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 in accordance with 19.15.29 NMAC.

1220 S. St. Fran	cis Dr., Santa	a Fe, NM 87505	5	Sa	anta Fe	e, NM 875	05					
			Rele	ase Notific	cation	and Co	orrective A	ction				
						OPERAT	TOR	Г I	nitial Report		Final Report	
Name of Co	mpany Co	nocoPhillir	s Compa	nv		Contact Ashley Maywell						
Address 34	01 E. 30th	St., Farming	ton, NM 8	7402		Telephone 1	No. 505-324-51	69				
Facility Na	ne Chacol	n Hill #2]	Facility Typ	e Gas Well					
Surface Ow	ner Feder	al		Mineral C	Owner 1	Federal API No. 3003922136 SE 07045(
						51-0/7430						
				LOCA	ATION	OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/West Li	ne	Coun	ty	
G	20	024N	003W	1850'	1	North	1850'	East		Rio Ar	riba	
Latitude <u>36.297988</u> Longitude <u>-107.17658</u>												
				NAT	URE	OF REL	EASE					
Type of Rele	ase Produ	ction Fluids				Volume of Unknown	Release	Volur 492 y	Initial Report Final Report Initial Report Final Report API No. 3003922136 SF-079456 West Line County East Rio Arriba Volume Recovered 492 yds ³ Date and Hour of Discovery RCVD JAN 8 '13 OIL CONS. DIV. Itercourse. DIST. 3 DIST. 3 he excavation was 30'X40'X11' and ccurred. Analytical results were is needed. and that pursuant to NMOCD rules and tions for releases which may endanger does not relieve the operator of liability ground water, surface water, human health sibility for compliance with any other VATION DIVISION st: JAWARAY Expiration Date:			
Source of Re	lease Belov	w Grade Tan	k '			Date and H 9/10/2012	lour of Occurrenc	Date Date	and Hour of D	scovery		
Was Immediate Notice Given?					If YES, To	Whom?		RCVD J	AN 8 '			
By Whom?						Date and H	Iour		OIL CO	NS. DI	(V.	
Was a Water	Was a Watercourse Reached?						olume Impacting	the Watercours	e. DIS	1.3		
If a Watercon	urse was Im	pacted, Descr	ibe Fully.*		0.1							
Describe Cat	a Affected	and Cleanup	dial Action	en *	v Grade	Tank Closure	e Activities					
Excavation 492 yds ³ of s below the r	was require oil was tra egulatory	ed based on N nsported to a standards s	MOCD C third par set forth	Guidelines for Rotty land farm. E	emediati xcavati ction lev	ion of Leaks on and con vels; theref	, Spills and Relea firmation samp ore no further	ases. The excav oling occurre action is need	vation was 30' d. Analytica led.	X40'X1 I result	1' and ts were	
I hereby cert regulations a public health should their or the enviro federal, state	fy that the is ill operators or the envi operations h nment. In a or local lay	information g are required t ronment. The nave failed to iddition, NMC ws and/or reg	iven above o report an acceptanc adequately OCD accep ulations.	is true and comp d/or file certain t e of a C-141 rep investigate and t tance of a C-141	olete to the release ne ort by the remediate report de	ne best of my otifications a e NMOCD m e contaminations oes not reliev	knowledge and u nd perform correc arked as "Final R ion that pose a thr re the operator of	inderstand that ctive actions for teport" does no reat to ground v responsibility f	pursuant to NN releases whic relieve the op vater, surface v or compliance	10CD r h may en erator of vater, hu with an	ules and ndanger f liability ıman health y other	
Signature:	Se	el					<u>OIL CON</u>	<u>SERVATIO</u>	<u>DN DIVISI</u>	<u>on</u> , /((
Printed Name	e: Ashley N	Maxwell				Approved by	Environmental S	pecialist:	Atten	KU	ly	
Title: Field	Environme	ntal Speciali	st			Approval Da	te: 1730/20	513 Expirat	ion Date:		<u> </u>	
E-mail Addr	ess: ashley	.p.wethington	1@conoco	ph <u>illip</u> s.com		Conditions o	f Approval:		Attache	d 🔲		
Date Januar	y 4, 2013	Ph	one: 505	324-5169								
Attach Addi	tional She	ets If Necess	ary			ĥ	JK1303	65528	0			



Animas Environmental Services. LLC

www.animasenvironmental.com

624 E. Comanche

505-564-2281

Durango, Colorado

970-403-3274

Farmington, NM.87401

December 28, 2012

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

RE: Initial Release Assessment and Final Excavation Report Chacon Hill #2 Rio Arriba County, New Mexico

Dear Ms. Maxwell:

On August 7 and September 11, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Chacon Hill #2, located in Rio Arriba County, New Mexico. The historical release was associated with the below grade tank (BGT) at the location. The initial release assessment was completed by AES on August 7, 2012. The final excavation was completed by contractors while AES was on location on September 11, 2012.

1.0 Site Information

1.1 Location

Location – SW¼ NE¼, Section 20, T24N, R3W, Rio Arriba County, New Mexico Well Head Latitude/Longitude – N36.29802 and W107.17717, respectively Release Location Latitude/Longitude – N36.29794 and W107.17682, respectively Land Jurisdiction – Private 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 Pit Site Assessment form dated April 1996 for the Chacon Hill #2 reported the depth to groundwater at less than 50 feet below ground surface (bgs). The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum

Ashley Maxwell Chacon Hill #2 Initial Release Assessment and Final Excavation Report December 28, 2012 Page 2 of 7

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 less than 50 feet bgs. The wash in Medio Canyon is located approximately 530 feet southwest of the release location. Based on this information, the location was assessed a ranking score of 30 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 1, 2012, and on August 7, 2012, Heather Woods and Zachary Trujillo of AES completed the release assessment field work. The assessment included collection and field screening of 44 soil samples (SB-1 through SB-11) from 11 soil borings in and around the release area. Based on the field screening results, AES recommended an area of excavation. Sample locations are shown on Figure 3.

On September 11, 2012, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of seven confirmation soil samples (SC-1 through SC-7) of the walls and base of the excavation. The area of the final excavation was approximately 880 ft² by 12 feet in depth. Sample locations and final excavation extents are shown on Figure 4.

2.0 Soil Sampling

A total of 44 soil samples from 11 soil borings (SB-1 through SB-11) and 7 composite samples (SC-1 through SC-7) were collected during the release assessments. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Two composite samples (SC-6 and SC-7) collected during the excavation clearance were submitted for 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.

2.3 Field Screening and Laboratory Analytical Results

On August 7, 2012, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 1.5 ppm in SB-3 up to 4,110 ppm in SB-1. Field TPH concentrations ranged from 94.6 mg/kg in SB-2 up to greater than 2,500 mg/kg in SB-4.

On September 11, 2012, final excavation field screening results for VOCs via OVM showed concentrations ranging from 1.9 ppm in SC-3 to 38.0 ppm in SC-6. Field TPH concentrations ranged from 65.5 mg/kg in SC-3 up to 618 mg/kg in SC-5. Results are included below in Table 1 and on Figures 3 and 4. The AES field screening reports are attached.

