

# NARRATIVE ATTACHMENT

## FORM 4 (SUNDRY NOTICE)

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### Earthen Pit (Fiberglass Tank) Closure (Cathedral Federal 22-1)

Document Date-10/22/2013

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#### Introduction

Encana Oil & Gas (USA) Inc. (Encana) is submitting this Form 4 Sundry Notice to request final closure status for the earthen pit (w/fiberglass tank) associated with the Cathedral Federal Unit #22-1 (COGCC facility #315008, COGCC remediation #TBD). The site investigation was conducted by a third party contractor as authorized by Encana personnel and in accordance with the approved Form 27 previously submitted for this location. All samples were collected in accordance with Encana's Environmental Compliance Group's Sampling Procedures. The analytical results for the respective soil samples are provided in Table 1 and Attachment A of this submittal. The text below provides the details of the site investigation. For a visual description of the site please refer to Figures 1, 2, and 3 – Site Maps.

#### Assessment Activities

October 3, 2013 - The excavated soil surrounding the earthen pit (w/fiberglass tank) was screened utilizing a photoionization detector (PID) prior to collecting soil samples for laboratory analysis. The fiberglass tank was carefully removed using a trackhoe and placed onsite for later recycling or disposal. It should be noted that the fiberglass tank was pumped out prior to removal. A grab sample was collected directly from the lowest point of the culvert pit after excavation. In addition, four (4) grab samples were collected, one from each excavated sidewall. Approximately 165 cubic yards of excavated material was removed from the pit and laid out in 1.5 foot tall (51' x 60') lift for evaluation of impacts. The excavated material was sampled by way of a nine (9) point composite sample. Four (4) background samples were collected from approximately six (6) inches beneath the grounds surface for analysis with regards to arsenic.

#### Analytical Review

Sample results indicate that soil within the earthen pit (w/fiberglass tank) footprint on Encana's Cathedral Federal Unit #22-1 well pad, had organic constituent concentrations of the excavated area and excavated material below or within COGCC Table 910-1. Analytical results indicated the excavated material exceeded COGCC Table 910-1 allowable concentrations for arsenic (4.6 ppm), EC (6 mmhos/cm), SAR (52), and pH (9.7). Though the arsenic concentration in the soil is above the allowable concentration identified in Table 910-1, the concentration is within the range of arsenic background values (4.0 – 4.9 ppm) in this area. Based on these results and footnote 1 to COGCC Table 910-1, Encana requests that the COGCC consider the higher range of background arsenic value(s) as the allowable concentration for this constituent. Please see Table 1 and Attachment A for the analytical results.

Though the elevated arsenic, EC, SAR, and pH levels of the returned spoil material within the excavated footprint area is above the allowable levels identified in Table 910-1; it will be buried greater than three feet bgs of existing pad footprint material to assure that material with elevated level of arsenic, EC, SAR, and pH will have no adverse effect on future re-vegetation efforts and receptors in the area. Please see Table 1 and Attachment A for analytical results.



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#### Conclusion

Based on the site investigation and analytical results, the pit associated with the Cathedral Federal Unit #22-1 is in compliance with the standards specified within COGCC Table 910-1. Encana respectfully requests that final closure be granted for the respective pit, COGCC remediation #TBD.

#### Notification of Completion

This Sundry Notice is also being submitted as the Notification of Completion for Remediation #TBD. If the information provided here is satisfactory, please provide documentation of the closure of this remediation project.

#### Attachments

Topographic Location Map (Figure 1)  
22-1 Aerial map with sample locations (Figure 2)  
22-1 Site Diagram of Excavation and sample locations (Figure 3)  
Laboratory Results Summary Table 1 – 22-1 Site Investigation (Table 1)  
Attachment A- Laboratory Reports

