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 Corrective Action

	OPERATOR	Initial Report	Final Report
Name of Company Burlington Resources Oil & Gas Company	Contact Crystal Tafoya		
Address 3401 East 30 th St, Farmington, NM	Telephone No.(505) 326-9837		
Facility Name: Cundiff A 2R	Facility Type: Gas Well		

Surface Owner BLM

Mineral Owner BLM (NMNM-03371)

API No.30-045-31790

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County	
Α	17	32N	12W	880	North	560	East	San Juan	

Latitude 36.99101 Longitude 108.11091

NATURE OF RELEASE

Type of Release Produced Fluids	Volume of Release Unknown	Volume Recovered None
Source of Release Below Grade Tank	Date and Hour of Occurrence	Date and Hour of Discovery
	Unknown	October 18, 2012
Was Immediate Notice Given?	If YES, To Whom?	
🗌 Yes 🔲 No 🖾 Not Require	d	DAIN 101 95 11 9
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the Wat	
Yes No		DIST. 3
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 b	e 1000 nnm. A sample was taken and	then transported to the lab and
analytical results for TPH, BTEX and Chlorides were below the reg		
Leaks, Spills and Release; therefore no further action is required.		
	-	
I hereby certify that the information given above is true and complete to	the best of my knowledge and understa	ind that pursuant to NMOCD rules and
regulations all operators are required to report and/or file certain release	the NMOCD merited as "Final Depart"	tions for releases which may endanger
public health or the environment. The acceptance of a C-141 report by should their operations have failed to adequately investigate and remedi	inte NMOCD marked as Final Report	round water, surface water, human health
or the environment. In addition, NMOCD acceptance of a C-141 report	t does not relieve the operator of response	sibility for compliance with any other
federal, state, or local laws and/or regulations.	a des not reneve the operator of respons	is in compliance with any other
	OIL CONSERV	ATION DIVISION
Pill Port		
Cystal L. Talaya		
Signature:	Approved by Environmental Specialis	st: bright // alle -
Printed Name: Crystal Tafoya		v V
Title: Field Environmental Specialist	Approval Date: 1/2/2013	Expiration Date:
The, ried Environmental Specialist	Approvar Date. 1/2010	
E-mail Address: crystal.tafoya@conocophillips.com	Conditions of Approval: C-144 C	losace
		Attached
Date: 1/24/2013 Phone: (505) 326-9837	Conditions of Approval: C-144 (Permit newsed for BbTC NJK (3029)	Closure
Attach Additional Sheets If Necessary		
	NJK(30:29)	54762



Animas Environmental Services, LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3274

December 14, 2012

Crystal Tafoya ConocoPhillips San Juan Business Unit Office 214-5 5525 Hwy 64 Farmington, New Mexico 87401

RE: Below Grade Tank Closure Report Cundiff A #2R San Juan County, New Mexico

Dear Ms. Tafoya:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) Cundiff A #2R, located in San Juan 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 – Cundiff A #2R Legal Description - NE¼ NE¼, Section 17, T32N, R12W, San Juan County, New Mexico Well Latitude/Longitude - N36.99102 and W108.11156, respectively BGT Latitude/Longitude - N36.99105 and W108.11172, respectively Land Jurisdiction - Bureau of Land Management (BLM) Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, October 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 December 2006 for the State Com #2B well located approximately 1,400 feet east of the location reported the depth to groundwater as greater than 100 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 Research Center online

Crystal Tafoya Cundiff A #2R BGT Closure Report December 14, 2012 Page 2 of 5

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 greater than 100 feet bgs. An unnamed ephemeral wash is located approximately 750 feet southeast of the location. Based on this information, the location was assessed a ranking score of 10.

1.3 BGT Closure Assessment

AES was initially contacted by Jess Henson, CoP representative, on October 18, 2012, and on October 19, 2012, Kelsey Christiansen and Heather Woods of AES met with a CoP representative at the location. AES personnel collected six soil samples from 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 October 19, 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 were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Soil sample SC-1 was field screened for chlorides and also 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 protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*.

Crystal Tafoya Cundiff A #2R BGT Closure Report December 14, 2012 Page 3 of 5

2.1.3 Chlorides

Soil samples 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 0.6 ppm in S-3 up to 1.7 ppm in S-1. Field TPH concentrations ranged from 39.9 mg/kg in S-1 up to 223 mg/kg in S-3. 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.

