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

\* Attach Additional Sheets If Necessary

# State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr.

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

- 1220 SStFrancis Dr., Santa Fe, NM 87505	Fe, NM 87505		<b>.</b>		
	on and Corrective A	etion			-
	OPERATOR	<u> </u>	] Initiz	al Report	Final_Report
Name of Company Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company	Contact Ashley Maxwell			T. T. C.	
Address 3401 East 30 <sup>th</sup> St, Farmington, NM	Telephone No.(505) 324-5	160			
Facility Name: San Juan 27-4 Unit 36A	Facility Type: Gas Well	109			
Facility Name. San Suan 27-4 Onit 30A	Tachity Type. Gas Well				
Surface Owner Forest Mineral Owne	r Federal	<b>I</b>	API No SF-079	. 30039223 527	377
LOCATIO	ON OF RELEASE				
Unit Letter Section Township Range Feet from the Nor F 36 27N 04W 1530'	th/South Line Feet from the North 1620'	East/Wes Wes		County Rio Arrib	a
Latitude <u>36.532</u>	76 Longitude <u>-107.20573</u>				
	E OF RELEASE				
Type of Release Produced Fluids				Recovered	324 yds <sup>3</sup>
Source of Release Unknown Production Equipment	Date and Hour of Occurren 9/24/2012	ce D	ate and	Hour of Disc	covery
Was Immediate Notice Given?  ☐ Yes ☐ No ☒ Not Require	If YES, To Whom?			RCVD DE	C6'12
By Whom?	Date and Hour			DIST	
Was a Watercourse Reached?	If YES, Volume Impacting	the Waterco	ourse.		· • • • • • • • • • • • • • • • • • • •
☐ Yes ⊠ No					
If a Watercourse was Impacted, Describe Fully.*  N/A					
Describe Cause of Problem and Remedial Action Taken.*					
Discovery of historical hydrocarbon impacted soil.					
Describe Area Affected and Cleanup Action Taken.*		<b></b>		4-1-1	4=15101
Excavation was required based on NMOCD Guidelines for Remedi 324 yds <sup>3</sup> of soil was transported to a third party land farm. Excavat	ation of Leaks, Spills and Rele	ases. The e	xcavatio	on was 45'X	45'X3' and
laboratory analytical results of the excavation of petroleum contam	ingted soils at the San Juan 27	g occurreu. '_4 Linit #36	. Daseu .A benz	one total R	a screening and
TPH concentrations were below applicable NMOCD action levels for	or each of the sidewalls of the	excavation.	Howev	er, the base	of the excavation
exceeded the applicable NMOCD action level for TPH. Because of	the known depth to groundwa	ter and the	presenc	e of compet	tent sandstone at
the site, Brandon Powell of NMOCD granted approval to COP to b	ackfill the excavation on Septe	mber 28, 2	012. No	further wor	rk is
recommended.					
I hereby certify that the information given above is true and complete to regulations all operators are required to report and/or file certain release	the best of my knowledge and u	inderstand t	that purs	uant to NMO	OCD rules and
public health or the environment. The acceptance of a C-141 report by	the NMOCD marked as "Final R	cuve acuon Senort" does	s 101 rele s not reli	eve the oper	may endanger ator of liability
should their operations have failed to adequately investigate and remedi					
or the environment. In addition, NMOCD acceptance of a C-141 report					
federal, state, or local laws and/or regulations.	-				
	OIL CON	<b>SERVA</b>	TION	<b>DIVISIO</b>	<u>N</u>
Sell			_		$\Delta d$
Signature:			1	$\mathbb{I}()$	ν.Μ.
Deleted Names Ashley Mayurell	Approved by Environmental S	Specialist:	Bra	AT V. K	Ellhy .
Printed Name: Ashley Maxwell	1,		1		0
Title: Field Environmental Specialist	Approval Date: 2/11/20	2   Exp	V piration I	Date:	
E-mail Address: ashley.p.wethington@conocophillips.com	Conditions of Approval:		•	Attached	
Date: December 3, 2012 Phone: 505-324-5169					

NJK 1304240829



November 26,-2012

Animas Environmental Services, LLC

www.animasenvironmental.com-

Ashley Maxwell

ConocoPhillips

San Juan Business Unit

Office 216-2

5525 Hwy 64

Farmington, New Mexico 87401

624 E. Comanche

Farmington, NM 87401

505-564-2281

Durango, Colorado 970-403-3274

RE: Initial Release Assessment and Final Excavation Report

San Juan 27-4 Unit #36A

**Rio Arriba County, New Mexico** 

RCVD DEC 6 '12 OIL CONS. DIV. DIST. 3

Dear Ms. Maxwell:

On August 13 and September 25, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 27-4 Unit #36A, located in Rio Arriba County, New Mexico. A historical release was discovered while CoP contractors were installing a ditch on the twinned location of the San Juan 27-4 Unit #36A and the San Juan 27-4 Unit #150M. The initial release assessment was completed by AES on August 13, 2012. The final excavation was completed by CoP contractors while AES was on location on September 25, 2012.

#### 1.0 Site Information

#### 1.1 Location

Location – SE½ NW½, Section 36, T27N, R4W, Rio Arriba County, New Mexico Well Head Latitude/Longitude – N36.53299 and W107.20641, respectively Release Location Latitude/Longitude – N36.53305 and W107.20620, respectively Land Jurisdiction – U.S. Forest Service

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, August 2012

#### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a Cathodic Protection Report dated January 1994 for the San Juan 27-4 Unit #36A well reported the depth to groundwater at 130 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 mapping tool

(http://ford.nmt.edu/react/project.html) 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 which drains into Cottonwood Canyon is located less than 100 feet south-southwest of the location. Based on this information, the location was assessed a ranking score of 20 per the NMOCD Guidelines for Leaks, Spills, and Releases (August 1993).

#### 1.3 Assessment

AES was initially contacted by Ashley Maxwell of CoP on August 9, 2012, and on August 13, 2012, Corwin Lameman and Zachary Trujillo of AES completed the release assessment field work. The assessment included collection and field screening of 16 soil samples (SB-1 through SB-16) from 16 borings in and around the release area. Soil borings were terminated between 1 and 3 feet due to a competent sandstone layer. Based on the field screening results, AES recommended further excavation of the release area. Sample locations are shown on Figure 3.

On September 25, 2012, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of five confirmation soil samples (SC-1 through SC-5) of the walls and base of the excavation. The area of the final excavation was approximately 1,470 ft<sup>2</sup> by 2 feet in depth. Sample locations and final excavation extents are shown on Figure 4.

#### 2.0 Soil Sampling

A total of 16 soil samples (SB-1 through SB-16) and 5 composite samples (SC-1 through SC-5) were collected during the assessments. All soil samples were field screened for volatile organic compounds (VOCs) and were also analyzed for total petroleum hydrocarbons (TPH). Four composite samples (SC-1 and SC-3 through SC-5) collected during the excavation clearance were submitted for confirmation laboratory analysis.