Ashley Maxwell Chacon Hill #2 Initial Release Assessment and Final Excavation Report December 28, 2012 Page 4 of 7

August and September 2012 Sample VOCs Field Depth via OVM ТРН Date Sample ID Sampled (ft bgs) (ppm) (mg/kg) NMOCD Action Level* 100 100 7 4,110 NA 10 1,411 NA 11 113 SB-1 8/7/12 1,030 14 136 266 16 44.1 117 6 24.5 NA 8 349 NA 8/7/12 SB-2 11 20.2 1,230 14 13.6 94.6 6 1.5 NA 10 SB-3 8/7/12 3.9 NA 12 4.1 108 6 3.5 NA 8 3.2 NA 8/7/12 SB-4 10 18.1 >2,500 12 6.0 118 6 6.0 NA 8 13.3 SB-5 8/7/12 NA 12 11.5 127 4 747 NA 6 3,859 NA 8 SB-6 8/7/12 556 NA 10 247 NA 12 564 1,220 2 7.9 NA 4 8/7/12 10.8 SB-7 NA 7 10.0 NA

Table 1. Soil Field Screening VOCs and TPH Results Chacon Hill #2 Initial Release Assessment and Final Excavation Ashley Maxwell Chacon Hill #2 Initial Release Assessment and Final Excavation Report December 28, 2012 Page 5 of 7

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)		
	NMOCD A	ction Level*	100	100		
SB-7	8/7/12	10	6.0	98.5		
CD 0	9/7/12	3	5.7	NA		
30-0	0/7/12	6	6.2	136		
50.0	0/7/10	2	7.2	NA		
30-3	0///12	4	8.3	NA		
		2	7.4	NA		
		4	8.9	NA		
CD 10	0/7/10	6	9.9	Field TPH (mg/kg) 100 98.5 NA 136 NA NA NA NA NA NA NA NA NA NA NA NA NA		
2B-10	8///12 ·	8	8.2	NA		
	·	10	6.9	117		
		12	7.2	NA		
		2	2.5	NA		
	·	4	3.8	NA		
CD 11	פיק אין אין פי	6	5.3	NA		
28-11	8///12 ·	8	3.5	NA		
		10	5.2	NA Solution 65.5 90.1		
	·	12	3.4	135		
SC-1	9/11/12	1 to 12	22.4	242		
SC-2	9/11/12	12	6.3	85.2		
SC-3	9/11/12	1 to 12	1.9	65.5		
SC-4	9/11/12	1 to 12	33.9	90.1		
SC-5	9/11/12	1 to 12	5.8	618		
SC-6	9/11/12	1 to 12	38.0	122		
SC-7	9/11/12	1 to 12	30.0	158		

NA – Not Analyzed

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

Laboratory analyses for SC-6 and SC-7 were used to confirm field screening results during excavation activities. TPH concentrations as GRO/DRO were reported at 25

mg/kg in SC-6 and less than 14.9 mg/kg in SC-7. Results are presented in Table 2 and on . Figure 4. The laboratory analytical report is attached.

Table 2. Laboratory Analytical Results – TPH										
Chacon Hill #2 Final Excavation, September 2012										
Sample GRO DRO Sample ID Date Depth GRO DRO Sampled (ft bgs) (mg/kg) (mg/kg)										
NMO	CD Action Le	100								
SC-6	9/11/12	1 to 12	<5.0	25						

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

3.0 Conclusions and Recommendations

On August 7, 2012, AES conducted an initial assessment of the excavation associated with a historical release at the Chacon Hill #2. 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 ranking of 30. Field screening results above the NMOCD action level of 100 ppm VOCs were reported in SB-1, SB-2, and SB-6. The highest VOC concentration was reported in SB-1 with 4,110 ppm. Field screening results also showed TPH concentrations above the NMOCD action level of 100 mg/kg in SB-1 through SB-6, SB-8, SB-10, and SB-11. The highest TPH concentration was reported in SB-4 with greater than 2,500 mg/kg.

On September 11, 2012, final assessment of the excavation area was completed. Field screening results of the excavation extents showed that VOC concentrations were below the NMOCD action level for all of the final four walls and base of the excavation. Field TPH concentrations above the applicable NMOCD action level of 100 mg/kg were reported in SC-6 (122 mg/kg) and SC-7 (158 mg/kg). However, laboratory analytical results for SC-6 and SC-7 from September 11, 2012, reported TPH concentrations as GRO/DRO below the applicable NMOCD action level of 100 mg/kg.

Based on the final field screening results of the excavation of petroleum contaminated soils at the Chacon Hill #2, VOC and TPH concentrations were below applicable NMOCD action levels for each of the sidewalls and the base of the excavation. No further work is recommended.

Ashley Maxwell Chacon Hill #2 Initial Release Assessment and Final Excavation Report December 28, 2012 Page 7 of 7

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

Sincerely,

Heather M. Woods

Heather M. Woods Staff Geologist

Ulipobith V Merdaly

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 080712

AES Field Screening Report 091112

Hall Laboratory Analytical Report 1209445

R:\Animas 2000\Dropbox\2012 December 2012\ConocoPhillips\Chacon Hill #2\Chacon Hill #2 Initial Release Assessment and Final Excavation Report 122812.docx





