State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

1220 S. St. Fra	ncis Dr., Santa I	Fe, NM 87505		Sa	anta Fe	e, NM 875	505					
C. W. C.			Rele	ase Notific	cation	and Co	orrective A	Action		1995	. S. S.	120 1
						OPERA	TOR		□ Initi	al Report		Final Report
Name of C	ompany Cor	nocoPhillip	s Compa	ny		Contact Lindsay Dumas						1940
	401 East 30th						No.(505) 258-1	643	17.15	100		
	me: Schlosse					Facility Typ						
Surface Ov	wner: BLM			Mineral (Owner:	SF-078673			API No	. 30-045-0	7114	
				LOCA	ATIO	OF RE	LEASE		1	1	1	
Unit Letter M	Section 27	Township 28N	Range 11W	Feet from the 910'		South Line FSL	Feet from the 935'		Vest Line WL	County San Juan		
						<u>7</u> Longitu OF REL	de <u>-107.99751</u> FASE					
Type of Rel	ease Unknov	vn		11211	Uni	Volume of		own	Volume I	Recovered	0	
	elease BGT	· · · ·				Date and I	Hour of Occurren		Date and	Hour of Dis		
Was Immed	iate Notice Giv		Vec [No 🛛 Not R	equired	Unknown If YES, To			10/2/2012	2	1	10
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By Whom? Was a Wate	Vas a Watercourse Reached?					the second se	olume Impacting	the Wate	ercourse			
in do de in dec	recurse recurs		Yes 🛛 1	No			stante impaeting	the trate	i course.			
If a Waterco	ourse was Impa	icted, Descr	ibe Fully.*	:						100	5 m 100	
Describe Ca	use of Problen	n and Reme	dial Action	n Taken.*	_			_	OIL C	ONS. DIV	DIST	5.3
A historic re	elease was cont	firmed durin	g BGT cl	osure activity.								
									l	DCT 16 2	2015	
The below release. The	e sample was t	mple result then transp	s were ab orted to t	en.* ove regulatory s he lab and analy nd Release; ther	tical res	ults were be	low the regulate					
regulations a public health should their or the enviro	all operators ar h or the environ operations hav	e required to nment. The ve failed to a lition, NMC	o report ar acceptance dequately CD accept	is true and comp d/or file certain r e of a C-141 repo investigate and r tance of a C-141	elease no ort by the emediate	otifications a NMOCD m contaminat	nd perform corre arked as "Final I ion that pose a th re the operator of	ective acti Report" d reat to gr responsi	ons for rel oes not rel ound wate bility for c	eases which ieve the oper r, surface wa ompliance w	may en rator of iter, hu with any	ndanger f liability man health
Signature	Kindoa	yDu	mera	-			OIL CON	ISERV	ATION	DIVISIO	M	
Printed Nam	ne: Lindsay D	umas				Approved by	Environmental S	Specialist	b	nent	a	5
Title: Field	Environment	al Specialis	t			Approval Da	te: 11/19/5	JOIS I	Expiration	Date:		
E-mail Add	ess: Lindsay.l	Dumas@co	nocophilli	ps.com		Condition o	f Approval:			Attached		
Date: 10/8/2		1021		none: (505) 258-1	643	N	one			24	10	
Attach Add	itional Sheets	If Necess	ary		1	nrs1	53234	JOOL	02			



December 6, 2012

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

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

> Durango, Colorado 970-403-3274

RE: Below Grade Tank Closure Report Schlosser WN Federal #8 San Juan 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) Schlosser WN Federal #8, 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 – Schlosser WN Federal #8 Legal Description - SW¼ SW¼, Section 27, T28N, R11W, San Juan County, New Mexico Well Latitude/Longitude - N36.62843 and W107.99709, respectively BGT Latitude/Longitude - N36.62827 and W107.99751, 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 two pit remediation and closure reports dated November 2000 and February 2004 for the Schlosser WN Federal #8E well located approximately 2,900 feet north of the BGT 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

Ashley Maxwell Schlosser WN Federal #8 BGT Closure Report December 6, 2012 Page 2 of 5

Mexico Tech Petroleum Recovery 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 greater than 100 feet bgs. An unnamed ephemeral wash is located approximately 160 feet south of the location. Based on this information, the location was assessed a ranking score of 20.

