aquitard to downward fluid migration. Photos are available as Attachment B. Melt



water from a recent snowfall event was seen ponded 2-3 inches deep in the Northwest corner of the pit. No sheen was observed. A sample was collected of this water to characterize water still remaining on top of the shale layer. The pit sample (water standing in the pit) was collected as previously described and transported to Accutest. The onsite Weston geologist also conducted a site reconnaissance in order to locate possible outcrops or seeps related to the shale layer that might create a pathway for contaminant migration. No active seeps were observed though water was ponded in an area used by cattle to cross the drainage, but was most likely a result of recent precipitation.

Phase II Analytical Data Summary – Based on comparison of the Analytical Data Report provided by Accutest (Attachment A) to COGCC Table 910-1 standards the water collected from the 1-34 pit no exceedances of COGCC Table 910-1 standards were observed or reported. All analytical data is summarized in Table 1.

Conclusions and Recommendations – Based on the data observed during two field sampling efforts Weston believes no groundwater exists at the 1-34 pit location. Water that infiltrated uphill of the pit over the years of operation encountered an aquitard in the shale layer as well as the pit liner causing water to collect beneath the liner. Weston believes the benzene exceedances reported in the water samples collected from SB-02 and SB-03 were the result of the trapped water mixing with the remaining sediment when the liner was cut to allow for sampling. Additional sampling and observations indicate that the remaining sediment has been removed and the water remaining in the pit does not exceed COGCC Table 910-1 standards and not representative of groundwater. Therefore, Weston recommends the pit be backfilled to prevent the collection and infiltration of surface water and regarded to allow surface water from uphill to flow past the pit location.



Gunnison Energy Corporation
Hotchkiss 1-34 Production Pit Closure
Page 4 of 4

If you have any questions about this report please give me a call at (303) 729-6149. We look forward to our continued working relationship with you on this important project.

Sincerely,
Weston Solutions, Inc.

A handwritten signature in black ink, appearing to read "Ken Miller", written in a cursive style.

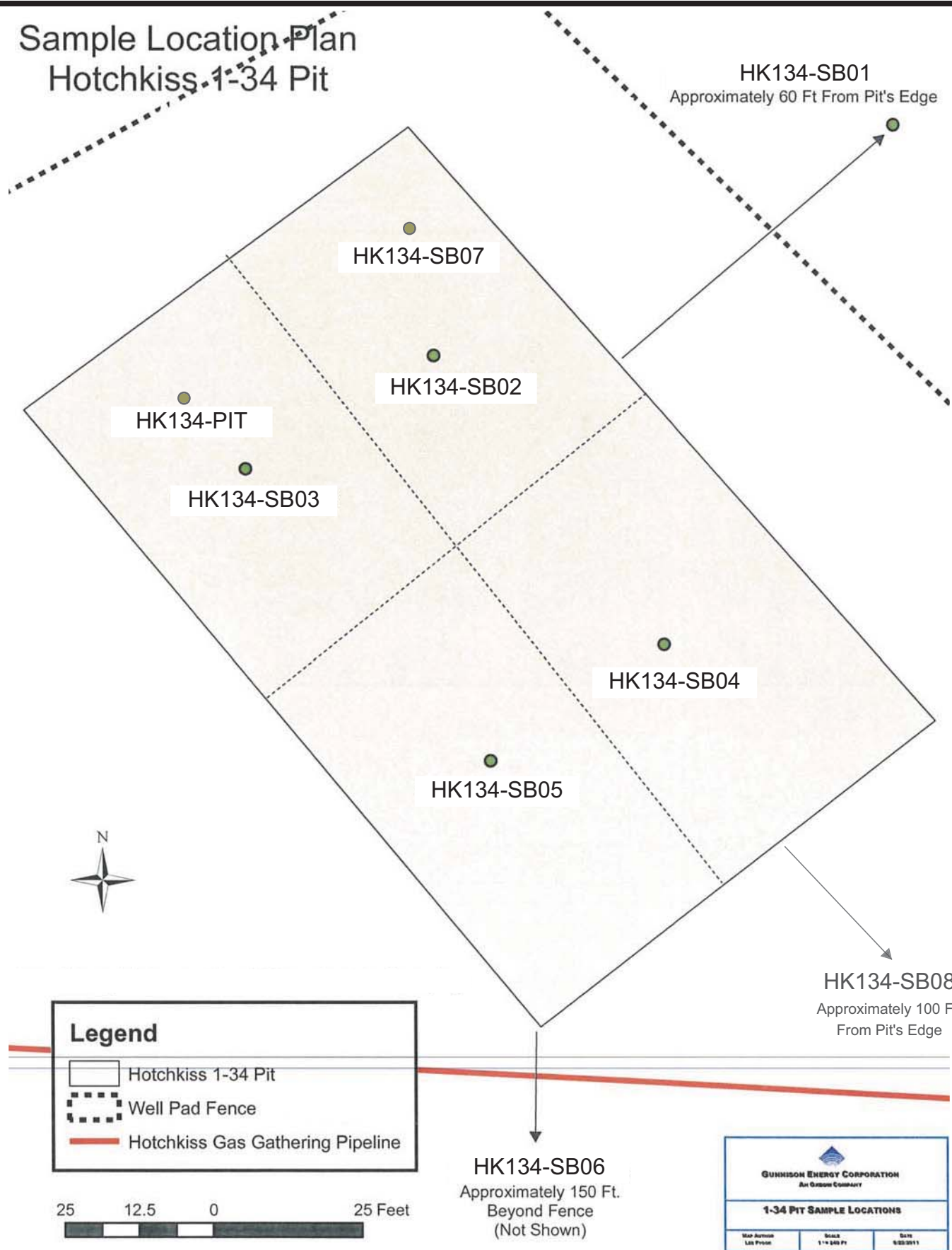
Kenneth E. Miller, P.G.
Sr. Project Manager

Attachments:

Figures and Tables
A – Analytical Data Reports
B – Photo Log

Cc: Missy Warner, Weston Solutions, Inc.
File

Sample Location Plan Hotchkiss 1-34 Pit



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Pit 1-34 Closure Fieldwork Summary Report
Gunnison Energy Corporation, Hotchkiss, Colorado

SAMPLE LOCATIONS

Figure

1

Table 1
Analytical Results
Gunnison Energy Corporation
Hotchkiss 1-34 Production Pit Closure

Contaminant of Concern	COGCC Table 910-1 Standards	Name	SB-01		SB-02	SB-03		SB-04	
		Location	Background		NE Pit	NW Pit		SE Pit	
		Depth	1-2 feet	3-4 feet	Water	0-1 foot	Water	1-2 feet	2-3 feet
Organic Compounds in Soil									
Total Petroleum Hydrocarbons	500	mg/kg	14.3 J	15.1	NA	12.3 J	NA	15.3 J	12.8 J
Benzene	0.17	mg/kg	<0.061	<0.065	NA	<0.086	NA	<0.070	<0.070
Toluene	85	mg/kg	<0.120	<0.130	NA	<0.170	NA	<0.140	<0.140
Ethylbenzene	100	mg/kg	<0.120	<0.130	NA	<0.170	NA	<0.140	<0.140
Xylenes (total)	175	mg/kg	<0.240	<0.260	NA	<0.340	NA	<0.280	<0.280
Acenaphthene	1000	mg/kg	<0.037	<0.015	NA	<0.0092	NA	<0.0081	<0.0080
Anthracene	1000	mg/kg	<0.037	<0.015	NA	<0.0092	NA	<0.0081	<0.0080
Benzo(a)anthracene	0.22	mg/kg	<0.093	<0.038	NA	<0.023	NA	<0.020	<0.020
Benzo(b)fluoranthene	0.22	mg/kg	<0.093	<0.038	NA	<0.023	NA	<0.020	<0.020
Benzo(k)fluoranthene	2.2	mg/kg	<0.093	<0.038	NA	<0.023	NA	<0.020	<0.020
Benzo(a)pyrene	0.022	mg/kg	<0.093	<0.038	NA	<0.023	NA	<0.020	<0.020
Chrysene	22	mg/kg	<0.093	<0.038	NA	<0.023	NA	<0.020	<0.020
Dibenzo(a,h)anthracene	0.022	mg/kg	<0.093	<0.038	NA	<0.023	NA	<0.020	<0.020
Fluoranthene	1000	mg/kg	<0.037	<0.015	NA	<0.0092	NA	<0.0081	<0.0080
Fluorene	1000	mg/kg	<0.037	<0.015	NA	<0.0092	NA	<0.0081	<0.0080
Indeno(1,2,3-cd)pyrene	0.22	mg/kg	<0.110	<0.046	NA	<0.028	NA	<0.024	<0.024
Naphthalene	23	mg/kg	<0.037	<0.015	NA	<0.0092	NA	<0.0081	<0.0080
Pyrene	1000	mg/kg	<0.037	<0.015	NA	<0.0092	NA	<0.0081	<0.0080
Organic Compounds in Groundwater									
Benzene	5	µg/l	NA	NA	9.1	NA	10.1	NA	NA
Toluene	560 to 1000	µg/l	NA	NA	<2.0	NA	<2.0	NA	NA
Ethylbenzene	700	µg/l	NA	NA	10.1	NA	14.9	NA	NA
Xylenes (total)	1400 to 10000	µg/l	NA	NA	14.1	NA	15.5	NA	NA
Inorganics in Soil									
Electrical Conductivity (EC)	<4 or 2x background	mmhos/cm	0.0499	0.0337	NA	2.02	NA	2.79	1.31
Sodium Adsorption Ratio (SAR)	<12	-	0.360	0.442	NA	10.2	NA	9.04	8.91
pH	6-9	Standard Units	7.72	8.07	NA	8.21	NA	7.71	8.72
Inorganics in Groundwater									
Total Dissolved Solids (TDS)	<1.25 x background	mg/l	NA	NA	3000	NA	3350	NA	NA
Chlorides	<1.25 x background	mg/l	NA	NA	1440	NA	1740	NA	NA
Sulfates	<1.25 x background	mg/l	NA	NA	71.9	NA	71.9	NA	NA
Metals in Soil									
Arsenic	0.39	mg/kg	1.5	0.87	NA	<0.57	NA	<0.49	0.63
Barium	15000	mg/kg	187	226	NA	221	NA	182	241
Cadmium	70	mg/kg	<1.1	<1.1	NA	<1.4	NA	<1.2	<5.8
Chromium (III)	120000	mg/kg	4.4	4.0	NA	2.4	NA	<1.7	<6.3
Chromium (VI)	23	mg/kg	0.59	0.53	NA	<0.54	NA	<0.48	<0.48
Copper	3100	mg/kg	9.6	5.4	NA	14.0	NA	28.0	19.7
Lead	400	mg/kg	8.7	8.2	NA	7.5	NA	9.1	<29
Mercury	23	mg/kg	<0.10	<0.10	NA	<0.14	NA	<0.12	<0.12
Nickel	1600	mg/kg	6.2	5.3	NA	<4.3	NA	<3.6	<17
Selenium	390	mg/kg	<5.4	<5.4	NA	<7.1	NA	<6.1	<29
Silver	390	mg/kg	<3.2	<3.2	NA	<4.3	NA	<3.6	<17
Zinc	23000	mg/kg	39.8	37.4	NA	33.7	NA	25.5	42.7

COGCC-Colorado Oil and Gas Conservation Commission

mg/kg- milligrams per kilogram

mg/l-milligrams per liter

J-Value estimateed

BOLD-indicates analyte detected in sample

NA- Not Analyzed

Detection limit may exceed standard

µg/l- micrograms per liter

Analyte exceeds standard in sample

mmhos/cm- millimhos per centimeter

Table 1
Analytical Results
Gunnison Energy Corporation
Hotchkiss 1-34 Production Pit Closure

Contaminant of Concern	COGCC Table 910-1 Standards	Name	SB-05		SB-06		Pit
		Location	SW Pit		Downgradient		In Pit
		Depth	1-2 feet	2-3 feet	1-2 feet	3-4 feet	Water
Organic Compounds in Soil							
Total Petroleum Hydrocarbons	500	mg/kg	12.7 J	11.0 J	13.4 J	19.6	NA
Benzene	0.17	mg/kg	<0.076	<0.068	<0.062	<0.062	NA
Toluene	85	mg/kg	<0.150	<0.140	<0.120	<0.120	NA
Ethylbenzene	100	mg/kg	<0.150	<0.140	<0.120	<0.120	NA
Xylenes (total)	175	mg/kg	<0.300	<0.270	<0.250	<0.250	NA
Acenaphthene	1000	mg/kg	<0.0084	<0.0079	<0.015	<0.015	NA
Anthracene	1000	mg/kg	<0.0084	<0.0079	<0.015	<0.015	NA
Benzo(a)anthracene	0.22	mg/kg	<0.021	<0.020	<0.037	<0.038	NA
Benzo(b)fluoranthene	0.22	mg/kg	<0.021	<0.020	<0.037	<0.038	NA
Benzo(k)fluoranthene	2.2	mg/kg	<0.021	<0.020	<0.037	<0.038	NA
Benzo(a)pyrene	0.022	mg/kg	<0.021	<0.020	<0.037	<0.038	NA
Chrysene	22	mg/kg	<0.021	<0.020	<0.037	<0.038	NA
Dibenzo(a,h)anthracene	0.022	mg/kg	<0.021	<0.020	<0.037	<0.038	NA
Fluoranthene	1000	mg/kg	<0.0084	<0.0079	<0.015	<0.015	NA
Fluorene	1000	mg/kg	<0.0084	<0.0079	<0.015	<0.015	NA
Indeno(1,2,3-cd)pyrene	0.22	mg/kg	<0.025	<0.024	<0.045	<0.046	NA
Naphthalene	23	mg/kg	<0.0084	<0.0079	<0.015	<0.015	NA
Pyrene	1000	mg/kg	<0.0084	<0.0079	<0.015	<0.015	NA
Organic Compounds in Groundwater							
Benzene	5	µg/l	NA	NA	NA	NA	<1.0
Toluene	560 to 1000	µg/l	NA	NA	NA	NA	<2.0
Ethylbenzene	700	µg/l	NA	NA	NA	NA	<2.0
Xylenes (total)	1400 to 10000	µg/l	NA	NA	NA	NA	<4.0
Inorganics in Soil							
Electrical Conductivity (EC)	<4 or 2x background	mmhos/cm	2.43	1.26	0.0562	0.0523	NA
Sodium Adsorption Ratio (SAR)	<12	-	12.4	8.80	0.545	0.603	NA
pH	6-9	Standard Units	8.86	8.71	7.60	7.85	NA
Inorganics in Groundwater							
Total Dissolved Solids (TDS)	<1.25 x background	mg/l	NA	NA	NA	NA	552
Chlorides	<1.25 x background	mg/l	NA	NA	NA	NA	1400
Sulfates	<1.25 x background	mg/l	NA	NA	NA	NA	122
Metals in Soil							
Arsenic	0.39	mg/kg	<0.50	<0.47	1.6	1.9	NA
Barium	15000	mg/kg	204	304	267	269	NA
Cadmium	70	mg/kg	<1.2	<1.2	<1.2	<1.1	NA
Chromium (III)	120000	mg/kg	<1.7	<1.7	5.1	5.8	NA
Chromium (VI)	23	mg/kg	<0.50	<0.47	<0.44	0.71	NA
Copper	3100	mg/kg	23.2	18.8	11.9	11.5	NA
Lead	400	mg/kg	7.4	6.1	9.4	10.3	NA
Mercury	23	mg/kg	<0.12	<0.11	<0.11	<0.11	NA
Nickel	1600	mg/kg	<3.7	<3.5	6.4	7.1	NA
Selenium	390	mg/kg	<6.2	<5.9	<5.8	<5.6	NA
Silver	390	mg/kg	<3.7	<3.5	<3.5	<3.3	NA
Zinc	23000	mg/kg	22.9	21.5	46	49.1	NA