0-3-7 0									
0 10.7 1000 × 10000 × 1000 × 1000 × 1000 × 1000 × 1000 × 1000 × 1000 × 1000 × 100		r	Ciald See	aaning Ross			1	FIG	JRE 3
		Sample ID	Date	Depth (ft)	OVM- PID	TPH (mg/kg)		INITIAL ASSES LOCATIONS	SMENT SAMPLE AND RESULTS
9.8.7 0.9.8.7 0					(ppm)	100	İ.	AUGU	OPhillips
0.9.7 9.8.1 V(7)7 1 1.0.6 1.0			NINOLDACI	7	4 110	N/A	Í	CHACO	N HILL #2
9.9-31 0.9-31	© 58-7			10	1.411	NA	1 1	RIO ARRIBA COU SW% NE%, SECT	JNTY, NEW MEXICO
		SR-1	8/7/12		113	1.030	İ.	N36.29802	, W107.17717
9391 182 143 137 138 143 138		50-1	0,7722	14	136	266	İ	Statistics I	2 July 2 Martin
0321 032			•	16	44.1	117	Í	I ADO	
98-2 N/7/2 5 52-5 4.1 98-2 N/7/2 5 52-6 4.6 98-3 97/72 10 3-2 4.6 98-4 97/72 10 3-2 4.6 98-5 97/72 10 3-2 4.6 98-6 97/72 10 3-2 4.6 98-7 97/72 10 3-2 4.6 98-7 97/72 10 3-2 4.6 98-7 97/72 10 3-2 4.6 98-7 97/72 10 3-2 4.6 98-7 97/72 10 3-2 4.6 98-7 97/72 10 10 4.7 4.7 98-7 97/72 10 <td></td> <td></td> <td></td> <td>6 .</td> <td>24.5</td> <td>NA</td> <td>· · ·</td> <td></td> <td></td>				6 .	24.5	NA	· · ·		
919-31 13 132 122 13 132 123 134 134 135				8	349	NA	İ		
0 891 13 13 8 983 0 991 10 9 10 1000 0 981 10 1 1 1 2000 0 981 10 1 1 1 2000 0 981 10 1 1 1 2000 0 981 10 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 1 1 1 2000 0 981 10 2 2 1 1 1 2000 0 981 10 2 2 1 1 1 2000 0 981 10 2 2 1 1 1 1 2000 0 981 10 2 2 1 1 1 1 2000 0 981 10 2 2 1 1 1 1 2000 0 981 10 2 2 1 2 1 1 1 1 2000 0 1 2 2 2 3 000 10 2 2 1 1 1 1 1 2000 10 2 2 2 3 000 10 2 1 1 1 1 1 2000 10 2 2 2 3 000 10 2 1 1 1 1 1 1 2000		5B-2	8/7/12	11	20.2	1,230	İ	12	marken -
0.551 6 5 6.4 0.56 7/12 4.1 100 0.56 7/12 4.1 100 0.56 7/12 6 5.5 6.4 0.56 7/12 6 0.5 6.4 0.56 7/12 6 0.5 6.4 0.56 7/12 7 0.5 6.4 0.56 6/7/12 7 0.5 6.4 0.56 6/7/12 7 0.5 6.4 0.56 6/7/12 7 0.5 6.4 0.56 6/7/12 7 0.5 6.4 0.56 6/7/12 7 0.5 6.4 0.56 6/7/12 7 0.5 6.4 10 6.4 0.5 6.4 0.5 6.4 10 6.5 6.4 0.5 6.4 0.5 6.4 10 6.5 6.4 0.5 6.4 0.5 6.4 10 6.5 6.4 0.5 6.4 0.5 6.4	• ro r			14	13.6	94.6	İ	Animas Environm	iental Services, LLC
958-3 87/12 10 3.2 6.4 958-5 87/12 12 4.4 308 958-6 87/12 10 3.1 7.52.007 958-7 87/12 12 4.5 3.2 6.4 958-8 87/12 12 1.5 127 6.4 1.32 958-6 87/12 12 1.5 127 6.4 1.32 958-6 87/12 12 1.5 127 6.4 1.32 958-6 87/12 12 1.5 127 6.4 1.32 958-6 87/12 12 1.5 127 1.5 127 12 12 1.5 127 1.5 127 1.5 127 12 12 12 1.5 127 1.5 127 1.5 127 12 12 12 1.5 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2	1-95.1			6	1.5	NA	l I	DRAWN BY:	DATE DRAWN:
0.588 0.54 0.588 0.57/12 0.564 0.51 0.564 0.51 0.57 0.54 0.58 0.57 0.58 0.57 0.58 0.57 0.56 0.77/12 0.56 0.77/12 0.51 0.72 0.51 0.72		SB-3	8/7/12	10	3.9	NA	4	C. Lameman	August 9, 2012
958 9700088 51000816 51000816 51000816 51000816 51000816 51000816 51000816 51000816 51000816 51000816 51000816 51000816 51000816 51000816 51000816 510				12	4.1	108	1.1	REVISIONS BY:	DATE REVISED:
53.4 87/712 8 13.4 73.4 107 0.13.1 53.6 51.00 0.13.1 13.3 12.2 6.6 11.3 13.4 12.2 13.4 12.2 13.4 12.2 13.4 12.2 13.4 12.2 13.4 12.2 13.4 12.2 13.4 12.4				6	3.5	NA	ł	C. Lameman	August 9, 2012
0.9.8 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.6 0.9.7 0.9.6 0.9.7 0.9.6 0.9.7 0.9.6 0.9.7 0.9.6 0.9.7 0.9.7 0.9.7 0.9.6 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.9.7 0.		58-4	8/7/12	8	3.Z	NA (> 1 500	Í	CHECKED BY:	DATE CHECKED:
958 034 934 12 15 12	FORMER			10	18.1	119	Í	D. Watson	August 14, 2012
0 58-5 \$7/12 \$ \$ 133 \$ 14 \$ 127 \$ 143 \$ 14 \$ 127 \$ 14 \$ 127 \$ 14 \$ 127 \$ 14 \$ 127 \$ 14 \$ 127 \$ 14 \$ 127 \$ 14 \$ 127 \$ 14 \$ 127 \$ 12 \$ 1	STOCKPILE	· · ·		12 6	6.0	NA	Í	E. McNally	August 14, 2012
0.964 0.8-9 <td< td=""><td>• 58-8</td><td>58-5</td><td>8/7/12</td><td>8</td><td>13.3</td><td>NA</td><td>İ</td><td>LE</td><td>GEND</td></td<>	• 58-8	58-5	8/7/12	8	13.3	NA	İ	LE	GEND
53:00 0:89 53:00 0:89 58:00 0:89 58:00 0:80 58:00 0:80 58:00 0:80 58:00 0:80 58:00 0:80 58:00 0:80 58:00 0:80 58:00 0:80 58:00 0:80 58:00 8/7/12 6 53:00 58:00 8/7/12 6 53:0 60:00 8/7/12 6 53:0 60:00 8/7/12 6 53:0 60:00 8/7/12 6 53:0 6 53:0 80:00 8/7/12 6 53:0 80:00 8/7/12 6 53:0 80:00 8/7/12 6 53:0 80:00 8/7/12 6 53:0 80:00 8/7/12 80:00 8/7/12 80:00 8/7/12	© 58-6			12	11.5	127	1		
SP-0	SB-10 ● SB-9	· · · ·		4	747	NA	l .	C. Lameman Augus REVISIONS BY: DATE C. Lameman Augus CHECKED BY: DATE D. Watson Augus APPROVED BY: DATE A E. McNaily Augus LEGEND SAMPLE LOCATIONS ETTE	OCATIONS
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	30-10			6	3,859	NA	j		RY CONTAINMENT BERM
BOT RELEASE LOCATION 0.58.4 BOT RELEASE LOCATION 0.58.2 VIDE STPS4, VID7.17520 0.58.2 POBMURE ECT LOCATION 0.58.3 RECT CRESSING 0.58.3 SB-10 8/7/12 2 7.2 MA 10.6 SB-11 8/7/12 6 5.3 MA 10.5 SB-11 8/7/12 10 5.3 MA 10.5		SB-6 8/7/1	8/7/12	8	556	NA	1		
BCT RELEASE LOCATION 0.9.2,1 FORMER BCT LICATION 0.9.2,1 FORMER BCT LICATION 0.9.2,1 FORMER BCT LICATION 0.9.2,1 FORMER BCT LICATION 0.9.3,3 EGT CRIMENG 0.9.3,3 SS-1 0.1,1 SS-1 0.1,2				10	247	NA	Í		