1.3 BGT Closure Assessment

AES was initially contacted by Bruce Yazzie, CoP representative, on October 2, 2012, and on October 3, 2012, Heather Woods and Zachary Trujillo 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 3, 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 VOCs and chloride and was 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 Schlosser WN Federal #8 BGT Closure Report December 6, 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 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 8.5 ppm in S-4 up to 52.2 ppm in S-1. Field TPH concentrations ranged from 98.6 mg/kg in S-3 up to 1,860 mg/kg in S-4. The field chloride concentration was 40 mg/kg in SC-1. 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	10/3/12	0.5	52.2	330	NA
S-2	10/3/12	0.5	44.7	189	NA
S-3	10/3/12	0.5	37.6	98.6	NA
S-4	10/3/12	0.5	8.5	1,860	NA
S-5	10/3/12	0.5	22.9	132	NA

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results Schlosser WN Federal #8 BGT Closure, October 2012

Ashley Maxwell Schlosser WN Federal #8 BGT Closure Report December 6, 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 L	evel (NMAC 19.	15.17.13E)		100	250
SC-1	10/3/12	0.5	NA	NA	40

NA - not analyzed

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.050 mg/kg and 0.25 mg/kg, respectively. TPH concentrations were reported at 38 mg/kg DRO and less than 5.0 mg/kg GRO. 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. Soil Laboratory Analytical Results Schlosser WN Federal #8 BGT Closure, October 2012

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	10/03/12	0.5	< 0.050	<0.25	<5.0	38	<30

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 the 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 four samples, S-1 (330 mg/kg), S-2 (189 mg/kg), S-4 (1,860 mg/kg), and S-5 (132 mg/kg). However, laboratory analytical results for TPH as GRO/DRO in SC-1 were below the NMOCD action level of 100 mg/kg with 38 mg/kg. Chloride concentrations for SC-1 were 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 Schlosser WN Federal #8 BGT Closure Report December 6, 2012 Page 5 of 5

Sincerely,

Lelang Christian

Kelsey Christiansen Environmental Scientist

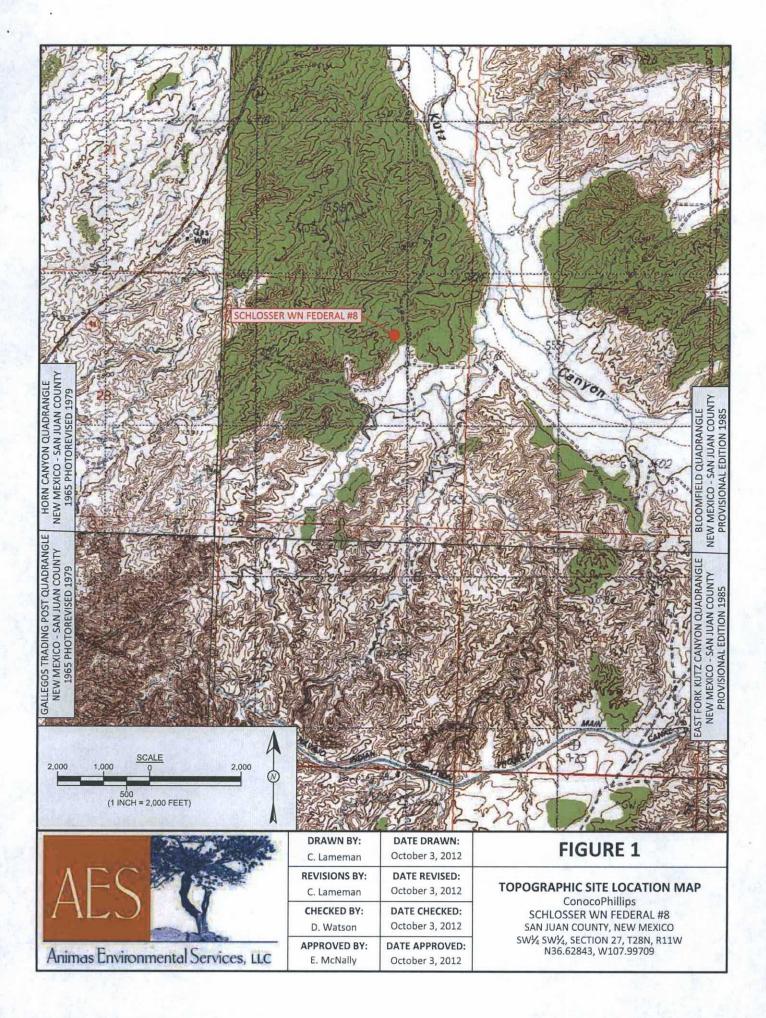
Elizabeth o Mandly

Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, October 2012 AES Field Screening Report 100312 Hall Analytical Report 1210283