COGCC-Colorado Oil and Gas Conservation Commission

mg/kg- milligrams per kilogram

mg/l-milligrams per liter

J-Value estimated

BOLD-indicates analyte detected in sample

NA- Not Analyzed

Detection limit may exceed standard

µg/l- micrograms per liter

Analyte exceeds standard in sample

mmhos/cm- millimhos per centimeter



09/27/11

Technical Report for

Weston Solutions, Inc.

Gunnison Energy

Accutest Job Number: D27497

Sampling Date: 09/12/11

Report to:

**Weston Solutions, Inc.
143 Union Boulevard
Lakewood, CO 80228
k.miller@westonsolutions.com**

ATTN: Ken Miller

Total number of pages in report: 151



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.

Table of Contents

-1-

Section 1: Sample Summary	4
Section 2: Case Narrative/Conformance Summary	6
Section 3: Sample Results	10
3.1: D27497-1: HK134-SB01-0102	11
3.2: D27497-1A: HK134-SB01-0102	17
3.3: D27497-2: HK134-SB01-0304	19
3.4: D27497-2A: HK134-SB01-0304	25
3.5: D27497-3: HK134-SB06-0102	27
3.6: D27497-3A: HK134-SB06-0102	33
3.7: D27497-4: HK134-SB06-0304	35
3.8: D27497-4A: HK134-SB06-0304	41
3.9: D27497-5: HK134-SB04-0102	43
3.10: D27497-5A: HK134-SB04-0102	49
3.11: D27497-6: HK134-SB04-0203	51
3.12: D27497-6A: HK134-SB04-0203	57
3.13: D27497-7: HK134-SB05-0102	59
3.14: D27497-7A: HK134-SB05-0102	65
3.15: D27497-8: HK134-SB05-0203	67
3.16: D27497-8A: HK134-SB05-0203	73
3.17: D27497-9: HK134-SB02-0911	75
3.18: D27497-10: HK134-SB03-0001	77
3.19: D27497-10A: HK134-SB03-0001	83
3.20: D27497-11: HK134-SB03-0911	85
Section 4: Misc. Forms	87
4.1: Chain of Custody	88
Section 5: GC/MS Volatiles - QC Data Summaries	90
5.1: Method Blank Summary	91
5.2: Blank Spike Summary	93
5.3: Matrix Spike/Matrix Spike Duplicate Summary	95
Section 6: GC/MS Semi-volatiles - QC Data Summaries	97
6.1: Method Blank Summary	98
6.2: Blank Spike Summary	99
6.3: Matrix Spike/Matrix Spike Duplicate Summary	100
Section 7: GC Volatiles - QC Data Summaries	101
7.1: Method Blank Summary	102
7.2: Blank Spike Summary	103
7.3: Matrix Spike/Matrix Spike Duplicate Summary	104
Section 8: GC Semi-volatiles - QC Data Summaries	105
8.1: Method Blank Summary	106
8.2: Blank Spike Summary	108
8.3: Matrix Spike/Matrix Spike Duplicate Summary	110
Section 9: Metals Analysis - QC Data Summaries	112

Table of Contents

-2-

9.1: Prep QC MP5733: Hg	113
9.2: Prep QC MP5762: Ba,Cd,Cr,Cu,Pb,Ni,Se,Ag,Zn	117
9.3: Prep QC MP5763: As	127
9.4: Prep QC MP5765: Ca,Mg,Na,Sodium Adsorption Ratio	132
Section 10: General Chemistry - QC Data Summaries	140
10.1: Method Blank and Spike Results Summary	141
10.2: Duplicate Results Summary	142
10.3: Matrix Spike Results Summary	143
10.4: Matrix Spike Duplicate Results Summary	144
Section 11: Misc. Forms (Accutest Labs of New England, Inc.)	145
11.1: Chain of Custody	146
Section 12: General Chemistry - QC Data (Accutest Labs of New England, Inc.)	148
12.1: Method Blank and Spike Results Summary	149
12.2: Duplicate Results Summary	150
12.3: Matrix Spike Results Summary	151



Sample Summary

Weston Solutions, Inc.

Job No: D27497

Gunnison Energy

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D27497-1	09/12/11	11:55 RW	09/13/11	SO	Soil	HK134-SB01-0102
D27497-1A	09/12/11	11:55 RW	09/13/11	SO	Soil	HK134-SB01-0102
D27497-2	09/12/11	12:05 RW	09/13/11	SO	Soil	HK134-SB01-0304
D27497-2A	09/12/11	12:05 RW	09/13/11	SO	Soil	HK134-SB01-0304
D27497-3	09/12/11	12:40 RW	09/13/11	SO	Soil	HK134-SB06-0102
D27497-3A	09/12/11	12:40 RW	09/13/11	SO	Soil	HK134-SB06-0102
D27497-4	09/12/11	12:50 RW	09/13/11	SO	Soil	HK134-SB06-0304
D27497-4A	09/12/11	12:50 RW	09/13/11	SO	Soil	HK134-SB06-0304
D27497-5	09/12/11	13:15 RW	09/13/11	SO	Soil	HK134-SB04-0102
D27497-5A	09/12/11	13:15 RW	09/13/11	SO	Soil	HK134-SB04-0102
D27497-6	09/12/11	13:20 RW	09/13/11	SO	Soil	HK134-SB04-0203
D27497-6A	09/12/11	13:20 RW	09/13/11	SO	Soil	HK134-SB04-0203
D27497-7	09/12/11	13:45 RW	09/13/11	SO	Soil	HK134-SB05-0102

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

Weston Solutions, Inc.

Job No: D27497

Gunnison Energy

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D27497-7A	09/12/11	13:45	RW	09/13/11	SO Soil	HK134-SB05-0102
D27497-8	09/12/11	13:50	RW	09/13/11	SO Soil	HK134-SB05-0203
D27497-8A	09/12/11	13:50	RW	09/13/11	SO Soil	HK134-SB05-0203
D27497-9	09/12/11	14:30	RW	09/13/11	AQ Water	HK134-SB02-0911
D27497-10	09/12/11	14:40	RW	09/13/11	SO Soil	HK134-SB03-0001
D27497-10A	09/12/11	14:40	RW	09/13/11	SO Soil	HK134-SB03-0001
D27497-11	09/12/11	14:50	RW	09/13/11	AQ Water	HK134-SB03-0911

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Weston Solutions, Inc.

Job No D27497

Site: Gunnison Energy

Report Dat 9/27/2011 11:52:08 AM

On 09/13/2011, 11 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 1.4 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D27497 was assigned to the project. The lab sample IDs, client sample IDs, 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.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ

Batch ID: V7V479

- All samples were analyzed within the recommended method holding time.
- Sample(s) D27634-10MS, D27634-10MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix SO

Batch ID: V5V1038

- All samples were analyzed within the recommended method holding time.
- Sample(s) D27491-1MS, D27491-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix SO

Batch ID: OP4466

- All samples were extracted and analyzed within the recommended method holding time.
- Sample(s) D27493-5MS, D27493-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- The matrix spike (MS) and matrix spike duplicate (MSD) recovery(s) of multiple analytes are outside control limits. Outside control limits due to matrix interference. Refer to Blank Spike.
- The matrix spike (MS) recovery(s) of Naphthalene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- The RPD(s) for the MS and MSD recoveries of Acenaphthene, Anthracene, Benzo(a)anthracene, Benzo(k)fluoranthene, Chrysene, Fluoranthene, Naphthalene are outside control limits for sample OP4466-MSD. Probable cause due to sample homogeneity.
- Sample(s) OP4466-MS have surrogates outside control limits. Probable cause due to matrix interference.
- D27497-1 through D27497-4: Elevated RL due to matrix interference.

Volatiles by GC By Method SW846 8015B

Matrix SO

Batch ID: GGB743

- All samples were analyzed within the recommended method holding time.
- Sample(s) D27497-1MS, D27497-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846-8015B

Matrix SO

Batch ID: OP4473

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D27544-1MS, D27544-1MSD were used as the QC samples indicated.
- The matrix spike (MS) and matrix spike duplicate (MSD) recovery(s) of TPH-DRO (C10-C28) are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix SO

Batch ID: OP4541

- All samples were extracted and analyzed within the recommended method holding time.
- Sample(s) D27977-1MS, D27977-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010B

Matrix AQ

Batch ID: MP5765

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D27497-7AMS, D27497-7AMSD were used as the QC samples for the metals analysis.

Matrix SO

Batch ID: MP5762

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D27497-1MS, D27497-1MSD, D27497-1SDL were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery(s) of Selenium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- The serial dilution RPD(s) for Cadmium, Selenium, Silver are outside control limits for sample MP5762-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- D27497-6 for several analytes: Elevated detection limit due to dilution required for possible matrix interference.
- The serial dilution RPD(s) for Barium, Chromium, Lead, Nickel, Zinc are outside control limits for sample MP5762-SD1. Serial dilution indicates possible matrix interference.

Metals By Method SW846 6020

Matrix SO

Batch ID: MP5763

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D27497-1MS, D27497-1MSD, D27497-1SDL were used as the QC samples for the metals analysis.
- The serial dilution RPD(s) for Arsenic are outside control limits for sample MP5763-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method SW846 7471A

Matrix SO

Batch ID: MP5733

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D27410-1MS, D27410-1MSD were used as the QC samples for the metals analysis.
- The matrix spike duplicate (MSD) recovery(s) of Mercury are outside control limits. Probable cause due to matrix interference.

Wet Chemistry By Method ASTM D1498-76M

Matrix SO	Batch ID: GN11544
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- Sample(s) D27490-1DUP were used as the QC samples for the Redox Potential Vs H2 analysis.

Wet Chemistry By Method EPA 300/SW846 9056

Matrix AQ	Batch ID: GP5537
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- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D27724-2MS, D27724-2MSD were used as the QC samples for the Chloride, Sulfate, Chloride analysis.

Wet Chemistry By Method SM19 2540B M

Matrix SO	Batch ID: GN11537
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- The data for SM19 2540B M meets quality control requirements.

Wet Chemistry By Method SM20 2540C

Matrix AQ	Batch ID: GN11571
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- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D27514-1DUP were used as the QC samples for the Solids, Total Dissolved analysis.

