ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division
Fort Collins, Colorado

Metals
Case Narrative

Colorado Oil & Gas Conservation Commission

Complaint 200265825

Work Order Number: 1008116

1. This report consists of 2 soil samples.

2. The samples were received intact at 15°C by ALS on 08/11/10.

3. The samples were prepared for analysis based on SW-846, 3rd Edition procedures.

   For analysis by Trace ICP and ICP-MS, the samples were digested following method 3050B and SOP 806 Rev. 14.

   For analysis by Cold Vapor AA (CVAA), the sample was digested following method 7471A and SOP 812 Rev. 14.

4. The samples were analyzed following SW-846, 3rd Edition procedures.

   Analysis by Trace ICP followed method 6010B and SOP 834 Rev. 7.

   The relationship between intensity and concentration for each element is established using at least four standards, one of which is a blank solution.

   During sample analysis concentrations are computed by the software and the results are printed in mg/L. The instrument software does not provide a printout which gives both intensity and concentration. The validity of the calibration equation is tested by analyzing the following solutions: a blank, a low level check solution with concentrations near the reporting limit, an Initial Calibration Verification (ICV) standard from a 2nd source standard solution with concentrations near the middle of the analytical range, a Continuing Calibration Verification (CCV) standard with concentrations at two times those in the ICV, and a readback of the highest calibration standard.

   These solutions provide verification that the calibration equations are functioning properly throughout the analytical range of the instrument. During sample analysis

dilutions are made for analytes found at concentrations above the highest calibration standard. No results are taken from extrapolations beyond the highest standard.

Analysis by ICP-MS followed method 6020A and SOP 827 Rev. 6.

The relationship between intensity and concentration for each element is established using at least four standards, one of which is a blank solution. A calibration equation relating instrument response to concentration is developed by the instrument software. The equation is a higher order polynomial. This type of equation is used to improve quantitation accuracy at lower concentrations where the relationship between concentration and instrument response is non-linear.

During sample analysis concentrations are computed by the software and the results are printed in ug/L. The validity of the calibration equation is tested by analyzing the following solutions: a blank, a low level check solution with concentrations near the reporting limit, an Initial Calibration Verification (ICV) standard from a 2nd source standard solution with concentrations near the middle of the analytical range, a Continuing Calibration Verification (CCV) standard with concentrations near the middle of the analytical range but different than those in the ICV, and a readback of the highest calibration standard.

These solutions provide verification that the calibration equations are functioning properly throughout the analytical range of the instrument. During sample analysis dilutions are made for analytes found at concentrations above the highest calibration standard. No results are taken from extrapolations beyond the highest standard.

Analysis by CVAA followed method 7471A and SOP 812 Rev. 14.

The relationship between intensity and concentration is determined daily, prior to sample analysis. At least five standards and a blank solution are analyzed to establish the calibration curve. The instrument software performs a linear regression to fit the calibration data to a curve of the form:

$$conc. = B * I + C$$

where: conc. = concentration
B = slope coefficient
I = intensity
C = intercept coefficient

A printout summarizing the calibration data supplies the calibration curve and correlation coefficient. During sample analysis both intensity and concentration values are printed. Dilutions are made for concentrations above the highest calibration standard. No results are taken from extrapolations above the highest standard.

5. All standards and solutions are NIST traceable and were used within their recommended shelf life.

6. The samples were prepared and analyzed within the established hold times.

All in house quality control procedures were followed, as described below.

7. General quality control procedures.
   - A preparation (method) blank and laboratory control sample were digested and analyzed with the samples in each digestion batch. There were not more than 20 samples in each digestion batch.
   - The preparation (method) blank associated with each digestion batch was below the practical quantitation limit for the requested analytes.
   - The laboratory control sample associated with each digestion batch was within the acceptance limits. This indicates complete digestion according to the method.
   - All initial and continuing calibration blanks associated with each analytical batch were below the practical quantitation limits for the requested analytes.
   - All initial and continuing calibration verifications associated with each analytical batch were within the acceptance criteria for the requested analytes. This indicates a valid calibration and stable instrument conditions.
   - The high standard readbacks associated with Method 6010B and 6020A analyses were within acceptance criteria.
   - The interference check samples associated with Method 6010B were within acceptance criteria.
   - The interference check samples associated with Method 6020A were analyzed.
8. Matrix specific quality control procedures.