C:\Dropbox\2012 December 2012 (Former Trial File)\ConocoPhillips\Schlosser WN Federal #8\Schlosser WN Federal #8 BGT Closure Report 120612.docx



LEGEND

SAMPLE LOCATIONS

State 2	Field S	creenin	g Results	
Sample ID	Date	OVM- PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION		-	100	250
S-1	10/3/12	52.2	330	NA
S-2	10/3/12	44.7	189	NA
S-3	10/3/12	37.6	98.6	NA
S-4	10/3/12	8.5	1,860	NA
S-5	10/3/12	22.9	132	NA
SC-1	10/3/12	NA	NA	40

THROUGH S-5. NA - NOT ANALYZED

S-4

GT - N36.62827 W107.99751

		Laborato	ry Analytica	al Results		
Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		0.2	50	11	00	250
SC-1	10/3/12	< 0.050	<0.25	<5.0	38	<30

SCHLOSSER WN FEDERAL #8 WELL MONUMENT

		SCALE	4
40	20	-	40
	(1	10 INCH = 40 FEET)	

AES	Real Provide American Science Provide American
Animas Environ	mental Services, LLC

A	AL SOURCE: © 2012 GOO	DGLE EARTH, AERIAL TAKEN: .	JUNE 10, 2011
- AL	DRAWN BY: C. Lameman	DATE DRAWN: October 3, 2012	
r	REVISIONS BY: C. Lameman	DATE REVISED: October 3, 2012	BELC
	CHECKED BY: D. Watson	DATE CHECKED: October 3, 2012	SC
, LLC	APPROVED BY: E. McNally	DATE APPROVED: October 3, 2012	SAI SW1/4

S-1

S-3

FIGURE 2

AERIAL SITE MAP BELOW GRADE TANK CLOSURE OCTOBER 2012 ConocoPhillips SCHLOSSER WN FEDERAL #8 SAN JUAN COUNTY, NEW MEXICO SW¼ SW¼, SECTION 27, T28N, R11W N36.62843, W107.99709

AES Field Screening Report

Client: ConocoPhillips Project Location: Schlosser WN Federal #8 Date: 10/3/2012

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	10/3/2012	10:00	North	52.2	NA	10:30	330	20.0	1	HW
S-2	10/3/2012	10:06	South	44.7	NA	10:33	189	20.0	1	HW
S-3	10/3/2012	10:04	East	37.6	NA	10:36	98.6	20.0	1	HW
S-4	10/3/2012	10:08	West	8.5	NA	10:39	1,860	20.0	1	HW
S-5	10/3/2012	10:11	Center	22.9	NA	10:41	132	20.0	1	HW
SC-1	10/3/2012	10:14	Composite	NA	40	Labo	oratory Analyze	d for BTEX, TPH	and chio	rides

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit 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:

Aleather M. Woods

Page 1 Report Finalized: 12/7/12



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

October 15, 2012

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

RE: CoP Schlosser WN Federal #8

OrderNo.: 1210283

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/4/2012 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 1210283

Date Reported: 10/15/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services Client Sample ID: SC-1 Collection Date: 10/3/2012 10:14:00 AM **Project:** CoP Schlosser WN Federal #8 Lab ID: 1210283-001 Matrix: MEOH (SOIL) Received Date: 10/4/2012 10:34:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS	3	1.5		Analyst: JMP
Diesel Range Organics (DRO)	38	10	mg/Kg	1	10/4/2012 12:08:41 PM
Surr: DNOP	103	77.6-140	%REC	1	10/4/2012 12:08:41 PM
EPA METHOD 8015B: GASOLINE R	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/6/2012 2:58:21 AM
Surr: BFB	101	84-116	%REC	1	10/6/2012 2:58:21 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	10/4/2012 1:07:06 PM
Toluene	ND	0.050	mg/Kg	1	10/4/2012 1:07:06 PM
Ethylbenzene	ND	0.050	mg/Kg	1	10/4/2012 1:07:06 PM
Xylenes, Total	ND	0.10	mg/Kg	1	10/4/2012 1:07:06 PM
Surr: 4-Bromofluorobenzene	106	80-120	%REC	1	10/4/2012 1:07:06 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	ND	30	mg/Kg	20	10/4/2012 11:45:37 AM

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

- Analyte detected in the associated Method Blank В
- 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

Hall Environmental Analysis Laboratory, Inc.

