District J 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

### OIL CONS. DIV DIST. 3

Form C-141 Revised August 8, 2011

NOV 032015 Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action OPERATOR** Initial Report Final Report Name of Company ConocoPhillips Company Contact Crystal Walker Address 3401 East 30th St, Farmington, NM Telephone No.(505) 326-9837 Facility Name: Lindrith B Unit 37 Facility Type: Gas Well Mineral Owner BLM (SF-078907 API No.30-039-23816 Surface Owner BLM LOCATION OF RELEASE Feet from the North/South Line Feet from the East/West Line Unit Letter Section Township Range County 24N 2W 1850 North 1850 **Rio Arriba** G 4 East Latitude 36.342098 Longitude -107.05178 NATURE OF RELEASE **Produced Fluids** Volume of Release Volume Recovered Type of Release Source of Release **Below Grade Tank** Date and Hour of Occurrence Date and Hour of Discovery Was Immediate Notice Given? If YES, To Whom? Yes No X Not Required By Whom? Date and Hour Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. Yes No If a Watercourse was Impacted, Describe Fully.\* Describe Cause of Problem and Remedial Action Taken.\* **Below Grade Tank Closure Activities** Describe Area Affected and Cleanup Action Taken.\* The regulatory standard for closure at this site was determined to be 100ppm. Soil samples were taken and then transported to the lab and analytical results for TPH, BTEX and Chlorides were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release: therefore no further action is required. The final report is attached for review. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION al Walker Signature: Approved by Environmental Specialist Printed Name: Crystal Walker Approval Date: 12 109 10015 Expiration Date: Title: Regulatory Coordinator E-mail Address: crystal.walker@conocophillips.com Conditions of Approval: Attached Date: 10/29 IS Phone: (505) 326-9837 NVF1536341447 \* Attach Additional Sheets If Necessary



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche Farmington, NM 87401 505-564-2281

> Durango, Colorado 970-403-3274

### November 14, 2012

Ashley Maxwell ConocoPhillips San Juan Business Unit Office 216-2 5525 Hwy 64 Farmington, New Mexico 87401

### RE: Below Grade Tank Closure Report Lindrith B #37 Rio Arriba County, New Mexico

Dear Ms. Maxwell:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) Lindrith B #37, located in Rio Arriba County, New Mexico. Tank removal had been completed by CoP contractors prior to AES' arrival at the location.

### 1.0 Site Information

### 1.1 Location

Site Name – Lindrith B #37 Legal Description – SW¼ NE¼, Section 4, T24N, R2W, Rio Arriba County, New Mexico Well Latitude/Longitude – N36.34203 and W107.05225, respectively BGT Latitude/Longitude – N36.34241 and W107.05262, respectively Land Jurisdiction – Private Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, September 2012

### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a C-144 form dated June 2008 for the Lindrith B #37 well reported the depth to groundwater as less than 50 feet below ground surface (bgs). The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum Recovery

Ashley Maxwell Lindrith B #37 BGT Closure Report November 14, 2012 Page 2 of 5

Research Center online mapping tool (<u>http://ford.nmt.edu/react/project.html</u>) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was less than 50 feet bgs. The well location is situated approximately 1,000 feet south of a drainage leading to Oso Canyon, and a pond is located approximately 450 feet northeast of the location. Based on this information, the site was assessed a ranking score of 30 per NMOCD's *Guidelines for Leaks, Spills, and Releases* (August 1993).

### 1.3 BGT Closure Assessment

AES was initially contacted by Jess Henson, CoP representative, on September 6, 2012, and on September 7, 2012, Heather Woods and Zachary Trujillo of AES met with a CoP representative at the location. AES personnel collected six soil samples from the below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample.

### 2.0 Soil Sampling

On September 7, 2012, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples S-1 through S-5 were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH). Soil sample SC-1 was field screened for chlorides and submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

### 2.1 Field Screening

### 2.1.1 Volatile Organic Compounds

A portion of each sample was utilized for field screening of VOC vapors with a photoionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

#### 2.1.2 Total Petroleum Hydrocarbons

Soil samples were also analyzed in the field for TPH per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical

Ashley Maxwell Lindrith B #37 BGT Closure Report November 14, 2012 Page 3 of 5

protocol followed AES's Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.

### 2.1.3 Chlorides

Soil sample SC-1 was field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

### 2.2 Laboratory Analyses

The composite soil sample SC-1 collected for laboratory analysis was placed into a new, clean, laboratory-supplied container, which was then labeled, placed on ice, and logged onto a sample chain of custody record. The sample was maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil sample SC-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B;
- Total petroleum hydrocarbons (TPH) for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B;
- Chloride per USEPA Method 300.0.

### 2.3 Field and Laboratory Analytical Results

Field screening readings for VOCs via OVM ranged from 1.8 ppm in S-3 up to 111 ppm in S-2. Field TPH concentrations ranged from 74.4 mg/kg in S-4 up to 249 mg/kg in S-2. The field chloride concentration in SC-1 was 40 mg/kg. Field screening results are summarized in Table 1 and presented on Figure 2. The AES Field Screening Report is attached.

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action L	evel (NMAC 19.	15.17.13E)		100	250
S-1	09/07/12	0.5	3.1	82.7	NA
S-2	09/07/12	0.5	111	249	NA
S-3	09/07/12	0.5	1.8	172	NA
S-4	09/07/12	0.5	3.4	74.4	NA
S-5	09/07/12	0.5	3.5	134	NA

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results Lindrith B #37 BGT Closure, September 2012

Ashley Maxwell Lindrith B #37 BGT Closure Report November 14, 2012 Page 4 of 5

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action	evel (NMAC 19.	15.17.13E)		100	250
SC-1	09/07/12	0.5	NA	NA	40

NA – Not Analyzed

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 below the laboratory detection limits of 0.050 mg/kg and 0.25 mg/kg, respectively. TPH concentrations were reported at 15 mg/kg GRO and 22 mg/kg DRO. The laboratory chloride concentration was below the laboratory detection limit of 30 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. Laboratory analytical reports are attached.

Table 2. Soli Laboratory Analytical Results, Linurith D #57 DGT Closure, September 20	Table 2.	. Soil Laboratory	Analytical Results,	Lindrith B #37 BGT	Closure, September 20
---	----------	-------------------	---------------------	--------------------	-----------------------

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH- GRO (mg/kg)	TPH- DRO (mg/kg)	Chlorides (mg/kg)	
NMOCD Action	Level (NMAC 19.15	5.17.13E)	0.2	50	1	00	250	
NIA Not A	naturad							

NA – Not Analyzed

### 3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in three samples, S-2 (249 mg/kg), S-3 (172 mg/kg), and S-5 (134 mg/kg). However, laboratory analytical results for TPH as GRO/DRO in SC-1 were reported below the NMOCD threshold of 100 mg/kg with 37 mg/kg. Benzene concentrations in SC-1 were below the laboratory detection limit of 0.050 mg/kg, and total BTEX concentrations were below the NMOCD action level of 50 mg/kg. The chloride concentration for SC-1 was below the NMOCD action level of 250 mg/kg. Based on field screening and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended.

If you have any questions about this report or site conditions, please do not hesitate to contact Deborah Watson at (505) 564-2281.

Ashley Maxwell Lindrith B #37 BGT Closure Report November 14, 2012 Page 5 of 5

Sincerely,

Sandree R. Cupps

Landrea Cupps Environmental Scientist

Elizabeth V Mindly

Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, September 2012 AES Field Screening Report 090712 Hall Analytical Report 1209277

R:\Animas 2000\2012 Projects\Conoco Phillips\Lindrith B #37\Lindrith B #37 BGT Closure Report 111412.docx



SAMPLE LOCATIONS

	Field S	creenin	g Results	
Sample ID Date		OVM- PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCI	ACTION LEVEL		100	250
S-1	9/7/12	3.1	82.7	NA
S-2	9/7/12	111	249	NA
S-3	9/7/12	1.8	172	NA
S-4	9/7/12	3.4	74.4	NA
S-5	9/7/12	3.5	134	NA
SC-1	9/7/12	NA	NA	40

BGT - N36.34241 W107.05262

LEVE SEA	Lates.	Laborato	ry Analytica	l Results	1- 18-1	1
Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACT	ION LEVEL	0.2	50	1(	250	
SC-1	9/7/12	< 0.050	<0.25	15	22	<30
SAMPLE WAS	ANALYZED	PER EPA M	ETHOD 802	1B, 8015B A	ND 300.0.	0.16-7.3