   Sample 1008116-1 was designated as the quality control sample for the Trace ICP and ICP-MS analyses. Per method requirements, matrix QC was performed for the mercury analysis. Since a sample from this order number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

   Similarity of matrix and therefore relevance of the QC results should not be automatically inferred for any sample other than the native sample selected for QC.

   - A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. Due to analyst error, the Trace ICP MS & MSD were not spiked for silver. All other acceptance criteria for accuracy were met with the following exception:

Analyte	Sample ID
Barium	1008116-1MSD

   The native sample result is flagged for matrix spike failure and an analytical post spike was performed. The result of the spike was acceptable indicating that the matrix was not significantly affecting quantitation of this analyte.

- A sample duplicate and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.
- A serial dilution was analyzed with each ICP batch. All acceptance criteria were met with the following exception:

Analyte	Sample ID
Zinc	1008116-1L

The native sample result is flagged for serial dilution failure.

9. It is a standard practice that samples for ICP-MS are analyzed at a dilution.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Emily Knodel
Inorganics Primary Data Reviewer

09-20-10
Date

Inorganics Final Data Reviewer

9-17-10
Date

Inorganic Data Reporting Qualifiers

The following qualifiers are used by the laboratory when reporting results of inorganic analyses.

- Result qualifier -- If the analyte was analyzed for but not detected a "U" is entered.
- QC qualifier -- Specified entries and their meanings are as follows:

  E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

  M - Duplicate injection precision was not met.

  N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

  Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

  * - Duplicate analysis (relative percent difference) not within control limits.

  S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 1008116
Client Name: Colorado Oil & Gas Conservation Commission
Client Project Name: Complaint 200265825
Client Project Number:
Client PO Number: OE PHA 11000000014

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
United Oil 346	1008116-1		SOIL	04-Aug-10	11:40
Rix Background	1008116-2		SOIL	04-Aug-10	11:45

ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r8

WORKORDER # 1008116

PAGE 1 of 1

DISPOSAL: By Lab or Return to Client

PROJECT NAME	Complaint 20026525	SAMPLER	P Gintautas
PROJECT No.		SITE ID	United Oil 346 location
		EDD FORMAT	
		PURCHASE ORDER	PHA 11-04
COMPANY NAME	Colo. Oil & Gas Cons. Comm.	BILL TO COMPANY	
SEND REPORT TO	Peter Gintautas	INVOICE ATTN TO	
ADDRESS	PO Box 108	ADDRESS	
CITY / STATE / ZIP	Trinidad CO 81082	CITY / STATE / ZIP	
PHONE	719-846-3091	PHONE	
FAX		FAX	
E-MAIL	peter.gintautas@state.co.us	E-MAIL	

DATE: 9 Aug 2010

TURNAROUND: 14 day

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	VOC metals 6/7471	GORO metals	TVPH	TEPH	PAHs (SIM 8270)	SAR, EC, pH (Sub)
1	United Oil 346	soil	4 Aug 2010	11:40	5	HCl/Ice	—	X	X	X	X	X	X
2	URix Background	soil	4 Aug 2010	11:45	1	None	—		X				

VOC metals = Ba, B, Cd, Cr, Cu, Pb, Ni, Se, Ag, Zn

GORO metal = Ag

*Time Zone (Circle): EST CST (MST) PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:

QC PACKAGE (check below)	
X	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Peter Gintautas	9 Aug 2010	11:45
RECEIVED BY			8-11-10	0955
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Laboratory Group - Fort Collins

CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COCGC Workorder No: 1008116