Cundiff A #2	R BGT Closu	re, October 20	012	
Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)
Level (NMAC 19.	15.17.13E)		100	250
10/19/12	0.5	1.7	39.9	NA
10/19/12	0.5	1.0	131	NA
10/19/12	0.5	0.6	223	NA
10/19/12	0.5	0.7	45.3	NA
10/19/12	0.5	0.7	41.3	NA
10/19/12	0.5	NA	NA	40
	Date Sampled Level (NMAC 19. 10/19/12 10/19/12 10/19/12 10/19/12 10/19/12	Date Depth Date below Sampled BGT (ft) Level (NMAC 19.15.17.13E) 0.5 10/19/12 0.5 10/19/12 0.5 10/19/12 0.5 10/19/12 0.5 10/19/12 0.5 10/19/12 0.5 10/19/12 0.5	Depth VOCs OVM Date below Reading Sampled BGT (ft) (ppm) Level (NMAC 19.15.17.13E) 10/19/12 0.5 1.7 10/19/12 0.5 1.0 10/19/12 0.5 0.6 10/19/12 0.5 0.7 10/19/12 0.5 0.7	Date Sampledbelow BGT (ft)Reading (ppm)TPH (mg/kg)Level (NMAC 19.15.17.13E)10010/19/120.51.739.910/19/120.51.013110/19/120.50.622310/19/120.50.745.310/19/120.50.741.3

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results Cundiff A #2R BGT Closure. October 2012

NA - not analyzed

Crystal Tafoya Cundiff A #2R BGT Closure Report December 14, 2012 Page 4 of 5

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.050 mg/kg and less than 0.25 mg/kg, respectively. TPH concentrations were reported as less than 5.0 mg/kg GRO and less than 10 mg/kg DRO. The laboratory chloride concentration was reported at 47 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. Laboratory analytical reports are attached.

			aboratory A BGT Closur	•			
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	.17.13E)	0.2	50	1	00	250
SC-1	10/19/12	0.5	<0.050	<0.25	<5.0	<10	47

3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Benzene and total BTEX concentrations in SC-1 were reported below NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in two samples, S-2 (131 mg/kg) and S-3 (223 mg/kg). However, laboratory analytical results for TPH as GRO/DRO in SC-1 were reported below the NMOCD action level of 100 mg/kg. Chloride concentrations for SC-1 were also 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.

Sincerely,

Lelang Christian

Kelsey Christiansen Environmental Scientist

Crystal Tafoya Cundiff A #2R BGT Closure Report December 14, 2012 Page 5 of 5

Elipstith & Mindly

Elizabeth McNally, P.E.

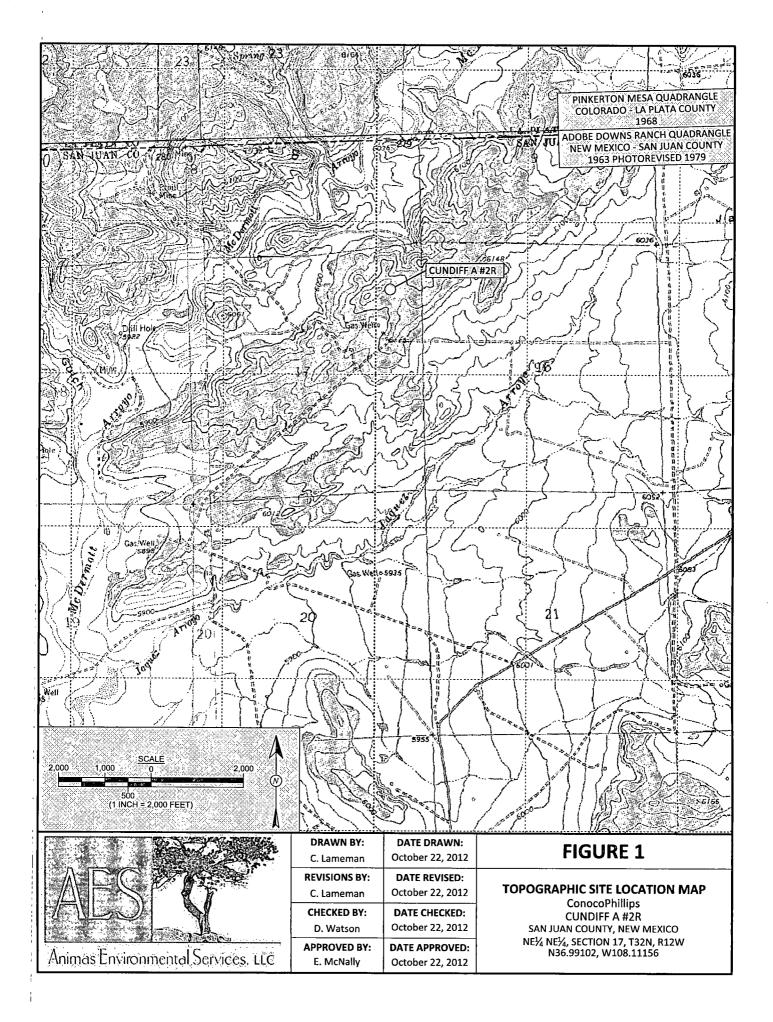
Attachments:

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Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, October 2012 AES Field Screening Report 101912 Hall Analytical Report 1210966

C:\Dropbox\December 2012\ConocoPhillips\Cundiff A #2R\Cundiff A #2R BGT Closure Report 121412.docx



				(.) *	а. Э					ŧż	6 .		<u>LEGEND</u> SAMPLE LC	1982 - A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A
		Field S	creenin OVM-	g Results]								•
	Sample ID	Date	PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)			8100722 201472	10000300 4000	ry Analytico Total	Il Results	TPH -	Chloridae	
	- GEE LAG	D ACTION	8 /	100	250		Sample ID	Date	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	Chlorides (mg/kg)	
		10/19/12 10/19/12	1.7	39.9 3 131	NA NA	6	NMOCD ACT		0.2	50			250	
and the second		10/19/12	7.1.1.1.42	223	NA		SC-1	10/19/12 ANAI Y7FD	<0.050	<0.25	<5.0	<10 ND 300 0	47	
	S-4	10/19/12	0.7	×45.3 ×	NA		a Car	*			7		**	7.1
unar:		10/19/12	<u>0.7</u>	41.3	NA									
		10/19/12 5-POINT C	OMPOS	NA SITE SAMP	40 LE OF S-1									
		<u> </u>						44 J.						0.3
			ې کې						K.	1 20				
	Ê		6.		ę.		<u>(5.</u> BGT - N36.9	<u>S-5</u> <u>4</u>	-5-1		0		DIFF A #2R UMENT	
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Λ			7				REVISIONS BY: C. Lameman		REVISED: er 22, 2012	8	ELOW GR		IK CLOSU	RE
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				R			D. Watson		er 22, 2012			JNDIFF A		
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Anin	nas Env	vironme	intal 3	Jervice	s, LLC		E. McNally	Octob	er 22, 2012		NE74 NE74, S N36.9	ECTION 17 9102, W10	, T32N, R12\ 8.11156	N

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Animas Environmental Services, LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3274

AFS	Field	Screening	Report
	I ICIU	JUICUIIIIg	Nepore

Client: ConocoPhillips

Project Location: Cundiff A #2R

Date: 10/19/2012

Matrix: Soil

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	10/19/2012	9:28	North	1.7	NA	10:38	39.9	20.0	1	кс
S-2	10/19/2012	9:30	South	1.0	NA	10:44	131	20.0	1	кс
S-3	10/19/2012	9:33	East	0.6	NA	10:49	223	20.0	1	КС
S-4	10/19/2012	9:36	West	0.7	NA	10:54	45.3	20.0	1	КС
S-5	10/19/2012	9:38	Center	0.7	NA	10:58	41.3	20.0	1	КС
SC-1	10/19/2012	9:42	Composite	NA	40		Not	Analyzed for Th	РН.	