LINDRITH B #37 WELL P&A MONUMENT





	DRAWN BY: C. Lameman	DATE DRAWN: November 1, 2012	
	REVISIONS BY: C. Lameman	DATE REVISED: November 1, 2012	
	CHECKED BY: D. Watson	DATE CHECKED: November 1, 2012	
	APPROVED BY: E. McNally	DATE APPROVED: November 1, 2012	
-			-

### FIGURE 2 AERIAL SITE MAP BELOW GRADE TANK CLOSURE SEPTEMBER 2012 ConocoPhillips LINDRITH B #37 RIO ARRIBA COUNTY, NEW MEXICO SW¼ NE¼, SECTION 4, T24N, R2W N36.34203, W107.05225

# **AES Field Screening Report**

Client: ConocoPhillips Project Location: Lindrith B #37 Date: 9/7/2012

Matrix: Soil



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche Farmington, NM 87401 505-564-2281

> Durango, Colorado 970-403-3274

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	9/7/2012	8:55	North	3.1	NA	9:30	82.7	20.0	1	HMW
S-2	9/7/2012	9:00	South	111	NA	9:33	249	20.0	1	HMW
S-3	9/7/2012	9:04	East	1.8	NA	9:36	172	20.0	1	HMW
S-4	9/7/2012	9:06	West	3.4	NA	9:38	74.4	- 20.0	1	HMW
S-5	9/7/2012	9:08	Center	3.5	NA	9:41	134	20.0	1	HMW
SC-1	9/7/2012	9:10	Composite	NA	40		Not A	Analyzed for T	PH.	

PQL Practical Quantitation Limit

- ND Not Detected at the Reporting Limit
- NA Not Analyzed
- DF Dilution Factor

\*Field TPH concentrations recorded may be below PQL.

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Aleather M. Woods Analyst:



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

September 14, 2012

Debbie Watson Animas Environmental Services 624 East Comanche Farmington, NM 87401 TEL: (505) 486-4071 FAX

OrderNo.: 1209277

Dear Debbie Watson:

RE: COP Lindrith B #37

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/8/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

**Analytical Report** 

#### Lab Order 1209277

Date Reported: 9/14/2012

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services Project: COP Lindrith B #37

1209277-001

Lab ID:

Client Sample ID: SC-1 Collection Date: 9/7/2012 9:10:00 AM Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL O	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	GE ORGANICS					Analyst: JMP
Diesel Range Organics (DRO)	22	10		mg/Kg	1	9/10/2012 12:01:20 PM
Surr: DNOP	118	77.6-140		%REC	1	9/10/2012 12:01:20 PM
EPA METHOD 8015B: GASOLINE R	ANGE					Analyst: NSB
Gasoline Range Organics (GRO)	15	5.0		mg/Kg	1	9/10/2012 1:41:46 PM
Surr: BFB	252	84-116	S	%REC	1	9/10/2012 1:41:46 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	9/10/2012 1:41:46 PM
Toluene	ND	0.050		mg/Kg	1	9/10/2012 1:41:46 PM
Ethylbenzene	ND	0.050		mg/Kg	1	9/10/2012 1:41:46 PM
Xylenes, Total	ND	0.10		mg/Kg	1	9/10/2012 1:41:46 PM
Surr: 4-Bromofluorobenzene	125	80-120	S	%REC	1	9/10/2012 1:41:46 PM
EPA METHOD 300.0: ANIONS						Analyst: SRM
Chloride	ND	30		mg/Kg	20	9/10/2012 2:11:03 PM

Matrix: SOIL

Qualifiers:

\*

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

Page 1 of 10

WO#: 1209277

14-Sep-12

Client: Project:	Animas E COP Linc	nvironmer lrith B #37	ntal Ser	vices							
Sample ID	MB-3668	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	300.0: Anior	15	1000	
Client ID:	PBS	Batch	ID: 36	68	F	RunNo: 5	415				
Prep Date:	9/10/2012	Analysis D	ate: 9/	10/2012	5	SeqNo: 1	54533	Units: mg/k	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5				1.1.1			Street.	15.5
Sample ID	LCS-3668	SampT	ype: LC	s	Tes	tCode: E	PA Method	300.0: Anior	ns		5 E .
Client ID:	LCSS	Batch	ID: 36	68	F	RunNo: 5	415				
Prep Date:	9/10/2012	Analysis D	ate: 9/	10/2012	5	SeqNo: 1	54534	Units: mg/k	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	The second	14	1.5	15.00	0	96.2	90	110		1.564	
Sample ID	1209219-001AMS	SampT	ype: MS	S	Tes	tCode: E	PA Method	300.0: Anior	ıs	- 14 T	
Client ID:	BatchQC	Batch	ID: 36	68	F	RunNo: 5	415				
Prep Date:	9/10/2012	Analysis D	ate: 9/	10/2012	S	SeqNo: 1	54547	Units: mg/k	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		16	7.5	15.00	3.156	86.2	64.4	117	W. Lab	35 V	
Sample ID	1209219-001AMS	SampT	ype: MS	SD	Tes	tCode: E	PA Method	300.0: Anior	ıs	1.1	
Client ID:	BatchQC	Batch	ID: 36	68	F	RunNo: 5	415				
Prep Date:	9/10/2012	Analysis D	ate: 9/	10/2012	5	SeqNo: 1	54548	Units: mg/l	Kg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	1221911	16	7.5	15.00	3.156	87.0	64.4	117	0.694	20	
Sample ID	1209219-007AMS	SampT	ype: MS	S	Tes	tCode: E	PA Method	300.0: Anior	ıs		
Client ID:	BatchQC	Batch	ID: 36	68	F	RunNo: 5	415				
Prep Date:	9/10/2012	Analysis D	ate: 9/	10/2012	5	SeqNo: 1	54562	Units: mg/l	Kg		
Analyte	The second second	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	a fair and	35	7.5	15.00	23.36	78.4	64.4	117		1. 1	- × 16
Sample ID	1209219-007AMSE	SampT	ype: MS	SD	Tes	tCode: E	PA Method	300.0: Anior	IS		
Client ID:	BatchQC	Batch	ID: 36	68	F	RunNo: 5	415				
Prep Date:	9/10/2012	Analysis D	ate: 9/	10/2012	S	SeqNo: 1	54563	Units: mg/k	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		37	7.5	15.00	23.36	91.8	64.4	117	5.58	20	

### Qualifiers:

J R

Value exceeds Maximum Contaminant Level. \*

RPD outside accepted recovery limits

- Value above quantitation range Е Analyte detected below quantitation limits
- Analyte detected in the associated Method Blank Holding times for preparation or analysis exceeded Η
  - ND Not Detected at the Reporting Limit
  - RL Reporting Detection Limit

В

WO#: 1209277

14-Sep-12

Client: Project:	Animas Envi COP Lindrith	B #37	al Ser	vices							
Sample ID MB-36 Client ID: PBS	69 2012	SampTy Batch	pe: ME	BLK 69	Tes F	tCode: E RunNo: 5	PA Method	8015B: Dies	el Range (	Organics	
Analyte	2012 An	esult	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics Surr: DNOP	(DRO)	ND 11	10	10.00		111	77.6	140			
Sample ID LCS-3 Client ID: LCSS	669	SampTy Batch	pe: LC	:S 69	Tes F	tCode: E RunNo: 5	PA Method 402	8015B: Dies	el Range (	Organics	124
Prep Date: 9/10/	2012 An	ilysis Da	te: 9/	10/2012	S	SeqNo: 1	54022	Units: mg/H	٢g		
Analyte	R	esult	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics Surr: DNOP	(DRO)	36 4.4	10	50.00 5.000	0	71.9 88.3	52.6 77.6	130 140	1	1	

- Value exceeds Maximum Contaminant Level. \*
- E Value above quantitation range
- Analyte detected below quantitation limits J
- R RPD outside accepted recovery limits