#### 2.1 Field Screening

#### 2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted with a photo-ionization 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

Field TPH samples were analyzed 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.

#### 2.2 Laboratory Analyses

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

 TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B;

Soil sample SC-5 was also laboratory analyzed for:

 Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B;

#### 2.3 Field Screening and Laboratory Analytical Results

On August 13, 2012, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 0.5 ppm in SB-15 up to 1,868 ppm in SB-5. Field TPH concentrations ranged from 55.7 mg/kg in SB-14 up to 3,890 mg/kg in SB-5.

On September 25, 2012, final excavation field screening results for VOCs via OVM showed concentrations ranging from 2.7 ppm in SC-2 up to 911 ppm in SC-5. Field TPH concentrations ranged from 83.7 mg/kg in SC-2 up to 1,630 mg/kg in S-5. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Screening Reports are attached.

Page 4 of 6

Table 1. Field Screening VOCs and TPH Results

San Juan 27-4 Unit #36A Release Assessment and Final Excavation

August and September 2012 **VOCs** Field Sample via OVM **TPH** Date Depth Sample ID Sampled (ft bgs) (ppm) (mg/kg) NMOCD Action Level\* 100 100 SB-1 8/13/12 3 71.2 317 68.0 3 33.0 SB-2 8/13/12 2 SB-3 8/13/12 11.0 61.2 2 502 2,530 SB-4 8/13/12 2 3,890 SB-5 8/13/12 1,868 SB-6 8/13/12 1 76.5 1,240 SB-7 8/13/12 2 4.0 63.9 3 SB-8 2.4 219 8/13/12 SB-9 8/13/12 2 346 2,670 61.2 SB-10 8/13/12 1 4.2 2 84.4 SB-11 8/13/12 1.9 SB-12 8/13/12 2 21.7 66.6 SB-13 8/13/12 2 39.6 234 8/13/12 55.7 SB-14 1 39.3 1 SB-15 8/13/12 0.5 61.2 1 0.7 80.3 SB-16 8/13/12 SC-1 9/25/12 0 to 2 16.5 107 SC-2 9/25/12 83.7 0 to 2 2.7 95.8 SC-3 9/25/12 0 to 2 11.9 SC-4 9/25/12 0 to 2 6.4 248 SC-5 9/25/12 2 911 1,630

Laboratory analyses for SC-1 and SC-3 through SC-5 were used to confirm field screening results during excavation activities. Benzene and total BTEX concentrations in SC-5 were reported below laboratory detection limits of 0.25 mg/kg and 1.25 mg/kg, respectively. TPH concentrations as GRO/DRO ranged from below laboratory detection limits up to

<sup>\*</sup>Action level determined by the NMOCD ranking score per *NMOCD Guidelines* for Leaks, Spills, and Releases (August 1993)

779 mg/kg in SC-5. Results are presented in Table 2 and on Figure 4. The laboratory analytical report is attached.

Table 2. Laboratory Analytical Results – Benzene, BTEX, and TPH San Juan 27-4 Unit #36A Final Excavation, September 2012

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
NMO	CD Action Le	vel*	10	50	1	00
SC-1	9/25/12	0 to 2	NA	NA	<5.0	<9.8
SC-3	9/25/12	0 to 2	NA	NA	<5.0	<10
SC-4	9/25/12	0 to 2	NA	NA	<5.0	28
SC-5	9/25/12	2	<0.25	<1.25	49	730

NA = Not Analyzed.

#### 3.0 Conclusions and Recommendations

On August 13, 2012, AES conducted an initial assessment of petroleum contaminated soils associated with a historical release at the San Juan 27-4 Unit #36A. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 20. Field screening results above the NMOCD action level of 100 ppm VOCs were reported in SB-4, SB-5, and SB-9. The highest VOC concentration was reported in SB-5 with 1,868 ppm. Field screening results also showed TPH concentrations above the NMOCD action level of 100 mg/kg in SB-1, SB-4, SB-5, SB-6, SB-8, SB-9, and SB-13. The highest TPH concentration was reported in SB-5 with 3,890 mg/kg.

On September 25, 2012, final assessment of the excavation area was completed. Field screening results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels for all of the final four walls of the excavation. The base of the excavation (SC-5) exceeded the NMOCD action level of 100 ppm for VOCs with 911 ppm. Field TPH concentrations above the applicable NMOCD action level of 100 mg/kg were reported in SC-1 (107 mg/kg), SC-4 (248 mg/kg), and SC-5 (1,630 mg/kg). Laboratory analytical results from September 25, 2012, reported benzene and total BTEX concentrations in SC-5 below NMOCD action levels. TPH concentrations as GRO/DRO were reported below the applicable NMOCD action level of 100 mg/kg in SC-

<sup>\*</sup>Action level determined by the NMOCD ranking score per NMOCD Guidelines for Leaks, Spills, and Releases (August 1993)

1, SC-3, and SC-4. However, the TPH concentration in SC-5 was above the applicable NMOCD action level with 779 mg/kg.

Based on final field screening and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 27-4 Unit #36A, benzene, total BTEX, VOC and TPH concentrations were below applicable NMOCD action levels for each of the sidewalls of the excavation. However, the base of the excavation exceeded the applicable NMOCD action level for TPH. Because of the known depth to groundwater and the presence of competent sandstone at the site, Brandon Powell of NMOCD granted approval to CoP to backfill the excavation on September 28, 2012. 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,

Landrea Cupps

**Environmental Scientist** 

Johnt V MiNelly

Elizabeth McNally, PE

#### Attachments:

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, August 2012

Figure 3. Initial Assessment Soil Sample Locations and Results, August 2012

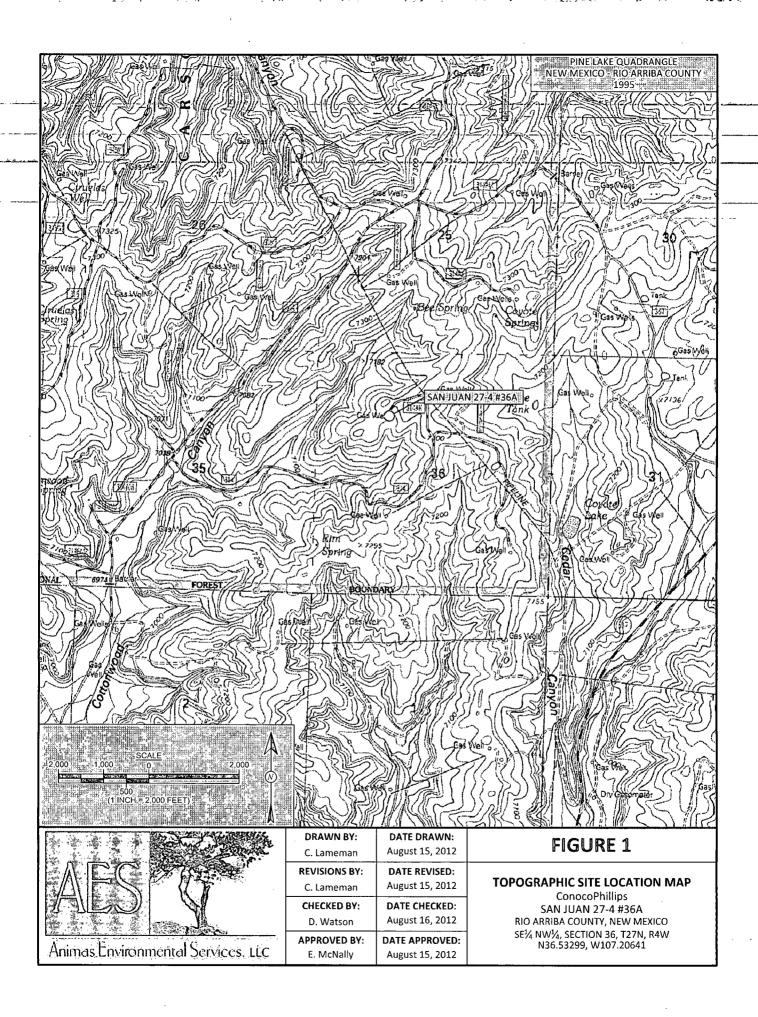
Figure 4. Final Excavation Soil Sample Locations and Results, September 2012