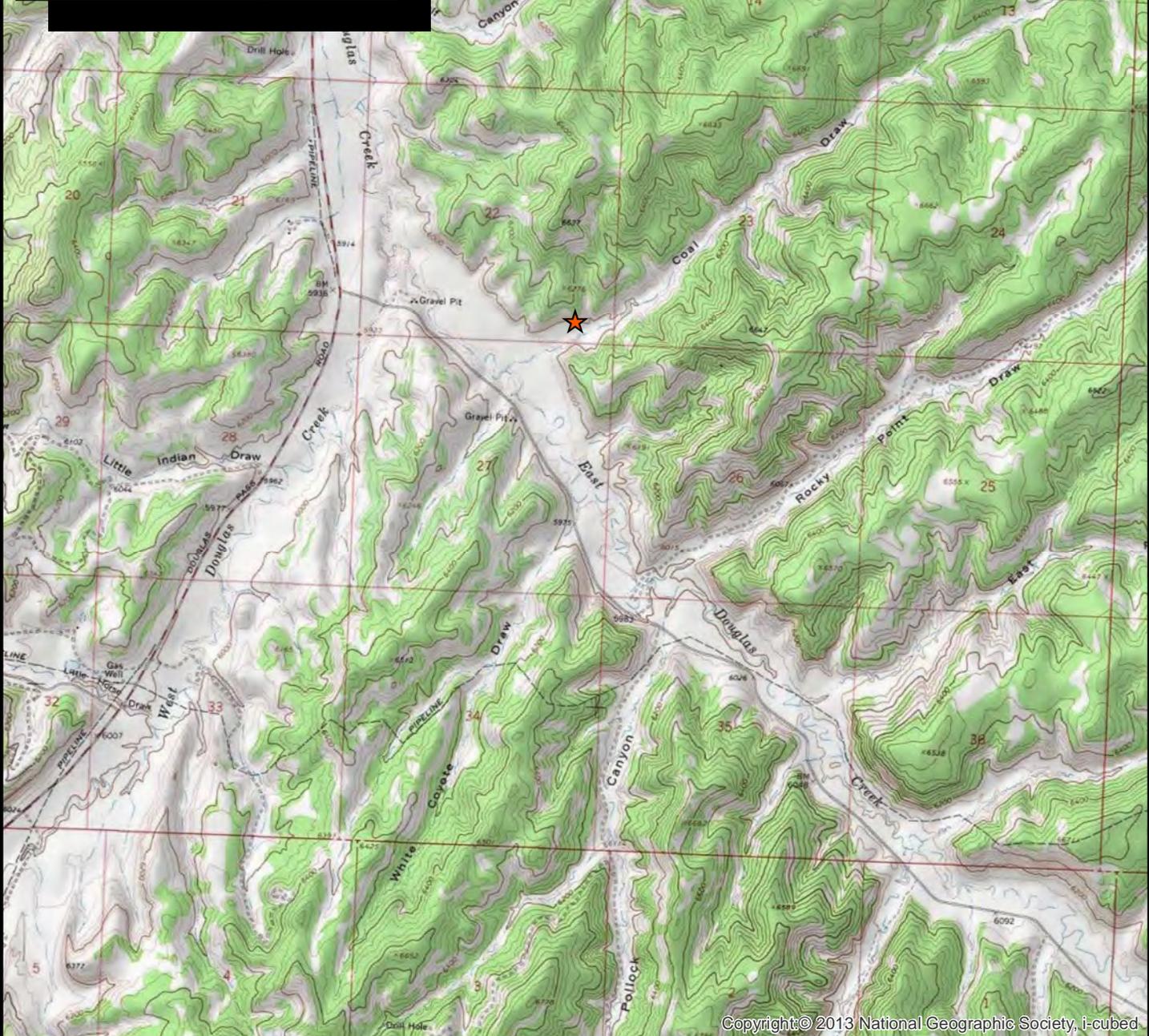


# Legend

★ 22-1 Location

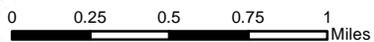


National Geographic, Esri,  
DeLorme, NAVTEQ, UNEP-  
WCMC, USGS, NASA, ESA,  
METI, NRCAN, GEBCO,



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**Rule Engineering, LLC**  
Solutions to Regulations for Industry