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

WO#: 1209277

14-Sep-12

Client: Project:	Anima COP L	s Environmental Services .indrith B #37		
Sample ID	MB-3703	SampType: MBLK TestCode: EPA Method 8015B: Diesel Range		5 m (
Client ID:	PBW	Batch ID: 3703 RunNo: 5423		
Prep Date:	9/11/2012	Analysis Date: 9/11/2012 SeqNo: 154966 Units: %REC		
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD	RPDLimit	Qual
Surr: DNOP	1. 18 M	1.2 1.000 118 79.5 166		
Sample ID	LCS-3703	SampType: LCS TestCode: EPA Method 8015B: Diesel Range		
Client ID:	LCSW	Batch ID: 3703 RunNo: 5423		
Prep Date:	9/11/2012	Analysis Date: 9/11/2012 SeqNo: 155418 Units: %REC		
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD	RPDLimit	Qual
Surr: DNOP		0.49 0.5000 97.1 79.5 166	1	
Sample ID	LCSD-3703	SampType: LCSD TestCode: EPA Method 8015B: Diesel Range		100
Client ID:	LCSS02	Batch ID: 3703 RunNo: 5423		
Prep Date:	9/11/2012	Analysis Date: 9/11/2012 SeqNo: 155419 Units: %REC		
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD	RPDLimit	Qual
Surr: DNOP	1 . T. 1	0.42 0.5000 84.4 79.5 166 0	0	0. BU

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
  - RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1209277

14-Sep-12

Client:	Animas Environmental Services

Project: COP Lindrith B #37

Sample ID 1209273-004AD	UP SampTyp	e: DU	P	Test	Code: El	PA Method	8015B: Gaso	line Rang	e	
Client ID: BatchQC	Batch II	): R54	410	R	unNo: 5	410				
Prep Date:	Analysis Date	e: 9/*	10/2012	S	SeqNo: 1	54803	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	120	5.0						4.49	21	1.00
Surr: BFB	1700		2000		83.0	43.1	185	0	0	

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

. . . .

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1209277

14-Sep-12

Client: Project:	Animas E COP Linc	nvironme lrith B #3'	ntal Ser 7	vices							
Sample ID	5ML RB	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	8015B: Gase	oline Rang	je	
Client ID:	PBS	Batch	h ID: R5	5410	F	RunNo: 5	410				
Prep Date:		Analysis D	Date: 9/	/10/2012	S	SeqNo: 1	54807	Units: mg/H	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0						1000	17.805	
Surr: BFB	1.1.1	940		1000		93.6	84	116		a Birth	6
Sample ID	2.5UG GRO LCS	SampT	Type: LC	s	Tes	tCode: E	PA Method	8015B: Gase	oline Rang	je	
Client ID:	LCSS	Batch	h ID: RS	5410	F	RunNo: 5	410				
Prep Date:		Analysis D	Date: 9/	/10/2012	5	SeqNo: 1	54808	Units: mg/k	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	23	5.0	25.00	0	90.0	74	117			
Surr: BFB		880		1000		87.6	84	116		1.00	
Sample ID	1209278-001AMS	SampT	ype: M	S	Tes	tCode: E	PA Method	8015B: Gase	oline Rang	je	
Client ID:	BatchQC	Batch	h ID: RS	5410	F	RunNo: 5	410				
Prep Date:		Analysis D	Date: 9	/10/2012	S	SeqNo: 1	54810	Units: mg/l	Kg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	20	5.0	19.14	2.021	96.3	70	130			
Surr: BFB	and the same	760		765.7		98.9	84	116			
Sample ID	1209278-001AMS	Samp1	Type: M	SD	Tes	tCode: E	PA Method	8015B: Gase	oline Rang	le	
Client ID:	BatchQC	Batch	h ID: RS	5410	F	RunNo: 5	410				
Prep Date:		Analysis D	Date: 9	/10/2012	5	SeqNo: 1	54811	Units: mg/l	Kg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	20	5.0	19.14	2.021	93.8	70	130	2.39	22.1	
Surr: BFB		800		765.7		105	84	116	0	0	

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
  - RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1209277

14-Sep-12

Client: Animas F Project: COP Lin	Environment drith B #37	al Ser	vices							
Sample ID 5ML RB Client ID: PBW Prep Date:	SampTy Batch I Analysis Da	De: MI D: R&	BLK 5410 /10/2012	Tes F S	tCode:   RunNo: SeqNo:	EPA Method 5410 154800	8015B: Gaso Units: mg/L	line Rang	le	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Jasoline Range Organics (GRO) Surr: BFB	ND 19	0.050	20.00		93.6	69.8	119			
Sample ID 2.5UG GRO LCS Client ID: LCSW Prep Date:	SampTy Batch I Analysis Da	De: LC D: R5 te: 9/	CS 5410 /10/2012	Tes F	tCode:   RunNo: SeqNo:	EPA Method 5410 154801	8015B: Gaso Units: mg/L	line Rang	Ie	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Jasoline Range Organics (GRO) Surr: BFB	0.45 18	0.050	0.5000 20.00	0	90.0 87.6	0 75.9 6 69.8	119 119		6.2	

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
  - RL Reporting Detection Limit

#### Animas Environmental Services Client: **Project:**

COP Lindrith B #37

Sample ID 1209273-004	4ADUP	SampT	ype: DL	IP	Tes	tCode: E	PA Method	8021B: Volat	tiles		
Client ID: BatchQC		Batch	1D: R5	410	F	RunNo: 5	410				
Prep Date:	An	alysis D	ate: 9/	10/2012	S	SeqNo: 1	54817	Units: µg/L			
Analyte	R	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.00	0.49	0.10		1 H. C.				2.89	105	1.1.1
Toluene		0.12	0.10						3.41	34	
Ethylbenzene		ND	0.10						0	22.1	
Xylenes, Total		ND	0.30						0	21.9	
Surr: 4-Bromofluorobenzene	•	1.9		2.000		94.8	66.1	135	0	0	