AES Field Screening Report 081312

AES Field Screening Report 092512

Hall Laboratory Analytical Report 1209B51

R:\Animas 2000\2012 Projects\Conoco Phillips\San Juan 27-4 Unit 36A\ San Juan 27-4 Unit 36A Release Assessment and Final Excavation Report 112612.docx



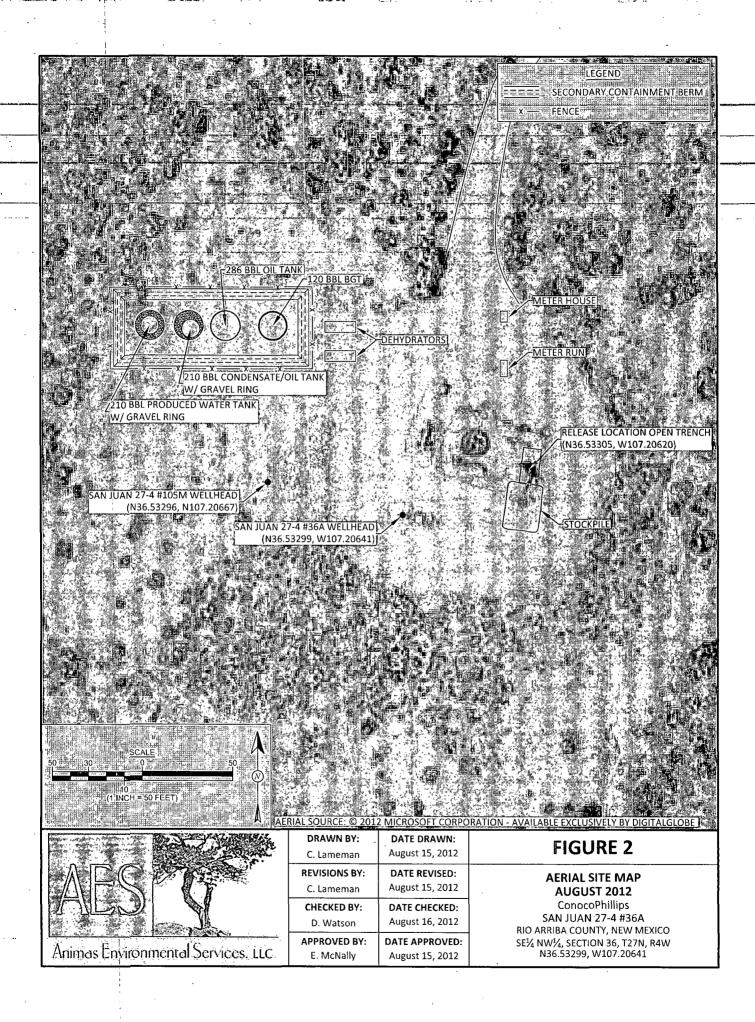
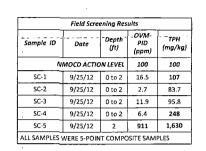


FIGURE 3 METER RUN INITIAL ASSESSMENT SOIL SAMPLE LOCATIONS AND RESULTS AUGÚST 2012 ConocoPhillips SAN JUAN 27-4 #36A RIO ARRIBA COUNTY, NEW MEXICO SE¼ NW¼, SECTION 36, T27N, R4W Field Screening Results OVM-Depth ТРН Sample ID PID Date (ft) (mg/kg) (ppm) NMOCD ACTION LEVEL 100 100 SB-1 8/13/12 71.2 317 Animas Environmental Services, LLC SB-2 8/13/12 33.0 68.0 3 SB-3 8/13/12 2 11.0 61.2 DRAWN BY: DATE DRAWN: 2,530 C. Lameman August 15, 2012 \$8-4 8/13/12 2 502 1,868 3,890 REVISIONS BY: DATE REVISED: SB-5 8/13/12 2 August 15, 2012 C. Lameman SB-6 8/13/12 1 76.5 1,240 CHECKED BY: DATE CHECKED: SB-7 8/13/12 2 4.0 63.9 D. Watson August 15, 2012 SB-8 8/13/12 3 2.4 219 DATE APPROVED: APPROVED BY: SB-9 8/13/12 346 2,670 E. McNally August 15, 2012 SB-10 8/13/12 1 4.2 61.2 LEGEND SB-3 🖨 8/13/12 SB-11 1.9 84.4 5B-12 8/13/12 2 21.7 66.6 RELEASE LOCATION SAMPLE LOCATIONS OPEN TRENCH 20 FT x 10 FT x 1 FT DEEP SB-13 8/13/12 2 39.6 234 (N36.53305, W107.20641) SB-14 8/13/12 1 39.3 55.7 SB-9 🖨 **○** SB-15 SB-15 8/13/12 0.5 61.2 o<sup>SB-1</sup> SB-2 8/13/12 SB-16 1 0.7 80.3 ♠ SR-6 **○** SB-10 FORMER PRODUCTION TANK-**●** \$B-7 **⊜** SB-5 **○** SB-8 **⇔** SB-12 SB-13 🌣 **©** SB-11 **○** SB-16 SOIL STOCKPILE SAN JUAN 27-4 #36A WELLHEAD (N36.53299, W107.20641) **○** SB-14

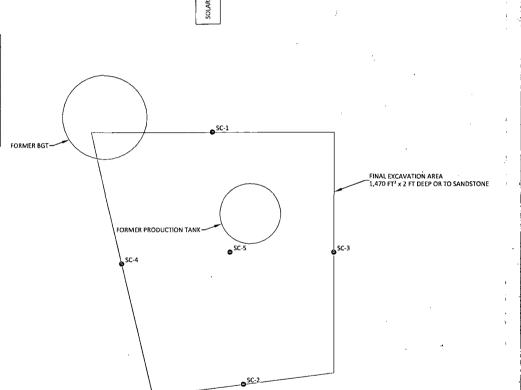
> 2 ( (1 INCH = 10 FEET)



	L	aboratory	Analytical i	Results		
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOC	O ACTION LEV	/EL	10	50	10	10
SC-1 ·	9/25/12	0 to 2	NA	NA	<5.0	<9.8
SC-3	9/25/12	0 to 2	NA	NA	<5.0	<10
SC-4	9/25/12	0 to 2	NA	NA	<5.0	28
SC-5	9/25/12	2	<0.25	1.2	49	730

SAN JUAN 27-4 #36A WELLHEAD (N36.53299, W107.20641)

SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015B.



