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

State of New Mexico Energy Minerals and Natural Resources

Form C-141
Revised August 8, 2011

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

			Rele	ease Notific	eatic	n a	nd Co	orrective A	Action	1			
						OI	PERA	ΓOR		Initial	al Report	⊠ F	inal Repor
		urlington R oPhillips Co		, a Wholly Owi	ned	Contact Lisa Hunter							
		0 th St, Farm		NM		Telephone No. (505) 258-1607							
Facility Na	me: San J	uan 28-7 85				Faci	ility Typ	e: Gas well					
Surface Ow	ner BLM			Mineral C	wner	FED)			API No	.30039069	000	
				LOCA	ATIC	O NO	F REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the		th/South Line Feet from the Ea			DESCRIPTION .	West Line	County		
G	25	27	6	1840		Nort	th	1460		East	Rio Arrib	oa	
							ongitud REL	e <u>-107.60944</u> EASE					
Type of Rele	Type of Release Hydrocarbon								nown	Volume I	Recovered	30 c/yds	
Source of Re	elease BG					U	nknown	Hour of Occurrer	ice	Date and 10-21-20	Hour of Dis 16	scovery	
Was Immedi	ate Notice (Yes [] No 🛛 Not Re	equired		YES, To	Whom?					
By Whom?	N/A							Hour N/A					
Was a Water	Was a Watercourse Reached? ☐ Yes ☑ No						If YES, Volume Impacting the Watercourse. N/A Oil CONS. DIV D						DIST. 3
If a Waterco N/A	urse was Im	pacted, Descr	ibe Fully.'	k		•					JU	N 15	2017
		em and Reme was encounter		n Taken.* oil sample was tak	cen on	10-21	-16 durin	ng a BGT Resam	ple Proje	ect.			
		and Cleanup A area on 12-5-1		cen.* es a 10'x18' x 6' a	area th	at will	be excav	ated to at or bel	ow actio	n levels.			
				s found during d to IEI land fa									
				. The closure r									8
regulations a public health should their or the enviro	Il operators or the envi operations h nment. In a	are required to ronment. The nave failed to a	o report and acceptant adequately OCD accept	e is true and comp nd/or file certain r ce of a C-141 report investigate and r ottance of a C-141	elease ort by t emedia	notificathe NM ate cor	cations ar MOCD m ntaminati	nd perform corre arked as "Final on that pose a the te the operator of	ective act Report" of reat to g	tions for relations for relati	eases which ieve the ope r, surface wa ompliance v	may enda rator of lia ater, huma with any ot	nger ability n health
	0							OIL CON	ISERV	ATION	DIVISIO	<u>DN</u>	
July Ht											_		
Signature:						Appı	roved by	Environmental	Specialis	A (X		
Printed Nam	e: Lisa Hur	nter)an	i		-
Title: Field	Environme	ntal Specialis	st			Appı	roval Dat	te: 7/31/20	Tie	Expiration	Date:		
E-mail Addr	ess: Lisa.H	unter @cop.c	om			Conditions of Approval: Attached			I 🗆				
Date: 06-14			05-258-16	07			_						
* Attach Addi	tional She	ets If Necess	ary			1	NFI	170233	766	0			

5

Fields, Vanessa, EMNRD

From:	Thomas, Leigh <i1thomas@blm.gov></i1thomas@blm.gov>
Sent:	Monday, May 8, 2017 8:29 AM
To:	Hunter, Lisa
Cc:	Smith, Cory, EMNRD, Fields, Vanessa, EMNRD; Spearman, Bobby E
Subject:	Re: Preliminary Laboratory Analytical Results for San Juan 28-7 Unit 85 Excavation
The BLM concurs with NMOC	CD and approves COPC to spray the site with Potassium Permanganate and backfill the site.
If you have any questions ple	ase let me know.
Thank you	
Whitney Thomas	
On Mon, May 8, 2017 at 7:34	AM, Hunter, Lisa < <u>Lisa. Hunter@conocophillips.com</u> > wrote:
Thank you!	
Lisa Hunter	
Field Environmental Spec	zialist
ConocoPhillips Company	
505.258.1607	
Lisa.Hunter@cop.com	
•	
"Archaeology permits us to s	ee small moments in time to witness events in everyday lives not recorded by history."
From: Smith, Cory, EMNRD	[mailto: <u>Cory.Smith@state.nm.us]</u>
Sent: Monday, May 08, 201	
	r@conocophillips.com>; Fields, Vanessa, EMNRD < <u>Vanessa.Fields@state.nm.us</u> >
<pre><c: <="" <li="" bobby="" e="" ro!="" spearman,="">11thomas@blm.gov></c:></pre>	bert.E.Spearman@conocophillips.com>; whitney thomas (l1thomas@blm.gov)
	liminary Laboratory Analytical Results for San Juan 28-7 Unit 85 Excavation
Lisa,	•
OCD approves of COPC pl	an to spray potassium Permanganate and backfill the excavation.