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Page 8 of 10

WO#: 1209277

14-Sep-12

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1209277 14-Sep-12

Project:         COL Emmint DH07           Sample ID         SMIL RB         SampType: MBLK         TestCode: EPA Method 8021B: Volatiles           Client ID:         PBS         Batch ID:         R5410         RunNo:         5410           Prep Date:         Analysis Date:         910/2012         SeqNo:         164818         Units: mg/Kg           Analysis Date:         910         0.050         Smrtel Mondulation         No         0.026           Sample ID         100NG BTEX LCS         SampType: LCS         TestCode:         EPA Method 8021B: Volatiles         Units: mg/Kg           Sample ID         100NG BTEX LCS         SampType: LCS         TestCode:         EPA Method 8021B: Volatiles         Units: mg/Kg           Sample ID         100NG BTEX LCS         SampType: LCS         TestCode:         EPA Method 8021B: Volatiles         Units: mg/Kg           Sample ID         100NG BTEX LCS         Batch ID:         R5410         RunNo:         5410         Units: mg/Kg           Sample ID         100NG BTEX LCS         SampType: LCS         TestCode:         EPA Method 8021B: Volatiles         Units: mg/Kg           Analysis Date:         910/2012         SeqNo:         164819         Units: mg/Kg         SampType: ID         TestCode:         EPA Method 8021B: Volatil	Client:	Animas E	nvironme	ntal Ser	vices							
Sample ID       SML RB       Samp Type:       MBLK       TestCode:       EPA Method 3021B; Volatiles       Volatiles         Client ID:       PRS       Balch ID:       R540       RunNo:       5410       Vinits:       mg/K2         Prep Date:       Analysis Date:       9/10/2012       Seq N:       154818       Units:       mg/K2       Qual         Banzene       ND       0.05       Serverial       %REV       %REV       Montoline       %RPD       RPDLimit       Qual         Benzene       ND       0.050       Serverial       %REV       80       120       Serverial       %REV       Serverial       %REV       Montoline       %REV       %REV       Montoline       %REV       %REV       %REV       %REV       %REV       %REV       Montoline       %REV       %REV       Montoline       %REV       Montoline       %REV       Montoline       %REV	Project:	COP Line	INUI D #3	/			_					
Client ID:PBSBatch ID:R5410RunN:S410KunN:S410Prep Date:Analysis Date:9702Seq.N:15487Units:ing/KAnalysisPQLSPK valueSPK Ref Val%RECkeRECkunLint%RPDRPDLintQualSerzaneND0.050SerzaneND0.050SerzaneND%RECkeRECk	Sample ID	5ML RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Prep Date:       Analyte       Result       P/02       SPK ratus       SPK Ref Val       No       No <th< td=""><td>Client ID:</td><td>PBS</td><td>Batch</td><td>h ID: R5</td><td>410</td><td>F</td><td>RunNo: 5</td><td>410</td><td></td><td></td><td></td><td></td></th<>	Client ID:	PBS	Batch	h ID: R5	410	F	RunNo: 5	410				
Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLinit         HighLinit         %RPD         RPDLinit         Qual           Benzene         ND         0.050	Prep Date:		Analysis D	)ate: 9/	10/2012	S	SeqNo: 1	54818	Units: mg/k	(g		
Benzene         ND         0.050           Toluene         ND         0.050           Strit-ABromofluorobenzene         1.1         1.000         107         80         120           Sample ID         100NG BTEX LCS         BarpType: LCS         TestCode:         EPA Method 8021B: Volatiles           Sample ID         100NG BTEX LCS         Batch ID:         R5410         TestCode:         EPA Method 8021B: Volatiles           Prep Date:         Analysis Date:         9/10/2012         SeqNo: 154819         Units: mg/Kg           Analysis Date:         9/10/2012         SeqNo: 154819         Units: mg/Kg           Analysis Date:         9/10/2012         SeqNo: 154819         Units: mg/Kg           Analysis Date:         POL         SPK value         SPK Ref Val         %REC         LowLinit         HighLinit         %RPD         RPDLinit         Qual           Benzene         1.1         0.050         1.000         0         113         80         120         S           Strit-ABromofluorobenzene         1.2         1.000         0         116         76.7         117         S         S           Sample ID         1209276-004AMS         Smg/Fyre: MS         TestCode:         EPA Method SOIEIB: Volatile	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene         ND         0.050           Ethylbanzane         ND         0.050           Sum 4-Bromofluorobanzane         1.1         1.000         107         80         120           Sample ID         100NG BTEX LCS         SampT-ye:         LS         TestCode:         EPA Method 8021B: Volatiles           Client ID:         LCSS         Batch ID:         R5410         RunNo:         5410           Prep Date:         Analysis Date:         9/10/2012         SeqNo:         154819         Units:         mg/Kg           Analysis         Result         PQL         SPK value         SPK Ref Val         %REC         LowLinit         169Lnitt         %RPD         RPDLinit         Qual           Benzene         1.1         0.050         1.000         0         113         80         120         S           Toluene         1.1         0.050         1.000         0         113         80         120         S           Sample ID         1209276-004AMS         SampT-ye:         TestLer Method Suzt         Yeine         S           Sample ID         1209276-004AMS         SampT-yeine         RunNo:         5410         Yeine         Yeine         S <t< td=""><td>Benzene</td><td></td><td>ND</td><td>0.050</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Benzene		ND	0.050								
Ethylenzene         ND         0.050           Xylenes, Total         ND         0.10           Surr. 4-Bromoluorobanzene         1.1         1.000         107         80         120           Sample ID         100NG BTEX LCS         Samptry::         CS         TestCode:         EPA Method         8021B:         Vol           Prep Date:         Analysis         Date:         9/10/2012         SeqNo:         154819         Units:         mg/K           Stample ID         1209276-004AMS         Samptry::         ND         0.01         113         80         120         S           Sample ID         1209276-004AMS         Samptry::         TestCode:         EPA Method         8021B:         Volatis           Sample ID         1209276-004AMS         Samptry::         Samptry::         TestCode:         EPA Method         8021B:         Volatis         Mg/K </td <td>Toluene</td> <td></td> <td>ND</td> <td>0.050</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Toluene		ND	0.050								
Wyenes, Total         ND         0.10         1.000         107         80         120           Sample ID         1000 S BTEX LCS         SampType:         LCS         TestCode:         EPA Method         80218:         Volatilles           Client ID:         LCSS         Batch ID:         R5410         RunNo:         54419         Units:         mg/kg           Analyse         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Benzene         1.1         0.050         1.000         0         113         80         120         -         -         4         Qual           Benzene         1.1         0.050         1.000         0         113         80         120         -         -         -         5           Stybenes, Total         3.5         0.10         0.000         0         116         76.7         117         -         -         S           Systemation         1.000         0         112         80         120         -         S         S           Systemation         3.5         0.10         0.000         0.0726<	Ethylbenzene		ND	0.050								
Surr.4-Bromofuorobanzene         1.1         1.000         107         80         120           Sample ID         1000 G BTEX LCS         SampT-ye:         LCS         Batch ID:         R5410         RunNo:         5410         Units:         mg/s           Prep Date:         Analysis Date:         9/10/2012         SeqNo:         154819         Units:         mg/s           Analyte         Result         PQL         SPK Ref Vall         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Benzene         1.1         0.050         1.000         0         113         80         120          S           Striptenes, Total         3.5         0.10         3.000         0         116         76.7         117          S           Sampte ID         1209276-004AMS         SampT-ye:         MS         TestCode:         EPA Method S21B: Volutille         S           Sample ID         1209276-004AMS         SampT-ye:         MS         TestCode:         LPA Method S21B: Volutille         S         S           Benzene         0.4700         0.770         0.07900         0         97.9         67.2         113         S         S <td>Xylenes, Total</td> <td></td> <td>ND</td> <td>0.10</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Xylenes, Total		ND	0.10								
Sample ID         100NG BTEX LCS         SampType: LCS         TestCode:         EPA Method 8021B:         Volatilies           Client ID:         LCSS         Batch ID:         R5+10         RunNo:         5410         Nunts:         mg/g           Prep Date:         Analysis Date:         9/10/2012         SeqNo:         154819         Units:         mg/g           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Benzene         1.1         0.050         1.000         0         113         80         120         Environmetal         SeqNo:         15400         116         76.3         117         SeqNo:         SeqNo:         SeqNo:         15400         100         116         76.7         117         SeqNo:         SeqNo:         1500         100         116         76.7         117         SeqNo:	Surr: 4-Brom	nofluorobenzene	1.1		1.000	the second	107	80	120			
Client ID:       LCSS       Bath ID:       R441U:       Runk:       Kunk:       S441       Unit:       mg/K         Prep Date:       Analysis Date:       9/10/2012       SeqNo:       154819       Units:       mg/K         Analyte       Result       PQL       SPK value       SPK Value       NREC       LowLinit       HighLinit       %RPD       RPDLinit       Qual         Benzene       1.1       0.050       1.000       0       113       80       120       Ethylon       Setter       116       77       116       100       100       115       777       116       100       100       112       80       120       100       100       112       80       120       100       100       100       115       777       116       100       100       120       80       120       100	Sample ID	100NG BTEX LCS	Samp	Type: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles	1.00	
Prep Date:       Analysis Date:       9/10/2012       SeqNo:       154819       Units:       mg/s         Analyte       Result       PQL       SPK value       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit       Qual         Benzene       1.1       0.050       1.000       0       113       80       120       100       115       77       116       Xylees, Total       3.5       0.10       3.000       0       115       77       116       Xylees, Total       3.5       0.10       3.000       0       122       80       120       S         Sample ID       1209276-004AMS       Sampt-pe:       K5410       RunNo:       5410       S       S       S         Prep Date:       Analyte       Result       POL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit       Qual         Benzene       0.77       0.7900       0       97.9       67.2       113       27       Ylee       <	Client ID:	LCSS	Batc	h ID: R5	410	F	RunNo: 5	410				
Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Benzene         1.1         0.050         1.000         0         113         80         120         1         1         1         1         0.050         1.000         0         113         80         120         1         1         1         0.050         1.000         0         115         77         116         1         1         0.050         1.000         0         115         76.7         117         1         1         0.050         1.000         122         80         120         S         S           Sum: 4-Bromofluorobenzene         1.2         1.000         125         RenNo:         5410         Statis         S         S         S         S           Sample ID         1209276-004AMS         SampType: MS         TestLote:         EPA Method 8021B: Volatiles         S	Prep Date:		Analysis E	Date: 9/	10/2012	S	SeqNo: 1	54819	Units: mg/k	٢g		
Benzene         1.1         0.050         1.000         0         112         76.3         117           Toluene         1.1         0.050         1.000         0         113         80         120           Ethylbenzene         1.1         0.050         1.000         0         115         77         116           Xylenes, Total         3.5         0.10         3.000         0         116         76.7         117           Surr: 4-Bromofluorobenzene         1.2         1.000         122         80         120         S           Sample ID         1209276-004AMIS         SampType: MS         TestCode:         EPA Method 8021B:         Volatilles           Client ID:         BatchQC         Batch ID:         R5410         RunNo:         5410           Prep Date:         Analysis Date:         9/10/2012         SeqNo:         154820         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Benzene         0.77         0.050         0.7900         0.0114         104         67.9         127         Xylenes, Total         <	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene       1.1       0.050       1.000       0       113       80       120         Ethylbenzene       1.1       0.050       1.000       0       115       77       116         Xylenes, Total       3.5       0.10       3.000       0       116       76.7       117         Surr: 4-Bromofluorobenzene       1.2       1.000       0       122       80       120       S         Sample ID       1209276-004AMS       SampType: MS       TestCode:       EPA Method 8021B: Volatiles       S         Client ID:       BatchQC       Batch ID:       R5410       RunNo:       54/20       Units: mg/Kg         Analysis       Pat.       910/2012       SeqNo:       154820       Units: mg/Kg         Analysis       0.77       0.050       0.7900       0       97.9       67.2       113         Benzene       0.77       0.050       0.7900       0.007268       100       62.1       116         Sum: 4-Bromofluorobenzene       0.84       0.050       0.7900       0.2370       0.684       107       60.6       134         Sum: 4-Bromofluorobenzene       0.96       0.7900       0       121       80       120       S<	Benzene		1.1	0.050	1.000	0	112	76.3	117			