Client: Project:		Environmental Se osser WN Federa								
Sample ID	MB-4115	SampType: M	BLK	Tes	tCode: EF	A Method	300.0: Anion	s		
Client ID:	PBS	Batch ID: 4	115	F	RunNo: 59	979				
Prep Date:	10/4/2012	Analysis Date: 1	0/4/2012	5	SeqNo: 17	72234	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5	i						12 2	202
Sample ID	LCS-4115	SampType: L	cs	Tes	tCode: EF	A Method	300.0: Anion	s		1
Client ID:	LCSS	Batch ID: 4	115	F	RunNo: 59	979				
Prep Date:	10/4/2012	Analysis Date: 1	0/4/2012	5	SeqNo: 17	72235	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	93.3	90	110			199
Sample ID	1210003-002AMS	SampType: M	S	Tes	tCode: EF	A Method	300.0: Anion	s		
Client ID:	BatchQC	Batch ID: 4	115	F	RunNo: 60	011				
Prep Date:	10/4/2012	Analysis Date: 1	0/4/2012	5	SeqNo: 17	3248	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		62 7.5	15.00	45.57	111	64.4	117	125	- 1 Te.	1
Sample ID	1210003-002AMSE	SampType: M	SD	Tes	tCode: EP	A Method	300.0: Anion	S		
Client ID:	BatchQC	Batch ID: 4*	115	F	RunNo: 60	011				
Prep Date:	10/4/2012	Analysis Date: 1	0/4/2012	S	SeqNo: 17	3249	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		60 7.5	15.00	45.57	95.3	64.4	117	3.81	20	

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P 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

Page 2 of 5

WO#: 1210283

15-Oct-12

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210283

15-Oct-12

C IIIIII	Environment										
Sample ID MB-4114 Client ID: PBS Prep Date: 10/4/2012	SampTy Batch I Analysis Da	ID: 41		F	tCode: El RunNo: 5 SeqNo: 1	963	8015B: Dies Units: mg/K		Organics		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO) Surr: DNOP	ND 9.8	10	10.00		97.8	77.6	140				
Sample ID LCS-4114 Client ID: LCSS					TestCode: EPA Method 8015B: Diesel Range Organics RunNo: 5963						
Prep Date: 10/4/2012	Analysis Da	te: 10	0/4/2012	S	SeqNo: 1	72079	Units: mg/k	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO) Surr: DNOP	52 4.1	10	50.00 5.000	0	105 81.3	52.6 77.6	130 140				

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

Han Divitoninental Analysis Laboratory, in	Environmental Analysis I	Laboratory, I	nc.
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Animas Environmental Services Client: **Project:** CoP Schlosser WN Federal #8 Sample ID MB-4015 SampType: MBLK TestCode: EPA Method 8015B: Gasoline Range Client ID: PBS Batch ID: 4015 RunNo: 6019 Prep Date: 10/1/2012 Analysis Date: 10/5/2012 SeqNo: 173412 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 1000 1000 100 84 116 Sample ID LCS-4015 SampType: LCS TestCode: EPA Method 8015B: Gasoline Range Client ID: LCSS Batch ID: 4015 RunNo: 6019 Analysis Date: 10/5/2012 SegNo: 173413 Units: mg/Kg Prep Date: 10/1/2012 PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result Gasoline Range Organics (GRO) 25 5.0 25.00 0 101 74 117 Surr: BFB 1000 1000 103 84 116 Sample ID 1210002-001AMS SampType: MS TestCode: EPA Method 8015B: Gasoline Range Client ID: BatchQC Batch ID: 4015 RunNo: 6019 Prep Date: 10/1/2012 Analysis Date: 10/5/2012 SeqNo: 173418 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 26 24.61 0 70 49 106 130 Surr: BFB 1100 984.3 108 84 116 Sample ID 1210002-001AMSD SampType: MSD TestCode: EPA Method 8015B: Gasoline Range Client ID: BatchQC Batch ID: 4015 RunNo: 6019 Prep Date: 10/1/2012 Analysis Date: 10/5/2012 SeqNo: 173419 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Gasoline Range Organics (GRO) 24 4.9 24.61 0 97.4 70 130 8.23 22.1 Surr: BFB 1100 984.3 110 84 116 0 0