METER RUN

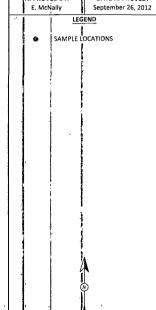
#### FIGURE 4

#### FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS (SEPTEMBER 2012

ConocoPhillips SAN JUAN 27-4 #36A RIO ARRIBA COUNTY, NEW MEXICO SE' NW', SECTION 36, T27N, R4W N36.53299,W107.20641



Animas Environm	ental Services, LLC
DRAWN BY: C. Lameman	DATE DRAWN: August 15, 2012
REVISIONS BY: C. Lameman	DATE REVISED: September 26, 2012
D. Watson	DATE CHECKED: September 26, 2012
APPROVED BY:	DATE APPROVED:



2 (1 INCH = 10 FEET)

### **AES Field Screening Report**



Animas Environmental Services LLC

Client: ConocoPhillips

www.animasenvironmental.com

Project Location:-San Juan 27-4 Unit-#36A-

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

Date: 8/13/2012

Durango, Colorado 970-403-3274

Matrix: Soil

		Time of		Field TPH				TPH
	Collection	Sample	OVM	Analysis	Field TPH*	TPH PQL		Analysts
Sample ID	Date	Collection	(ppm)	Time	(mg/kg)	(mg/kg)	DF	Initials
SB-1 @ 3'	8/13/2012	11:40	71.2	12:06	317	20.0	1	CL
SB-2 @ 3'	8/13/2012	11:51	33.0	12:11	68.0	20.0	1	CL
SB-3 @ 2'	8/13/2012	11:56	11.0	12:16	61.2	20.0	1	CL
SB-4 @ 2'	8/13/2012	11:59	502	12:20	2,530	20.0	1	CL
SB-5 @ 2'	8/13/2012	12:17	1,868	12:40	3,890	200	10	CL
SB-6 @ 1'	8/13/2012	12:30	76.5	13:01	1,240	20.0	1	CL
SB-7 @ 2'	8/13/2012	12:35	4.0	13:05	63.9	20.0	1	CL
SB-8 @ 3'	8/13/2012	12:56	2.4	13:18	219	20.0	1	CL
SB-9 @ 2'	8/13/2012	13:12	346	13:50	2,670	20.0	1	CL
SB-10 @ 1'	8/13/2012	13:18	4.2	13:54	61.2	20.0	1	CL
SB-11 @ 2'	8/13/2012	13:35	1.9	14:01	84.4	20.0	1	CL
SB-12 @ 2'	8/13/2012	13:39	21.7	14:06	66.6	20.0	1	CL
SB-13 @ 2'	8/13/2012	13:45	39.6	14:12	234	20.0	1	CL
SB-14 @ 1'	8/13/2012	13:51	39.3	14:16	55.7	20.0	1	CL
SB-15 @ 1'	8/13/2012	14:12	0.5	14:33	61.2	20.0	1	CL
SB-16 @ 1'	8/13/2012	14:26	0.7	14:40	80.3	20.0	1	CL

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

NA Not Analyzed

DF Dilution Factor

Total Petroleum Hydrocarbons - USEPA 418.1

\*Field TPH concentrations recorded may be below PQL.

Analyst:

Page 1

Report Finalized: 8/13/12

## **AES Field Screening Report**

Client: ConocoPhillips

Project Location: San Juan 27-4 Unit #36A

Date: 9/25/2012

Matrix: Soil



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche

Farmington, NM 37401 505-564 2281

Durango, Colorado 970-403-3274

	Collection	Time of Sample	Sample	OVM	Field TPH Analysis	Field TPH*	TPH PQL		TPH Analysts
Sample ID	Date	Collection	Location	(ppm)	Time	(mg/kg)	(mg/kg)	DF	Initials
SC-1	9/25/2012	11:12	North Wall	16.5	11:55	107	20.0	1	DÁW
SC-2	9/25/2012	12:39	South Wall	2.7	12:55	83.7	20.0	1	DÁW
SC-3	9/25/2012	11:18	East Wall	11.9	12:01	95.8	20.0	1	DAW
SC-4	9/25/2012	11:32	West Wall	6.4	12:05	248	20.0	1	DAW
SC-5	9/25/2012	11:35	Base	911	12:07	1,630	20.0	1	DAW

PQL

**Practical Quantitation Limit** 

ND

Not Detected at the Reporting Limit

NA

Not Analyzed

DF

**Dilution Factor** 

Total Petroleum Hydrocarbons - USEPA 418.1

\*Field TPH concentrations recorded may be below PQL.

Analyst:

Debrah Water

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

October 01, 2012

Debbie Watson

Animas Environmental Services

624 East Comanche

Farmington, NM 87401 TEL: (505) 486-4071

FAX

RE: CoP San Juan 27-4 #36A

OrderNo.: 1209B51

#### Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 9/26/2012 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1209B51

### Hall Environmental Analysis Laboratory, Inc.

Date Reported:-10/1/2012-

CLIENT:-Animas Environmental-Serv	ices		Client Sample	e ID: SC-1	
Project: CoP San Juan 27-4 #36A			Collection I	Date: 9/25/20	012 11:12:00 AM
Lab ID: 1209B51-001	Matrix:	MEOH (SOIL)	Received I	Date: 9/26/20	012 10:00:00 AM
Änalyses	Result	RL. Qua	l_Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E ORGANICS				Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	9/26/2012 11:48:43 AM
Surr: DNOP	104	77.6-140	%REC	1 .	9/26/2012 11:48.43 AM
EPA METHOD 8015B: GASOLINE RA	NGE		•		Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/27/2012 11:52:56 AM
Surr': BFB	98.9	84-116	%REC	1	9/27/2012 11:52:56 AM

Λ	lifiers	

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

- 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
  - S Spike Recovery outside accepted recovery limits Page 1 of 9

Lab Order 1209B51

Hall Environmental Analysis Laboratory, Inc.