BGT RELEXE LOCATION 0.56.7 8/7/12 2 7.9 NA 10 6.0 98.5 58.7 8/7/12 6 6.2 136 58.8 8/7/12 6 6.2 136 58.9 8/7/12 4 8.3 NA 58.9 8/7/12 4 8.3 NA 58.9 8/7/12 4 8.3 NA 58.10 8/7/12 4 8.3 NA 58.10 8/7/12 4 8.3 NA 58.10 8/7/12 4 8.3 NA 58.10 8/7/12 4 8.3 NA 58.10 8/7/12 6 5.2 NA 58.10 8/7/12 6 5.2 NA 58.11 8/7/12 8 3.5 NA 50.11 8/7/12 8 3.5 NA 10 6 5.3 NA 10 5.5 NA 10 5.2 NA 12 3.4 135 10 <tr< td=""><td>0584</td><td></td><td></td><td>12</td><td>564</td><td>1,220</td><td>1</td><td></td><td></td></tr<>	0584			12	564	1,220	1		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		2 7.9 NA	4						
BGT RELEASE LOCATION 0		SB-7	8/7/12	4	10.8	NA	1		
0 6.0 98.5 FORMER EGT LOCATION 58-8 8/7/12 6 6.2 135 S8-8 8/7/12 2 7.2 NA BGT CRIBSING 0.56.3 10 6.9.9 NA S8-1 8/7/12 4 8.3 NA 10 6.9.9 NA 10 6.9.9 NA 58-1 8/7/12 4 8.3 NA 10 6.9.9 NA 10 6.9.9 NA 58-10 8/7/12 8 8.2 NA 10 6.9.9 NA 10 6.9.9 NA 58-10 8/7/12 8 8.2 NA 10 6.9.9 NA 10 6.9.9 NA 10 5.3 NA 10 5.3 NA 10 5.2 NA 12 3.4 135 NA - NOT ANALIZED 12 3.4 135 10 10	BGT RELEASE LOCATION			7	10.0	NA	1		
FORMER BGT LOCATION FORMER BGT LOCATION EGT CH38NG $SB-9$ $B/7/12$ $\frac{3}{5}$ 5.7 NA $SB-9$ $B/7/12$ $\frac{2}{4}$ 7.2 NA 4 8.3 $NA2$ 7.2 $NA4$ 8.9 $NA6$ 9.9 $NA\frac{4}{8} 8.2 NA\frac{4}{8} 3.5 NA\frac{5}{8} 3.5 NA\frac{5}{10} 5.3 NA\frac{5}{10} 5.2 NA\frac{5}{10} 5.2 NA\frac{5}{10} \frac{5}{2.2} NA\frac{5}{10} \frac{5}{2.2} NA\frac{5}{10} \frac{5}{2.2} NA\frac{5}{10} \frac{5}{2.2} NA\frac{5}{10} \frac{5}{2.2} NA\frac{5}{10} \frac{5}{2.2} NA\frac{5}{10} \frac{5}{2.2} NA\frac{5}{10} \frac{5}{2.2} NA\frac{5}{10} \frac{5}{2.2} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{10} \frac{5}{12} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{12} \frac{5}{12} \frac{5}{13} \frac{5}{12} \frac{5}{12} \frac{5}{12} \frac{5}{13} \frac{5}{12}$			<u> </u>	10	6.0	98.5	ł		
FORMER BGT LOCATION 0		S8-8	8/7/12	- 3	5.7	126	i		
FORMER EGT LOCATION- 0 58-3 8/7/12 4 8.3 MA BGT CRIBSING 0 58-3 8/7/12 4 8.3 MA S8-10 8/7/12 4 8.3 MA S8-11 8/7/12 4 8.3 MA S8-11 8/7/12 6 5.3 MA S8-11 8/7/12 6 5.3 MA NA - NOT ANALYZED 52 NA ID 6 5.3 MA ID 5.2 NA ID 10 5.2 NA ID 10 5.2 NA ID 10 5.2 NA ID 10 5.2 NA ID 10 10 10 ID 10 10 10 <			1.	2	7.2	NA	Í		
BET CRIBSING 0 58-3 4 8.9 MA 58-10 8/7/12 4 8.9 MA 58-10 8/7/12 6 9.9 MA 58-10 10 6.9 117 12 7.2 NA 58-11 8/7/12 8 3.5 NA 10 5.2 NA 10 5.2 NA 12 3.4 135 135 10 110	FORMER BGT LOCATION	58-9	8/7/1Z	4	8.3	NA	İ	SAMPLE LOCATIONS SECONDARY CONTAINME	
$ \frac{4}{6} + \frac{8}{9} + \frac{1}{2} + 1$	BGT CRIMBING			2	7.4	NA	Í		
$ \frac{58-10}{58-10} = \frac{8/7/12}{12} = \frac{6}{9.9} = \frac{NA}{A} = \frac{8}{117} = \frac{10}{12} = \frac{7.2}{7.2} = \frac{NA}{A} = \frac{2}{12} = \frac{2.5}{7.2} = \frac{NA}{A} = \frac{2}{10} = \frac{2}{10} = \frac{2}{10} = \frac{10}{10} = \frac{5}{10} = \frac{5}{10} = \frac{10}{10} = \frac{5}{10} = \frac{10}{10} = \frac{5}{10} = \frac{10}{10} = \frac{5}{10} = \frac{10}{10} = \frac$				4	8.9	NA	t		
SB-10 8//12 8 8.2 NA 10 6.9 117 12 7.2 NA 2 2.5 NA 6 5.3 NA 6 5.3 NA 10 5.2 NA 12 3.4 135 NA - NOT ANALYZED 10 5.2			0/7/40	6	9.9	NA	Í		
$ \frac{10 6.9 117}{12 7.2 NA}} $ $ \frac{2 2.5 NA}{4 3.8 NA}} $ $ \frac{2 2.5 NA}{4 3.8 NA}} $ $ \frac{3 3.5 NA}{10 5.2 NA}} $ $ \frac{10 5.2 NA}{12 3.4 135}} $ $ \frac{2 2.5 NA}{12 3.4 135}} $ $ \frac{2 2.5 NA}{12 3.4 135}} $ $ \frac{2 2.5 NA}{12 3.4 135}} $ $ \frac{2 2.5 NA}{12 3.4 135}} $		SB-10	8///12	8	8.2	NA	ł		
$ \frac{12}{12} 7.2 NA \\ \frac{12}{12} 7.2 7$				10	6.9	117	j		
$SB-11 \qquad SR-11 \qquad SR-11 \qquad 8/7/12 \qquad \frac{2}{6} \frac{2.5}{3.3} \frac{NA}{4} \\ \frac{4}{3.8} \frac{3.8}{3.5} \frac{NA}{4} \\ \frac{5}{10} \frac{5.2}{5.2} \frac{NA}{4} \\ \frac{10}{12} \frac{5.2}{3.4} \frac{135}{135} \\ \frac{2}{10} \frac{5}{0} \frac{5}{0} \frac{5}{0} \\ \frac{2}{11} \frac{10}{10} \frac{5}{0} \frac{2}{0} \frac{10}{10} \\ \frac{2}{11} \frac{2}{10} \frac{2}{10} \frac{2}{10} \\ \frac{2}{11} \frac{2}{10} \frac{2}{10} \frac{2}{10} \\ \frac{2}{11} \frac{2}{10} \frac{2}{10} \frac{2}{10} \\ \frac{2}{11} \frac{2}{10} \frac{2}{10} \frac{2}{10} \\ \frac{2}{11} \frac{2}{10} \frac{2}{10} \frac{2}{10} \\ \frac{2}{10} \frac{2}{10} \frac{2}{10} \frac{2}{10} \\ \frac{2}{10} \frac{2}{10} \frac{2}{10} \frac{2}{10} \\ \frac{2}{10} \frac{2}{10$				12	· 7.2	NA	j		٨
$SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-11 \qquad SB-12 \qquad SB-1$				2	2.5	NA			4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				4	3.8	NA	4		Å
8 3.5 NA 10 5.2 NA 12 3.4 135		SB-11	8/7/12	6	5.3	NA	1		Ť
10 5.2 NA 12 3.4 135 NA - NOT ANALYZED 2 2 10 F EFT)				8	3.5	. NA	Į		A .
12 3.4 135 NA - NOT ANALYZED 2 (1) INCH = 10 FEET) 10				10	5.2	NA	1 .	<u>s</u>	CALE
NA - NOT ANALYZED 2 (1 INCH = 10 FEET)				12	3.4	135	1		10
		NA - NUT ANALYZ	.ED				i	2 (1 INCH	= 10 FEET)
		·						· · · · · · · · · · · · · · · · · · ·	· •