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

Analyst:

Lelang Christian



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquergue, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

October 25, 2012

1

Debbie Watson Animas Environmental Services 624 East Comanche Farmington, NM 87401 TEL: (505) 486-4071 FAX (505) 324-2022

RE: COP Cundiff A #2R

OrderNo.: 1210966

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/20/2012 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,

andia

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Lab Order 1210966

Date Reported: 10/25/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

COP Cundiff A #2R **Project:**

1210966-001

Lab ID:

Client Sample ID: SC-1

Collection Date: 10/19/2012 11:06:00 AM **Received Date: 10/20/2012**

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: SCC
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/22/2012 8:12:16 AM
Surr: DNOP	107	77.6-140	%REC	1	10/22/2012 8:12:16 AM
EPA METHOD 8015B: GASOLINE R	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/22/2012 2:08:49 PM
Surr: BFB	92.9	84-116	%REC	1	10/22/2012 2:08:49 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	10/22/2012 2:08:49 PM
Toluene	ND	0.050	mg/Kg	1	10/22/2012 2:08:49 PM
Ethylbenzene	ND	0.050	mg/Kg	1	10/22/2012 2:08:49 PM
Xylenes, Total	ND	0.10	mg/Kg	1	10/22/2012 2:08:49 PM
Surr: 4-Bromofluorobenzene	103	80-120	%REC	1	10/22/2012 2:08:49 PM
EPA METHOD 300.0: ANIONS					Analyst: SRM
Chloride	47	30	mg/Kg	20	10/22/2012 12:41:09 PM

Matrix: SOIL

Qualifiers:

* Value exceeds Maximum Contaminant Level.

Е Value above quantitation range

J Analyte detected below quantitation limits

Р Sample pH greater than 2

RL Reporting Detection Limit В Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded Н

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits S

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	1210966

25-Oct-12

Client: Project:		s Environme undiff A #2I		vices							
Sample ID	MB-4442	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	PBS Batch ID: 4442			F	RunNo: 64	409					
Prep Date:	10/22/2012	Analysis D	ate: 10	0/22/2012	S	SeqNo: 1	84313	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID	LCS-4442	SampT	ype: LC	s	Tes	tCode: Ef	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	n ID: 44	42	F	RunNo: 64	409				
Prep Date:	10/22/2012	Analysis D	ate: 10	0/22/2012	S	SeqNo: 18	84314	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		15	1.5	15.00	0	100	90	110		-	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

ND

QC SUMMARY REPORT

Client:

Project:

Client ID:

Prep Date:

Diesel Range Organics (DRO)

Analyte

ND

10

Animas Environmental Services COP Cundiff A #2R Sample ID MB-4432 SampType: MBLK TestCode: EPA Method 8015B: Diesel Range Organics PBS Batch ID: 4432 RunNo: 6379 10/21/2012 Analysis Date: 10/22/2012 SeqNo: 183490 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP	11		10.00		114	77.6	140			
Sample ID LCS-4432	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	
Client ID: LCSS	Batch	n ID: 44	32	F	RunNo: 6	379				
Prep Date: 10/21/2012	Analysis Date: 10/22/2012		S	SeqNo: 1	83491	Units: mg/ #				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	32	10	50.00	0	64.4	52.6	. 130			
Surr: DNOP	5.5		5.000		110	77.6	140			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- Value above quantitation range E
- Analyte detected below quantitation limits J
- Р Sample pH greater than 2

- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

WO#: 1210966 25-Oct-12

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1210966

25-Oct-12

	Environme Indiff A #21		vices												
Sample ID MB-4420	MB-4420 SampType: MBLK				TestCode: EPA Method 8015B: Gasoline Range										
Client ID: PBS	Batch	n ID: 44	20	F	RunNo: 6	401									
Prep Date: 10/19/2012	Analysis D	ate: 10	e: 10/22/2012 SeqNo: 184413			Units: mg/Kg									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Gasoline Range Organics (GRO)	ND	5.0													
Surr: BFB	930		1000		93.3	84	116								
Sample ID LCS-4420	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	e						
Client ID: LCSS	Batch	n ID: 44	20	F	RunNo: 6	401									
Prep Date: 10/19/2012	Analysis D	ate: 10	0/22/2012	S	SeqNo: 1	84414	Units: mg/k	٢g							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.7	74	117								
Surr: BFB	990		1000		99.5	84	116								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Animas Environmental Services