Date, Reported: .10/1/2012

-CLIENT: Animas Environmental Services \_\_\_\_\_ Client Sample ID: SC-3\_

Lab ID: 1209B51-002 Matrix: MEOH (SOIL) Received Date: 9/26/2012 10:00:00 AM

Analyses	Result	RL_Qu	al_Units	DF	Date_Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				^^Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	9/26/2012 12:13:49 PM
Surr: DNOP	106	77.6-140	%REC	1	9/26/2012 12:13:49 PM
EPA METHOD 8015B: GASOLINE R	RANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/27/2012 12:21:40 PM
Surr: BFB	99.9	84-116	%REC	1	9/27/2012 12:21:40 PM

#### Qualifiers:

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

- 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
  - S Spike Recovery outside accepted recovery limits Page 2 of 9

Lab Order 1209B51

## Hall Environmental Analysis Laboratory, Inc.

-Date Reported: -10/1/2012

CLIENT:Animas Environmental Ser Project: CoP San Juan 27-4 #36A	vices		-		12 11:32:00 AM
Lab ID: 1209B51-003	Matrix:	MEOH (SOIL)	Received	Date: 9/26/20	12 10:00:00 AM
Analyses	Result	ŘL_Qua	l - Units	DF	_Date Analyzed
EPA METHOD 8015B: DIESEL RANG	GE ORGANICS			· · · - · -,-·	Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	, 28	10	mg/Kg	1 .	9/26/2012 12:39:16 PM
Surf. DNOP	103	77.6-140	%REC	1	9/26/2012 12:39:16 PM
EPA METHOD 8015B: GASOLINE R	ANGE	,	5		Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/27/2012 12:50:26 PM
Surr BFB	99.0	84-116	%REC	1	9/27/2012 12:50:26 PM

Qualifiers:

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

- 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
  - S Spike Recovery outside accepted recovery limits Page 3 of 9

#### Lab Order 1209B51

### Hall Environmental Analysis Laboratory, Inc.

.Date.Reported: .10/1/2012.

CLIENT: Animas Environmental Services \_\_\_\_\_ Client Sample ID: SC-5\_

Lab ID: 1209B51-004 Matrix: MEOH (SOIL) Received Date: 9/26/2012 10:00:00 AM

Analyses	Result	RL_0	Qual	_Units _	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E ORGANICS					Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	730	9.8		mg/Kg	1	9/26/2012 1:04:22 PM
Surr: DNOP	179	77.6-140	S	%REC	· 1	9/26/2012 1:04:22 PM
EPA METHOD 8015B: GASOLINE RA	NGE			٠		Analyst: NSB
Gasoline Range Organics (GRO)	49	25		mg/Kg	5 .	9/27/2012 1:19:11 PM
Surr: BFB	180	84-116	s	%REC	5	9/27/2012 1:19:11 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.25		mg/Kg	5	9/26/2012 1:52:45 PM
Toluene	ND	0.25		mg/Kg	5	9/26/2012 1:52:45 PM
Ethylbenzene	ND	0.25		mg/Kg	. 5	9/26/2012 1:52:45 PM
Xylenes, Total	1.2	0.50		mg/Kg	. 5	9/26/2012 1:52:45 PM
Surr: 4-Bromofluorobenzene	104	80-120		%REC	. 5	9/26/2012 1:52:45 PM

#### Qualifiers:

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

- 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
  - S Spike Recovery outside accepted recovery limits Page 4 of 9