`

•





.

Sample ID	Date	Depth (ft)	OVM- PID (ppm)	TPH (mg/kg)	
	NMOCD ACT	ION LEVEL	100	100	
SC-1	9/11/12	1 to 12	22.4	242	
SC-2	9/11/12	12	6.3	85.Z	
SC-3	9/11/12	1 to 12	1.9	65.5	
5C-4	9/11/12	1 to 12	33.9	90.4	
SC-5	9/11/12	1 to 12	5.8	618	
SC-6	9/1 1 /12	1 to 12	38.0	122	
SC-7	9/11/12	1 to 12	30.0	158	

Laboratory Analytical Results									
Sample ID	Date	Depth (ft)	TPH- GRO (mg/kg)	TPH- DRO (mg/kg)					
	NMOCD ACT	100							
SC-6	9/11/12	1 to 12	<5.0	25					
5C-7	9/11/12	1 to 12	<5.0	<9.9					
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8015B.									

SAMPLE LOCATIONS AND RESULTS								
SEPTEM	BER 2012							
CHACON	N HILL #2							
RIO ARRIBA COU	NTY, NEW MEXICO							
SW¼ NE¼, SECTION N36.29802,	ON 20, T24N, R3W W107.17717							
AES								
Animas Environme	intal Services, LLC							
DRAWN BY:	DATE DRAWN:							
C. Lameman	September 13, 2012							
REVISIONS BY:	DATE REVISED:							
C. Lameman	September 13, 2012							
CHECKED BY:	DATE CHECKED:							
D. Watson	September 13, 2012							
APPROVED BY:	DATE APPROVED:							
E. McNally	September 13, 2012							
LEG	END							
SAMPLE LO	CATIONS							
SECONDARY CONTAINMENT BERM								
1								
/								
<i>\</i>								
6								
L L								
10 6 <u>SCALE</u> 10 6 0 10								
2 (1 INCH =	10 FEET)							

AES Field Screening Report



Animas Environmental Services.LLC

www.animasenvironmental.com

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

> Durango, Colorado . 970-403-3274

Client: ConocoPhillips

Project Location: Chacon Hill #2

Date: 8/7/2012

Matrix: Soil

		· · ·								
	Collection	Collection	OVM	Time of Sample	Field TPH*	TPH PQL		TPH Analysts		
Sample ID	Date	Time	(ppm)	Analysis	(mg/kg)	(mg/kg)	DF	Initials		
SB-1 @ 7'	8/7/2012	10:20	4,110		Not A	nalyzed for T	TPH 🕤			
SB-1 @ 10'	8/7/2012	10:34	1,411		Not A	nalyzed for 1	ГРН			
SB-1 @ 11'	8/7/2012 [.]	10:40	113	11:16	1,030	20.0	1	HMW		
SB-1 @ 14'	8/7/2012	11:25	136	12:03	266	20.0	1	нмм		
SB-1 @ 16'	8/7/2012	11:54	• 44.1	12:19	1 17	20.0	1	HMW		
SB-2 @ 6'	8/7/2012	. 10:52	24.5		Not A	nalyzed for 1	ГРН			
SB-2 @ 8'	8⁄7/2012	11:04	349		Not A	nalyzed for 1	ГРН			
SB-2 @ 11'	8/7/2012	11:19	20.2	11:52	1,230	20.0	1	нмм		
SB-2 @ 14'	8/7/2012	12:11	13.6	12:28	94.6	20.0	1	нмм		
SB-3 @ 6'	8/7/2012	12:20	1.5	Not Analyzed for TPH						
SB-3 @ 10'	8/7/2012	12:33	3.9	Not Analyzed for TPH						
SB-3 @ 12'	8/7/2012	12:40	4.1	13:01	108	20.0	1	нмм		
SB-4 @ 6'	8/7/2012	12:56	3.5		Not A	nalyzed for T	ТРН			
SB-4 @ 8'	8/7/2012	13:08	3.2		Not A	nalyzed for	ТРН			
SB-4 @ 10'	8/7/2012	13:17	18.1	14:14	>2,500	20.0	1	нмw		
SB-4 @ 12'	8/7/2012	13:24	6.0	13:46	118	20.0	1	HMW		
SB-5 @ 6'	8/7/2012	13:35	6.0		Not A	nalyzed for	ТРН			
SB-5 @ 8'	8/7/2012	13:40	13.3		Not A	nalyzed for T	ТРН			
SB-5 @ 12	8/7/2012	13:51	11.5	14:31	127	20.0	1	HMW		
SB-6 @ 4'	8/7/2012	14:27	747		Not A	nalyzed for	ТРН	· · ·		
SB-6@6'	8/7/2012	14:34	3,859		Not A	nalyzed for	ТРН			
SB-6 @ 8'	8/7/2012	14:47	556		Not A	nalyzed for	ТРН			
	-									