Wet Chemistry By Method SW846 3060/7196A M

Matrix SO	Batch ID: R9751
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- The data for SW846 3060/7196A M meets quality control requirements.
- Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

Wet Chemistry By Method SW846 3060A/7196A

Matrix SO	Batch ID: M:GP13513
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- The data for SW846 3060A/7196A meets quality control requirements.
- Chromium, Hexavalent: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method USDA HANDBOOK 60

Matrix SO	Batch ID: MP5765
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- Sodium Adsorption Ratio: Calculated as: $(\text{Na meq/L}) / \sqrt{[(\text{Ca meq/L}) + (\text{Mg meq/L})/2]}$

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 DELIVERY GROUP CASE NARRATIVE

Client: Accutest Mountain States

Job No D27497

Site: WESTCOL: Gunnison Energy

Report Date 9/20/2011 2:56:10 PM

9 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 09/12/2011 and were received at Accutest on 09/13/2011 properly preserved, at 2.1 Deg. C and intact. These Samples received an Accutest job number of D27497. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Wet Chemistry By Method SW846 3060A/7196A

Matrix SO

Batch ID: GP13513

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D27611-1MS, D27611-1DUP were used as the QC samples for Chromium, Hexavalent.
- RPD(s) for Duplicate for Chromium, Hexavalent are outside control limits for sample GP13513-D1. RPD acceptable due to low duplicate and sample concentrations.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(D27497).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	HK134-SB01-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-1	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	90.0
Method:	SW846 8260B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V17486.D	1	09/14/11	DC	n/a	n/a	V5V1038
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.04 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	61	27	ug/kg	
108-88-3	Toluene	ND	120	61	ug/kg	
100-41-4	Ethylbenzene	ND	120	30	ug/kg	
1330-20-7	Xylene (total)	ND	240	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	108%		61-130%
460-00-4	4-Bromofluorobenzene	107%		53-131%
17060-07-0	1,2-Dichloroethane-D4	109%		62-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB01-0102		
Lab Sample ID:	D27497-1	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846 8270C BY SIM SW846 3546	Percent Solids:	90.0
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3G06023.D	5	09/14/11	TMB	09/14/11	OP4466	E3G217
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	37	30	ug/kg	
120-12-7	Anthracene	ND	37	33	ug/kg	
56-55-3	Benzo(a)anthracene	ND	93	48	ug/kg	
50-32-8	Benzo(a)pyrene	ND	93	67	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	93	68	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	93	41	ug/kg	
218-01-9	Chrysene	ND	93	41	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	93	68	ug/kg	
206-44-0	Fluoranthene	ND	37	37	ug/kg	
86-73-7	Fluorene	ND	37	31	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	110	100	ug/kg	
91-20-3	Naphthalene	ND	37	35	ug/kg	
129-00-0	Pyrene	ND	37	35	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		10-145%
321-60-8	2-Fluorobiphenyl	67%		10-130%
1718-51-0	Terphenyl-d14	70%		22-130%

(a) Elevated RL due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB01-0102		
Lab Sample ID:	D27497-1	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846 8015B	Percent Solids:	90.0
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB13018.D	1	09/18/11	SK	n/a	n/a	GGB743
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	12	6.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	82%		60-140%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB01-0102		Date Sampled:	09/12/11	
Lab Sample ID:	D27497-1		Date Received:	09/13/11	
Matrix:	SO - Soil		Percent Solids:	90.0	
Method:	SW846-8015B SW846 3546				
Project:	Gunnison Energy				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD10282.D	1	09/26/11	KV	09/26/11	OP4541	GFD483
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	14.3	15	9.6	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		61-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB01-0102**Lab Sample ID:** D27497-1**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 90.0**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.5	0.43	mg/kg	5	09/15/11	09/16/11 GJ	SW846 6020 ³	SW846 3050B ⁶
Barium	187	1.1	mg/kg	1	09/15/11	09/15/11 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 1.1	1.1	mg/kg	1	09/15/11	09/15/11 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	5.0	1.1	mg/kg	1	09/15/11	09/15/11 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	9.6	1.1	mg/kg	1	09/15/11	09/15/11 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	8.7	5.4	mg/kg	1	09/15/11	09/15/11 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury	< 0.10	0.10	mg/kg	1	09/14/11	09/14/11 JB	SW846 7471A ¹	SW846 7471A ⁴
Nickel	6.2	3.2	mg/kg	1	09/15/11	09/15/11 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 5.4	5.4	mg/kg	1	09/15/11	09/15/11 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 3.2	3.2	mg/kg	1	09/15/11	09/15/11 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	39.8	3.2	mg/kg	1	09/15/11	09/15/11 JM	SW846 6010B ²	SW846 3050B ⁵

(1) Instrument QC Batch: MA1822

(2) Instrument QC Batch: MA1828

(3) Instrument QC Batch: MA1833

(4) Prep QC Batch: MP5733

(5) Prep QC Batch: MP5762

(6) Prep QC Batch: MP5763

RL = Reporting Limit

Report of Analysis

Client Sample ID: HK134-SB01-0102**Lab Sample ID:** D27497-1**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 90.0**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	0.59	0.44	mg/kg	1	09/19/11 15:32	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	4.4	1.5	mg/kg	1	09/19/11 15:32	AMA	SW846 3060/7196A M
Redox Potential Vs H2	555		mv	1	09/13/11	JD	ASTM D1498-76M
Solids, Percent	90		%	1	09/13/11	SWT	SM19 2540B M
Specific Conductivity	49.9	1.0	umhos/cm	1	09/20/11	CJ	DEPT.OF AG, BOOK N9
pH	7.72		su	1	09/13/11 13:55	JD	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB01-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-1A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	90.0
Project:	Gunnison Energy		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	12.5	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	3.74	1.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	5.65	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA1828
(2) Prep QC Batch: MP5765

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB01-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-1A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	90.0
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.360		ratio	1	09/15/11 20:48	JM	USDA HANDBOOK 60

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB01-0304	Date Sampled:	09/12/11
Lab Sample ID:	D27497-2	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	86.9
Method:	SW846 8260B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V17487.D	1	09/14/11	DC	n/a	n/a	V5V1038
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	65	29	ug/kg	
108-88-3	Toluene	ND	130	65	ug/kg	
100-41-4	Ethylbenzene	ND	130	32	ug/kg	
1330-20-7	Xylene (total)	ND	260	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	109%		61-130%
460-00-4	4-Bromofluorobenzene	107%		53-131%
17060-07-0	1,2-Dichloroethane-D4	110%		62-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB01-0304	Date Sampled:	09/12/11
Lab Sample ID:	D27497-2	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	86.9
Method:	SW846 8270C BY SIM SW846 3546		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3G06024.D	2	09/14/11	TMB	09/14/11	OP4466	E3G217
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	15	12	ug/kg	
120-12-7	Anthracene	ND	15	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	38	20	ug/kg	
50-32-8	Benzo(a)pyrene	ND	38	28	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	38	28	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	38	17	ug/kg	
218-01-9	Chrysene	ND	38	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	38	28	ug/kg	
206-44-0	Fluoranthene	ND	15	15	ug/kg	
86-73-7	Fluorene	ND	15	13	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	46	42	ug/kg	
91-20-3	Naphthalene	ND	15	15	ug/kg	
129-00-0	Pyrene	ND	15	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		10-145%
321-60-8	2-Fluorobiphenyl	69%		10-130%
1718-51-0	Terphenyl-d14	71%		22-130%

(a) Elevated RL due to matrix interference.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB01-0304
Lab Sample ID: D27497-2
Matrix: SO - Soil
Method: SW846 8015B
Project: Gunnison Energy

Date Sampled: 09/12/11
Date Received: 09/13/11
Percent Solids: 86.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB13024.D	1	09/18/11	SK	n/a	n/a	GGB743
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	85%		60-140%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB01-0304
Lab Sample ID: D27497-2
Matrix: SO - Soil
Method: SW846-8015B SW846 3546
Project: Gunnison Energy

Date Sampled: 09/12/11
Date Received: 09/13/11
Percent Solids: 86.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD10283.D	1	09/26/11	KV	09/26/11	OP4541	GFD483
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	15.1	15	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	74%		61-142%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB01-0304**Lab Sample ID:** D27497-2**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 86.9**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.87	0.43	mg/kg	5	09/15/11	09/17/11 GJ	SW846 6020 ³	SW846 3050B ⁶
Barium	226	1.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 1.1	1.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	4.5	1.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	5.4	1.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	8.2	5.4	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury	< 0.10	0.10	mg/kg	1	09/14/11	09/14/11 JB	SW846 7471A ¹	SW846 7471A ⁴
Nickel	5.3	3.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 5.4	5.4	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 3.2	3.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	37.4	3.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵

(1) Instrument QC Batch: MA1822

(2) Instrument QC Batch: MA1828

(3) Instrument QC Batch: MA1833

(4) Prep QC Batch: MP5733

(5) Prep QC Batch: MP5762

(6) Prep QC Batch: MP5763

RL = Reporting Limit

Report of Analysis

Client Sample ID: HK134-SB01-0304**Lab Sample ID:** D27497-2**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 86.9**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	0.53	0.46	mg/kg	1	09/19/11 15:32	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	4.0	1.6	mg/kg	1	09/19/11 15:32	AMA	SW846 3060/7196A M
Redox Potential Vs H2	532		mv	1	09/13/11	JD	ASTM D1498-76M
Solids, Percent	86.9		%	1	09/13/11	SWT	SM19 2540B M
Specific Conductivity	33.7	1.0	umhos/cm	1	09/20/11	CJ	DEPT.OF AG, BOOK N9
pH	8.07		su	1	09/13/11 13:55	JD	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB01-0304	Date Sampled:	09/12/11
Lab Sample ID:	D27497-2A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	86.9
Project:	Gunnison Energy		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	5.88	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	2.06	1.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	4.89	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²

- (1) Instrument QC Batch: MA1828
(2) Prep QC Batch: MP5765

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB01-0304	Date Sampled:	09/12/11
Lab Sample ID:	D27497-2A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	86.9
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.442		ratio	1	09/15/11 20:55	JM	USDA HANDBOOK 60

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB06-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-3	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8260B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V17488.D	1	09/14/11	DC	n/a	n/a	V5V1038
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.06 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	62	27	ug/kg	
108-88-3	Toluene	ND	120	62	ug/kg	
100-41-4	Ethylbenzene	ND	120	31	ug/kg	
1330-20-7	Xylene (total)	ND	250	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	107%		61-130%
460-00-4	4-Bromofluorobenzene	106%		53-131%
17060-07-0	1,2-Dichloroethane-D4	110%		62-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB06-0102		
Lab Sample ID:	D27497-3	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846 8270C BY SIM SW846 3546	Percent Solids:	89.1
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3G06025.D	2	09/14/11	TMB	09/14/11	OP4466	E3G217
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	15	12	ug/kg	
120-12-7	Anthracene	ND	15	13	ug/kg	
56-55-3	Benzo(a)anthracene	ND	37	19	ug/kg	
50-32-8	Benzo(a)pyrene	ND	37	27	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	37	28	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	37	16	ug/kg	
218-01-9	Chrysene	ND	37	16	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	37	28	ug/kg	
206-44-0	Fluoranthene	ND	15	15	ug/kg	
86-73-7	Fluorene	ND	15	13	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	45	41	ug/kg	
91-20-3	Naphthalene	ND	15	14	ug/kg	
129-00-0	Pyrene	ND	15	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		10-145%
321-60-8	2-Fluorobiphenyl	67%		10-130%
1718-51-0	Terphenyl-d14	80%		22-130%

(a) Elevated RL due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB06-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-3	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8015B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB13025.D	1	09/18/11	SK	n/a	n/a	GGB743
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	12	6.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	82%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB06-0102		
Lab Sample ID:	D27497-3	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846-8015B SW846 3546	Percent Solids:	89.1
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD10284.D	1	09/26/11	KV	09/26/11	OP4541	GFD483
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	13.4	15	9.7	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	69%		61-142%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB06-0102**Lab Sample ID:** D27497-3**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 89.1**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.6	0.47	mg/kg	5	09/15/11	09/17/11 GJ	SW846 6020 ³	SW846 3050B ⁶
Barium	267	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 1.2	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	5.4	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	11.9	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	9.4	5.8	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury	< 0.11	0.11	mg/kg	1	09/14/11	09/14/11 JB	SW846 7471A ¹	SW846 7471A ⁴
Nickel	6.4	3.5	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 5.8	5.8	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 3.5	3.5	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	46.0	3.5	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵

(1) Instrument QC Batch: MA1822

(2) Instrument QC Batch: MA1828

(3) Instrument QC Batch: MA1833

(4) Prep QC Batch: MP5733

(5) Prep QC Batch: MP5762

(6) Prep QC Batch: MP5763

RL = Reporting Limit

Report of Analysis

Client Sample ID: HK134-SB06-0102**Lab Sample ID:** D27497-3**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 89.1

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 0.44	0.44	mg/kg	1	09/19/11 15:32	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	5.1	1.6	mg/kg	1	09/19/11 15:32	AMA	SW846 3060/7196A M
Redox Potential Vs H2	556		mv	1	09/13/11	JD	ASTM D1498-76M
Solids, Percent	89.1		%	1	09/13/11	SWT	SM19 2540B M
Specific Conductivity	56.2	1.0	umhos/cm	1	09/20/11	CJ	DEPT.OF AG, BOOK N9
pH	7.60		su	1	09/13/11 13:55	JD	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB06-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-3A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	89.1
Project:	Gunnison Energy		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	10.5	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	3.05	1.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	7.80	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA1828
(2) Prep QC Batch: MP5765

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB06-0102		
Lab Sample ID:	D27497-3A	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
		Percent Solids:	89.1
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.545		ratio	1	09/15/11 21:02	JM	USDA HANDBOOK 60

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID: HK134-SB06-0304
Lab Sample ID: D27497-4
Matrix: SO - Soil
Method: SW846 8260B
Project: Gunnison Energy

Date Sampled: 09/12/11
Date Received: 09/13/11
Percent Solids: 87.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V17489.D	1	09/14/11	DC	n/a	n/a	V5V1038
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.25 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	62	27	ug/kg	
108-88-3	Toluene	ND	120	62	ug/kg	
100-41-4	Ethylbenzene	ND	120	31	ug/kg	
1330-20-7	Xylene (total)	ND	250	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	110%		61-130%
460-00-4	4-Bromofluorobenzene	107%		53-131%
17060-07-0	1,2-Dichloroethane-D4	110%		62-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB06-0304

Lab Sample ID: D27497-4

Date Sampled: 09/12/11

Matrix: SO - Soil

Date Received: 09/13/11

Method: SW846 8270C BY SIM SW846 3546

Percent Solids: 87.2

Project: Gunnison Energy

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3G06026.D	2	09/14/11	TMB	09/14/11	OP4466	E3G217
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	15	12	ug/kg	
120-12-7	Anthracene	ND	15	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	38	20	ug/kg	
50-32-8	Benzo(a)pyrene	ND	38	27	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	38	28	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	38	17	ug/kg	
218-01-9	Chrysene	ND	38	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	38	28	ug/kg	
206-44-0	Fluoranthene	ND	15	15	ug/kg	
86-73-7	Fluorene	ND	15	13	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	46	42	ug/kg	
91-20-3	Naphthalene	ND	15	15	ug/kg	
129-00-0	Pyrene	ND	15	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		10-145%
321-60-8	2-Fluorobiphenyl	68%		10-130%
1718-51-0	Terphenyl-d14	76%		22-130%

(a) Elevated RL due to matrix interference.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: HK134-SB06-0304
Lab Sample ID: D27497-4
Matrix: SO - Soil
Method: SW846 8015B
Project: Gunnison Energy