Ethylbenzene       1.1       0.050       1.000       0       115       77       116         Xylenes, Total       3.5       0.10       3.000       0       116       76.7       117         Surr: 4-Bromofluorobenzene       1.2       1.000       122       80       120       S         Sample ID       1209276-004AMS       SampType: MS       TestCode:       EPA Method SUB:       Voltatiles       S         Client ID:       BatchQC       Batch ID:       R5410       RunNo:       5410       Units: mg/Kg         Analyte       Result       PQL       SPK value       SPK value       SPK value       Make       0.007268       102       113       %RPD       RPDLimit       Qual         Benzene       0.77       0.050       0.7900       0       97.9       67.2       113       116 <t< td=""><td>Toluene</td><td></td><td>1.1</td><td>0.050</td><td>1.000</td><td>0</td><td>113</td><td>80</td><td>120</td><td></td><td></td><td></td></t<>	Toluene		1.1	0.050	1.000	0	113	80	120			
Xylenes, Total         3.5         0.10         3.000         0         116         76.7         117           Surr: 4-Bromofluorobenzene         1.2         1.000         122         80         120         S           Sample ID         1209276-004AMIS         SampType:         MS         TestCode:         EPA Method 8021B:         Volatiles         S           Client ID:         BatchQC         Batch ID:         R5410         RunNo:         5410         Units:         mg/Kg           Analyte         Result         PQL         SPK xelve         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Benzene         0.77         0.050         0.7900         0.079268         102         62.1         116           Ethylbenzene         0.84         0.050         0.7900         0.01114         104         67.9         127           Xylenes, Total         2.6         0.10         2.370         0.06834         107         60.6         134           Surr: 4-Bromofluorobenzene         0.96         0.7900         121         80         120         S           Sample ID         1209276-004AMISD         SampType:         MS	Ethylbenzene		1.1	0.050	1.000	0	115	77	116			
Surr. 4-Bromofluorobenzene         1.2         1.000         122         80         120         S           Sample ID         1209276-004AMIS         SampType: MIS         TestCode:         EPA Method 8021B: Volatiles         Volatiles <t< td=""><td>Xylenes, Total</td><td></td><td>3.5</td><td>0.10</td><td>3.000</td><td>0</td><td>116</td><td>76.7</td><td>117</td><td></td><td></td><td></td></t<>	Xylenes, Total		3.5	0.10	3.000	0	116	76.7	117			
Sample ID         1209276-004AMS         SampType:         MS         TestCode:         EPA Method 8021B:         Volatiles           Client ID:         BatchQC         Batch ID:         R5410         RunNo:         5410           Prep Date:         Analysis Date:         9/10/2012         SeqNo:         154820         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Benzene         0.77         0.050         0.7900         0         97.9         67.2         113            Qual           Benzene         0.82         0.050         0.7900         0.007268         102         62.1         116	Surr: 4-Bron	nofluorobenzene	1.2		1.000		122	80	120			S
Client ID:       BatchQC       Batch ID:       R5410       RunNo:       5410       Units:       mg/Kg         Prep Date:       Analysis Date:       9/10/2012       SeqNo:       154820       Units:       mg/Kg       Qual         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit       Qual         Benzene       0.77       0.050       0.7900       0       97.9       67.2       113       116	Sample ID	1209276-004AMS	Samp	Гуре: М	3	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Prep Date:       Analysis Date:       9/10/2012       SeqNo:       154820       Units:       mg/Kg         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit       Qual         Benzene       0.77       0.050       0.7900       0       97.9       67.2       113       116	Client ID:	BatchQC	Batc	h ID: R5	410	F	RunNo: 5	410				
Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Benzene         0.77         0.050         0.7900         0         97.9         67.2         113         116         1	Prep Date:		Analysis [	Date: 9/	10/2012	S	SeqNo: 1	54820	Units: mg/k	٢g		
Benzene       0.77       0.050       0.7900       0       97.9       67.2       113         Toluene       0.82       0.050       0.7900       0.007268       102       62.1       116         Ethylbenzene       0.84       0.050       0.7900       0.01114       104       67.9       127         Xylenes, Total       2.6       0.10       2.370       0.06834       107       60.6       134         Surr: 4-Bromofluorobenzene       0.96       0.7900       121       80       120       S         Sample ID       1209276-004AMSD       SampType:       MSD       TestCode:       EPA Method 8021B:       Volatiles         Client ID:       BatchQC       Batch ID:       R5410       RunNo:       5410       S         Prep Date:       Analysis Date:       9/10/2012       SeqNo:       154821       Units:       mg/Kg         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit       Qual         Benzene       0.76       0.050       0.7900       0       95.8       67.2       113       2.17       14.3         Toluene       0.79	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene       0.82       0.050       0.7900       0.007268       102       62.1       116         Ethylbenzene       0.84       0.050       0.7900       0.01114       104       67.9       127         Xylenes, Total       2.6       0.10       2.370       0.06834       107       60.6       134         Surr: 4-Bromofluorobenzene       0.96       0.7900       121       80       120       S         Sample ID       1209276-004AMSD       SampType: MSD       TestCode:       EPA Method 8021B: Volatiles       S         Client ID:       BatchQC       Batch ID:       R5410       RunNo:       5410       S         Prep Date:       Analysis Date:       9/10/2012       SeqNo:       154821       Units: mg/Kg         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit       Qual         Benzene       0.76       0.050       0.7900       0       95.8       67.2       113       2.17       14.3         Toluene       0.79       0.050       0.7900       0.007268       99.6       62.1       116       2.86       15.9         Ethylbenzene	Benzene		0.77	0.050	0.7900	0	97.9	67.2	113		The survey	
Ethylbenzene       0.84       0.050       0.7900       0.01114       104       67.9       127         Xylenes, Total       2.6       0.10       2.370       0.06834       107       60.6       134         Surr: 4-Bromofluorobenzene       0.96       0.7900       121       80       120       S         Sample ID       1209276-004AMSD       SampType: MSD       TestCode: EPA Method 8021B: Volatiles       S         Client ID:       Batch QC       Batch ID:       R5410       RunNo: 5410       Units: mg/Kg         Prep Date:       Analysis Date:       9/10/2012       SeqNo: 154821       Units: mg/Kg         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit       Qual         Benzene       0.76       0.050       0.7900       0       95.8       67.2       113       2.17       14.3         Toluene       0.81       0.050       0.7900       0.01114       101       67.9       127       2.70       14.4         Xylenes, Total       2.5       0.10       2.370       0.06834       104       60.6       134       3.19       12.6 <td>Toluene</td> <td></td> <td>0.82</td> <td>0.050</td> <td>0.7900</td> <td>0.007268</td> <td>102</td> <td>62.1</td> <td>116</td> <td></td> <td></td> <td></td>	Toluene		0.82	0.050	0.7900	0.007268	102	62.1	116			
Xylenes, Total       2.6       0.10       2.370       0.06834       107       60.6       134         Surr: 4-Bromofluorobenzene       0.96       0.7900       121       80       120       S         Sample ID       1209276-004AMSD       SampType:       MSD       TestCode:       EPA Method 8021B:       Volatiles       S         Client ID:       BatchQC       Batch ID:       R5410       RunNo:       5410       Units:       mg/Kg         Prep Date:       Analysis Date:       9/10/2012       SeqNo:       154821       Units:       mg/Kg         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit       Qual         Benzene       0.76       0.050       0.7900       0       95.8       67.2       113       2.17       14.3         Toluene       0.79       0.050       0.7900       0.007268       99.6       62.1       116       2.86       15.9         Ethylbenzene       0.81       0.050       0.7900       0.01114       101       67.9       127       2.70       14.4         Surr: 4-Bromofluorobenzene       0.88       0.7900       0.06834	Ethylbenzene		0.84	0.050	0.7900	0.01114	104	67.9	127			
Surr: 4-Bromofluorobenzene         0.96         0.7900         121         80         120         S           Sample ID         1209276-004AMSD         SampType: MSD         TestCode: EPA Method 8021B: Volatiles         S	Xylenes, Total		2.6	0.10	2.370	0.06834	107	60.6	134			
Sample ID         1209276-004AMSD         SampType:         MSD         TestCode:         EPA Method         8021B:         Volatiles           Client ID:         BatchQC         Batch ID:         R5410         RunNo:         5410         RunNo:         5410           Prep Date:         Analysis Date:         9/10/2012         SeqNo:         154821         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Benzene         0.76         0.050         0.7900         0         95.8         67.2         113         2.17         14.3           Toluene         0.79         0.050         0.7900         0.007268         99.6         62.1         116         2.86         15.9           Ethylbenzene         0.81         0.050         0.7900         0.01114         101         67.9         127         2.70         14.4           Xylenes, Total         2.5         0.10         2.370         0.06834         104         60.6         134         3.19         12.6	Surr: 4-Bron	nofluorobenzene	0.96		0.7900		121	80	120			S
Client ID:       BatchQC       Batch ID:       R5410       RunNo:       5410         Prep Date:       Analysis Date:       9/10/2012       SeqNo:       154821       Units:       mg/Kg         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit       Qual         Benzene       0.76       0.050       0.7900       0       95.8       67.2       113       2.17       14.3         Toluene       0.79       0.050       0.7900       0.007268       99.6       62.1       116       2.86       15.9         Ethylbenzene       0.81       0.050       0.7900       0.01114       101       67.9       127       2.70       14.4         Xylenes, Total       2.5       0.10       2.370       0.06834       104       60.6       134       3.19       12.6	Sample ID	1209276-004AMSI	D Samp	Гуре: М	SD	Tes	tCode: E	PA Method	8021B: Vola	tiles		246453
Prep Date:         Analysis Date:         9/10/2012         SeqNo:         154821         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Benzene         0.76         0.050         0.7900         0         95.8         67.2         113         2.17         14.3           Toluene         0.79         0.050         0.7900         0.007268         99.6         62.1         116         2.86         15.9           Ethylbenzene         0.81         0.050         0.7900         0.01114         101         67.9         127         2.70         14.4           Xylenes, Total         2.5         0.10         2.370         0.06834         104         60.6         134         3.19         12.6	Client ID	BatchQC	Batc	h ID: R5	410	F	RunNo: 5	410				
Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Benzene         0.76         0.050         0.7900         0         95.8         67.2         113         2.17         14.3           Toluene         0.79         0.050         0.7900         0.007268         99.6         62.1         116         2.86         15.9           Ethylbenzene         0.81         0.050         0.7900         0.01114         101         67.9         127         2.70         14.4           Xylenes, Total         2.5         0.10         2.370         0.06834         104         60.6         134         3.19         12.6	Prep Date:	Dutoniqu	Analysis [	Date: 9/	10/2012	5	SeqNo: 1	54821	Units: mg/ł	٢g		
Benzene         0.76         0.050         0.7900         0         95.8         67.2         113         2.17         14.3           Toluene         0.79         0.050         0.7900         0.007268         99.6         62.1         116         2.86         15.9           Ethylbenzene         0.81         0.050         0.7900         0.01114         101         67.9         127         2.70         14.4           Xylenes, Total         2.5         0.10         2.370         0.06834         104         60.6         134         3.19         12.6	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene         0.79         0.050         0.7900         0.007268         99.6         62.1         116         2.86         15.9           Ethylbenzene         0.81         0.050         0.7900         0.01114         101         67.9         127         2.70         14.4           Xylenes, Total         2.5         0.10         2.370         0.06834         104         60.6         134         3.19         12.6	Benzene		0.76	0.050	0.7900	0	95.8	67.2	113	2.17	14.3	
Ethylbenzene         0.81         0.050         0.7900         0.01114         101         67.9         127         2.70         14.4           Xylenes, Total         2.5         0.10         2.370         0.06834         104         60.6         134         3.19         12.6           Surr 4.Bromofluorobenzene         0.88         0.7900         112         80         120         0         0	Toluene		0.79	0.050	0.7900	0.007268	99.6	62.1	116	2.86	15.9	
Xylenes, Total         2.5         0.10         2.370         0.06834         104         60.6         134         3.19         12.6           Surr 4.Bromofluorobenzene         0.88         0.7900         112         80         120         0         0	Ethylhenzene		0.81	0.050	0.7900	0.01114	101	67.9	127	2.70	14.4	
Surr 4.Bromofluorobenzene 0.88 0.7000 112 80 120 0 0	Xvlenes Total		2.5	0.10	2 370	0.06834	104	60.6	134	3 19	12.6	
	Surr A.Bron	nofluorobenzene	0.88	0.10	0 7000	0.00004	112	80	120	0.13	0	