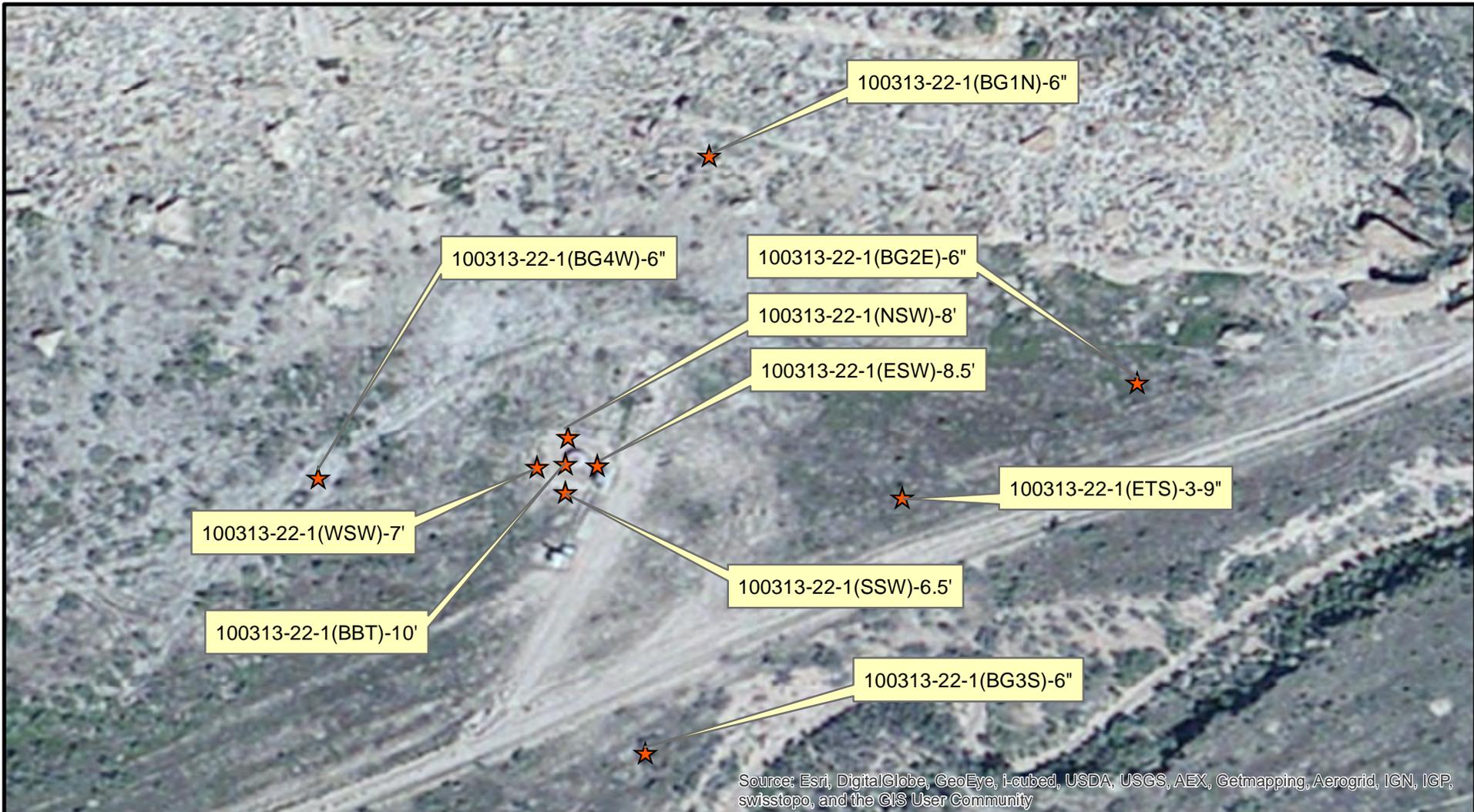


Location: 22-1  
QtrQtr, SESE Sec. 22 Twp, 2S Rng, 101W  
Site Map

Date: 10/7/2013

File: 22-1 Site Location Map.pdf

Figure: 1



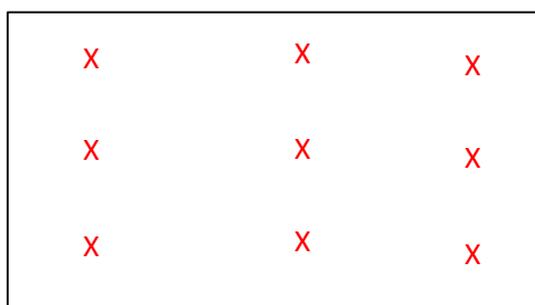
### Legend

★ Soil Sample Location



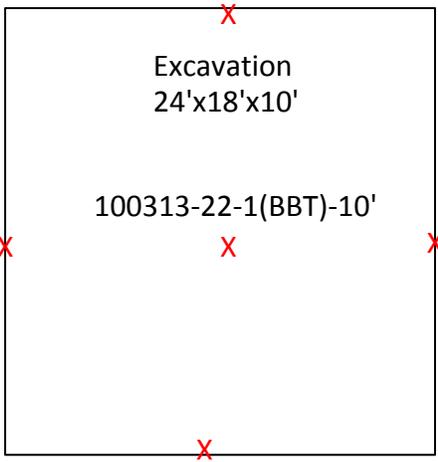


100313-22-1(ETS)