Date Sampled: 09/12/11
Date Received: 09/13/11
Percent Solids: 87.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB13026.D	1	09/18/11	SK	n/a	n/a	GGB743
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.2 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	12	6.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	79%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB06-0304		
Lab Sample ID:	D27497-4	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846-8015B SW846 3546	Percent Solids:	87.2
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD10082.D	1	09/16/11	KV	09/15/11	OP4473	GFD465
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	19.6	15	9.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	70%		61-142%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB06-0304**Lab Sample ID:** D27497-4**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 87.2**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.9	0.45	mg/kg	5	09/15/11	09/17/11 GJ	SW846 6020 ³	SW846 3050B ⁶
Barium	269	1.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 1.1	1.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	6.5	1.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	11.5	1.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	10.3	5.6	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury	< 0.11	0.11	mg/kg	1	09/14/11	09/14/11 JB	SW846 7471A ¹	SW846 7471A ⁴
Nickel	7.1	3.3	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 5.6	5.6	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 3.3	3.3	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	49.1	3.3	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵

(1) Instrument QC Batch: MA1822

(2) Instrument QC Batch: MA1828

(3) Instrument QC Batch: MA1833

(4) Prep QC Batch: MP5733

(5) Prep QC Batch: MP5762

(6) Prep QC Batch: MP5763

RL = Reporting Limit

Report of Analysis

Client Sample ID: HK134-SB06-0304**Lab Sample ID:** D27497-4**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 87.2**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	0.71	0.45	mg/kg	1	09/19/11 15:32	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	5.8	1.6	mg/kg	1	09/19/11 15:32	AMA	SW846 3060/7196A M
Redox Potential Vs H2	518		mv	1	09/13/11	JD	ASTM D1498-76M
Solids, Percent	87.2		%	1	09/13/11	SWT	SM19 2540B M
Specific Conductivity	52.3	1.0	umhos/cm	1	09/20/11	CJ	DEPT.OF AG, BOOK N9
pH	7.85		su	1	09/13/11 13:55	JD	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB06-0304	Date Sampled:	09/12/11
Lab Sample ID:	D27497-4A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	87.2
Project:	Gunnison Energy		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	8.54	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	2.35	1.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	7.72	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA1828
(2) Prep QC Batch: MP5765

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB06-0304	Date Sampled:	09/12/11
Lab Sample ID:	D27497-4A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	87.2
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	0.603		ratio	1	09/15/11 21:09	JM	USDA HANDBOOK 60

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB04-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-5	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	82.3
Method:	SW846 8260B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V17490.D	1	09/14/11	DC	n/a	n/a	V5V1038
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.09 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	70	31	ug/kg	
108-88-3	Toluene	ND	140	70	ug/kg	
100-41-4	Ethylbenzene	ND	140	35	ug/kg	
1330-20-7	Xylene (total)	ND	280	140	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	109%		61-130%
460-00-4	4-Bromofluorobenzene	108%		53-131%
17060-07-0	1,2-Dichloroethane-D4	110%		62-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB04-0102		
Lab Sample ID:	D27497-5	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846 8270C BY SIM SW846 3546	Percent Solids:	82.3
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G06027.D	1	09/14/11	TMB	09/14/11	OP4466	E3G217
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	8.1	6.5	ug/kg	
120-12-7	Anthracene	ND	8.1	7.3	ug/kg	
56-55-3	Benzo(a)anthracene	ND	20	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	20	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	20	15	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	20	8.9	ug/kg	
218-01-9	Chrysene	ND	20	8.9	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	20	15	ug/kg	
206-44-0	Fluoranthene	ND	8.1	8.1	ug/kg	
86-73-7	Fluorene	ND	8.1	6.9	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	24	22	ug/kg	
91-20-3	Naphthalene	ND	8.1	7.7	ug/kg	
129-00-0	Pyrene	ND	8.1	7.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		10-145%
321-60-8	2-Fluorobiphenyl	70%		10-130%
1718-51-0	Terphenyl-d14	79%		22-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB04-0102
Lab Sample ID: D27497-5
Matrix: SO - Soil
Method: SW846 8015B
Project: Gunnison Energy

Date Sampled: 09/12/11
Date Received: 09/13/11
Percent Solids: 82.3

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB13027.D	1	09/18/11	SK	n/a	n/a	GGB743
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	14	7.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	87%		60-140%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB04-0102		Date Sampled:	09/12/11
Lab Sample ID:	D27497-5		Date Received:	09/13/11
Matrix:	SO - Soil		Percent Solids:	82.3
Method:	SW846-8015B SW846 3546			
Project:	Gunnison Energy			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD10083.D	1	09/16/11	KV	09/15/11	OP4473	GFD465
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	15.3	16	11	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	70%		61-142%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB04-0102

Lab Sample ID: D27497-5

Matrix: SO - Soil

Project: Gunnison Energy

Date Sampled: 09/12/11

Date Received: 09/13/11

Percent Solids: 82.3

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.49	0.49	mg/kg	5	09/15/11	09/17/11 GJ	SW846 6020 ³	SW846 3050B ⁶
Barium	182	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 1.2	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	< 1.2	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	28.0	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	9.1	6.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury	< 0.12	0.12	mg/kg	1	09/14/11	09/14/11 JB	SW846 7471A ¹	SW846 7471A ⁴
Nickel	< 3.6	3.6	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 6.1	6.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 3.6	3.6	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	25.5	3.6	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵

(1) Instrument QC Batch: MA1822

(2) Instrument QC Batch: MA1828

(3) Instrument QC Batch: MA1833

(4) Prep QC Batch: MP5733

(5) Prep QC Batch: MP5762

(6) Prep QC Batch: MP5763

RL = Reporting Limit

Report of Analysis

Client Sample ID: HK134-SB04-0102**Lab Sample ID:** D27497-5**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 82.3**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 0.48	0.48	mg/kg	1	09/19/11 15:32	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	< 1.7	1.7	mg/kg	1	09/19/11 15:32	AMA	SW846 3060/7196A M
Redox Potential Vs H2	519		mv	1	09/13/11	JD	ASTM D1498-76M
Solids, Percent	82.3		%	1	09/13/11	SWT	SM19 2540B M
Specific Conductivity	2790	1.0	umhos/cm	1	09/20/11	CJ	DEPT.OF AG, BOOK N9
pH	7.71		su	1	09/13/11 13:55	JD	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB04-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-5A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	82.3
Project:	Gunnison Energy		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	166	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	13.1	1.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	450	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA1828
(2) Prep QC Batch: MP5765

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB04-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-5A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	82.3
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	9.04		ratio	1	09/15/11 21:16	JM	USDA HANDBOOK 60

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB04-0203	Date Sampled:	09/12/11
Lab Sample ID:	D27497-6	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	82.8
Method:	SW846 8260B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V17491.D	1	09/14/11	DC	n/a	n/a	V5V1038
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.04 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	70	31	ug/kg	
108-88-3	Toluene	ND	140	70	ug/kg	
100-41-4	Ethylbenzene	ND	140	35	ug/kg	
1330-20-7	Xylene (total)	ND	280	140	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	109%		61-130%
460-00-4	4-Bromofluorobenzene	107%		53-131%
17060-07-0	1,2-Dichloroethane-D4	111%		62-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB04-0203		
Lab Sample ID:	D27497-6	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846 8270C BY SIM SW846 3546	Percent Solids:	82.8
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G06058.D	1	09/15/11	TMB	09/14/11	OP4466	E3G218
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	8.0	6.4	ug/kg	
120-12-7	Anthracene	ND	8.0	7.2	ug/kg	
56-55-3	Benzo(a)anthracene	ND	20	10	ug/kg	
50-32-8	Benzo(a)pyrene	ND	20	14	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	20	15	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	20	8.9	ug/kg	
218-01-9	Chrysene	ND	20	8.9	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	20	15	ug/kg	
206-44-0	Fluoranthene	ND	8.0	8.0	ug/kg	
86-73-7	Fluorene	ND	8.0	6.8	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	24	22	ug/kg	
91-20-3	Naphthalene	ND	8.0	7.6	ug/kg	
129-00-0	Pyrene	ND	8.0	7.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	88%		10-145%
321-60-8	2-Fluorobiphenyl	79%		10-130%
1718-51-0	Terphenyl-d14	92%		22-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB04-0203	Date Sampled:	09/12/11
Lab Sample ID:	D27497-6	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	82.8
Method:	SW846 8015B		
Project:	Gunnison Energy		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB13028.D	1	09/19/11	SK	n/a	n/a	GGB743
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	14	7.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	88%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB04-0203		Date Sampled:	09/12/11
Lab Sample ID:	D27497-6		Date Received:	09/13/11
Matrix:	SO - Soil		Percent Solids:	82.8
Method:	SW846-8015B SW846 3546			
Project:	Gunnison Energy			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD10084.D	1	09/16/11	KV	09/15/11	OP4473	GFD465
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	12.8	16	10	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	74%		61-142%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB04-0203**Lab Sample ID:** D27497-6**Date Sampled:** 09/12/11**Matrix:** SO - Soil**Date Received:** 09/13/11**Percent Solids:** 82.8**Project:** Gunnison Energy**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.63	0.46	mg/kg	5	09/15/11	09/17/11 GJ	SW846 6020 ³	SW846 3050B ⁶
Barium	241	5.8	mg/kg	5	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium ^a	< 5.8	5.8	mg/kg	5	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium ^a	< 5.8	5.8	mg/kg	5	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	19.7	5.8	mg/kg	5	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Lead ^a	< 29	29	mg/kg	5	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury	< 0.12	0.12	mg/kg	1	09/14/11	09/14/11 JB	SW846 7471A ¹	SW846 7471A ⁴
Nickel ^a	< 17	17	mg/kg	5	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium ^a	< 29	29	mg/kg	5	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Silver ^a	< 17	17	mg/kg	5	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	42.7	17	mg/kg	5	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵

(1) Instrument QC Batch: MA1822

(2) Instrument QC Batch: MA1829

(3) Instrument QC Batch: MA1833

(4) Prep QC Batch: MP5733

(5) Prep QC Batch: MP5762

(6) Prep QC Batch: MP5763

(a) Elevated detection limit due to dilution required for possible matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HK134-SB04-0203**Lab Sample ID:** D27497-6**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 82.8**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 0.48	0.48	mg/kg	1	09/19/11 15:32	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	< 6.3	6.3	mg/kg	1	09/19/11 15:32	AMA	SW846 3060/7196A M
Redox Potential Vs H2	479		mv	1	09/13/11	JD	ASTM D1498-76M
Solids, Percent	82.8		%	1	09/13/11	SWT	SM19 2540B M
Specific Conductivity	1310	1.0	umhos/cm	1	09/20/11	CJ	DEPT.OF AG, BOOK N9
pH	8.72		su	1	09/13/11 13:55	JD	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB04-0203	Date Sampled:	09/12/11
Lab Sample ID:	D27497-6A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	82.8
Project:	Gunnison Energy		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	49.0	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	3.83	1.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	241	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA1828
(2) Prep QC Batch: MP5765

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB04-0203	Date Sampled:	09/12/11
Lab Sample ID:	D27497-6A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	82.8
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	8.91		ratio	1	09/15/11 21:23	JM	USDA HANDBOOK 60

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB05-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-7	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	79.5
Method:	SW846 8260B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V17492.D	1	09/14/11	DC	n/a	n/a	V5V1038
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.01 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	76	33	ug/kg	
108-88-3	Toluene	ND	150	76	ug/kg	
100-41-4	Ethylbenzene	ND	150	38	ug/kg	
1330-20-7	Xylene (total)	ND	300	150	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	110%		61-130%
460-00-4	4-Bromofluorobenzene	108%		53-131%
17060-07-0	1,2-Dichloroethane-D4	115%		62-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB05-0102		
Lab Sample ID:	D27497-7	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846 8270C BY SIM SW846 3546	Percent Solids:	79.5
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G06059.D	1	09/15/11	TMB	09/14/11	OP4466	E3G218
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	8.4	6.7	ug/kg	
120-12-7	Anthracene	ND	8.4	7.5	ug/kg	
56-55-3	Benzo(a)anthracene	ND	21	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	21	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	21	16	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	21	9.2	ug/kg	
218-01-9	Chrysene	ND	21	9.2	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	21	16	ug/kg	
206-44-0	Fluoranthene	ND	8.4	8.4	ug/kg	
86-73-7	Fluorene	ND	8.4	7.1	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	25	23	ug/kg	
91-20-3	Naphthalene	ND	8.4	8.0	ug/kg	
129-00-0	Pyrene	ND	8.4	8.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	88%		10-145%
321-60-8	2-Fluorobiphenyl	74%		10-130%
1718-51-0	Terphenyl-d14	100%		22-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3.13

3

Client Sample ID:	HK134-SB05-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-7	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	79.5
Method:	SW846 8015B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB13031.D	1	09/19/11	SK	n/a	n/a	GGB743
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	15	7.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	83%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB05-0102		Date Sampled:	09/12/11
Lab Sample ID:	D27497-7		Date Received:	09/13/11
Matrix:	SO - Soil		Percent Solids:	79.5
Method:	SW846-8015B SW846 3546			
Project:	Gunnison Energy			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD10085.D	1	09/16/11	KV	09/15/11	OP4473	GFD465
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	12.7	17	11	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	79%		61-142%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB05-0102**Lab Sample ID:** D27497-7**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 79.5**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.50	0.50	mg/kg	5	09/15/11	09/17/11 GJ	SW846 6020 ³	SW846 3050B ⁶
Barium	204	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 1.2	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	< 1.2	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	23.2	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	7.4	6.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury	< 0.12	0.12	mg/kg	1	09/14/11	09/14/11 JB	SW846 7471A ¹	SW846 7471A ⁴
Nickel	< 3.7	3.7	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 6.2	6.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 3.7	3.7	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	22.9	3.7	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵

(1) Instrument QC Batch: MA1822

(2) Instrument QC Batch: MA1828

(3) Instrument QC Batch: MA1833

(4) Prep QC Batch: MP5733

(5) Prep QC Batch: MP5762

(6) Prep QC Batch: MP5763

RL = Reporting Limit

Report of Analysis

Client Sample ID: HK134-SB05-0102**Lab Sample ID:** D27497-7**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 79.5**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 0.50	0.50	mg/kg	1	09/19/11 15:32	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	< 1.7	1.7	mg/kg	1	09/19/11 15:32	AMA	SW846 3060/7196A M
Redox Potential Vs H2	467		mv	1	09/13/11	JD	ASTM D1498-76M
Solids, Percent	79.5		%	1	09/13/11	SWT	SM19 2540B M
Specific Conductivity	2430	1.0	umhos/cm	1	09/20/11	CJ	DEPT.OF AG, BOOK N9
pH	8.86		su	1	09/13/11 13:55	JD	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB05-0102		
Lab Sample ID:	D27497-7A	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
		Percent Solids:	79.5
Project:	Gunnison Energy		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	85.8	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	6.37	1.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	443	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²