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
  - RL Reporting Detection Limit

Surr: 4-Bromofluorobenzene

# Hall Environmental Analysis Laboratory, Inc.

21

WO#: 1209277

14-Sep-12

Animas Environmental Services **Client:** COP Lindrith B #37 **Project:** Sample ID 5ML RB TestCode: EPA Method 8021B: Volatiles SampType: MBLK Client ID: PBW Batch ID: R5410 RunNo: 5410 Prep Date: Analysis Date: 9/10/2012 SeqNo: 154814 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Qual Benzene ND 1.0 ND Toluene 1.0 Ethylbenzene ND 1.0 Xylenes, Total ND 2.0 1,2,4-Trimethylbenzene ND 1.0 ND 1,3,5-Trimethylbenzene 1.0

Sample ID 100NG BTEX LCS	SampT	ype: LC	S	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: LCSW	Batch	n ID: R5	410	F	RunNo: 5	410				
Prep Date:	Analysis D	)ate: 9/	10/2012	5	SeqNo: 1	54815	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	80	120			
Toluene	23	1.0	20.00	0	113	80	120			
Ethylbenzene	23	1.0	20.00	0	115	80	120			
Xylenes, Total	69	2.0	60.00	0	116	80	120			
1,2,4-Trimethylbenzene	23	1.0	20.00	0	113	74.3	117			
1,3,5-Trimethylbenzene	23	1.0	20.00	0	117	75.8	117			S
Surr: 4-Bromofluorobenzene	24		20.00		122	69.7	152			

69.7

152

107

20.00

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Page 10 of 10

ENVIRONMENTAL ANALYSIS LABORATORY Website:	4901 Albuquerque Albuquerque 345-3975 FAX: 50 www.hallenviror	Hawl NM 5-34 umen	kins 1 871 15-41 tal.c	NE 105 107	Sample Log-In Check List
lient Name: Animas Environmental Received by/date: <u>AF 09/08//2</u>	Work Ore	der N	lum	ber:	1209277
ogged By: Anne Thome 9/8/2012 11:15	:00 AM			an	ne Han
completed By: Anne Thome 9/10/2012 Reviewed By: Anno 1/0/2				am	ne Ihan
hain of Custody					The set of the set of the
1. Were seals intact?	Yes		No		Not Present 🗹
2. Is Chain of Custody complete?	Yes	~	No		Not Present
3. How was the sample delivered?	Cour	ier			
og In					
4. Coolers are present? (see 19. for cooler specific information	n) Yes	✓	No		NA 🗆
5. Was an attempt made to cool the samples?	Yes		No		NA 🗆
5. Were all samples received at a temperature of >0° C to 6.0	0°C Yes	✓	No		NA 🗆
7. Sample(s) in proper container(s)?	Yes		No		
3. Sufficient sample volume for indicated test(s)?	Yes	V	No		
9. Are samples (except VOA and ONG) properly preserved?	Yes	Y	No		
0. Was preservative added to bottles?	Yes		No		NA 🗌
1. VOA vials have zero headspace?	Yes		No		No VOA Viais 🗹
2, Were any sample containers received broken?	Yes		No	1	
<ol> <li>Does paperwork match bottle labels? (Note discrepancies on chain of custody)</li> </ol>	Yes		No		# of preserved bottles checked for pH:
4. Are matrices correctly identified on Chain of Custody?	Yes		No		(<2 or >12 unless noted
5. Is it clear what analyses were requested?	Yes	~	No		Adjusted?
<ol> <li>Were all holding times able to be met? (If no, notify customer for authorization.)</li> </ol>	Yes	V	No		Checked by:
pecial Handling (if applicable)					
7. Was client notified of all discrepancies with this order?	Yes		No		NA 🗹
Person Notified: By Whom: Regarding: Client Instructions:	Date		] Pł	попе	Fax In Person
8. Additional remarks:					