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

Page 4 of 5

1210283

WO#:

15-Oct-12

Hall Environmenta	l Analysis	Laboratory, Inc.	
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WO#: 1210283 15-Oct-12

Client: Project:	Animas E CoP Schl	Environme osser WN											
Sample ID	MB-4015	Samp	Туре: МІ	BLK	Tes	tCode: E	PA Method	8021B: Vola	tiles				
Client ID:	PBS	Batc	h ID: 40	15	F	RunNo: 5	980						
Prep Date:	10/1/2012	Analysis I	Date: 1	0/4/2012	5	SegNo: 1	72741	Units: mg/k	(a				
	10/112012								in the				
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	ALL MARY	ND	0.10										
Surr: 4-Brom	ofluorobenzene	1.1	14	1.000		108	80	120	and the	Se har	-		
Sample ID	LCS-4015	Samp	Type: LC	s	Tes	tCode: E	PA Method	8021B: Vola	tiles	100	1		
Client ID:	LCSS	Batc	h ID: 40	15	F	RunNo: 5	980						
Prep Date:	10/1/2012	Analysis [Date: 1	0/4/2012	S	SeqNo: 1	72742	Units: mg/k	٢g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	and the second second	1.0	0.050	1.000	0	101	76.3	117		122			
Toluene		1.0	0.050	1.000	0	103	80	120					
Ethylbenzene		1.1	0.050	1.000	0	105	77	116					
Xylenes, Total		3.2	0.10	3.000	0	105	76.7	117					
	ofluorobenzene	1.1	0.10	1.000		111	80	120					
								1.000			-		
Sample ID	1210003-001AMS	Samp	Type: MS	5	Tes	tCode: E	PA Method	8021B: Vola	tiles				
Client ID:	BatchQC	Batc	h ID: 40	15	F								
Prep Date:	10/1/2012	Analysis [Date: 1	0/4/2012	S	SeqNo: 1	72746	Units: mg/H	٢g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene		1.0	0.049	0.9881	0.006000	104	67.2	113	1.44	STORES (2.		
Toluene		1.0	0.049	0.9881	0	105	62.1	116					
Ethylbenzene		1.1	0.049	0.9881	0	108	67.9	127					
Xylenes, Total		3.2	0.099	2.964	0	107	60.6	134					
Surr: 4-Brom	ofluorobenzene	1.1		0.9881		112	80	120					
Sample ID	1210003-001AMS	Samp	Type: MS	SD	Tes	tCode: El	PA Method	8021B: Vola	tiles	29.75	1. 57		
Client ID:	BatchQC	Batc	h ID: 40	15	F	RunNo: 5	5980						
Prep Date:	10/1/2012	Analysis [Date: 10	0/4/2012	S	SeqNo: 1	72747	Units: mg/k	٢g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	S. Marker	0.96	0.049	0.9872		97.0	67.2	113	7.01	14.3	18		
Toluene		0.98	0.049	0.9872	0	99.4	62.1	116	5.49	15.9			
Ethylbenzene		1.0	0.049	0.9872	0	102	67.9	127	5.10	14.4			
Xylenes, Total		3.0	0.099	2.962	0	102	60.6	134	4.78	12.6			
		1. (17 CTP-17 CA	TAT TAT	18.000 5700000000000	85.0		24-2019-1202-50-5	247 A 124 A 14 A 14 A 14 A 14 A 14 A 14 A 1	1.000/F.55				

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

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquergue, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