Lift  
51' x 60'

100313-22-1(NSW)-8'



Excavation  
24'x18'x10'

100313-22-1(BBT)-10'

100313-22-1(WSW)-7'

100313-22-1(ESW)-8.5'

100313-22-1(SSW)-6.5'



Meter  
House

Legend  
X-Sample



Well: Figure 3. 22-1 Site Diagram	
Area: Cathedral Federal Unit	
Legal: SESE, Sec 22, 02S, 101W, 6 <sup>th</sup> PM	
Date: 10/10/13	Drawn By: Shad Johnson
Revision Date:	Scale: None



# Appendix A



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
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1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Charles Jensen  
EnCana Oil & Gas - Rangely, CO  
1125 Escalante Drive  
Rangely, CO 81648-3600

## Report Summary

Monday October 21, 2013

Report Number: L661691

Samples Received: 10/05/13

Client Project: 22-1

Description: 22-1 Site Clearance

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

T. Alan Harvill , ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,  
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,  
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,  
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,  
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,  
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Charles Jensen  
 EnCana Oil & Gas - Rangely, CO  
 1125 Escalante Drive  
 Rangely, CO 81648-3600

October 21, 2013

Date Received : October 05, 2013  
 Description : 22-1 Site Clearance  
 Sample ID : 100313-22-1(NSW) 8 FT  
 Collected By : Shad Johnson  
 Collection Date : 10/03/13 13:00

ESC Sample # : L661691-01  
 Site ID : 22-1  
 Project # : 22-1

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021	10/11/13	5
Toluene	BDL	0.025	mg/kg	8021	10/11/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021	10/11/13	5
Total Xylene	BDL	0.0075	mg/kg	8021	10/11/13	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015	10/11/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	101.		% Rec.	8021/8015	10/11/13	5
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021/8015	10/11/13	5
TPH (GC/FID) High Fraction	6.9	4.0	mg/kg	8015D/DRO	10/10/13	1
Surrogate recovery(%)						
o-Terphenyl	64.1		% Rec.	8015D/DRO	10/10/13	1

BDL - Below Detection Limit  
 Det. Limit - Practical Quantitation Limit(PQL)  
 Note:  
 The reported analytical results relate only to the sample submitted.  
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REPORT OF ANALYSIS

Charles Jensen  
 EnCana Oil & Gas - Rangely, CO  
 1125 Escalante Drive  
 Rangely, CO 81648-3600

October 21, 2013

Date Received : October 05, 2013  
 Description : 22-1 Site Clearance  
 Sample ID : 100313-22-1(ESW) 8.5 FT  
 Collected By : Shad Johnson  
 Collection Date : 10/03/13 13:10

ESC Sample # : L661691-02  
 Site ID : 22-1  
 Project # : 22-1

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021	10/11/13	5
Toluene	BDL	0.025	mg/kg	8021	10/11/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021	10/11/13	5
Total Xylene	BDL	0.0075	mg/kg	8021	10/11/13	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015	10/11/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	99.5		% Rec.	8021/8015	10/11/13	5
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021/8015	10/11/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	8015D/DRO	10/10/13	1
Surrogate recovery(%)						
o-Terphenyl	66.9		% Rec.	8015D/DRO	10/10/13	1

BDL - Below Detection Limit  
 Det. Limit - Practical Quantitation Limit(PQL)  
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 1125 Escalante Drive  
 Rangely, CO 81648-3600

October 21, 2013

Date Received : October 05, 2013  
 Description : 22-1 Site Clearance  
 Sample ID : 100313-22-1(SSW) 6.5 FT  
 Collected By : Shad Johnson  
 Collection Date : 10/03/13 13:20

ESC Sample # : L661691-03  
 Site ID : 22-1  
 Project # : 22-1

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021	10/11/13	5
Toluene	BDL	0.025	mg/kg	8021	10/11/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021	10/11/13	5
Total Xylene	BDL	0.0075	mg/kg	8021	10/11/13	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015	10/11/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	100.		% Rec.	8021/8015	10/11/13	5
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021/8015	10/11/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	8015D/DRO	10/10/13	1
Surrogate recovery(%)						
o-Terphenyl	66.6		% Rec.	8015D/DRO	10/10/13	1