Page 1 of 1

1

2.8

Good

Yes

Client: Mailing Farv Phone #	Address ming be #: 505	-of-Cu s Envin	E. Comanche B7401 - 2281	Turn-Around Standard Project Name CoPLin Project #:	Time: <u>S</u> Rust a: drith B	#37		490 Te	)1 Ha	H A v awkir 5-34	ns Ni 5-39	hall F - 75	EN YS envir Albu Fa	IV IS ronm ique ax 5 sis R	IR henta rque	AE al.co e, NN 345-	NN 801 0m 4 87 4107	1EI RA 109	NT	RY
email or QA/QC I D Stan Accredi	r Fax#: Package: dard tation		Level 4 (Full Validation)	Project Manager:		TPH (Gas only)	3 (Gas/Diesel)	1)	(1)	()	0.0	NO2, PO4, SO4)	8082 PCB's					11		
Date	AP (Type) Time	□ Othe Matrix	Sample Request ID	On lease Sample Tem Container Type and #	Preservative Type	HEALNO DIAN 2.77	BTEX + Made + 7	BTEX + MTBE + T	TPH Method 8015	TPH (Method 418.	EDB (Method 504.	8310 (PNA or PAH	RCRA 8 Metals	Anions (F, CLNO3,	8081 Pesticides / 8	8260B (VOA)	8270 (Semi-VOA)			Air Dishlas (V or
1/7/12	910	50',1	SC-I	MeOH Kit	Meo4 NA	-001	X		×				>	×						
													-							
Date: Date:	Time: 1555 Time: 1621		ed by: the M. Wood	Received by:	Weeler K	Date Time 9 7 12 1555 Date Time 9 8 12 11 1555	Ren WC Act	narks D: 10 ninty	All 338 Code	11 + 0 7 1: C1 . Ha	-7 200 ry I	ion Dee	000	Ph. Use Wo An	; // ; r 15 r 15 r 2 C	ps >: K 210	GA	RCI J:J	A ess	tenson

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-141 Revised August 8, 2011

Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

Release Notification	and Correcti	ve Action								
	OPERATOR	$\boxtimes$	Final Report							
Name of Company ConocoPhillips Company	Contact Crystal Walker									
Address 3401 East 30 <sup>th</sup> St, Farmington, NM	Telephone No.(505)	326-9837		a da se d						
Facility Name: Lindrith B Unit 37	Facility Type: Gas V	Vell								
Surface Owner BLM Mineral Owner B	BLM (SF-078907		API No	.30-039-23	816					
LOCATION	N OF RELEASE									
Jnit LetterSectionTownshipRangeFeet from theNorth/G424N2W1850I	South Line Feet from 185	m the East/W	/est Line L <b>ast</b>	County Rio Arrib	a					
Latitude <u>36.342098</u>	Longitude <u>-107.0</u>	5178								
Type of Release Produced Fluids	Volume of Release		Volume F	ecovered	_					
Source of Release Below Grade Tank	Date and Hour of Oc	currence	Date and	Hour of Dis	covery					
Was Immediate Notice Given?	If YES, To Whom?					1. 1.				
By Whom?	Date and Hour					and they				
Was a Watercourse Reached?	If YES, Volume Imp	pacting the Wate	rcourse.							
f a Watercourse was Impacted, Describe Fully.*					i.					
Describe Cause of Problem and Remedial Action Taken.* Below Grade Tank Closure Activities										
Describe Area Affected and Cleanup Action Taken.* The regulatory standard for closure at this site was determined to be analytical results for TPH, BTEX and Chlorides were below the regul Leaks, Spills and Release; therefore no further action is required. Th	100ppm. Soil samples latory standards set fo e final report is attacl	s were taken an orth in the NM hed for review.	d then tra OCD Guid	nsported to elines for F	the la temedi	b and ation of				

regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	<u>OIL CON</u>	ISERVATION DIVISION					
Printed Name: Crystal Walker	Approved by Environmental Specialist:						
Title: Regulatory Coordinator	Approval Date:	Expiration Date:					
E-mail Address: crystal.walker@conocophillips.com	Conditions of Approval:	Attached 🗌					
Date: Phone: (505) 526-9857							

\* Attach Additional Sheets If Necessary



October 5, 2010

Project Number 92115-1940

Ms. Kelsi Harrington Conoco Phillips 3401 East 30<sup>th</sup> Street Farmington, New Mexico 87401

Phone: (505) 599-3403

### RE: BELOW-GRADE TANK CLOSURE DOCUMENTATION FOR THE SAN JUAN 29-7 #155 (HBR) WELL SITE, SAN JUAN COUNTY, NEW MEXICO

Dear Ms. Harrington,

Enclosed please find the field notes and analytical results for below-grade tank (BGT) closure activities performed at the San Juan 29-7 #155 (hBr) well site located in Section 9, Township 27 North, Range 9 West, San Juan County, New Mexico. Prior to Envirotech's arrival on September 7, 2010, the BGT had been removed. A brief site assessment was conducted and the regulatory standards were determined to be 1000 ppm TPH and 100 ppm organic vapors due to horizontal distance to surface water between 200 to 1,000 feet and depth to groundwater at 125 feet, pursuant to New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Spills, Leaks, and Releases. One (1) five (5)-point composite sample was collected from beneath the former BGT. The sample was analyzed in the field for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, for organic vapors using a photoionization detector (PID), and for chlorides. The sample returned results below the regulatory standards for benzene, BTEX and chlorides but above the regulatory standard of 100 parts per million (ppm) TPH using USEPA Method 418.1, confirming a release did occur. Additionally, the sample was placed into a four (4)-ounce glass jar, capped headspace free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for benzene and BTEX using USEPA Method 8021 and for total chlorides using USEPA Method 4500.

The sample from beneath the former BGT returned results below the regulatory standards for TPH, benzene and BTEX, and of 568 ppm chlorides confirming a release did occur.; see attached *Analytical Results*. Envirotech, Inc. recommends no further action in regards to this incident.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

ConocoPhillips San Juan 29-7 #155 (hBr) BGT Closure Sampling Project Number 92115-1940 Page 2

Respectfully submitted, ENVIROTECH, INC.

Barian Williamson

Project Manager bwilliamson@envirotech-inc.com

Enclosures:	Analytical Results
	Field Notes

Cc:

Client File 92115

# Benvirotech

# EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1940
Sample No .:	1	Date Reported:	10/4/2011
Sample ID:	BGT Composite	Date Sampled:	9/7/2011
Sample Matrix:	Soil	Date Analyzed:	9/7/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

Total Petroleum Hydrocarbons	444	5.0

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: San Juan 29-7 #155

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

John Rollins, Environmental Field Technician Printed

Barian Williamson, Project Manager Printed



CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Cal. Date:	7-Sep-11		
Parameter	Standard Concentration mg/L	Concentration Reading mg/L	
трн	100 200 500 1000	209	

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

Analyst

Date

10/4/2011

John Rollins, Environmental Field Technician Print Name

Review

10/4/2011

Date

Barian Williamson, Project Manager Print Name



### EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips		Project #:		92115-1940	
Sample ID:	BGT		Date Reported:		09-09-11	
Laboratory Number:	59561		Date Sampled:		09-07-11	
Chain of Custody:	12531		Date Received:		09-07-11	
Sample Matrix:	Soil		Date Analyzed:		09-08-11	
Preservative:	Cool		Date Extracted:		09-07-11	
Condition:	Intact		Analysis Requested:		BTEX	
			Dilution:		10	
				Det.		
		Concentration		Limit		
Parameter		(ug/Kg)		(ug/Kg)		
Bonzono		ND		0.0		
Toluene		ND		1.0		
Ethylbenzene		ND		1.0		
n m-Yulone		21		12		
o Yylono		1.0		0.0		
0-Aylette		1.5		0.5		
Total BTEX		4.0				

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	105 %
	1,4-difluorobenzene	119 %
	Bromochlorobenzene	100 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: SJ 29-7 #155.