Project Manager: AW Initials: CKO Date: 8-11-10

1. Does this project require any **special handling** in addition to standard Paragon procedures?		YES	NO
2. Are custody **seals** on **shipping containers** intact?	NONE	YES	NO
3. Are Custody seals on **sample containers** intact?	NONE	YES	NO
4. Is there a **COC (Chain-of-Custody) present** or other representative documents?		YES	NO
5. Are the **COC and bottle labels complete and legible**?		YES	NO
6. Is the **COC in agreement** with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	NO
7. Were **airbills / shipping documents** present and/or removable?	DROP OFF	YES	NO
8. Are all aqueous **samples requiring preservation preserved correctly?** (excluding volatiles)	N/A	YES	NO
9. Are all aqueous **non-preserved samples pH 4-9**?	N/A	YES	NO
10. Is there **sufficient sample** for the requested analyses?		YES	NO
11. Were all samples placed in the **proper containers** for the requested analyses?		YES	NO
12. Are all samples within **holding times** for the requested analyses?		YES	NO
13. Were all sample containers received **intact**? (not broken or leaking, etc.)		YES	NO
14. Are all samples requiring **no** headspace (**VOC, GRO, RSK/MEE, Rx CN/S, radon**) headspace free? **Size of bubble:** ____ < green pea ____ > green pea	N/A	YES	NO
15. Do perchlorate LCMS-MS samples **have** headspace? (at least 1/3 of container required)	N/A	YES	NO
16. Were samples checked for and free from the presence of **residual chlorine?** (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	N/A	YES	NO
17. Were the samples **shipped on ice**?		YES	NO
18. Were cooler temperatures measured at 0.1-6.0°C? **IR gun used*:** #2 #4	RAD ONLY	YES	NO

Cooler #:	1
Temperature (°C):	15
No. of custody seals on cooler:	1
DOT Survey/ Acceptance Information — External µR/hr reading:	12
Background µR/hr reading:	12

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? YES / NO / NA (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16

If applicable, was the client contacted? YES / NO / NA Contact: _____ Date/Time: _____

Project Manager Signature / Date: 8/12/10

*IR Gun #2: Oakton, SN 29922500201-0066 *IR Gun #4: Oakton, SN 2372220101-0002

Total ICP Metals

Method SW6010B

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Field ID: United Oil 346
Lab ID: 1008116-1

Sample Matrix: SOIL
% Moisture: 5.0
Date Collected: 04-Aug-10
Date Extracted: 17-Aug-10
Date Analyzed: 19-Aug-10
Prep Method: SW3050 Rev B

Prep Batch: IP100817-3
QCBatchID: IP100817-3-1
Run ID: IT100819-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 100819a.

Sample Aliquot: 1.015 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7440-39-3	BARIUM	1	120	10		N
7440-42-8	BORON	1	10	10	U	
7440-43-9	CADMIUM	1	0.52	0.52	U	
7440-47-3	CHROMIUM	1	7	1		
7440-50-8	COPPER	1	10	1		
7439-92-1	LEAD	1	6.3	0.31		
7440-02-0	NICKEL	1	6.7	2.1		
7782-49-2	SELENIUM	1	0.52	0.52	U	
7440-22-4	SILVER	1	1	1	U	
7440-66-6	ZINC	1	27	2.1		E

Data Package ID: *IT1008116-1*

Total SILVER

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: Colorado Oil & Gas Conservation Commission
Client Project ID: Complaint 200265825
Work Order Number: 1008116 **Final Volume:** 100 ml
Reporting Basis: Dry Weight **Matrix:** SOIL
Prep Method: SW3050B **Result Units:** UG/KG

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
Rix Background	1008116-2	08/04/2010	08/17/2010	08/20/2010	7.9	10	47	11		1.031 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *IM1008116-1*

Total Mercury

Method SW7471A

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Field ID: United Oil 346
Lab ID: 1008116-1

Sample Matrix: SOIL
% Moisture: 5.0
Date Collected: 04-Aug-10
Date Extracted: 12-Aug-10
Date Analyzed: 13-Aug-10
Prep Method: METHOD

Prep Batch: HG100813-2
QCBatchID: HG100813-2-1
Run ID: HG100813-2A1
Cleanup: NONE
Basis: Dry Weight
File Name: 10081302

Sample Aliquot: 0.622 g
Final Volume: 100 g
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7439-97-6	MERCURY	1	0.034	0.034	U	

Data Package ID: *HG1008116-1*

ICP Metals

Method SW6010B

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Lab ID: IP100817-3MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 17-Aug-10
Date Analyzed: 19-Aug-10
Prep Method: SW3050 Rev B

Prep Batch: IP100817-3
QCBatchID: IP100817-3-1
Run ID: IT100819-2A1
Cleanup: NONE
Basis: N/A
File Name: 100819a.