	Collection	Collection	OVM	Time of Sample	Field TPH*	TPH PQL	;	TPH Analysts		
Sample ID	Date	Time	(ppm)	Analysis	(mg/kg)	(mg/kg)	DF	Initials		
SB-6 @ 10'	8/7/2012	14:55	247		Not Ai	nalyzed for T	РН			
SB-6 @ 12'	8/7/2012	15:02	564	15:36	1,220	20.0	1	HMW		
SB-7 @ 2'	8/7/2012	15:14	7.9		Not A	nalyzed for T	ЪΗ			
SB-7 @ 4'	8/7/2012	15:19	10.8		Not A	nalyzed for T	РН			
SB-7 @ 7'	8/7/2012	15:27	10.0		Not Ai	nalyzed for T	РН			
SB-7 @ 10'	8/7/2012	15:38	6.0	15:53	98.5	20.0	1	HMW		
SB-8 @ 3'	8/7/2012	15:36	5.7	Not Analyzed for TPH						
SB-8 @ 6'	8/7/2012	15:56	6.2	16:28	136	20.0	1	HMW		
SB-9 @ 2'	8/7/2012	16:01	7.2	Not Analyzed for TPH						
SB-9 @ 4'	8/7/2012	16:06	8.3	Not Analyzed for TPH						
SB-10 @ 2'	8/7/2012	16:18	7.4	Not Analyzed for TPH						
SB-10 @ 4'	8/7/2012	16:23	8.9		Not A	nalyzed for T	ΡΗ			
SB-10 @ 6'	8/7/2012	16:32	9.9		Not A	nalyzed for T	ЪΗ			
SB-10 @ 8'	8/7/2012	16:37	8.2		Not A	nalyzed for T	РН			
SB-10 @ 10'	8/7/2012	16:45	6.9	17:03	117	20.0	1	HMW		
SB-10 @ 12'	8/7/2012	16:54	7.2		Not A	nalyzed for T	<u>P</u> H			
SB-11 @ 2'	8/7/2012	17:00	2.5		Not A	nalyzed for T	ГРН			
SB-11 @ 4'	8/7/2012	17:04	3.8		Not A	nalyzed for T	ЪΗ	•		
SB-11 @ 6'	8/7/2012	17:10	5.3		Not A	nalyzed for T	ЪΗ			
SB-11 @ 8'	8/7/2012	17:15	3.5		Not A	nalyzed for T	РН			
SB-11 @ 10'	8/7/2012	17:21	5.2		Not A	nalyzed for T	ΡΗ			
SB-11 @ 12'	8/7/2012	17:27	3.4	17:43	135	20.0	1	HMW		

Total Petroleum Hydrocarbons - USEPA 418.1

- PQLPractical Quantitation LimitNDNot Detected at the Reporting Limit
- DF Dilution Factor
- NA Not Analyzed

Analyst: Aleather M. Woods

AES S

Animas Environmental Services, LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3274

Matrix: Soil									
Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	9/11/2012	12:10	North Wall	22.4	13:03	242	20.0	1	HMW
SC-2	9/11/2012	12:13	Base	6.3	13:07	85.2	20.0	1	нмм
SC-3	9/11/2012	12:14	East Wall	1.9	13:10	65.5	20.0	1	HMW
SC-4	9/11/2012	12:16	West Wall	33.9	13:14	90.1	20.0	1	HMW
SC-5	9/11/2012	12:20	South Wall	5.8	13:18	618	20.0	1	HMW
SC-6	9/11/2012	13:30	North Wall	38.0	13:47	122	20.0	1	HMW
SC-7	9/11/2012	13:33	South Wall	30.0	13:43	158	20.0	1	HMW

Total Petroleum Hydrocarbons - USEPA 418.1

AES Field Screening Report

Client: ConocoPhillips

Date: 9/11/2012

Project Location: Chacon Hill #2

PQL Practical Quantitation Limit

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

Aleather M. Woods Analyst:

Page 1 Report Finalized: 09/11/12



September 17, 2012

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

OrderNo.: 1209445

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Debbie Watson:

RE: COP Chacon Hill #2

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/12/2012 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 Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall E	nvironmental Analy		Date Reported: 9/17/2012							
CLIENT:	Animas Environmental Ser	vices	Client Sample ID: SC-7							
Project:	COP Chacon Hill #2			Collection E	Date: 9/11/2	/2012 1:33:00 PM				
Lab ID:	1209445-001	Matrix:	MEOH (SOIL) Received [Date: 9/12/2	2/2012 10:05:00 AM				
Analyses		Result	RL Qu	al Units	DF	Date Analyzed				
EPA ME	THOD 8015B: DIESEL RANG	SE ORGANICS				Analyst: JMP				
Diesel R	ange Organics (DRO)	ND	9.9	mg/Kg	1	9/12/2012 12:16:37 PM ´				
Surr:	DNOP.	116	77.6-140	%REC	1	9/12/2012 12:16:37 PM				
EPA ME	THOD 8015B: GASOLINE R	ANGE				Analyst: NSB				

5.0

84-116

mg/Kg

%REC

1

1

ND

109

Qualifiers:

Gasoline Range Organics (GRO)

Surr: BFB

- * Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Page 1 of 5

Analytical Report Lab Order 1209445

9/12/2012 2:29:38 PM

9/12/2012 2:29:38 PM

Analytical Report Lab Order 1209445

Date Reported: 9/17/2012

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: SC-6 **CLIENT:** Animas Environmental Services COP Chacon Hill #2 **Project:** Collection Date: 9/11/2012 1:30:00 PM 1209445-002 Received Date: 9/12/2012 10:05:00 AM Lab ID: Matrix: MEOH (SOIL)

Analyses	Result	RL Qual Units		DF	Date Analyzed	
EPA METHOD 8015B: DIESEL RANG					Analyst: JMP	
Diesel Range Organics (DRO)	25	9.8		mg/Kg	1	9/12/2012 12:38:26 PM
Surr: DNOP	120	77.6-140		%REC	1	9/12/2012 12:38:26 PM
EPA METHOD 8015B: GASOLINE RA	NGE	•				Analyst: NSB `
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/12/2012 2:00:45 PM
Surr: BFB	119	84-116	s	%REC	1	9/12/2012 2:00:45 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level. Е
 - Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit ND
- RL Reporting Detection Limit

Page 2 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1209445 17-Sep-12

Client: Animas	Environmental	Services							
Project: COP C	nacon Hill #2								• .
Sample ID MB-3724	SampType	MBLK	Tes	tCode: EP	A Method	8015B: Diese	el Range C	Organics	
Client ID: PBS	Batch ID:	3724	F	RunNo: 54	50				
Prep Date: 9/12/2012	Analysis Date:	9/12/2012	S	SeqNo: 15	6055	Units: mg/K	g		•
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10							
Motor Oil Range Organics (MRO)	ND	50							
Surr: DNOP	11	10.00		113	77.6	140			
Sample ID LCS-3724	SampType	LCS	Tes	tCode: EP	A Method	8015B: Diese	el Range C	Organics	
Client ID: LCSS	Batch ID	3724	ਜ	RunNo: 54	50				
Prep Date: 9/12/2012	Analysis Date	9/12/2012	5	SeqNo: 15	6114	Units: mg/K	g		
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10 50.00	0	75.9	52.6	130			
Surr: DNOP	4.3	5.000	•	86.4	77.6	140			
Sample ID 1209366-002AM	S SampType	: MS	Tes	tCode: EP	A Method	8015B: Diese	el Range C	Organics	
Client ID: BatchQC	. Batch ID	3724	F	RunNo: 54	85				
Prep Date: 9/12/2012	Analysis Date	9/13/2012	5	SeqNo: 15	6858	Units: mg/K	g		
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	· 37	9.8 48.97	0	75.0	57.2	146			
Surr: DNOP	4.7	4.897		95.9	77.6	140			
Sample ID 1209366-002AM	SD SampType	: MSD	Tes	tCode: EP	A Method	8015B: Diese	el Range (Organics	
Client ID: BatchQC	Batch ID	: 3724	F	RunNo: 54	85				
Prep Date: 9/12/2012	Analysis Date	: 9/13/2012	9	SeqNo: 15	6967	Units: mg/K	(g		
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	. 10 50.51	. 0	71.3	57.2	146	1.98	24.5	
Surr: DNOP	4.6	5.051		90.8	77.6	140	0	0	

Qualifiers:

J

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

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

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Page 3 of 5

Q

QC SUMMARY REPORT	
Hall Environmental Analysis Laboratory, Inc.	