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Review



### EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Sample ID: Laboratory Number: Sample Matrix: Preservative: Condition:	N/A 0908BBLK QA/QC 59563 Soil N/A N/A		Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Analysis: Dilution:		I/A 19-07-11 I/A I/A 19-08-11 BTEX
Calibration and	I-Cal RF:	C-Cal RF:	%Diff.	Blank	Detect
Detection Limits (ug/L)		Accept. Rang	ge 0 - 15%	Conc	Limit
Benzene	3.7583E+006	3.7658E+006	0.2%	ND	0.1
Toluene	3.8095E+006	3.8171E+006	0.2%	ND	0.1
Ethylbenzene	3.3597E+006	3.3664E+006	0.2%	ND	0.1
p,m-Xylene	9.2537E+006	9.2723E+006	0.2%	ND	0.1
o-Xylene	3.1163E+006	3.1226E+006	0.2%	ND	0.1
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	ND	ND	0.0%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	475	95.0%	39 - 150
Toluene	ND	500	450	90.1%	46 - 148
Ethylbenzene	ND	500	448	89.7%	32 - 160
p,m-Xylene	ND	1000	897	89.7%	46 - 148
o-Xylene	ND	500	449	89.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996. Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using

Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:	AAAC for Samples 59538, 5	9542, 59561, 59563-59568.	-
Y	R	A	
Analyst		Review	1 1
0	$\bigcirc$		



## Chloride

Client:	ConocoPhillips	Project #:	92115-1940	
Sample ID:	BGT	Date Reported:	09/09/11	
Lab ID#:	54258	Date Sampled:	09/07/11	
Sample Matrix:	Soil	Date Received:	09/07/11	
Preservative:	Cool	Date Analyzed:	09/09/11	
Condition:	Intact	Chain of Custody:	12531	

### Parameter

## Concentration (mg/Kg)

**Total Chloride** 

568

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

SJ 29-7 #155.

Analyst

Review

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

Client:		1	Project Name /	Location	: ,	,	20 - ET 19							ANAL	YSIS	PAR	AMET	TERS				
Conoco			55 20	7-7	# 155	/			5.	1						22						
Client Address:			Sampler Name:	2					8015)	d 8021)	8260)	lls	-		٩				1			**
Client Phone No.:		•	Client No.: 92115-	194	10				(Method	(Metho	(Methoc	A 8 Meta	n / Anio		with H/		(418.1)	ORIDE			ole Cool	ole Intac
Sample No./ Identification	Sample Date	Sample Time	Lab No.	S	ample Matrix	No./Volume of Containers	Preser HgCl, HC	vative	TPH (	BTEX	Voc	RCR/	Catio	RCI	TCLP	PAH	TPH	GHLO			Sam	Sam
BGT	9/7/11	13:45	59561	Solid	Sludge Aqueous	402		X		X				_				X			Х	X
				Soil Solid	Sludge Aqueous							_										
				Solid Solid	Sludge Aqueous																	
			1-1-1	Solid	Sludge Aqueous						_								_		_	
18. 31			- n - 1	Soli Solid	Sludge Aqueous																	
				Solid Solid	Sludge Aqueous																	_
				Soil Solid	Sludge Aqueous											_						
				Soil Solid	Sludge Aqueous																	
-				Soil Solid	Sludge Aqueous														_			
	1			Soil Solid	Sludge Aqueous																	
telinquished by: (Sig	pature)	K	0		Date	Time /5:30	Re	ceive	d by:	(Sign	ature)	T	2	-	in	1			11	7/1	15	:3
Relinquished by: (Sig	nature)						Re	ceive	d by:	(Sign	ature	)										
Relinquished by: (Sig	nature)						Re	ceive	d by:	(Sign	ature	)	8									
KP	1)	5	HX	4	3	en	<b>/i</b>	r O ical	t	ee		<b>1</b> y				R P						

PAGE NO:OF	/	6	3 en	viro	tech		ENVIRON	MENTAL SPECIALIST:	
DATE STARTED: 9/7/	11		5796 U.S. Hwy 64, Farmington, NM 87401 LAT: 36.74753						
DATE FINISHED: 9/7	///	and state of a	PHON	NE: (505) 63	2-0615	the star	LONG: -/a	07.571	
	FIELD R	EPORT: 1	BGT / PI	IT CLOS	URE VE	RIFICAT	ΓION		
LOCATION: NAME: 5	5 29-7		WELL #:	155	TEMP PIT:	PERMAN	ENT PIT:	BGT:X	
LEGAL ADD: UNIT: 7	4	SEC: 9		TWP: 29	N	RNG: 74	/	PM: NM	
QTR/FOOTAGE: 1085 F	-NG + 10	YO FEL	CNTY: K	2A		ST: NN	7		
EXCAVATION APPROX:	NA	FT. X	NA	FT. X	NK	FT. DEEP	CUBIC YA	RDAGE:	
LAND OWNED.	MA		ADI Zm Z	REMEDIA	ION METHO		VOLUME.		
CONSTRUCTION MATERI	AI. Ch. /		DOUBLE-	VALLED V	THLEAK	ETECTION	J.		
LOCATION ADDOXIMATERI	ELV.		DOUBLE-	TALLED, T	EDOM WELL				
DEPTH TO CROUNDWAT	ELY:	122.9	FI. Sort	2	FROM WELL		vory		
TEMPORARY DIT C	DOUNDWAT	ED 50 100 EE	ET DEED				-		
DEMPORART PIT - G. BENZENE ≤ 0.2 mg/kg, B X PERMANENT PIT OR BENZENE ≤ 0.2 mg/kg, 1	BGT BTEX ≤ 50 mg/k BTEX ≤ 50 mg/l	ER ≥100 FEE g, GRO & DRC kg, TPH (418.1)	FRACTION ) ≤ 100 mg/kg	N (8015) ≤ 500 3, CHLORIDE	) mg/kg, TPH (4 SS ≤ 250 mg/kg	418.1) ≤ 2500	mg/kg, CHLO	DRIDES ≤ 1000 mg/kg	
	TIME	SAMPLEID	LABNO	WEIGHT (of	ml FREON	DILUTION	READING	CALC (mg/kg)	
	10:15	STD	-	-	-	-	209	-	
	13:40	BGT	1	5	90	4	111	444	
			2						
			4						
			5						
			6				1.25		
PERIM	IETER		FIELD C	HLORIDES	S RESULTS		PRO	OFILE	
			SAMPLE	READING	CALC.				
A			D	20	(mg/kg)	1			
(			1201	5.0	110	Ň			
N	/					1			
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	$\langle$		I	PID RESUL	TS	1	400	yy	
1			SAME	PLEID	RESULTS	1			
		\ \			(mg/kg)	-	-	7	
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	( )	١				1	1		
	Get					]	-		
\ \	V					X=	sample p	aird	
LAB SAMPLE	S	NOTES	I						
SAMPLE ID ANALYSIS	S RESULTS								
BENZENE	3	1							
BTEX									
GRO & DRO		1							
CILORIDE		1							
		WORKORDE	R #		WHO ORDER	ED			

•

Client:	(505) 632-0615 (800) 362-1879 5796 U.S. Hwy 64, Farmington, NM 87401					Project No: 92//5-/940 COC No:			
FIELD REPORT: SPILL CLOSURE VERIFICATION							PAGE NO:OF / DATE STARTED: 9/7/1/		
LOCATION: NAMES J 29-7 WELL #: 155 QUAD/UNIT: A SEC: 9 TWP:29 NRG2972PM: NM CNTY: PAST: NM QTR/FOOTAGE: 1085 FUL + 1040 FEC CONTRACTOR:							DATE FINISHED: 9/5/// ENVIRONMENTAL SPECIALIST:		
EXCAVATION APPROX: DISPOSAL FACILITY: LAND USE: Renal CAUSE OF RELEASE:	NA	FT. X	LEASE:	FT. X /	ON METHO	FT. DEEP	CUBIC YA	RDAGE:	
SPILL LOCATED APPROXIMATELY: /22 DEPTH TO GROUNDWATER: /25 NEARE NMOCD RANKING SCORE: /0			FT. シッチム WATER SOURCE: フノッン NEAREST NMOCD TPH CLOSURE STD: ノッシン			NEAREST	SURFACE WATER: 390 /		
SAMPLE DESCRIPTION	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm	
200 570	10:15	STO	-	-	-	-	209		
SPILL PER	IMETER			OVM RESULTS			SPILL P	ROFILE	
t	ID ID	SAMPLE FIELD HEADSPACE PID D (ppm) $\not > G \not = \mathcal{N} \not > \mathcal{O}$							
6	<	-					XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	*	
			I SAMPLE ID CCT	AB SAMPLI ANALYSIS	ES TIME 75730	_	Tary as	1	
F E	361)	$\backslash$				X=S	sample p	e,no	
	0.111 55.01	100							