BDL - Below Detection Limit  
 Det. Limit - Practical Quantitation Limit(PQL)  
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REPORT OF ANALYSIS

Charles Jensen  
EnCana Oil & Gas - Rangely, CO  
1125 Escalante Drive  
Rangely, CO 81648-3600

October 21, 2013

Date Received : October 05, 2013  
Description : 22-1 Site Clearance  
Sample ID : 100313-22-1(WSW) 7 FT  
Collected By : Shad Johnson  
Collection Date : 10/03/13 13:30

ESC Sample # : L661691-04  
Site ID : 22-1  
Project # : 22-1

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021	10/11/13	5
Toluene	BDL	0.025	mg/kg	8021	10/11/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021	10/11/13	5
Total Xylene	BDL	0.0075	mg/kg	8021	10/11/13	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015	10/11/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	100.		% Rec.	8021/8015	10/11/13	5
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021/8015	10/11/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	8015D/DRO	10/10/13	1
Surrogate recovery(%)						
o-Terphenyl	62.9		% Rec.	8015D/DRO	10/10/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

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 1125 Escalante Drive  
 Rangely, CO 81648-3600

October 21, 2013

Date Received : October 05, 2013  
 Description : 22-1 Site Clearance  
 Sample ID : 100313-22-1(BBT) 10 FT  
 Collected By : Shad Johnson  
 Collection Date : 10/03/13 13:40

ESC Sample # : L661691-05  
 Site ID : 22-1  
 Project # : 22-1

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021	10/11/13	5
Toluene	BDL	0.025	mg/kg	8021	10/11/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021	10/11/13	5
Total Xylene	BDL	0.0075	mg/kg	8021	10/11/13	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015	10/11/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	101.		% Rec.	8021/8015	10/11/13	5
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021/8015	10/11/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	8015D/DRO	10/10/13	1
Surrogate recovery(%)						
o-Terphenyl	65.8		% Rec.	8015D/DRO	10/10/13	1

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 Det. Limit - Practical Quantitation Limit(PQL)  
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 1125 Escalante Drive  
 Rangely, CO 81648-3600

October 21, 2013

Date Received : October 05, 2013  
 Description : 22-1 Site Clearance  
 Sample ID : 100313-22-1(ETS) 3-9 IN  
 Collected By : Shad Johnson  
 Collection Date : 10/03/13 14:00

ESC Sample # : L661691-06  
 Site ID : 22-1  
 Project # : 22-1

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	10.	mg/kg	3060A/7196A	10/10/13	5
Chromium,Trivalent	BDL	10.	mg/kg	Calc.	10/21/13	1
ORP	-15.		mV	2580 B-2011	10/10/13	1
pH	9.7		su	9045D	10/11/13	1
Sodium Adsorption Ratio	52.			Calc.	10/20/13	1
Specific Conductance	6000		umhos/cm	9050AMod	10/11/13	1
Mercury	BDL	0.020	mg/kg	7471	10/09/13	1
Arsenic	4.6	1.0	mg/kg	6010B	10/19/13	1
Barium	180	0.25	mg/kg	6010B	10/19/13	1
Cadmium	BDL	0.25	mg/kg	6010B	10/19/13	1
Chromium	6.3	0.50	mg/kg	6010B	10/19/13	1
Copper	10.	1.0	mg/kg	6010B	10/19/13	1
Lead	9.2	0.25	mg/kg	6010B	10/19/13	1
Nickel	9.9	1.0	mg/kg	6010B	10/19/13	1
Selenium	BDL	1.0	mg/kg	6010B	10/19/13	1
Silver	BDL	0.50	mg/kg	6010B	10/20/13	1
Zinc	38.	1.5	mg/kg	6010B	10/19/13	1
Benzene	0.017	0.0025	mg/kg	8021	10/11/13	5
Toluene	BDL	0.025	mg/kg	8021	10/11/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021	10/11/13	5
Total Xylene	0.048	0.0075	mg/kg	8021	10/11/13	5
TPH (GC/FID) Low Fraction	42.	0.50	mg/kg	8015	10/11/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	93.4		% Rec.	8021/8015	10/11/13	5
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021/8015	10/11/13	5
TPH (GC/FID) High Fraction	8.1	4.0	mg/kg	8015D/DRO	10/10/13	1
Surrogate recovery(%)						
o-Terphenyl	65.1		% Rec.	8015D/DRO	10/10/13	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1

BDL - Below Detection Limit  
 Det. Limit - Practical Quantitation Limit(PQL)  
 L661691-06 (PH) - 9.7@21.6c  
 L661691-06 (CR6) - Diluted due to sample color interference.