- (1) Instrument QC Batch: MA1828
(2) Prep QC Batch: MP5765

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB05-0102	Date Sampled:	09/12/11
Lab Sample ID:	D27497-7A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	79.5
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	12.4		ratio	1	09/15/11 20:28	JM	USDA HANDBOOK 60

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB05-0203	Date Sampled:	09/12/11
Lab Sample ID:	D27497-8	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	84.5
Method:	SW846 8260B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V17493.D	1	09/14/11	DC	n/a	n/a	V5V1038
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	68	30	ug/kg	
108-88-3	Toluene	ND	140	68	ug/kg	
100-41-4	Ethylbenzene	ND	140	34	ug/kg	
1330-20-7	Xylene (total)	ND	270	140	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	108%		61-130%
460-00-4	4-Bromofluorobenzene	105%		53-131%
17060-07-0	1,2-Dichloroethane-D4	110%		62-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB05-0203		
Lab Sample ID:	D27497-8	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846 8270C BY SIM SW846 3546	Percent Solids:	84.5
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G06060.D	1	09/15/11	TMB	09/14/11	OP4466	E3G218
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	7.9	6.3	ug/kg	
120-12-7	Anthracene	ND	7.9	7.1	ug/kg	
56-55-3	Benzo(a)anthracene	ND	20	10	ug/kg	
50-32-8	Benzo(a)pyrene	ND	20	14	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	20	15	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	20	8.7	ug/kg	
218-01-9	Chrysene	ND	20	8.7	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	20	15	ug/kg	
206-44-0	Fluoranthene	ND	7.9	7.9	ug/kg	
86-73-7	Fluorene	ND	7.9	6.7	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	24	22	ug/kg	
91-20-3	Naphthalene	ND	7.9	7.5	ug/kg	
129-00-0	Pyrene	ND	7.9	7.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		10-145%
321-60-8	2-Fluorobiphenyl	78%		10-130%
1718-51-0	Terphenyl-d14	89%		22-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB05-0203	Date Sampled:	09/12/11
Lab Sample ID:	D27497-8	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	84.5
Method:	SW846 8015B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB13032.D	1	09/19/11	SK	n/a	n/a	GGB743
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	14	6.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	88%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB05-0203		
Lab Sample ID:	D27497-8	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846-8015B SW846 3546	Percent Solids:	84.5
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD10086.D	1	09/16/11	KV	09/15/11	OP4473	GFD465
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	11.0	16	10	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	75%		61-142%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB05-0203**Lab Sample ID:** D27497-8**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 84.5**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.47	0.47	mg/kg	5	09/15/11	09/17/11 GJ	SW846 6020 ⁴	SW846 3050B ⁷
Barium	304	5.9	mg/kg	5	09/15/11	09/16/11 JM	SW846 6010B ³	SW846 3050B ⁶
Cadmium	< 1.2	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁶
Chromium	< 1.2	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁶
Copper	18.8	1.2	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁶
Lead	6.1	5.9	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁶
Mercury	< 0.11	0.11	mg/kg	1	09/14/11	09/14/11 JB	SW846 7471A ¹	SW846 7471A ⁵
Nickel	< 3.5	3.5	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁶
Selenium	< 5.9	5.9	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁶
Silver	< 3.5	3.5	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁶
Zinc	21.5	3.5	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁶

(1) Instrument QC Batch: MA1822

(2) Instrument QC Batch: MA1828

(3) Instrument QC Batch: MA1829

(4) Instrument QC Batch: MA1833

(5) Prep QC Batch: MP5733

(6) Prep QC Batch: MP5762

(7) Prep QC Batch: MP5763

RL = Reporting Limit

Report of Analysis

Client Sample ID: HK134-SB05-0203**Lab Sample ID:** D27497-8**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 84.5**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 0.47	0.47	mg/kg	1	09/19/11 15:49	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	< 1.7	1.7	mg/kg	1	09/19/11 15:49	AMA	SW846 3060/7196A M
Redox Potential Vs H2	479		mv	1	09/13/11	JD	ASTM D1498-76M
Solids, Percent	84.5		%	1	09/13/11	SWT	SM19 2540B M
Specific Conductivity	1260	1.0	umhos/cm	1	09/20/11	CJ	DEPT.OF AG, BOOK N9
pH	8.71		su	1	09/13/11 13:55	JD	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB05-0203		
Lab Sample ID:	D27497-8A	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
		Percent Solids:	84.5
Project:	Gunnison Energy		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	44.4	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	3.36	1.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	226	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA1828
(2) Prep QC Batch: MP5765

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB05-0203	Date Sampled:	09/12/11
Lab Sample ID:	D27497-8A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	84.5
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	8.80		ratio	1	09/15/11 21:49	JM	USDA HANDBOOK 60

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB02-0911	Date Sampled:	09/12/11
Lab Sample ID:	D27497-9	Date Received:	09/13/11
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V09084.D	1	09/16/11	BR	n/a	n/a	V7V479
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	9.1	1.0	0.25	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	10.1	2.0	0.50	ug/l	
1330-20-7	Xylene (total)	14.1	4.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	108%		67-131%
2037-26-5	Toluene-D8	92%		65-130%
460-00-4	4-Bromofluorobenzene	83%		65-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB02-0911	Date Sampled:	09/12/11
Lab Sample ID:	D27497-9	Date Received:	09/13/11
Matrix:	AQ - Water	Percent Solids:	n/a
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1440	50	mg/l	100	09/26/11 14:48	GH	EPA 300/SW846 9056
Solids, Total Dissolved	3000	10	mg/l	1	09/15/11	JK	SM20 2540C
Sulfate	71.9	2.5	mg/l	5	09/26/11 11:41	GH	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB03-0001	Date Sampled:	09/12/11
Lab Sample ID:	D27497-10	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	72.2
Method:	SW846 8260B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V17494.D	1	09/14/11	DC	n/a	n/a	V5V1038
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.17 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	86	38	ug/kg	
108-88-3	Toluene	ND	170	86	ug/kg	
100-41-4	Ethylbenzene	ND	170	43	ug/kg	
1330-20-7	Xylene (total)	ND	340	170	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	109%		61-130%
460-00-4	4-Bromofluorobenzene	105%		53-131%
17060-07-0	1,2-Dichloroethane-D4	110%		62-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB03-0001		
Lab Sample ID:	D27497-10	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846 8270C BY SIM SW846 3546	Percent Solids:	72.2
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G06061.D	1	09/16/11	TMB	09/14/11	OP4466	E3G218
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	9.2	7.4	ug/kg	
120-12-7	Anthracene	ND	9.2	8.3	ug/kg	
56-55-3	Benzo(a)anthracene	ND	23	12	ug/kg	
50-32-8	Benzo(a)pyrene	ND	23	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	23	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	23	10	ug/kg	
218-01-9	Chrysene	ND	23	10	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	23	17	ug/kg	
206-44-0	Fluoranthene	ND	9.2	9.2	ug/kg	
86-73-7	Fluorene	ND	9.2	7.8	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	28	25	ug/kg	
91-20-3	Naphthalene	ND	9.2	8.8	ug/kg	
129-00-0	Pyrene	ND	9.2	8.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		10-145%
321-60-8	2-Fluorobiphenyl	66%		10-130%
1718-51-0	Terphenyl-d14	87%		22-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB03-0001	Date Sampled:	09/12/11
Lab Sample ID:	D27497-10	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	72.2
Method:	SW846 8015B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB13033.D	1	09/19/11	SK	n/a	n/a	GGB743
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.2 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	17	8.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	85%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB03-0001		
Lab Sample ID:	D27497-10	Date Sampled:	09/12/11
Matrix:	SO - Soil	Date Received:	09/13/11
Method:	SW846-8015B SW846 3546	Percent Solids:	72.2
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD10087.D	1	09/16/11	KV	09/15/11	OP4473	GFD465
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	12.3	18	12	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	71%		61-142%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HK134-SB03-0001**Lab Sample ID:** D27497-10**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 72.2**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.57	0.57	mg/kg	5	09/15/11	09/17/11 GJ	SW846 6020 ³	SW846 3050B ⁶
Barium	221	1.4	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Cadmium	< 1.4	1.4	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	2.9	1.4	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	14.0	1.4	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	7.5	7.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury	< 0.14	0.14	mg/kg	1	09/14/11	09/14/11 JB	SW846 7471A ¹	SW846 7471A ⁴
Nickel	< 4.3	4.3	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 7.1	7.1	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 4.3	4.3	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	33.7	4.3	mg/kg	1	09/15/11	09/16/11 JM	SW846 6010B ²	SW846 3050B ⁵

(1) Instrument QC Batch: MA1822

(2) Instrument QC Batch: MA1828

(3) Instrument QC Batch: MA1833

(4) Prep QC Batch: MP5733

(5) Prep QC Batch: MP5762

(6) Prep QC Batch: MP5763

RL = Reporting Limit

Report of Analysis

Client Sample ID: HK134-SB03-0001**Lab Sample ID:** D27497-10**Matrix:** SO - Soil**Project:** Gunnison Energy**Date Sampled:** 09/12/11**Date Received:** 09/13/11**Percent Solids:** 72.2**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 0.54	0.54	mg/kg	1	09/19/11 15:49	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	2.4	1.9	mg/kg	1	09/19/11 15:49	AMA	SW846 3060/7196A M
Redox Potential Vs H2	486		mv	1	09/13/11	JD	ASTM D1498-76M
Solids, Percent	72.2		%	1	09/13/11	SWT	SM19 2540B M
Specific Conductivity	2020	1.0	umhos/cm	1	09/20/11	CJ	DEPT.OF AG, BOOK N9
pH	8.21		su	1	09/13/11 13:55	JD	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB03-0001	Date Sampled:	09/12/11
Lab Sample ID:	D27497-10A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	72.2
Project:	Gunnison Energy		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	82.4	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Magnesium	10.1	1.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²
Sodium	369	2.0	mg/l	1	09/15/11	09/15/11 JM	SW846 6010B ¹	EPA 200.7 ²

(1) Instrument QC Batch: MA1828
(2) Prep QC Batch: MP5765

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB03-0001	Date Sampled:	09/12/11
Lab Sample ID:	D27497-10A	Date Received:	09/13/11
Matrix:	SO - Soil	Percent Solids:	72.2
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	10.2		ratio	1	09/15/11 21:56	JM	USDA HANDBOOK 60

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HK134-SB03-0911	Date Sampled:	09/12/11
Lab Sample ID:	D27497-11	Date Received:	09/13/11
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V09085.D	1	09/16/11	BR	n/a	n/a	V7V479
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	10.1	1.0	0.25	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	14.9	2.0	0.50	ug/l	
1330-20-7	Xylene (total)	15.5	4.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	105%		67-131%
2037-26-5	Toluene-D8	93%		65-130%
460-00-4	4-Bromofluorobenzene	84%		65-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-SB03-0911	Date Sampled:	09/12/11
Lab Sample ID:	D27497-11	Date Received:	09/13/11
Matrix:	AQ - Water	Percent Solids:	n/a
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1740	50	mg/l	100	09/26/11 14:59	GH	EPA 300/SW846 9056
Solids, Total Dissolved	3350	10	mg/l	1	09/15/11	JK	SM20 2540C
Sulfate	71.9	2.5	mg/l	5	09/26/11 11:52	GH	EPA 300/SW846 9056

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Mountain States
4036 Youngfield Street Wheat Ridge, Co 80033
TEL. 303-425-6021 877-737-4521
FAX 303-425-6021

[illegible]

D27497: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D27497

Client: WESTON

Immediate Client Services Action Required: No

Date / Time Received: 9/13/2011 8:50:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: GUNNISON

Airbill #'s: HD

Cooler Security	Y	or	N		Y	or	N
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"/>

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

Quality Control Preservation	Y	or	N	N/A
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"/>

Sample Integrity - Documentation	Y	or	N
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"/>

Sample Integrity - Condition	Y	or	N
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

Sample Integrity - Instructions	Y	or	N	N/A
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

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V1038-MB	5V17481.D	1	09/14/11	DC	n/a	n/a	V5V1038

The QC reported here applies to the following samples:

Method: SW846 8260B

D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	50	22	ug/kg	
100-41-4	Ethylbenzene	ND	100	25	ug/kg	
108-88-3	Toluene	ND	100	50	ug/kg	
1330-20-7	Xylene (total)	ND	200	100	ug/kg	

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	111% 61-130%
460-00-4	4-Bromofluorobenzene	99% 53-131%
17060-07-0	1,2-Dichloroethane-D4	110% 62-130%

Method Blank Summary

Page 1 of 1

Job Number: D27497

Account: WESTCOL Weston Solutions, Inc.

Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V479-MB	7V09075.D	1	09/16/11	BR	n/a	n/a	V7V479

The QC reported here applies to the following samples:

Method: SW846 8260B

D27497-9, D27497-11

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.50	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
1330-20-7	Xylene (total)	ND	4.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	114% 67-131%
2037-26-5	Toluene-D8	93% 65-130%
460-00-4	4-Bromofluorobenzene	83% 65-130%

Blank Spike Summary

Page 1 of 1

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V1038-BS	5V17482.D	1	09/14/11	DC	n/a	n/a	V5V1038

The QC reported here applies to the following samples:

Method: SW846 8260B

D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	51.9	104	70-130
100-41-4	Ethylbenzene	50	50.3	101	70-130
108-88-3	Toluene	50	52.4	105	70-130
1330-20-7	Xylene (total)	150	155	103	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	110%	61-130%
460-00-4	4-Bromofluorobenzene	106%	53-131%
17060-07-0	1,2-Dichloroethane-D4	108%	62-130%

Blank Spike Summary

Page 1 of 1

Job Number: D27497

Account: WESTCOL Weston Solutions, Inc.

Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V479-BS	7V09076.D	1	09/16/11	BR	n/a	n/a	V7V479

The QC reported here applies to the following samples:

Method: SW846 8260B

D27497-9, D27497-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	49.1	98	70-130
100-41-4	Ethylbenzene	50	48.2	96	70-130
108-88-3	Toluene	50	52.2	104	70-130
1330-20-7	Xylene (total)	150	142	95	56-138

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	113%	67-131%
2037-26-5	Toluene-D8	114%	65-130%
460-00-4	4-Bromofluorobenzene	108%	65-130%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D27491-1MS	5V17484.D	1	09/14/11	DC	n/a	n/a	V5V1038
D27491-1MSD	5V17485.D	1	09/14/11	DC	n/a	n/a	V5V1038
D27491-1	5V17483.D	1	09/14/11	DC	n/a	n/a	V5V1038

The QC reported here applies to the following samples:

Method: SW846 8260B

D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	D27491-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	945		3260	4660	114	4740	117	2	70-134/30
100-41-4	Ethylbenzene	236		3260	3760	108	3890	112	3	70-137/30
108-88-3	Toluene	2440		3260	6010	110	6120	113	2	70-130/30
1330-20-7	Xylene (total)	2420		9770	13400	112	13800	117	3	61-131/30

CAS No.	Surrogate Recoveries	MS	MSD	D27491-1	Limits
2037-26-5	Toluene-D8	105%	108%	107%	61-130%
460-00-4	4-Bromofluorobenzene	115%	117%	108%	53-131%
17060-07-0	1,2-Dichloroethane-D4	109%	110%	112%	62-130%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D27497

Account: WESTCOL Weston Solutions, Inc.

Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D27634-10MS	7V09077.D	5	09/16/11	BR	n/a	n/a	V7V479
D27634-10MSD	7V09078.D	5	09/16/11	BR	n/a	n/a	V7V479
D27634-10	7V09081.D	1	09/16/11	BR	n/a	n/a	V7V479

The QC reported here applies to the following samples:

Method: SW846 8260B

D27497-9, D27497-11

CAS No.	Compound	D27634-10 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	250	245	98	254	102	4	61-133/30
100-41-4	Ethylbenzene	ND	250	243	97	248	99	2	70-130/30
108-88-3	Toluene	ND	250	261	104	261	104	0	70-130/30
1330-20-7	Xylene (total)	ND	750	730	97	739	99	1	56-138/30

CAS No.	Surrogate Recoveries	MS	MSD	D27634-10	Limits
17060-07-0	1,2-Dichloroethane-D4	109%	105%	103%	67-131%
2037-26-5	Toluene-D8	112%	110%	93%	65-130%
460-00-4	4-Bromofluorobenzene	108%	106%	83%	65-130%

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4466-MB	3G06014.D	1	09/14/11	TMB	09/14/11	OP4466	E3G217

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	6.7	5.3	ug/kg	
120-12-7	Anthracene	ND	6.7	6.0	ug/kg	
56-55-3	Benzo(a)anthracene	ND	17	8.7	ug/kg	
50-32-8	Benzo(a)pyrene	ND	17	12	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	17	12	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	17	7.3	ug/kg	
218-01-9	Chrysene	ND	17	7.3	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	17	12	ug/kg	
206-44-0	Fluoranthene	ND	6.7	6.7	ug/kg	
86-73-7	Fluorene	ND	6.7	5.7	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	20	18	ug/kg	
91-20-3	Naphthalene	ND	6.7	6.3	ug/kg	
129-00-0	Pyrene	ND	6.7	6.3	ug/kg	

CAS No.	Surrogate Recoveries	Limits
4165-60-0	Nitrobenzene-d5	111% 10-145%
321-60-8	2-Fluorobiphenyl	97% 10-130%
1718-51-0	Terphenyl-d14	114% 22-130%

Blank Spike Summary

Page 1 of 1

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4466-BS	3G06015.D	1	09/14/11	TMB	09/14/11	OP4466	E3G217

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	83.3	64.0	77	34-130
120-12-7	Anthracene	83.3	71.4	86	35-130
56-55-3	Benzo(a)anthracene	83.3	68.9	83	36-130
50-32-8	Benzo(a)pyrene	83.3	67.5	81	36-130
205-99-2	Benzo(b)fluoranthene	83.3	71.4	86	35-130
207-08-9	Benzo(k)fluoranthene	83.3	67.5	81	37-130
218-01-9	Chrysene	83.3	69.0	83	40-130
53-70-3	Dibenzo(a,h)anthracene	83.3	66.8	80	32-130
206-44-0	Fluoranthene	83.3	66.4	80	38-130
86-73-7	Fluorene	83.3	66.6	80	35-130
193-39-5	Indeno(1,2,3-cd)pyrene	83.3	70.5	85	28-130
91-20-3	Naphthalene	83.3	66.5	80	35-130
129-00-0	Pyrene	83.3	75.4	90	37-130

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	95%	10-145%
321-60-8	2-Fluorobiphenyl	85%	10-130%
1718-51-0	Terphenyl-d14	105%	22-130%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4466-MS ^a	3G06018.D	5	09/14/11	TMB	09/14/11	OP4466	E3G217
OP4466-MSD ^a	3G06019.D	5	09/14/11	TMB	09/14/11	OP4466	E3G217
D27493-5	3G06017.D	5	09/14/11	TMB	09/14/11	OP4466	E3G217

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	D27493-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		98.2	71.0	72	97.5	99	31*	10-155/30
120-12-7	Anthracene	ND		98.2	44.1	45	61.6	63	33*	10-155/30
56-55-3	Benzo(a)anthracene	ND		98.2	58.0	59	80.4	82	32*	10-175/30
50-32-8	Benzo(a)pyrene	ND		98.2	ND	0*	ND	0*	nc	10-164/30
205-99-2	Benzo(b)fluoranthene	ND		98.2	ND	0*	ND	0*	nc	10-165/30
207-08-9	Benzo(k)fluoranthene	ND		98.2	ND	0*	66.9	68	200*	10-178/30
218-01-9	Chrysene	ND		98.2	59.6	61	83.1	85	33*	10-147/30
53-70-3	Dibenzo(a,h)anthracene	ND		98.2	ND	0*	ND	0*	nc	10-144/30
206-44-0	Fluoranthene	ND		98.2	65.9	67	97.8	100	39*	10-207/30
86-73-7	Fluorene	160		98.2	129	-32*	175	15	30	10-163/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND		98.2	ND	0*	ND	0*	nc	10-180/30
91-20-3	Naphthalene	1110		98.2	622	-497* ^b	1010	-102* ^b	48*	10-198/30
129-00-0	Pyrene	45.8		98.2	68.0	23	92.0	47	30	10-189/30

CAS No.	Surrogate Recoveries	MS	MSD	D27493-5	Limits
4165-60-0	Nitrobenzene-d5	7% *	12%	87%	10-145%
321-60-8	2-Fluorobiphenyl	36%	54%	56%	10-130%
1718-51-0	Terphenyl-d14	38%	55%	72%	22-130%

(a) Outside control limits due to matrix interference. Refer to Blank Spike.

(b) Outside control limits due to high level in sample relative to spike amount.

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB743-MB	GB13016.D	1	09/18/11	SK	n/a	n/a	GGB743

The QC reported here applies to the following samples: Method: SW846 8015B

D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	84% 60-140%

Blank Spike Summary

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB743-BS	GB13017.D	1	09/18/11	SK	n/a	n/a	GGB743

The QC reported here applies to the following samples: Method: SW846 8015B

D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	122	111	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	96%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D27497-1MS	GB13019.D	1	09/18/11	SK	n/a	n/a	GGB743
D27497-1MSD	GB13020.D	1	09/18/11	SK	n/a	n/a	GGB743
D27497-1	GB13018.D	1	09/18/11	SK	n/a	n/a	GGB743

The QC reported here applies to the following samples: Method: SW846 8015B

D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	D27497-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		134	146	109	144	108	1	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D27497-1	Limits
120-82-1	1,2,4-Trichlorobenzene	96%	97%	82%	60-140%

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4473-MB	FD10063.D	1	09/15/11	KV	09/15/11	OP4473	GFD462

The QC reported here applies to the following samples:

Method: SW846-8015B

D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	13	8.7	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	90% 61-142%

8.1.1

8

Method Blank Summary

Page 1 of 1

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4541-MB	FD10277.D	1	09/26/11	KV	09/26/11	OP4541	GFD483

The QC reported here applies to the following samples:

Method: SW846-8015B

D27497-1, D27497-2, D27497-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	13	8.7	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	88% 61-142%

8.1.2

8

Blank Spike Summary

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4473-BS	FD10064.D	1	09/15/11	KV	09/15/11	OP4473	GFD462

The QC reported here applies to the following samples: Method: SW846-8015B

D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	553	83	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	94%	61-142%

Blank Spike Summary

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4541-BS	FD10278.D	1	09/26/11	KV	09/26/11	OP4541	GFD483

The QC reported here applies to the following samples: Method: SW846-8015B

D27497-1, D27497-2, D27497-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	546	82	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	88%	61-142%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4473-MS	FD10065.D	1	09/15/11	KV	09/15/11	OP4473	GFD462
OP4473-MSD	FD10066.D	1	09/15/11	KV	09/15/11	OP4473	GFD462
D27544-1	FD10067.D	1	09/15/11	KV	09/15/11	OP4473	GFD462

The QC reported here applies to the following samples:

Method: SW846-8015B

D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

CAS No.	Compound	D27544-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	21700		8360	21800	1* a	21600	-1* a	1	24-157/35

CAS No.	Surrogate Recoveries	MS	MSD	D27544-1	Limits
84-15-1	o-Terphenyl	82%	83%	83%	61-142%

(a) Outside control limits due to high level in sample relative to spike amount.

8.3.1
8

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D27497
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4541-MS	FD10279.D	1	09/26/11	KV	09/26/11	OP4541	GFD483
OP4541-MSD	FD10280.D	1	09/26/11	KV	09/26/11	OP4541	GFD483
D27977-1	FD10281.D	1	09/26/11	KV	09/26/11	OP4541	GFD483

The QC reported here applies to the following samples:

Method: SW846-8015B

D27497-1, D27497-2, D27497-3

CAS No.	Compound	D27977-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	334		738	741	55	721	52	3	24-157/35

CAS No.	Surrogate Recoveries	MS	MSD	D27977-1	Limits
84-15-1	o-Terphenyl	66%	65%	65%	61-142%

8.3.2
8

Metals Analysis

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: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5733
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 09/14/11

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.10	.0011	.013	-0.0036	<0.10

Associated samples MP5733: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
 Account: WESTCOL - Weston Solutions, Inc.
 Project: Gunnison Energy

QC Batch ID: MP5733
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 09/14/11

Metal	D27410-1 Original MS	Spikelot HGWSR1	% Rec	QC Limits
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Mercury	0.018	0.46	0.49	90.2	85-115
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Associated samples MP5733: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
 Account: WESTCOL - Weston Solutions, Inc.
 Project: Gunnison Energy

QC Batch ID: MP5733
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 09/14/11

Metal	D27410-1		SpikeLot		MSD	QC
	Original	MSD	HGWSR1	% Rec	RPD	Limit
Mercury	0.018	0.43	0.49	84.0N(a)	6.7	20

Associated samples MP5733: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D27497
 Account: WESTCOL - Weston Solutions, Inc.
 Project: Gunnison Energy

QC Batch ID: MP5733
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 09/14/11

Metal	BSP Result	Spikelot HGWSR1	% Rec	QC Limits
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Mercury	0.36	0.4	90.0	80-120
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Associated samples MP5733: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5762
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 09/15/11

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.59	.59		
Antimony	3.0	.31	.31		
Arsenic	2.5	.59	.59		
Barium	1.0	.11	.11	0.030	<1.0
Beryllium	1.0	.044	.1		
Boron	5.0	.48	.48		
Cadmium	1.0	.027	.27	0.020	<1.0
Calcium	40	.96	1.1		
Chromium	1.0	.018	.031	0.020	<1.0
Cobalt	0.50	.035	.035		
Copper	1.0	.085	.16	0.070	<1.0
Iron	7.0	.34	2		
Lead	5.0	.16	.21	0.18	<5.0
Lithium	0.20	.028	.031		
Magnesium	20	.58	1.4		
Manganese	0.50	.0053	.012		
Molybdenum	1.0	.045	.054		
Nickel	3.0	.043	.099	-0.010	<3.0
Phosphorus	10	1.1	1.2		
Potassium	200	5.5	9.2		
Selenium	5.0	.38	.5	0.050	<5.0
Silicon	5.0	.38	.51		
Silver	3.0	.018	.051	-0.040	<3.0
Sodium	40	11	11		
Strontium	5.0		.017		
Thallium	1.0	.29	.34		
Tin	5.0	.55	1.3		
Titanium	1.0	.011	.1		
Uranium	5.0	.15	.2		
Vanadium	1.0	.016	.025		
Zinc	3.0	.028	.06	0.17	<3.0

Associated samples MP5762: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5762
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5762
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 09/15/11

Metal	D27497-1 Original MS		SpikeLot MPICPALL % Rec		QC Limits
Aluminum	anr				
Antimony					
Arsenic	anr				
Barium	187	380	229	84.2	75-125
Beryllium					
Boron					
Cadmium	0.25	45.7	57.3	79.4	75-125
Calcium	anr				
Chromium	5.0	50.5	57.3	79.4	75-125
Cobalt					
Copper	9.6	58.9	57.3	86.1	75-125
Iron	anr				
Lead	8.7	98.7	115	78.6	75-125
Lithium					
Magnesium	anr				
Manganese	anr				
Molybdenum	anr				
Nickel	6.2	49.7	57.3	76.0	75-125
Phosphorus					
Potassium	anr				
Selenium	0.59	86.1	115	74.7N(a)	75-125
Silicon					
Silver	0.30	19.6	22.9	84.2	75-125
Sodium	anr				
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	39.8	85.4	57.3	79.6	75-125