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7440-39-3	BARIUM	1	10	10	U	
7440-42-8	BORON	1	10	10	U	
7440-43-9	CADMIUM	1	0.5	0.5	U	
7440-47-3	CHROMIUM	1	1	1	U	
7440-50-8	COPPER	1	1	1	U	
7439-92-1	LEAD	1	0.3	0.3	U	
7440-02-0	NICKEL	1	2	2	U	
7782-49-2	SELENIUM	1	0.5	0.5	U	
7440-22-4	SILVER	1	1	1	U	
7440-66-6	ZINC	1	2	2	U	

Data Package ID: *IT1008116-1*

ICP Metals

Method SW6010B

Laboratory Control Sample

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Lab ID: IP100817-3LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 08/17/2010
Date Analyzed: 08/19/2010
Prep Method: SW3050B

Prep Batch: IP100817-3
QCBatchID: IP100817-3-1
Run ID: IT100819-2A1
Cleanup: NONE
Basis: N/A
File Name: 100819a.

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7440-39-3	BARIUM	200	205	10		102	80 - 120%
7440-42-8	BORON	100	99.1	10		99	80 - 120%
7440-43-9	CADMIUM	5	5.17	0.5		103	80 - 120%
7440-47-3	CHROMIUM	20	20.4	1		102	80 - 120%
7440-50-8	COPPER	25	26.1	1		104	80 - 120%
7439-92-1	LEAD	50	50.8	0.3		102	80 - 120%
7440-02-0	NICKEL	50	49.5	2		99	80 - 120%
7782-49-2	SELENIUM	200	204	0.5		102	80 - 120%
7440-22-4	SILVER	10	11.1	1		111	80 - 120%
7440-66-6	ZINC	50	51.7	2		103	80 - 120%

Data Package ID: *IT1008116-1*

ICP Metals

Method SW6010B

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1008116
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200265825

Field ID: United Oil 346
LabID: 1008116-1MS

Sample Matrix: SOIL
% Moisture: 5.0
Date Collected: 04-Aug-10
Date Extracted: 17-Aug-10
Date Analyzed: 19-Aug-10
Prep Method: SW3050 Rev B

Prep Batch: IP100817-3
QCBatchID: IP100817-3-1
Run ID: IT100819-2A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 0.993 g
Final Volume: 100 ml
Result Units: MG/KG
File Name: 100819a.

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7440-39-3	BARIUM	120		332		10.6	212	100	80 - 120%
7440-42-8	BORON	10.6	U	96.3		10.6	106	91	80 - 120%
7440-43-9	CADMIUM	0.53	U	5.17		0.53	5.3	98	80 - 120%
7440-47-3	CHROMIUM	7		27.9		1.06	21.2	99	80 - 120%
7440-50-8	COPPER	10		38.4		1.06	26.5	107	80 - 120%
7439-92-1	LEAD	6.3		55.9		0.318	53	94	80 - 120%
7440-02-0	NICKEL	6.7		54		2.12	53	89	80 - 120%
7782-49-2	SELENIUM	0.53	U	189		0.53	212	89	80 - 120%
7440-66-6	ZINC	27		77		2.12	53	95	80 - 120%

Data Package ID: *IT1008116-1*

ICP Metals

Method SW6010B

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1008116
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200265825

Field ID: United Oil 346
LabID: 1008116-1MSD

Sample Matrix: SOIL
% Moisture: 5.0
Date Collected: 04-Aug-10
Date Extracted: 17-Aug-10
Date Analyzed: 19-Aug-10
Prep Method: SW3050 Rev B

Prep Batch: IP100817-3
QCBatchID: IP100817-3-1
Run ID: IT100819-2A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.035 g
Final Volume: 100 ml
Result Units: MG/KG
File Name: 100819a.