WO#: 1209445

17-Sep-12

Client: Project:	Animas E COP Cha	Environme Icon Hill #	ntal Ser 2	vices												
Sample ID	MB-3710	SampT	ype: ME	== BLK	TestCode: EPA Method 8015B: Gasoline Range											
Client ID:	PBS	10	RunNo: 5469													
Prep Date:	9/11/2012	Analysis D)ate: 9/	12/2012	S	SeqNo: 1	56930	Units: mg/k	≺g							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 980	5.0	1000		98.1	84	116								
Sample ID	LCS-3710	SampT	ype: LC	s	Tes	tCode; E	PA Method	8015B: Gase	oline Rang	e	、					
Client ID:	LCSS	Batch	n ID: 371	10	F	RunNo: 5	469									
Prep Date:	9/11/2012	Analysis D)ate: 9 /	12/2012	S	SeqNo: 1	56932	Units: mg/k	≺g							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Basoline Rang	e Organics (GRO)	25	5.0	25.00	0	101	74	117								
Surr: BFB		1000		1000		102	84	116								
Sample ID	1209344-001AMS	SampT	ype: MS	5	Tes	tCode: E	PA Method	8015B: Gase	oline Rang	e .						
Client ID:	BatchQC	Batch	n ID: 371	10	F	RunNo: 5	469 、									
Prep Date:	9/11/2012	Analysis D)ate: 9 /	12/2012	S	SeqNo: 1	56934	Units: mg/k	≺g							
Analyte	•	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Gasoline Rang	ge Organics (GRO)	33	5.0	24.80	0	134	70	130			S					
Surr: BFB	<u> </u>	1100		992.1		107		. 116			•					
Sample ID	1209344-001AMSI	D SampT	ype: MS	D	Tes	tCode: El	PA Method	8015B: Gaso	oline Rang	e						
Client ID:	BatchQC	Batch	n ID: 374	10	F	RunNo: 5	469									
Prep Date:	9/11/2012	Analysis D)ate: 9/	12/2012	S	SeqNo: 1	56935	Units: mg/H	≺g							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
asoline Rang	e Organics (GRO)	33	5.0	24.80	0	132	70	[,] 130	1.29	22.1	S					
Surr: BFB	•	1100		992.1		108	84	116	0	0						
•																
	1 . · ·															
	. 1															
· · ·	<u>.</u> *															
•	,															

Qualifiers:

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

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

QC SUMMARY REPORT

	Hall Environmental Analysis Laboratory, Inc.	
--	--	--

WO#: 1209445

17-Sep-12

Client: Project:	Animas E COP Cha	nvironment	al Sei	rvices							
Sample ID	MB-3710	SampTy	pe: M	BLK .	Test	Code: E	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batch	ID: 37	/10	R	unNo: 5	469			•	· -
Prep Date:	9/11/2012	Analysis Da	te: 9	/12/2012	S	eqNo: 1	56943	Units: %RE	C		•
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromo	ofluorobenzene	1.0		1.000		100	80	120			`
Sample ID	LCS-3710	SampTy	pe: LO	cs	Test	Code: E	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batch	ID: 37	710	R	unNo: 5	5469			•	4
Prep Date:	9/11/2012	Analysis Da	te: 9	/12/2012	S	eqNo: 1	56944	Units: %RE	C	•	• •
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromo	ofluorobenzene	1.1		1.000		106	80	120	1		
Sample ID	1209366-002AMS	.SampTy	pe: M	s	Test	Code: E	PA Method	8021B: Vola	tiles		
Sample ID Client ID:	1209366-002AMS BatchQC	.SampTy Batch	pe: M ID: 3 7	S 710	Test R	Code: E	PA Method	8021B: Vola	tiles		
Sample ID Client ID: Prep Date:	1209366-002AMS BatchQC 9/11/2012	.SampTy Batch Analysis Da	pe: M ID: 37	S 710 0/12/2012	Test R S	Code: E tunNo: 5 eqNo: 1	EPA Method 5469 156948	8021B: Vola Units: %RE	tiles		
Sample ID Client ID: Prep Date: Analyte	1209366-002AMS BatchQC 9/11/2012	.SampTy Batch Analysis Da Result	pe: M ID: 37 Ite: 9 PQL	S 710 0/12/2012 SPK value	Test R S SPK Ref Val	Code: E Code: E CunNo: f SeqNo: 1 %REC	PA Method 5469 156948 LowLimit	8021B: Vola Units: %RE HighLimit	tiles C %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Surr: 4-Brome	1209366-002AMS BatchQC 9/11/2012 ofluorobenzene	.SampTy Batch Analysis Da Result 1.0	pe: M ID: 37 Ite: 9 PQL	S 710 0/12/2012 SPK value 0.9766	Test R S SPK Ref Val	Code: E unNo: { eqNo: 1 %REC 105	EPA Method 5469 156948 LowLimit 80	8021B: Vola Units: %RE HighLimit 120	tiles C %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Surr: 4-Bromo	1209366-002AMS BatchQC 9/11/2012 iofluorobenzene 1209366-002AMS	SampTy Batch Analysis Da Result 1.0 D SampTy	pe: M ID: 37 Ite: 9 PQL	S 710 0/12/2012 SPK value 0.9766 SD	Test R S SPK Ref Val Test	Code: E unNo: f eqNo: 1 %REC 105	PA Method 5469 156948 LowLimit 80 	8021B: Vola Units: %RE HighLimit 120 8021B: Vola	tiles	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Surr: 4-Brome Sample ID Client ID:	1209366-002AMS BatchQC 9/11/2012 ofluorobenzene 1209366-002AMS BatchQC	.SampTy Batch Analysis Da Result 1.0 D SampTy Batch	pe: M ID: 37 Ite: 9 PQL PQL ID: 37	S 710 //12/2012 SPK value 0.9766 SD 710	Test R SPK Ref Val Test R	Code: E tunNo: & keqNo: 1 %REC 105 Code: E tunNo: \$	PA Method 5469 156948 LowLimit 80 PA Method 5469	8021B: Vola Units: %RE HighLimit 120 8021B: Vola	tiles C %RPD tiles	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Surr: 4-Bromo Sample ID Client ID: Prep Date:	1209366-002AMS BatchQC 9/11/2012 oofluorobenzene 1209366-002AMS BatchQC 9/11/2012	SampTy Batch Analysis Da Result 1.0 D SampTy Batch Analysis Da	pe: M ID: 37 Ite: 9 PQL PQL ID: 37 ID: 37	S 710 0/12/2012 SPK value 0.9766 SD 710 0/12/2012	Test R SPK Ref Val Test R S	Code: E lunNo: & keqNo: 1 %REC 105 105 100de: E kunNo: &	5469 LowLimit 80 EPA Method 5469 156949	8021B: Vola Units: %RE HighLimit 120 8021B: Vola Units: %RE	tiles C %RPD tiles	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte	1209366-002AMS BatchQC 9/11/2012 ofluorobenzene 1209366-002AMS BatchQC 9/11/2012	SampTy Batch Analysis Da Result 1.0 D SampTy Batch Analysis Da Result	rpe: M ID: 37 Ite: 9 PQL ID: 37 ID: 37 Ite: 9 PQL	S 710 0/12/2012 SPK value 0.9766 SD 710 0/12/2012 SPK value	Test R SPK Ref Val Test R SPK Ref Val	Code: E kunNo: & keqNo: 1 %REC 105 Code: E kunNo: & keqNo: 1 %REC	PA Method 5469 156948 LowLimit 80 PA Method 5469 156949 LowLimit	8021B: Vola Units: %RE HighLimit 120 8021B: Vola Units: %RE HighLimit	tiles C %RPD tiles C %RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