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 EnCana Oil & Gas - Rangely, CO  
 1125 Escalante Drive  
 Rangely, CO 81648-3600

October 21, 2013

Date Received : October 05, 2013  
 Description : 22-1 Site Clearance  
 Sample ID : 100313-22-1(ETS) 3-9 IN  
 Collected By : Shad Johnson  
 Collection Date : 10/03/13 14:00

ESC Sample # : L661691-06  
 Site ID : 22-1  
 Project # : 22-1

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	10/10/13	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	10/10/13	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	10/10/13	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	10/10/13	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	10/10/13	1
Surrogate Recovery						
Nitrobenzene-d5	89.0		% Rec.	8270C-SIM	10/10/13	1
2-Fluorobiphenyl	82.1		% Rec.	8270C-SIM	10/10/13	1
p-Terphenyl-d14	74.4		% Rec.	8270C-SIM	10/10/13	1

BDL - Below Detection Limit  
 Det. Limit - Practical Quantitation Limit(PQL)  
 Note:

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Reported: 10/21/13 16:06 Printed: 10/21/13 18:24  
 L661691-06 (PH) - 9.7@21.6c  
 L661691-06 (CR6) - Diluted due to sample color interference.

Attachment A  
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L661691-01	WG685985	SAMP	TPH (GC/FID) High Fraction	R2838681	J6
L661691-06	WG686199	SAMP	Chromium,Hexavalent	R2838628	O

Attachment B  
Explanation of QC Qualifier Codes

Qualifier	Meaning
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
0	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed  
10/21/13 at 18:24:35

TSR Signing Reports: 358  
R5 - Desired TAT

Sample: L661691-01 Account: ENCANRCO Received: 10/05/13 09:00 Due Date: 10/11/13 00:00 RPT Date: 10/21/13 16:06  
Sample: L661691-02 Account: ENCANRCO Received: 10/05/13 09:00 Due Date: 10/11/13 00:00 RPT Date: 10/21/13 16:06  
Sample: L661691-03 Account: ENCANRCO Received: 10/05/13 09:00 Due Date: 10/11/13 00:00 RPT Date: 10/21/13 16:06  
Sample: L661691-04 Account: ENCANRCO Received: 10/05/13 09:00 Due Date: 10/11/13 00:00 RPT Date: 10/21/13 16:06  
Sample: L661691-05 Account: ENCANRCO Received: 10/05/13 09:00 Due Date: 10/11/13 00:00 RPT Date: 10/21/13 16:06  
Sample: L661691-06 Account: ENCANRCO Received: 10/05/13 09:00 Due Date: 10/11/13 00:00 RPT Date: 10/21/13 16:06

**\*ENCANRCO-RULEENG\***  
**Encana Oil & Gas**  
**143 Diamond Avenue**  
**Parachute, CO 81635**  
**\*ENCANRCO-RULEENG\***

Billing Information:  
 Charles Jensen  
 143 Diamond Ave  
 Parachute, CO 81635

Report to: Charles Jensen

Email to: Charles Jensen, Shad Johnson

Analysis/Container/Preservative

BTEXGRO / DRO - 8260/8015  
 SV8270PAHSIM - 8270SIM  
 SPCON - 9050AMod  
 SAR - Calc.  
 RCRA8 Metals + Cu, Ni, and Zn - 6010/7470  
 CR6SS - 3060A/7196  
 CR3 - Calc.  
 Arsenic

Chain of Custody  
 Page 1 of 1



12065 Lebanon Road  
 Mt. Juliet, TN 37122

Phone: (800) 767-5859  
 Phone: (615) 758-5858  
 Fax: (615) 758-5859

1083

CoCode ENCRCO (lab use only)

Template/Prelogin

Shipped Via:

Project Description: 22-1-Site Clearance City/State Collected

Phone: 970-285-2735 Client Project #: 22-1 ESC Key: ENCANRCO-RULEENG  
 FAX:

Collected by Shad Johnson Site/Facility ID#: 22-1 P.O.#:

Collected by (signature): *Shad Johnson*  
 Immediately Packed on Ice N   
**Rush?** (Lab MUST Be Notified)  
 \_\_\_ Same Day.....200%  
 \_\_\_ Next Day.....100%  
 \_\_\_ Two Day.....50%  
 \_\_\_ Three Day.....25%  
 Date Results Needed:  
 Email?  No  Yes  
 FAX?  No  Yes

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEXGRO / DRO	SV8270PAHSIM	SPCON	SAR	RCRA8 Metals + Cu, Ni, and Zn	CR6SS	CR3	Arsenic	Remarks/Contaminant	Sample # (lab only)
100313-22-1(NSW); 8'	Grab	SS	8'	10/03/13	1300	2	X									164169C-01
100313-22-1(ESW); 8.5'	Grab	SS	8.5'	10/03/13	1310	2	X									02
100313-22-1(SSW); 6.5'	Grab	SS	6.5'	10/03/13	1320	2	X									07
100313-22-1(WSW); 7.0'	Grab	SS	7.0'	10/03/13	1330	2	X									04
100313-22-1(BBT); 10'	Grab	SS	10'	10/03/13	1340	2	X									05
100313-22-1(ETS); 3-9"	Comp	SS	3-9"	10/03/13	1400	3	X	X	X	X	X	X	X			06

\*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other \_\_\_\_\_

pH \_\_\_\_\_ Temp \_\_\_\_\_

Remarks:

5086 58260773

Flow \_\_\_\_\_ Other \_\_\_\_\_

Relinquished by: (Signature) <i>Shad Johnson</i>	Date: 10/4/13	Time: 1000	Received by: (Signature)	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____	Condition: (lab use only) <i>AMS</i>
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 32	Bottles Received: 13=402
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <i>M. Lowe</i>	Date: 10-5-13	Time: 0900
				pH Checked:	NCF:



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Mt. Juliet, TN 37122  
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1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Charles Jensen  
EnCana Oil & Gas - Rangely, CO  
1125 Escalante Drive  
Rangely, CO 81648-3600

## Report Summary

Sunday October 20, 2013

Report Number: L661692

Samples Received: 10/05/13

Client Project: 22-1

Description: 22-1 Site Clearance

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

T. Alan Harvill , ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,  
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,  
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,  
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,  
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,  
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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Est. 1970

REPORT OF ANALYSIS

Charles Jensen  
EnCana Oil & Gas - Rangely, CO  
1125 Escalante Drive  
Rangely, CO 81648-3600

October 20, 2013

Date Received : October 05, 2013  
Description : 22-1 Site Clearance  
Sample ID : 100313-22-1(BG1N) 6 IN  
Collected By : Shad Johnson  
Collection Date : 10/03/13 09:00

ESC Sample # : L661692-01

Site ID : 22-1

Project # : 22-1

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	4.3	1.0	mg/kg	6010B	10/19/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 10/20/13 13:38 Printed: 10/20/13 13:38



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Est. 1970

REPORT OF ANALYSIS

Charles Jensen  
EnCana Oil & Gas - Rangely, CO  
1125 Escalante Drive  
Rangely, CO 81648-3600

October 20, 2013

Date Received : October 05, 2013  
Description : 22-1 Site Clearance  
Sample ID : 100313-22-1(BG2E) 6 IN  
Collected By : Shad Johnson  
Collection Date : 10/03/13 09:10

ESC Sample # : L661692-02

Site ID : 22-1

Project # : 22-1

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	4.0	1.0	mg/kg	6010B	10/19/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 10/20/13 13:38 Printed: 10/20/13 13:38



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REPORT OF ANALYSIS

Charles Jensen  
EnCana Oil & Gas - Rangely, CO  
1125 Escalante Drive  
Rangely, CO 81648-3600

October 20, 2013

Date Received : October 05, 2013  
Description : 22-1 Site Clearance  
Sample ID : 100313-22-1(BG3S) 6 IN  
Collected By : Shad Johnson  
Collection Date : 10/03/13 09:20

ESC Sample # : L661692-03  
Site ID : 22-1  
Project # : 22-1

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	4.9	1.0	mg/kg	6010B	10/19/13	1

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit(PQL)  
Note:  
The reported analytical results relate only to the sample submitted.  
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Reported: 10/20/13 13:38 Printed: 10/20/13 13:38



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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Charles Jensen  
EnCana Oil & Gas - Rangely, CO  
1125 Escalante Drive  
Rangely, CO 81648-3600