Associated samples MP5762: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5762
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5762
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 09/15/11

Metal	D27497-1 Original	MSD	Spikelet MPICPAL	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony						
Arsenic	anr					
Barium	187	375	224	83.8	1.3	20
Beryllium						
Boron						
Cadmium	0.25	45.6	56.1	80.8	0.2	20
Calcium	anr					
Chromium	5.0	50.6	56.1	81.3	0.2	20
Cobalt						
Copper	9.6	59.6	56.1	89.1	1.2	20
Iron	anr					
Lead	8.7	98.4	112	79.9	0.3	20
Lithium						
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	6.2	49.6	56.1	77.3	0.2	20
Phosphorus						
Potassium	anr					
Selenium	0.59	85.2	112	75.4	1.1	20
Silicon						
Silver	0.30	19.8	22.4	86.9	1.0	20
Sodium	anr					
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	39.8	86.0	56.1	82.3	0.7	20

Associated samples MP5762: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5762
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D27497
 Account: WESTCOL - Weston Solutions, Inc.
 Project: Gunnison Energy

QC Batch ID: MP5762
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 09/15/11

Metal	BSP Result	Spikelot MPICPALL	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic	anr			
Barium	184	200	92.0	80-120
Beryllium				
Boron				
Cadmium	44.0	50	88.0	80-120
Calcium	anr			
Chromium	44.2	50	88.4	80-120
Cobalt				
Copper	46.3	50	92.6	80-120
Iron	anr			
Lead	89.0	100	89.0	80-120
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	42.6	50	85.2	80-120
Phosphorus				
Potassium	anr			
Selenium	86.5	100	86.5	80-120
Silicon				
Silver	18.6	20	93.0	80-120
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	43.2	50	86.4	80-120

Associated samples MP5762: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5762
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5762
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 09/15/11

Metal	D27497-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony				
Arsenic	anr			
Barium	1730	2030	17.4*(a)	0-10
Beryllium				
Boron				
Cadmium	2.30	0.00	100.0(b)	0-10
Calcium	anr			
Chromium	46.2	53.0	14.7*(a)	0-10
Cobalt				
Copper	88.8	94.0	5.9	0-10
Iron	anr			
Lead	80.8	91.5	13.2*(a)	0-10
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	57.9	72.0	24.4*(a)	0-10
Phosphorus				
Potassium	anr			
Selenium	5.50	0.00	100.0(b)	0-10
Silicon				
Silver	2.80	4.00	42.9 (b)	0-10
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	369	476	28.9*(a)	0-10

Associated samples MP5762: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes

SERIAL DILUTION RESULTS SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5762
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

- (*) Outside of QC limits
- (anr) Analyte not requested
- (a) Serial dilution indicates possible matrix interference.
- (b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5763
Matrix Type: SOLID

Methods: SW846 6020
Units: mg/kg

Prep Date: 09/15/11

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	.14	1.2		
Antimony	0.20	.001	.0095		
Arsenic	0.40	.049	.22	0.31	<0.40
Barium	1.0	.0035	.1		
Beryllium	0.10	.0075	.014		
Boron	20	.97	1		
Cadmium	0.050	.023	.048		
Calcium	200	1.8	8.2		
Chromium	1.0	.021	.24		
Cobalt	0.10	.0033	.003		
Copper	1.0	.011	.063		
Iron	20	.81	3.7		
Lead	0.25	.0012	.015		
Magnesium	50	.067	2.6		
Manganese	0.50	.007	.029		
Molybdenum	0.50	.0044	.023		
Nickel	1.0	.0029	.031		
Phosphorus	30	1.8	3.5		
Potassium	100	2	3.2		
Selenium	0.20	.075	.19		
Silver	0.050	.0008	.002		
Sodium	250	.8	4.4		
Strontium	10	.004	.04		
Thallium	0.10	.015	.02		
Tin	5.0	.006	.028		
Titanium	1.0	.035	.062		
Uranium	0.25	.00038	.0009		
Vanadium	2.0	.052	.29		
Zinc	5.0	.039	.12		

Associated samples MP5763: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
 Account: WESTCOL - Weston Solutions, Inc.
 Project: Gunnison Energy

QC Batch ID: MP5763
 Matrix Type: SOLID

Methods: SW846 6020
 Units: mg/kg

Prep Date: 09/15/11

Metal	D27497-1 Original MS	Spikelot MPICPALL % Rec	QC Limits
Aluminum			
Antimony			
Arsenic	1.5	109	115
Barium			
Beryllium			
Boron			
Cadmium	anr		
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lead	anr		
Magnesium			
Manganese			
Molybdenum			
Nickel			
Phosphorus			
Potassium			
Selenium	anr		
Silver	anr		
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Uranium	anr		
Vanadium			
Zinc			

Associated samples MP5763: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
 Account: WESTCOL - Weston Solutions, Inc.
 Project: Gunnison Energy

QC Batch ID: MP5763
 Matrix Type: SOLID

Methods: SW846 6020
 Units: mg/kg

Prep Date: 09/15/11

Metal	D27497-1 Original	MSD	Spikelot MPICPAL	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	1.5	112	112	98.5	2.7	20
Barium						
Beryllium						
Boron						
Cadmium	anr					
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium	anr					
Vanadium						
Zinc						

Associated samples MP5763: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5763
Matrix Type: SOLID

Methods: SW846 6020
Units: mg/kg

Prep Date: 09/15/11

Metal	BSP Result	Spikelot MPICPALL	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	93.2	100	93.2	80-120
Barium				
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium	anr			
Vanadium				
Zinc				

Associated samples MP5763: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: D27497
 Account: WESTCOL - Weston Solutions, Inc.
 Project: Gunnison Energy

QC Batch ID: MP5763
 Matrix Type: SOLID

Methods: SW846 6020
 Units: ug/l

Prep Date: 09/15/11

D27497-1		QC	
Metal	Original	SDL 5:25 %DIF	Limits
Aluminum			
Antimony			
Arsenic	18.0	15.8	14.2 (a) 0-10
Barium			
Beryllium			
Boron			
Cadmium	anr		
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lead	anr		
Magnesium			
Manganese			
Molybdenum			
Nickel			
Phosphorus			
Potassium			
Selenium	anr		
Silver	anr		
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Uranium	anr		
Vanadium			
Zinc			

Associated samples MP5763: D27497-1, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8, D27497-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5765
Matrix Type: AQUEOUS

Methods: SW846 6010B, USDA HANDBOOK 60
Units: ug/l

Prep Date: 09/15/11

Metal	RL	IDL	MDL	MB raw	final
Aluminum	500	30	30		
Antimony	150	16	16		
Arsenic	130	30	30		
Barium	50	5.5	5.5		
Beryllium	50	2.2	2.5		
Boron	250	24	24		
Cadmium	50	1.4	1.4		
Calcium	2000	48	75	232	<2000
Chromium	50	.9	4		
Cobalt	25	1.8	1.8		
Copper	50	4.3	14		
Iron	350	17	65		
Lead	250	8	11		
Lithium	10	1.4	6		
Magnesium	1000	29	50	-26	<1000
Manganese	25	.27	1.6		
Molybdenum	50	2.3	4.4		
Nickel	150	2.2	5		
Phosphorus	500	55	100		
Potassium	5000	280	280		
Selenium	250	19	19		
Silicon	250	19	19		
Silver	150	.9	1.6		
Sodium	2000	570	570	-79	<2000
Strontium	25		1.3		
Thallium	50	15	15		
Tin	250	28	50		
Titanium	50	.55	1.6		
Uranium	250	7.5	18		
Vanadium	50	.8	1.1		
Zinc	150	1.4	9		

Associated samples MP5765: D27497-1A, D27497-2A, D27497-3A, D27497-4A, D27497-5A, D27497-6A, D27497-7A, D27497-8A, D27497-10A

Results < IDL are shown as zero for calculation purposes

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5765
Matrix Type: AQUEOUS

Methods: SW846 6010B, USDA HANDBOOK 60
Units: ug/l

Prep Date:

Metal

(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
 Account: WESTCOL - Weston Solutions, Inc.
 Project: Gunnison Energy

QC Batch ID: MP5765
 Matrix Type: AQUEOUS

Methods: SW846 6010B, USDA HANDBOOK 60
 Units: ug/l

Prep Date: 09/15/11

Metal	D27497-7A Original MS		SpikeLot MPICPALL % Rec		QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium	85800	222000	125000	109.0	75-125
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Lithium					
Magnesium	6370	133000	125000	101.3	75-125
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silicon					
Silver					
Sodium	443000	599000	125000	124.8	75-125
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP5765: D27497-1A, D27497-2A, D27497-3A, D27497-4A, D27497-5A, D27497-6A, D27497-7A, D27497-8A, D27497-10A

Results < IDL are shown as zero for calculation purposes

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5765
Matrix Type: AQUEOUS

Methods: SW846 6010B, USDA HANDBOOK 60
Units: ug/l

Prep Date:

Metal

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
 Account: WESTCOL - Weston Solutions, Inc.
 Project: Gunnison Energy

QC Batch ID: MP5765
 Matrix Type: AQUEOUS

Methods: SW846 6010B, USDA HANDBOOK 60
 Units: ug/l

Prep Date: 09/15/11

Metal	D27497-7A Original MSD	Spikelot MPICPAL % Rec	MSD RPD	QC Limit
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	85800	218000	125000	105.8
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	6370	131000	125000	99.7
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	443000	583000	125000	112.0
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP5765: D27497-1A, D27497-2A, D27497-3A, D27497-4A, D27497-5A, D27497-6A, D27497-7A, D27497-8A, D27497-10A

Results < IDL are shown as zero for calculation purposes

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5765
Matrix Type: AQUEOUS

Methods: SW846 6010B, USDA HANDBOOK 60
Units: ug/l

Prep Date:

Metal

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5765
Matrix Type: AQUEOUS

Methods: SW846 6010B, USDA HANDBOOK 60
Units: ug/l

Prep Date: 09/15/11

Metal	BSP Result	Spikelot MPICPALL	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	134000	125000	107.2	80-120
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	129000	125000	103.2	80-120
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	132000	125000	105.6	80-120
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP5765: D27497-1A, D27497-2A, D27497-3A, D27497-4A, D27497-5A, D27497-6A, D27497-7A, D27497-8A, D27497-10A

Results < IDL are shown as zero for calculation purposes

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

QC Batch ID: MP5765
Matrix Type: AQUEOUS

Methods: SW846 6010B, USDA HANDBOOK 60
Units: ug/l

Prep Date:

Metal

(*) Outside of QC limits
(anr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Bromide	GP5537/GN11724	0.20	0.0	mg/l	20	20.2	101.0	90-110%
Chloride	GP5537/GN11724	0.50	0.0	mg/l	20	20.0	100.0	90-110%
Solids, Total Dissolved	GN11571	10	0.0	mg/l	400	400	100.0	90-110%
Specific Conductivity	GP5490/GN11646			umhos/cm	9980	9940	99.6	90-110%
Sulfate	GP5537/GN11724	0.50	0.0	mg/l	30	28.9	96.3	90-110%
pH	GN11543			su	8.00	7.96	99.5	99.3-100.7%

Associated Samples:

Batch GN11543: D27497-1, D27497-10, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8

Batch GN11571: D27497-11, D27497-9

Batch GP5490: D27497-1, D27497-10, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8

Batch GP5537: D27497-11, D27497-9

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Redox Potential Vs H2	GN11544	D27490-1	mv	432	434	0.5	0-20%
Solids, Total Dissolved	GN11571	D27514-1	mg/l	150	150	0.0	0-25%

Associated Samples:

Batch GN11544: D27497-1, D27497-10, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8

Batch GN11571: D27497-11, D27497-9

(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP5537/GN11724	D27724-2	mg/l	0.0	2.5	2.6	104.0	80-120%
Chloride	GP5537/GN11724	D27724-2	mg/l	3.9	10	14.3	104.0	80-120%
Sulfate	GP5537/GN11724	D27724-2	mg/l	0.0	10	10	100.0	80-120%

Associated Samples:

Batch GP5537: D27497-11, D27497-9

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D27497
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP5537/GN11724	D27724-2	mg/l	0.0	2.5	2.6	0.0	20%
Chloride	GP5537/GN11724	D27724-2	mg/l	3.9	10	14.3	0.0	20%
Sulfate	GP5537/GN11724	D27724-2	mg/l	0.0	10	10	0.0	20%

Associated Samples:
Batch GP5537: D27497-11, D27497-9
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Misc. Forms

Custody Documents and Other Forms

(Accutest Labs of New England, Inc.)