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

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

Page 5 of 5

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmen A TEL: 505-345-39 Website: אראראו	tal Analysis Laboratory 4901 Hawkins NE Ibuquerque, NM 87105 175 FAX: 505-345-4107 hallenvironmental.com	Sample Log-In Ch	neck List
Client Name: Animas Env	vironmental	Work Order Number: 1	1209445	
Received by/date	- Dal12/17			
Logged By: Ashley Gal	legos 9/12/2012 10:05:00	AM A	F	
: Completed By: Ashley Gal	legos 9/12/2012 10:25:24	AM A	3	
Reviewed By: MAA	- 09/12/12		Q .	
Chain of Custody	[
1. Were seals intact?		Yes No	Not Present 🗸	
2. Is Chain of Custody comp	plete?	Yes 🗸 No	Not Present	
3. How was the sample deliv	vered?	Client		
Login				
A Coolers are present? /po/	o 10, for cooler specific information)	Voc 🖌 No	NA i	
4. Coolers are present? (set	a ration cooler specific information)	Yes ♥; No		
5. Was an attempt made to	cool the samples?	Yes 🖌 No	NA ¹	
6. Were all samples receive	ed at a temperature of >0° C to 6.0°C	Yes 🗸 No	NA	
			· .	
7 Sample(s) in proper conta	ainer(s)?	Yes 🖌 No 🗌		
Sufficient sample volume	for indicated test(s)?	Yes 🗸 No		
9. Are samples (except VO)	A and ONG) properly preserved?	Yes 🗸 No		
10. Was preservative added	to bottles?	Yes I. No ♥	. NA i	
11, VOA vials have zero hea	dspace?	Yes No	No VOA Vials 🖌	•
12. Were any sample contair	rers received broken?	Yes No 🔽	:	
13. Does paperwork match b (Note discrepancies on c	ottle labels? hain of custody)	Yes 🗸 No	# of preserved bottles checked for pH	
14. Are matrices correctly ide	entified on Chain of Custody?	Yes 🗸 No 👘	(<2 or >1)	2 unless noted)
15. Is it clear what analyses	were requested?	Yes 🖌 No	Adjusted?	
16. Were all holding times al (If no, notify customer for	ple to be met? r authorization.)	Yes ✔i No	Checked by:	
Special Handling (if ap	plicable)	•	,	
17 Was client notified of all	discrepancies with this order?	Yes No	NA 🗸	
Person Notified:	Date	9:		
By Whom:	Via:	eMail Phone	Fax In Person	
Regarding:				
Client Instructions:				
18. Additional remarks:				
10 Cooler Information				
Cooler No Temp °C	Condition Seal Intact Seal No	Seal Date Sign	ed By	
1 1.0	Good Yes			

Page 1 of 1

Chain-of-Custody Record			Turn-Around Time:							R.			, E 1	NI V	/ T E	20		ME	'NI'T	- 41		
Client: Animas Environmental Scruces				Standard & Rush Same Day ANALYSTS LABORATORY									Y									
				Project Name	e: /															•		
Mailing	Address	ii 1. 71	£ Λ Λ	Capel	а. <u>Ц</u> .	1 47																
<u> </u>		<u> </u>	L. Lomanchi	Project #:	acontin	144		1 4901 Hawkins NE - Albuquerque, ININ 87109														
<u> </u>	<u>ming</u> # 505	ton N	2081	- ·			•.	Tei. 505-345-3975 Fax 505-345-4107 Analysis Request														
email o	<u>#</u> or Fax# [.]	504.		Project Mana	aer:		•	Ň	ly)	el)					4)							T
QA/QC	Package:				.90			021)	uo s	Dies					°,	B's						
l⊈r Star	ndard		Level 4 (Full Validation)	D. Wats	son			s (8	(Ga:	o) ias/I					PO	PC						
Accred	itation			Sampler: H	·Wooids			MB	Hd.	6. ⁰ 6	Ę	,	<u></u>		202	3082						5
	.AP	□ Othe	er	On lee	X Yes	น่อเลทอะระ	e de se	+	·+	015 015	118.	504,	₽	s	0 ^{3,1}	3 / S		(A				Γ
) (Type)	T	<u> </u>	Samplectern	perature \			1BE	TBE	od 8	bo	po	P	letal	CI'N	cide	(A)	-i-	ı · [Σ
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type		AL No	BTEX + M	BTEX + M	TPH Metho	TPH (Meth	EDB (Meth	8310 (PNA	RCRA 8 M	Anions (F,	8081 Pesti	3260B (VC	3270 (Sen				Air Bubhle
7/11/12	1323	Soil	Sc-7	MEDH KUL	MEDHNA		-D01			X					<u> </u>			~		+		\uparrow
3/11/12	13:31	Soil	SC-Ble	MUOHS Kit	MLONI		-002			X												1
	6	In Ch	Duatson								·											\top
	/		5 09/12/12																			
																	_					Τ
			· · · · · · · · · · · · · · · · · · ·							_												
																						\Box
	_																					
Date:	Time:	Relinquishe	ed by:	Received by:		Date	Time	Rem	Remarks: Bill to ConocoPhillips													
V/11/12	1706	Heat	the M. Woods	/Mste	Walt	7/11/p	Mou															
Date:	rime:	rteiinquishe		Received by:	_	Date	Time															
11/12	1721	/m	ste Welter	ED.	09/12	12	D:05		<u>.</u>	•			•				. '					

1 -

•

....*

1

.

If necessary, saturales submitted to Hall Environmental may be subcontracted to other accredited laboratories! This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report

••

15

•