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1209B51

01-Oct-12

Client:	Animas Ei	nvironmenta	l Serv	ices							
Project:	CoP San J	uan 27-4 #30	6A <sup>·</sup>	,							
Sample ID MB-39	35	SampType	e: MBI	_K	Tes	tCode: El	PA Method	8015B: Diese	l Range C	)rganics	
Client ID: PBS		Batch ID	•			RunNo: <b>5</b>					
Prep Date: 9/26	2012	Analysis Date	: 9/2	6/2012		SeqNo: 1		Units: mg/K	g		
Analyte		, Result P	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics	(DRO) -	- ND -	10								
Surr: DNOP	i,	13		- 10.00		131	77.6	140			
Sample ID LCS-3	935	SampType	e: LCS		Tes	tCode: El	PA Method	8015B: Diese	l Range C	Organics	• •
Client ID: LCSS		Batch ID	393	5	· F	RunNo: <b>5</b>	768	2			
Prep Date: 9/26	2012	Analysis Date	: 9/2	6/2012	. 8	SeqNo: 1	66144	Units: mg/K	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics	(DRO)	45	10	50.00	0	90.3	52.6	130			
Surr: DNOP	1 .	5.9		5.000		118	77.6	140			i
Sample ID 1209A	69-001AMS	SampType	e: MS		Tes	tCode: El	PA Method	8015B: Diese	el Range C	Drganics	
Client ID: Batch	άc	Batch ID	393	5	F	RunNo: <b>5</b>	797				
Prep Date: 9/26	/2012	Analysis Date	9/2	7/2012	\$	SeqNo: 1	66858	Units: mg/K	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics	(DRO)	43	10	50.92	0	85.3	57.2	146			
Diesel Range Organics Surr: DNOP	(DRO)	43 4.6	10	50.92 5.092	0	85.3 89.4	57.2 77.6	146 140			
	1	4.6		5.092		89.4	77.6		el Range (	Organics	
Surr: DNOP	169-001AMSE	4.6	e: MSI	5.092 D	Tes	89.4	77.6 PA Method	140	el Range C	Organics	
Surr: DNOP Sample ID 1209A	469-001AMSD	4.6 SampType	e: MSI	5.092 D 5	Tes	89.4 tCode: E	77.6 PA Method 797	140	J	Organics	
Surr: DNOP  Sample ID 1209A Client ID: Batch	469-001AMSD	4.6  SampType  Batch ID  Analysis Date	e: MSI 0: 393 e: 9/2	5.092 D 5 7/2012	Tes	89.4 tCode: E RunNo: 5 SeqNo: 1	77.6 PA Method 797	140 8015B: Diese	J	<b>Drganics</b> RPDLimit	Qual
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26	069-001AMSE QC /2012	4.6  SampType  Batch ID  Analysis Date	e: MSI 0: 393 e: 9/2	5.092 D 5 7/2012	Tes F	89.4 tCode: E RunNo: 5 SeqNo: 1	77.6 PA Method 797 66860	140 8015B: Diese Units: mg/K	g	J	Qual
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26 Analyte	069-001AMSE QC /2012	4.6  SampType  Batch ID  Analysis Date  Result F	e: MSI 0: 393 e: 9/2	5.092 D 5 7/2012 SPK value	Tes F S SPK Ref Val	89.4 tCode: El RunNo: 5 SeqNo: 1 %REC	77.6 PA Method 797 66860 LowLimit	140 8015B: Diese Units: mg/K HighLimit	g %RPD	RPDLimit	Qual
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26 Analyte Diesel Range Organics	A69-001AMSE ACC /2012	4.6  SampType Batch ID  Analysis Date  Result F	e: MSI e: 9/2 e: 9/2	5.092 5 7/2012 SPK value 51.07 5.107	Tes F S SPK Ref Val 0	89.4 tCode: El RunNo: 5 SeqNo: 1 %REC 92.7 88.9	77.6  PA Method 797  66860  LowLimit 57.2 77.6	140  8015B: Diese  Units: mg/K  HighLimit  146	%RPD 8.61 0	RPDLimit 24.5 0	Qual
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26 Analyte Diesel Range Organics Surr: DNOP	A69-001AMSE ACC /2012	4.6  SampType Batch ID  Analysis Date  Result F  47  4.5	e: MSI e: 9/2 e: 9/2 10	5.092 D 5 7/2012 SPK value 51.07 5.107	Tes F SPK Ref Val 0	89.4 tCode: El RunNo: 5 SeqNo: 1 %REC 92.7 88.9	77.6  PA Method 797  66860  LowLimit 57.2 77.6  PA Method	140  8015B: Diese  Units: mg/K  HighLimit 146 140	%RPD 8.61 0	RPDLimit 24.5 0	Qual
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26 Analyte Diesel Range Organics Surr: DNOP  Sample ID MB-3:	169-001AMSE 1QC 1/2012 1 (DRO)	4.6  SampType Batch ID  Analysis Date  Result F  47  4.5  SampType	e: MSI D: 393 e: 9/2 10 PQL 10	5.092 5 7/2012 SPK value 51.07 5.107	Tes F SPK Ref Val 0	89.4 tCode: El RunNo: 5 SeqNo: 1 %REC 92.7 88.9 tCode: El	77.6  PA Method 797  66860  LowLimit 57.2 77.6  PA Method 816	140  8015B: Diese  Units: mg/K  HighLimit 146 140	%RPD 8.61 0	RPDLimit 24.5 0	Qual
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26 Analyte Diesel Range Organics Surr: DNOP  Sample ID MB-3: Client ID: PBS	169-001AMSE 1QC 1/2012 1 (DRO)	4.6  SampType Batch ID  Analysis Date  Result F 47 4.5  SampType Batch ID  Analysis Date	e: MSI e: 9/2 10 e: MBI e: MBI	5.092 5 7/2012 SPK value 51.07 5.107 LK 4	Tes F SPK Ref Val 0 Tes	89.4 tCode: E RunNo: 5 SeqNo: 1 %REC 92.7 88.9 ttCode: E RunNo: 5 SeqNo: 1	77.6 PA Method 797 66860 LowLimit 57.2 77.6 PA Method 816 67266	140  8015B: Diese Units: mg/K HighLimit 146 140  8015B: Diese	%RPD 8.61 0	RPDLimit 24.5 0	Qual
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26 Analyte Diesel Range Organics Surr: DNOP  Sample ID MB-3: Client ID: PBS Prep Date: 9/27	169-001AMSE 1QC 1/2012 1 (DRO)	4.6  SampType Batch ID  Analysis Date  Result F 47 4.5  SampType Batch ID  Analysis Date	e: MSI e: 9/2 10 e: MBI e: MBI	5.092 5 7/2012 SPK value 51.07 5.107 LK 4	Tes F SPK Ref Val 0	89.4 tCode: E RunNo: 5 SeqNo: 1 %REC 92.7 88.9 ttCode: E RunNo: 5 SeqNo: 1	77.6 PA Method 797 66860 LowLimit 57.2 77.6 PA Method 816 67266	140  8015B: Diese Units: mg/K HighLimit 146 140  8015B: Diese Units: %RE	%RPD 8.61 0 el Range C	RPDLimit 24.5 0  Organics	
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26 Analyte Diesel Range Organics Surr: DNOP  Sample ID MB-3: Client ID: PBS Prep Date: 9/27 Analyte	A69-001AMSD ACQC /2012 	4.6  SampType Batch ID  Analysis Date  Result F 47 4.5  SampType Batch ID  Analysis Date  Result F	e: MSI 0: 393 e: 9/2 10 10 e: MBI e: MBI e: y/2	5.092  5  7/2012  SPK value  51.07  5.107  LK  4  8/2012  SPK value  10.00	Tes  SPK Ref Val  0  Tes  F  SPK Ref Val	89.4 tCode: El RunNo: 5 GeqNo: 1 %REC 92.7 88.9 tCode: El RunNo: 5 GeqNo: 1 %REC 101	77.6  PA Method 797  66860  LowLimit 57.2 77.6  PA Method 816 67266  LowLimit 77.6	140  8015B: Diese  Units: mg/K  HighLimit 146 140  8015B: Diese  Units: %RE  HighLimit	%RPD 8.61 0 el Range C	RPDLimit 24.5 0  Organics  RPDLimit	
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26 Analyte Diesel Range Organics Surr: DNOP  Sample ID MB-3: Client ID: PBS Prep Date: 9/27 Analyte Surr: DNOP	169-001AMSE 10C 1/2012 10(DRO) 1/2012	4.6  SampType Batch ID  Analysis Date  Result F 47 4.5  SampType Batch ID  Analysis Date  Result F	e: MSI 0: 393 e: 9/2 PQL 10 2: 397 e: 9/2 PQL	5.092  5  7/2012  SPK value  51.07  5.107  LK  4  8/2012  SPK value  10.00	Tes  SPK Ref Val  0  Tes  SPK Ref Val  Tes	89.4 tCode: El RunNo: 5 GeqNo: 1 %REC 92.7 88.9 tCode: El RunNo: 5 GeqNo: 1 %REC 101	77.6  PA Method 797 66860  LowLimit 57.2 77.6  PA Method 816 67266  LowLimit 77.6  PA Method	140  8015B: Diese Units: mg/K HighLimit 146 140  8015B: Diese Units: %RE HighLimit 140	%RPD 8.61 0 el Range C	RPDLimit 24.5 0  Organics  RPDLimit	
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26 Analyte Diesel Range Organics Surr: DNOP  Sample ID MB-3: Client ID: PBS Prep Date: 9/27 Analyte Surr: DNOP  Sample ID LCS-5 Client ID: LCS-5 Client ID: LCS-5	169-001AMSE 10C 1/2012 10(DRO) 1/2012	4.6  SampType Batch ID  Analysis Date  47 4.5  SampType Batch ID  Analysis Date  Result F	e: MSI D: 393: e: 9/2 10 e: MBI D: 397: e: 9/2 PQL	5.092  5  7/2012  SPK value 51.07 5.107  LK  4  8/2012  SPK value 10.00	Tes  F SPK Ref Val  0  Tes  SPK Ref Val  Tes	89.4 tCode: El RunNo: 5 SeqNo: 1 %REC 92.7 88.9 tCode: El RunNo: 5 SeqNo: 1 %REC 101 tCode: E	77.6 PA Method 797 66860 LowLimit 57.2 77.6 PA Method 816 67266 LowLimit 77.6 PA Method 816	140  8015B: Diese Units: mg/K HighLimit 146 140  8015B: Diese Units: %RE HighLimit 140	%RPD 8.61 0 el Range C %RPD	RPDLimit 24.5 0  Organics  RPDLimit	
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26 Analyte Diesel Range Organics Surr: DNOP  Sample ID MB-3: Client ID: PBS Prep Date: 9/27 Analyte Surr: DNOP  Sample ID LCS-5 Client ID: LCS-5 Client ID: LCS-5	A69-001AMSE ACQC /2012 	4.6  SampType Batch ID  Analysis Date  47 4.5  SampType Batch ID  Analysis Date  Result F 10  SampType Batch ID  Analysis Date	e: MSI 0: 393 e: 9/2 10 10 e: MBI 0: 397 e: 9/2 e: LCS	5.092  5  7/2012  SPK value  51.07  5.107  LK  4  8/2012  SPK value  10.00  6  4  8/2012	Tes F SPK Ref Val 0  Tes SPK Ref Val  Tes	89.4 tCode: El RunNo: 5 SeqNo: 1 %REC 92.7 88.9 tCode: El RunNo: 5 SeqNo: 1 %REC 101 tCode: El RunNo: 5	77.6 PA Method 797 66860 LowLimit 57.2 77.6 PA Method 816 67266 LowLimit 77.6 PA Method 816	140  8015B: Diese Units: mg/K HighLimit 146 140  8015B: Diese Units: %RE HighLimit 140  8015B: Diese Units: %RE	%RPD 8.61 0 el Range C %RPD	RPDLimit 24.5 0  Organics  RPDLimit	
Surr: DNOP  Sample ID 1209A Client ID: Batch Prep Date: 9/26 Analyte Diesel Range Organics Surr: DNOP  Sample ID MB-3: Client ID: PBS Prep Date: 9/27 Analyte Surr: DNOP  Sample ID LCS-3 Client ID: L'CS-3 Prep Date: 9/27	A69-001AMSE ACQC /2012 	4.6  SampType Batch ID  Analysis Date  47 4.5  SampType Batch ID  Analysis Date  Result F 10  SampType Batch ID  Analysis Date	e: MSI 0: 393 e: 9/2 10 10 e: MBI 0: 397 e: 9/2 e: LCS	5.092  5  7/2012  SPK value  51.07  5.107  LK  4  8/2012  SPK value  10.00  6  4  8/2012	Tes  F SPK Ref Val  0  Tes  SPK Ref Val  Tes	89.4 tCode: E RunNo: 5 SeqNo: 1 %REC 92.7 88.9 ttCode: E RunNo: 5 SeqNo: 1 %REC 101 ttCode: E RunNo: 5	77.6  PA Method 797 66860  LowLimit 57.2 77.6  PA Method 816 67266  LowLimit 77.6  PA Method 816 67486	140  8015B: Diese Units: mg/K HighLimit 146 140  8015B: Diese Units: %RE HighLimit 140  8015B: Diese	%RPD 8.61 0 el Range C %RPD	RPDLimit 24.5 0 Organics RPDLimit Organics	Qual