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

4036 Youngfield St., Wheat Ridge, CO 80033
303-425-6021 FAX: 303-425-6854

Accutest Job #:	D27497
Accutest Quote #:	0
AMS P.O. #:	
Project No.:	

Client Information			Subcontract Laboratory Information										Analytical Information					Comments					
Name Accutest Mountain States (AMS)			Name Accutest - New England																				
Address 4036 Youngfield St.			Address 495 Technology Center West, BLDG C																				
City Wheat Ridge,			State CO			Zip 80033			City Marlborough			State MA							Zip 01752				
Send Report to: Tiffany Pham			Contact: Sample Management																				
Any questions contact: Shea Greiner																							
Phone/Fax #: (303) 425-6021; (303) 425-6854			Phone: (508) 481-6200																				
Field ID / Point of Collection			Collection			Matrix	# of bottles	Preservation					XCRA					Comments					
			Date	Time				HCL	NaOH	HNO3	H2SO4	None											
D27497 -1			9/12/11	11:55 AM		Soil	1								X								
-2				12:05 PM		Soil	1								X								
-3				12:40 PM		Soil	1								X								
-4				12:50 PM		Soil	1								X								
-5				1:15 PM		Soil	1								X								
-6				1:20 PM		Soil	1								X								
-7				1:45 PM		Soil	1								X								
-8				1:50 PM		Soil	1								X								
-10				2:40 PM		Soil	1								X								
Turnaround Information			Data Deliverable Information										Comments / Remarks										
<input checked="" type="checkbox"/> 10 Business Day Standard <input type="checkbox"/> Other _____ (Days)			Approved By: _____			<input type="checkbox"/> Commercial "A" <input type="checkbox"/> Commercial "B" <input type="checkbox"/> Commercial "BN" <input type="checkbox"/> Reduced Tier 1 <input type="checkbox"/> Full Tier 1		<input type="checkbox"/> PDF <input type="checkbox"/> Compact Disk Deliverable <input type="checkbox"/> Electronic Delivery: _____ <input type="checkbox"/> State Forms <input type="checkbox"/> Other (Specify) _____					Please use Colorado regulations and RLs. 10A										
10 Day Turnaround Hardcopy, RUSH is FAX Data unless previously approved.																							
Sample Custody must be documented below each time samples change possession, including courier delivery.																		For Subcontract Laboratory Use Only					
Relinquished by: 1 <i>ADL</i>			Date & Time: 9/13/11			Received By: 1 <i>FedEx</i>			Date & Time: 1			Seal #:		Headspace: Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>									
Relinquished by: 2 <i>FedEx</i>			Date & Time: 9/14/11 9:15			Received By: 2 <i>Cherry</i>			Date & Time: 2 9/14/11 9:15			Preserved where applicable: <input type="checkbox"/>											
Relinquished by: 3			Date & Time:			Received By: 3			Date & Time: 3			Temperature °C 2.1		On Ice <input checked="" type="checkbox"/>									

D27497: Chain of Custody

Page 1 of 2

Accutest Labs of New England, Inc.

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D27497

Client: AMS

Immediate Client Services Action Required: No

Date / Time Received: 9/14/2011

Delivery Method:

Client Service Action Required at Login: No

Project: D27494

No. Coolers: 1

Airbill #'s:

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 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"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Infrared gun | |
| 3. Cooler media: | Ice (bag) | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 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"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 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 | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 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 recvd 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

General Chemistry

QC Data Summaries

(Accutest Labs of New England, Inc.)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D27497
Account: ALMS - Accutest Mountain States
Project: WESTCOL: Gunnison Energy

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GP13513/GN36166	0.40	0.19	mg/kg	40	44.1	110.3	80-120%
Chromium, Hexavalent	GP13513/GN36166			mg/kg	805	911	113.2	80-120%

Associated Samples:

Batch GP13513: D27497-1, D27497-10, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D27497
Account: ALMS - Accutest Mountain States
Project: WESTCOL: Gunnison Energy

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GP13513/GN36166	D27611-1	mg/kg	0.21	0.28	28.6(a)	0-20%

Associated Samples:

Batch GP13513: D27497-1, D27497-10, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8

(*) Outside of QC limits

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D27497
Account: ALMS - Accutest Mountain States
Project: WESTCOL: Gunnison Energy

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GP13513/GN36166	D27611-1	mg/kg	0.21	44.7	49.4	110.0	75-125%
Chromium, Hexavalent	GP13513/GN36166	D27611-1	mg/kg	0.21	861	981	113.9	75-125%

Associated Samples:

Batch GP13513: D27497-1, D27497-10, D27497-2, D27497-3, D27497-4, D27497-5, D27497-6, D27497-7, D27497-8

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



10/27/11

Technical Report for

Weston Solutions, Inc.

Gunnison Energy

14798

Accutest Job Number: D28616

Sampling Date: 10/13/11

Report to:

Weston Solutions, Inc.
143 Union Boulevard
Lakewood, CO 80228
roy.weindorf@westonsolutions.com

ATTN: Roy Weindorf

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 'H. Madadian'.

Brad Madadian
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.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Sample Results	5
3.1: D28616-2: HK134-PIT	6
Section 4: Misc. Forms	8
4.1: Chain of Custody	9
Section 5: GC/MS Volatiles - QC Data Summaries	11
5.1: Method Blank Summary	12
5.2: Blank Spike Summary	13
5.3: Matrix Spike/Matrix Spike Duplicate Summary	14
Section 6: General Chemistry - QC Data Summaries	15
6.1: Method Blank and Spike Results Summary	16
6.2: Duplicate Results Summary	17
6.3: Matrix Spike Results Summary	18
6.4: Matrix Spike Duplicate Results Summary	19



Sample Summary

Weston Solutions, Inc.

Job No: D28616

Gunnison Energy
Project No: 14798

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
D28616-2	10/13/11	16:20 RW	10/14/11	AQ	Ground Water	HK134-PIT

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Weston Solutions, Inc.

Job No D28616

Site: Gunnison Energy

Report Date 10/27/2011 1:41:12 PM

On 10/14/2011, 2 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 2.6 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D28616 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.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ

Batch ID: V7V519

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D28769-1MS, D28769-1MSD were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056

Matrix AQ

Batch ID: GP5752

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D28616-2MS, D28616-2MSD were used as the QC samples for the Chloride, Sulfate, Chloride analysis.

Wet Chemistry By Method SM20 2540C

Matrix AQ

Batch ID: GN12067

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D28581-1DUP were used as the QC samples for the Solids, Total Dissolved 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:	HK134-PIT	Date Sampled:	10/13/11
Lab Sample ID:	D28616-2	Date Received:	10/14/11
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Gunnison Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V09753.D	1	10/22/11	BR	n/a	n/a	V7V519
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	4.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		67-131%
2037-26-5	Toluene-D8	99%		65-130%
460-00-4	4-Bromofluorobenzene	87%		65-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HK134-PIT	Date Sampled:	10/13/11
Lab Sample ID:	D28616-2	Date Received:	10/14/11
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Gunnison Energy		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	552	5.0	mg/l	10	10/21/11 11:51	NS	EPA 300/SW846 9056
Solids, Total Dissolved	1400	10	mg/l	1	10/18/11	JD	SM20 2540C
Sulfate	122	2.5	mg/l	5	10/21/11 11:27	NS	EPA 300/SW846 9056

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Mountain States
4036 Youngfield Street Wheat Ridge, Co 80033
TEL 303-425-6021 877-737-4521
FAX 303-425-6021

FED-EX Tracking #		Bottle Order Control #	
		SG-10/3/2011-9	
Accountest Quote #		Accountest Job #	
		N28616	
Requested Analysis (see TEST CODE sheet)			Matrix Codes
COGCC Table 910-1 list BTEX TPH Hold Sample			DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Waste FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank
			LAB USE ONLY 01 02 3
Comments / Special Instructions			
including courier delivery.			
Date Time:		Received By:	
		2	
Date Time:		Received By:	
		4	
Intact	Preserved where applicable		On Ice
Not Intact	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
			Cooler Temp.
			26

4.1

D28616: Chain of Custody

Page 1 of 2



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D28616

Client: WESTON SOLUTIONS, INC

Immediate Client Services Action Required: No

Date / Time Received: 10/14/2011 10:50:00 A

No. Coolers: 1

Client Service Action Required at Login: No

Project: GUNNISON ENERGY

Airbill #'s: HD

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 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"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Infrared gun | |
| 3. Cooler media: | Ice (bag) | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 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"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 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"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 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 | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 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

D28616: Chain of Custody
Page 2 of 2

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: D28616
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V519-MB	7V09750.D	1	10/22/11	BR	n/a	n/a	V7V519

The QC reported here applies to the following samples:

Method: SW846 8260B

D28616-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.50	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
1330-20-7	Xylene (total)	ND	4.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	92% 67-131%
2037-26-5	Toluene-D8	102% 65-130%
460-00-4	4-Bromofluorobenzene	88% 65-130%

Blank Spike Summary

Page 1 of 1

Job Number: D28616

Account: WESTCOL Weston Solutions, Inc.

Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V519-BS	7V09751.D	1	10/22/11	BR	n/a	n/a	V7V519

The QC reported here applies to the following samples:

Method: SW846 8260B

D28616-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	47.1	94	70-130
100-41-4	Ethylbenzene	50	48.5	97	70-130
108-88-3	Toluene	50	48.9	98	70-130
1330-20-7	Xylene (total)	150	146	97	56-138

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	89%	67-131%
2037-26-5	Toluene-D8	101%	65-130%
460-00-4	4-Bromofluorobenzene	100%	65-130%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D28616
Account: WESTCOL Weston Solutions, Inc.
Project: Gunnison Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D28769-1MS	7V09755.D	100	10/22/11	BR	n/a	n/a	V7V519
D28769-1MSD	7V09756.D	100	10/22/11	BR	n/a	n/a	V7V519
D28769-1	7V09754.D	50	10/22/11	BR	n/a	n/a	V7V519

The QC reported here applies to the following samples:

Method: SW846 8260B

D28616-2

CAS No.	Compound	D28769-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	5680	5000	10400	94	10800	102	4	61-133/30
100-41-4	Ethylbenzene	176	5000	4860	94	5050	97	4	70-130/30
108-88-3	Toluene	8340	5000	12500	83	12900	91	3	70-130/30
1330-20-7	Xylene (total)	4420	15000	18500	94	19400	100	5	56-138/30

CAS No.	Surrogate Recoveries	MS	MSD	D28769-1	Limits
17060-07-0	1,2-Dichloroethane-D4	93%	97%	92%	67-131%
2037-26-5	Toluene-D8	94%	95%	100%	65-130%
460-00-4	4-Bromofluorobenzene	94%	100%	89%	65-130%

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D28616
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP5752/GN12143	0.50	0.0	mg/l	20	18.9	94.5	90-110%
Solids, Total Dissolved	GN12067	10	0.0	mg/l	400	402	100.5	90-110%
Sulfate	GP5752/GN12143	0.50	0.0	mg/l	30	28.9	96.3	90-110%

Associated Samples:
Batch GN12067: D28616-2
Batch GP5752: D28616-2
(*) Outside of QC limits

6.1

6

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D28616
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN12067	D28581-1	mg/l	640	652	1.9	0-25%

Associated Samples:
Batch GN12067: D28616-2
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D28616
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP5752/GN12143	D28616-2	mg/l	552	200	761	104.5	80-120%
Sulfate	GP5752/GN12143	D28616-2	mg/l	122	200	313	95.5	80-120%

Associated Samples:

Batch GP5752: D28616-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

6.3

6

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D28616
Account: WESTCOL - Weston Solutions, Inc.
Project: Gunnison Energy

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP5752/GN12143	D28616-2	mg/l	552	200	755	0.8	20%
Sulfate	GP5752/GN12143	D28616-2	mg/l	122	200	312	0.3	20%

Associated Samples:
Batch GP5752: D28616-2
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

6.4

6

PHOTOGRAPH NO: 1**Date:** 10/13/2011**Direction:** NW**Photographer:**

Roy Weindorf

Description:

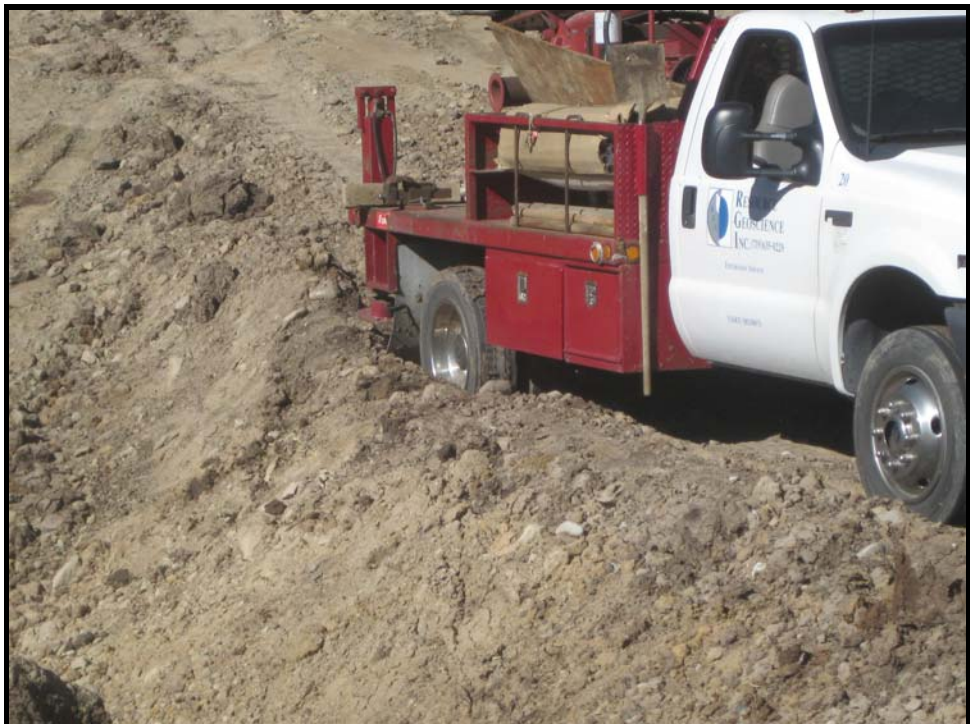
Overview of Pit 1-34 showing ramp into pit and standing water in NW corner.

**PHOTOGRAPH NO: 2****Date:** 10/13/2011**Direction:** N**Photographer:**

Roy Weindorf

Description:

View of drill rig in pit. The soft soil prevented moving around inside of the pit to additional boring locations.



PHOTOGRAPH NO: 3

Date: 10/13/2011

Direction: SE

Photographer:

Roy Weindorf

Description:

Location of SB-07 prior to geoprobe refusal at surface.

**PHOTOGRAPH NO: 4**

Date: 10/13/2011

Direction: W

Photographer:

Roy Weindorf

Description:

View of standing water ~3 inches deep. Water is presumably melt water from a recent snow event. Also shown layers of consolidated shale on floor and weathered shale in side wall.



PHOTOGRAPH NO: 5

Date: 10/13/2011

Direction: N

Photographer:

Roy Weindorf

Description:

Location of SB-08 outside of fence and downhill (SE) from pit.

**PHOTOGRAPH NO: 6**

Date: 10/13/2011

Direction: NW

Photographer:

Roy Weindorf

Description:

Cattle crossing in drainage SE of pit. Standing water was observed but no active seep was identified.