0.050

0.10

1.1

3.2

1.1

1.000

3.000

1.000

Project: COP C	undiff A #2I	R								
Sample ID MB-4420	Tes									
Client ID: PBS	Batcl	h ID: 44	20	F	RunNo: 6	401				
Prep Date: 10/19/2012	Analysis D	Date: 10)/22/2012	S	SeqNo: 184440			ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			
Sample ID LCS-4420	SampT	Type: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batcl	h ID: 44	20	Я	RunNo: 6	401				
Prep Date: 10/19/2012	Analysis D	Date: 10)/22/2012	S	SeqNo: 1	84441	Units: mg/H	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	108	76.3	117			
Toluene	1.1	0.050	1.000	0	107	80	120			

0

0

108

107

108

77

80

76.7

116

117

120

Qualifiers:

Client:

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

WO#: 1210966 25-Oct-12

	HALL
_ 3 7	ENVIRONMENTAL
225 225	ANALYSIS
2	LABORATORY

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Hall Envir ntal A vsis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvtronmental.com

Sample Log-In Check List

Client Name: Animas Environmental	Work Order Number: 1210966
Received by/date: AF 10/20//2	
Logged By: Andy Freeman 10/20/2012	and
Completed By: Anne Thorne 10/22/2012	and the
Reviewed By: AT 1922/12	·
Chain of Custody	
1. Were seals intact?	Yes 🔲 No 🗌 Not Present 🗹
2. Is Chain of Custody complete?	Yes 🗹 No 🗋 Not Present
3. How was the sample delivered?	Courier
Log In	
4. Coolers are present? (see 19. for cooler specific information)	Yes 🗹 No 🗌 🛛 NA 🗌
5. Was an attempt made to cool the samples?	Yes 🗹 No 🗌 🛛 NA 🗌
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🗹 No 🗌 🛛 NA 🗌
7. Sample(s) in proper container(s)?	Yes 🗹 No 🗔
8. Sufficient sample volume for indicated test(s)?	Yes 🗹 No 🗌
9. Are samples (except VOA and ONG) properly preserved?	Yes 🗹 No 🗔
10. Was preservative added to bottles?	Yes 🗌 No 🗹 🛛 NA 🗌
11. VOA vials have zero headspace?	Yes 🗋 No 🗌 No VOA Vials 🗹
12. Were any sample containers received broken?	
 Does paperwork match bottle labels? (Note discrepancies on chain of custody) 	Yes V No H # of preserved bottles checked for pH:
14. Are matrices correctly identified on Chain of Custody?	Yes ☑ No □ (<2 or >12 unless noted)
15. Is it clear what analyses were requested?	Yes 🗹 No 🗌 Adjusted?
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹 No 🗌 Checked by:
<u>Special Handling (if applicable)</u>	
17. Was client notified of all discrepancies with this order?	Yes 🗋 No 🗐 🛛 NA 🗹
Person Notified: Date	
By Whom: Via:	🗌 eMail 🔲 Phone 🔲 Fax 🔛 In Person
Regarding:	
Client Instructions:	
18. Additional remarks:	

19. <u>Cooler Information</u>

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
	2.8	Good	Yes			

Chain-of-Custody Record			Tum-Around Time:				, L		1.4			7 A	1000	RIX.	FT G	~ ~	BRE			- A I		
Client: Animas Environmental Services			I Standard & Rush Same Day				ANALYSIS LABORATORY															
				Project Name				www.hallenvironmental.com										8 T.A.	8			
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Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALNO		BTEX + A T	BTEX + MTBE	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Me	Anions (FCONO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
0/19/12	Date	50.1	SC-i	Ma OH KIT	MLOH	1210966-		X		X	- 1	-			X							\uparrow
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Date: 0/19/12 Date:	Time: <u>1649</u> Time:	Relinquishe	the M. Woods	1 Muster 2010 119/12 1649				Remarks: Bill to ConocoPhillips WO: 10334313 USA 10: KGARCIA									~ 4 -					
Date: Time: Rélinquished by: /19/12 1728 / Mistry Wallers			Received by:	K	Dáte Time	30	Aci Sup	+1016 er:	hy : Hai	C2 my	DO Der			Vork		end	by	:Je	ss H	oln3	n i	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be also a sub-contracted data will be also a