C	ient Name:	Animas Environmental	W	ork Or	der M	lum	ber:	1210283
R	eceived by/date:	AC	10/04/12					
L	gged By:	Michelle Garcia	10/4/2012 10:34:00 AM				mi	itall Games
	ompleted By:	Michelle Garcia	10/4/2012 10:41:08 AM				mi	italle Garries
	eviewed By:	×	aluta					quite
	hain of Cust	5×6	10/04/12	•				
	Were seals in			Yes	1	No		Not Present 🗸
		ustody complete?		Yes	~	No		Not Present
		sample delivered?		Cour				
Lo	<u>og In</u>							
4	Coolers are p	present? (see 19. for coole	er specific information)	Yes	~	No		NAII
	N/se an atten	npt made to cool the sam	niec?	Yes	1	No		NA
	, trac an atten	instantiate to open the selling		103				
e	Were all sam	ples received at a temper	ature of >0° C to 6.0°C	Yes		No	63	NA :
5								
7	Sample(s) in	proper container(s)?		Yes	×	No	1 1	
8	Sufficient sar	nple volume for indicated	test(s)?	Yes				
		(except VOA and ONG) p	roperly preserved?	Yes			+:	
1	0. Was preserva	ative added to bottles?		Yes	1	No	N.	NA i
1	1. VOA vials ha	ve zero headspace?		Yes	1.	No	łi	No VOA Vials 🖌
		mple containers received	broken?	Yes		No		
1	Contraction of the second s	ork match bottle labels? ancies on chain of custod	(y)	Yes	~	No	; 1	# of preserved bottles checked for pH:
1	4. Are matrices	correctly identified on Cha	ain of Custody?	Yes	Vi	No		(<2 or >12 unless noted
1	5. Is it clear what	at analyses were requeste	d?	Yes	1	No	*:	Adjusted?
1	The second s	ing times able to be met? customer for authorization		Yes	~	No	1	
		ing (if applicable)	.,					Checked by:
		otified of all discrepancies	with this order?	Yes	: 1	No	11	NA 🖌
1		Number of Concession, Name		103		NU		
		Notified:	Date:					
	By Who Regardi		Via:	eMai	1) 	Pr	none	Fax In Person
	1	structions:	CONTRACTOR OF THE OWNER OF THE OWNER		-	-	-	
							2	
		narks:						

Client: Animas Environmental Services			Turn-Around	Time:							-			BIR						
			nmentel Services Distandard & Rush Same Day Project Name:													RA				
Mailing	Mailing Address: 624 E. Comanche				COP Schlosser WN Federal #8				www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109											
Far	Farmington NM 87401 Phone #: 505-564-2281 email or Fax#:			Project #:			Tel. 505-345-3975 Fax 505-345-4107 Analysis Request													
email o				Project Mana	ager:		21)	only)	(lesel)				\$01) \$01)	S					2	
X Stan	QA/QC Package: X Standard Level 4 (Full Validation)			D. Wats			\$ (8021)	TPH (Gas only)	Gas/D				PO4	2 PCB's						
Accredi		D Othe	r	Sampler: H. Wood S On Team and the Net				HdT +	15B (0	18.1)	(1.4C)		S.No2	/ 8082		(A)			or N)	INI N
	(Type)				perature:	O A DAMAGE	KA	HE	80	4 1		tals	Z	des	2	0			2	2
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALND	BTEX + MIR-+	BTEX + MTBE (एड	TPH Method 8015B (Gas/Diesel	IPH (Method 418.1)	BUB (Method 504.1)	RCRA 8 Me	Anions (F.C)NO3,NO2,PO4,SO4	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)			Air Bubbles (Y	NI DUNNING
0/3/12	1014	5011	50-1	MEON King	MEDHNON	-001	X		C				X							1
									i i								+			
																	+			-
																				-
							-		-	-		-		-	1		-			-
1.1				A. C. B.	N 24 3 4												-			-
																		+		
Date:	Time:	Relinquishe	ad but	Received by:		Date Time	Der						1				-			-
10/3/12 Date: 10/3/12	1658 Time:	Relinquished by: Received by: Relinquished by: Relinquished by: Relinquished by: Relinquished by: Relinquished by: Received by: Received by: Received by: Received by: Received by: Received by: Received by: Received by: Received by: Date Time Date Time Date Time Remarks: Bill to ConocoOn illips Wo: 10330341 Work ordered by: B Area: 22 Supervisor: Harry Del User ID: KGARCIA								y∶B	uce la	zzie								

If necessary learnable submitted to Hall Environmental may be submatracted to other any malited laboratories. This serves as notice of this nessibility. Any sub-contracted data will be clearly notated on the analytical report