October 20, 2013

Date Received : October 05, 2013  
Description : 22-1 Site Clearance  
Sample ID : 100313-22-1(BG4W) 6 IN  
Collected By : Shad Johnson  
Collection Date : 10/03/13 09:30

ESC Sample # : L661692-04

Site ID : 22-1

Project # : 22-1

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	4.4	1.0	mg/kg	6010B	10/19/13	1

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.  
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Reported: 10/20/13 13:38 Printed: 10/20/13 13:38

Summary of Remarks For Samples Printed  
10/20/13 at 13:38:27

TSR Signing Reports: 358  
R5 - Desired TAT

Sample: L661692-01 Account: ENCANRCO Received: 10/05/13 09:00 Due Date: 10/11/13 00:00 RPT Date: 10/20/13 13:38

Sample: L661692-02 Account: ENCANRCO Received: 10/05/13 09:00 Due Date: 10/11/13 00:00 RPT Date: 10/20/13 13:38

Sample: L661692-03 Account: ENCANRCO Received: 10/05/13 09:00 Due Date: 10/11/13 00:00 RPT Date: 10/20/13 13:38

Sample: L661692-04 Account: ENCANRCO Received: 10/05/13 09:00 Due Date: 10/11/13 00:00 RPT Date: 10/20/13 13:38

**\*ENCANRCO-RULEENG\***  
**Encana Oil & Gas**  
**143 Diamond Avenue**  
**Parachute, CO 81635**  
**\*ENCANRCO-RULEENG\***

Billing Information:  
 Charles Jensen  
 143 Diamond Ave  
 Parachute, CO 81635

Report to: Charles Jensen

Email to: Charles Jensen, Shad Johnson

Analysis/Container/Preservative

Chain of Custody  
 Page 1 of 1



**ESC**  
 L.A.B S.C.I.E.N.C.E.S

12065 Lebanon Road  
 Mt. Juliet, TN 37122

Phone: (800) 767-5859  
 Phone: (615) 758-5858  
 Fax: (615) 758-5859

1082

Project Description: 22-1-Site Clearance

City/State Collected: \_\_\_\_\_

Phone: 970-285-2735 Client Project #: 22-1 ESC Key: ENCANRCO-RULEENG

FAX: \_\_\_\_\_

Collected by: Shad Johnson Site/Facility ID#: 22-1 P.O.#: \_\_\_\_\_

Collected by (signature): *[Signature]*

Immediately Packed on Ice N *[Mark]*

**Rush?** (Lab MUST Be Notified)

\_\_\_ Same Day.....200%

\_\_\_ Next Day.....100%

\_\_\_ Two Day.....50%

\_\_\_ Three Day.....25%

Date Results Needed: \_\_\_\_\_

Email?  No \_\_\_ Yes

FAX? \_\_\_ No \_\_\_ Yes

BTEXGRO / DRO - 8260/8015

SV8270PAHSIM - 8270SIM

SPCON - 9050AMod

SAR - Calc.

RCRA8 Metals + Cu, Ni, and Zn - 6010/7470

CR6SS - 3060A/7196

CR3 - Calc.

Arsenic

CoCode ENCRCO (lab use only)

Template/Prelogin

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Remarks/Contaminant	Sample # (lab only)
100313-22-1(BG1N);6"	Grab	SS	6"	10/03/13	0900	1		L66662001
100313-22-1(BG2E);6"	Grab	SS	6"	10/03/13	0910	1		02
100313-22-1(BG3S);6"	Grab	SS	6"	10/03/13	0920	1		03
100313-22-1(BG4W);6"	Grab	SS	6"	10/03/13	0930	1		01

\*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other \_\_\_\_\_

Remarks: \_\_\_\_\_

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

5086 5826 0773

Relinquished by: (Signature) <i>[Signature]</i>	Date: 10/4/13	Time: 1000	Received by: (Signature) _____	Samples returned via: <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> UPS <input type="checkbox"/> Courier	Condition: (lab use only) <i>[Signature]</i>
Relinquished by: (Signature) _____	Date: _____	Time: _____	Received by: (Signature) _____	Temp: 3.2	Bottles Received: 4 = 4oz
Relinquished by: (Signature) _____	Date: _____	Time: _____	Received for lab by: (Signature) <i>[Signature]</i>	Date: 10-5-13	Time: 0900
				pH Checked: _____	NCF: _____