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7440-39-3	BARIUM	366	N	203	121	10.2	20	10
7440-42-8	BORON	91		102	90	10.2	20	6
7440-43-9	CADMIUM	4.96		5.08	98	0.508	20	4
7440-47-3	CHROMIUM	26.7		20.3	97	1.02	20	4
7440-50-8	COPPER	35.7		25.4	101	1.02	20	7
7439-92-1	LEAD	53.6		50.8	93	0.305	20	4
7440-02-0	NICKEL	51.6		50.8	88	2.03	20	5
7782-49-2	SELENIUM	181		203	89	0.508	20	4
7440-66-6	ZINC	73.7		50.8	92	2.03	20	4

Data Package ID: *IT1008116-1*

ICP Metals

Method SW6010

Analytical Spike Sample Recovery

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Field ID: United Oil 346

LabID: 1008116-1A

Run ID: IT100819-2A1

Date Analyzed: 19-Aug-10

Result Units: mg/l

Target Analyte	Sample Result	Samp Qual	PS Result	PS Qual	Spike Added	PS % Rec.	Control Limits
BARIUM	1.17		3.05		2	94	75 - 125%

Data Package ID: *IT1008116-1*

ICPMS Metals

Method SW6020A

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Lab ID: IP100817-3MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 17-Aug-10
Date Analyzed: 20-Aug-10
Prep Method: SW3050 Rev B

Prep Batch: IP100817-3
QCBatchID: IP100817-3-2
Run ID: IM100820-11A1
Cleanup: NONE
Basis: N/A
File Name: 066SMPL.

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7440-22-4	SILVER	10	10	10	U	

Data Package ID: *IM1008116-1*

ICPMS Metals

Method SW6020A

Laboratory Control Sample

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Lab ID: IM100817-3LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 08/17/2010
Date Analyzed: 08/20/2010
Prep Method: SW3050B

Prep Batch: IP100817-3
QCBatchID: IP100817-3-2
Run ID: IM100820-11A1
Cleanup: NONE
Basis: N/A
File Name: 068SMPL.

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7440-22-4	SILVER	1000	1000	10		100	80 - 120%

Data Package ID: *IM1008116-1*

ICPMS Metals

Method SW6020A

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1008116
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200265825

Field ID: United Oil 346
LabID: 1008116-1MS

Sample Matrix: SOIL
% Moisture: 5.0
Date Collected: 04-Aug-10
Date Extracted: 17-Aug-10
Date Analyzed: 20-Aug-10
Prep Method: SW3050 Rev B

Prep Batch: IP100817-3
QCBatchID: IP100817-3-2
Run ID: IM100820-11A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 0.993 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: 072SMPL.

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7440-22-4	SILVER	28		1090		10.6	1060	100	75 - 125%

Field ID: United Oil 346
LabID: 1008116-1MSD

Sample Matrix: SOIL
% Moisture: 5.0
Date Collected: 04-Aug-10
Date Extracted: 17-Aug-10
Date Analyzed: 20-Aug-10
Prep Method: SW3050 Rev B

Prep Batch: IP100817-3
QCBatchID: IP100817-3-2
Run ID: IM100820-11A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.035 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: 073SMPL.

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7440-22-4	SILVER	1070		1020	102	10.2	20	3

Data Package ID: *IM1008116-1*

Mercury

Method SW7471A

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Lab ID: HG100813-2MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 12-Aug-10
Date Analyzed: 13-Aug-10
Prep Method: METHOD

Prep Batch: HG100813-2
QCBatchID: HG100813-2-1
Run ID: HG100813-2A1
Cleanup: NONE
Basis: N/A
File Name: 10081302

Sample Aliquot: 0.6 g
Final Volume: 100 g
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7439-97-6	MERCURY	1	0.033	0.033	U	

Data Package ID: *HG1008116-1*

Mercury

Method SW7471A

Laboratory Control Sample

Lab Name: ALS Environmental -- FC

Work Order Number: 1008116

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200265825

Lab ID: HG100813-2LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 08/12/2010
Date Analyzed: 08/13/2010
Prep Method: METHOD

Prep Batch: HG100813-2
QCBatchID: HG100813-2-1
Run ID: HG100813-2A1
Cleanup: NONE
Basis: N/A
File Name: 10081302

Sample Aliquot: 0.6 g
Final Volume: 100 g
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7439-97-6	MERCURY	0.167	0.173	0.0333		104	80 - 120%

Data Package ID: *HG1008116-1*