#### 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 5 of 9

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1209B51

01-Oct-12

Animas Environmental Services Client: Project: CoP San Juan 27-4 #36A Sample ID 1209B93-001AMS SampType: MS TestCode: EPA Method 8015B: Diesel Range Organics Client ID: **BatchQC** Batch ID: 3974 RunNo: 5816 Prep Date: 9/27/2012 Analysis Date: 9/28/2012 SeqNo: 167922 Units: %REC Analyte SPK value %REC LowLimit HighLimit Qual Surr: DNOP 77.6 Sample ID 1209B93-001AMSD SampType: MSD TestCode: EPA Method 8015B: Diesel Range Organics Client ID: **BatchQC** Batch ID: 3974 RunNo: 5816 Prep Date: 9/27/2012 Analysis Date: 9/28/2012 SeqNo: 168423 Units: %REC Analyte SPK value SPK Ref Val %REC HighLimit Surr: DNOP 4.822 101 77.6 4.9 140

#### 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

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## Hall Environmental Analysis Laboratory, Inc.

WO#:

1209B51

01-Oct-12

Client: Animas I	Environmental Services			
Project: CoP San	Juan 27-4 #36A		·	· 
Sample ID MB-3926	SampType: MBLK	TestCode: EPA Method	8015B: Diesel Range	
Client ID: PBW	Batch ID: 3926	RunNo: <b>5768</b>		
Prep Date: _ 9/26/2012	Analysis Date: 9/26/2012	SeqNo: 166167	Units: %REC _	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	1.2 1.000	124 79.5	166	• -
Sample ID LCS-3926	SampType: LCS	TestCode: EPA Method	8015B: Diesel Range	
Client ID: LCSW,	Batch ID: 3926	RunNo: 5768	0	
Prep Date: 9/26/2012	Analysis Date: 9/26/2012	SeqNo: 166173	Units: %REC	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	0.56 0.5000	113 79.5	166	
Sample ID LCSD-3926	SampType: LCSD TestCode: EPA Method 8015B: Diesel Range			
Client ID: LCSS02	Batch ID: 3926	RunNo: 5768		
Prep Date: 9/26/2012	Analysis Date: 9/26/2012	SeqNo: 166174	Units: %REC	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	0.54 0.5000	108 79.5	166 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

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### Hall Environmental Analysis Laboratory, Inc.

WO#:

1209B51

01-Oct-12

Client: Animas	Environmental Services	,		
Project: CoP Sa	n Juan 27-4 #36A			
Sample ID MB-3881	SampType: <b>MBLK</b>	TestCode: EPA Method	8015B: Gasoline Range	
Client ID: PBS	Batch ID: '3881	RunNo: 5824	• • • •	
Prep Date: _9/22/2012 _	Analysis Date: 9/27/2012	SeqNo: 167530	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	990 1000	99.3 84	116	
Sample ID LCS-3881	SampType: LCS	TestCode: EPA Method	8015B: Gasoline Range	•
Client ID: LCSS	Batch ID: 3881	RunNo: <b>5824</b>		
Prep Date: 9/22/2012	Analysis Date: 9/27/2012	SeqNo: 167531	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit	Qual
Gasoline Range Organics (GRO)	26 5.0 25.00	0 104 74	117	
Surr: BFB	1000 1000	. 104 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

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## Hall Environmental Analysis Laboratory, Inc.

WO#:

1209B51

01-Oct-12

Client:	Animas E	nvironme	ntal Ser	vices								
Project:	CoP San	Juan 27-4	#36A		•		•			, , , , , , , , , , , , , , , , , , , ,		
Sample ID	MB-3881	SampT	ype: ME	BLK	Tes	tCode:	EPA Method	8021B: Vola	tiles		· · · · · · · · · · · · · · · · · · ·	7
	PBS:		i ID: 38		, F	RunNo:	5783					
Prep Date:	9/22/2012	Analysis D				SeqNo:		Units: mg/l	Kg		<del></del>	77 7
Analyte	1	Result	PQL	SPK value	SPK Ref Val	%REC		HighLimit	%RPD	RPDLimit	Qual	$\mathbf{I}$
Benzene	1	ND	0.050	Of IX Value	Of ICTCF var	701120		riigiiEiiiiii	- 701 (1 D		·	
Toluene		ND	0.050	,	4-							
Ethylbenzene		ND	0.050						•			
Xylenes, Total		ND	0.10									
•	ofluoropenzene	1.0	•	1.000		99.7	80	120				
Sample ID	LCS-3881	SampT	ype: LC	s	Tes	tCode: I	EPA Method	8021B: Vola	tiles			╗
Client ID:	LCSS	Batch	1D: <b>38</b>	81	F	RunNo:	5783	•				
Prep Date:	9/22/2012	Analysis D	ate: 9/	26/2012		SeqNo:	166797	Units: mg/l	Kg			.
Analyte	•	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	<del>-</del>	0.95	0.050	1.000	0	95.3		117				
Toluene		0.98	0.050	1.000	0	97.8		120			•	
Ethylbenzene		1.0	0.050	1.000	0	101		116				
Xylenes, Total		3.1	0.10	3.000	0	102	76.7	117				
Surr: 4-Brom	ofluorobenzene	1.0		1.000		104	80	120				
Sample ID	1209929-003AMS	SampT	ype: <b>M</b> \$	 }	Tes	tCode: I	EPA Method	8021B: Vola	itiles	<u></u>		Ī
Client ID:	BatchQC	Batch	n ID: 38	81	F	RunNo:	5783					
Prep Date:	9/22/2012	Analysis D	ate: <b>9</b> /	26/2012	5	SeqNo:	166805	Units: mg/l	Kg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	I	0.88	0.048	0.9606	0	91.4	67.2	113				
Toluene	1	0.91	0.048	0.9606	0	94.8	62.1	116				
Ethylbenzene	1	0.92	0.048	0.9606	0.004087	95.5	67.9	127				
Xylenes, Total	i	2.8	0.096	2.882	0	97.9	60.6	134				
Surr: 4-Brom	ofluorobenzene	0.98		0.9606		102	80	120				
Sample ID	1209929-003AMSI	SampT	ype: MS	SD	Tes	tCode: I	EPA Method	8021B: Vola	tiles			٦
Client ID:	BatchQC	Batch	1D: 38	81	F	RunNo:	5783					
Prep Date:	9/22/2012	Analysis D	ate: 9/	26/2012	5	SeqNo:	166844	Units: mg/l	Kg			
i rop Bato.					ODK D-41/-1	%REC	Laudinait	HighLimit	%RPD	RPDLimit	Qual	1
Analyte		Result	PQL	SPK value	SPK Ret vai	MEC	LowLimit	riigneimic	///NTD	IN DEIMIN	Quui	
,	!	Result 0.90	PQL 0.048	SPK value 0.9615	O O	93.5		113	2.34	14.3	Quui	_
Analyte							67.2				Quui	
Analyte Benzene		0.90	0.048	0.9615	0	93.5	67.2 62.1	. 113	2.34	14.3	Qui	

#### Qualifiers:

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

Surr: 4-Bromofluorobenzene

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

0.9615

R RPD outside accepted recovery limits

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nau Environmental Analysis Laboratory
4901 Hawkins NE

4901 HUWKINS NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.con

### Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1209B51 Received by/date: Logged By: 9/26/2012 10:00:00 AM Michelle Garcia Completed By: Michelle Garcia 9/26/2012 10:16:41 AM Reviewed By: Chain of Custody Yes No 🗌 1. Were seals intact? Not Present Yes V No Not Present 2 Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In Yes 🗹 No 🗌 NA 🗆 4. Coolers are present? (see 19. for cooler specific information) NA 🔲 5. Was an attempt made to cool the samples? Yes 🔽 No 🗌 Yes V No NA 🗆 6. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗹 No 🗌 7. Sample(s) in proper container(s)? Yes V No 8. Sufficient sample volume for indicated test(s)? Yes 🗹 No 🗌 9. Are samples (except VOA and ONG) properly preserved? NA 🗆 10. Was preservative added to bottles? Yes No V Yes 🔲 No 🔲 No VOA Vials 🗹 11. VOA vials have zero headspace? Yes D No 🗹 12. Were any sample containers received broken? # of preserved Yes 🗹 No 🗌 13. Does paperwork match bottle labels? bottles checked (Note discrepancies on chain of custody) for pH; Yes V No (<2 or >12 unless noted) 14. Are matrices correctly identified on Chain of Custody? Yes V No Adjusted? 15. Is it clear what analyses were requested? 16. Were all holding times able to be met? Yes 🗹 No 🗌 (If no, notify customer for authorization.) Checked by: Special Handling (if applicable) Yes M No 17. Was client notified of all discrepancies with this order? Person Notified: Date: By Whom: Phone Fax ☐ eMail In Person Regarding: Client Instructions: 18. Additional remarks: 19. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Good

Chain-of-Custody Record	Turn-Around Time:	HALL ENVIRONMENTAL					
Client: Animas Environmental	Project Name:  Cop Sandrum 27-4 #36 A  Project #:	ANALYSIS LABORATORY					
Services UC	Project Name.	www.hallenvironmental.com					
Mailing Address: 624-EComanche	Cop Sandnan 27-4 #36 A	4901 Hawkins NE - Albuquerque, NM 87109					
Farmington AM 87401	Project #:	Tel. 505-345-3975 Fax 505-345-4107					
Phone #: 505 564 2281		Analysis-Request					
email or Fax#:	Project Manager:	(5) (7) (7) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1					
QA/QC Package:  Standard   Level 4 (Full Validation)	D Welson	H (Gas only) (Gas/D(eSel) ) ) ) 82 PCB's					
Accreditation	Sampler: 1) Watson	18.1) 1758 (604.1) 18.1) 18.1 (18.1) 18.1 (18.1) 18.1 (18.1)					
□ NELAP □ Other	Sampler: 1) Watson On Ice The Notation	E + TPH 8015B ( 8015B ( 418.1) PAH) NO <sub>3</sub> ,NO OA)					
□ EDD (Type)	Sample Tankerature # 30 44.	Od 2   Od 4   Od 6   Od					
Date Time Matrix Sample Request ID	Container Type and # Preservative Type	BTEX + MEBETHENS (8021) BTEX + MTBE + TPH (Gas only) TPH Method 8015B (Gas/Diesa) TPH (Method 418.1) EDB (Method 504.1) 8310 (PNA or PAH) RCRA 8 Metals Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) 8081 Pesticides / 8082 PCB's 8260B (VOA)					
9-25-12 1112 SON SC-1	Meal kut mealt 1001						
1 1118 SC-3	-002						
1132 Sc-4	-003	X					
_ 1135	1 -004	XXX					
Date: Time: Relinquished by:	Received by: Date Time	Remarks: But to Conoco Philips					
1/28/12/1438 Natruk Water	Muster Walter 1/25/12 1638	100:9180127 User D. KAITLW C. TO					
Date: Time: Relinquished by:	Received by: Date Time	act code: D250 work ordered by - cheming					
9/25/12 1757 Phrestere Weeter	# 09 kills 1000	Remarks: But to Conoco Phillips 100: 9180127  Oct codo: D250  Supervisor: Kendell Bassing					
If pecessary samples submitted to Hall Environmental may be subc	ontracted to other accredited laboratories. This serves as notice of this	nomibility Assessed and Assessed to the second seco					