Please include this approval in your final C-141.

OCD approval does not relive COPC of any requirements imposed by other regulatory agencies.

Cory Smith

Environmental Specialist

Oil Conservation Division

Energy, Minerals, & Natural Resources

1000 Rio Brazos, Aztec, NM 87410

(505)334-6178 ext 115

cory.smith@state.nm.us

From: Hunter, Lisa [mailto:Lisa.Hunter@conocophillips.com]

Sent: Friday, May 5, 2017 10:49 AM

To: Fields, Vanessa, EMNRD < Vanessa. Fields@state.nm.us >; Smith, Cory, EMNRD < Cory. Smith@state.nm.us > Cc: Spearman, Bobby E < Robert. E. Spearman@conocophillips.com >; whitney thomas (11thomas@blm.gov)

<l1thomas@blm.gov>

Subject: FW: Preliminary Laboratory Analytical Results for San Juan 28-7 Unit 85 Excavation

Below are the **field results** for the San Juan 28-7 Unit 85 Excavation Clearance conducted on May 3, 2017. Site rank is 10, however, at the request of NMOCD, strictest closure requirements specified in NMAC 19.15.17.13E Table 1 were to be utilized. All samples are 5-point composite samples. Excavation extent was 10 ft by 18 ft by 5 ft deep and was terminated on sandstone.

Field Sample Results:

Sample ID	Sample Location	Date	OVM (ppm)	Field TPH (mg/kg)
	NMOCE	100	100	
SC-1	North Wall		0.3	105
SC-2	South Wall	5/3/17	0.0	27.6

*SC-3	East Wall	5/3/17	0.2	211
SC-4	West Wall	5/3/17	0.4	69.2
*SC-5	Base	5/3/17	53.3	324

Samples SC-3 and SC-5 were submitted for a same-day turnaround time for 8021 BTEX and 8015 TPH (GRO/DRO/MRO). Attached is the preliminary lab report for SC-3 and SC-5. Although the TPH levels are a little above the 100ppm (SC-3: 128 mg/kg & SC-5: 188 mg/kg), Total BTEX is Non-Detect, and the base is terminated at a hard sandstone and is excavated to maximum depth practicable.

Due to Non-Detect BTEX levels, COPC believes the residual contaminates do not pose a present or foreseeable threat or an environmental risk to water, humans or animals, COPC requests at this time that the base be sprayed with Potassium Permanganate and backfill the excavation with clean soil.

Please let me know if you have any questions.

Thanks,

Lisa Hunter

Field Environmental Specialist

Conoco Phillips Company

505.258.1607

Lisa. Hunter@cop.com

"Archaeology permits us to see small moments in time to witness events in everyday lives not recorded by history."

From: Corwin Lameman [mailto:clameman@animasenvironmental.com]

Sent: Thursday, May 04, 2017 2:27 PM

To: Hunter, Lisa < <u>Lisa. Hunter@conocophillips.com</u>>

Cc: Spearman, Bobby E < Robert.E.Spearman@conocophillips.com >; Elizabeth McNally

<emcnally@animasenvironmental.com>

Subject: [EXTERNAL]Preliminary Laboratory Analytical Results for San Juan 28-7 Unit 85 Excavation

Afternoon Lisa,

Please find attached the preliminary laboratory analytical results for the San Juan 28-7 Unit 85 excavation clearance. The results are for the soil composite samples of SC-3 and SC-5 from May 3, 2017. Benzene and total BTEX concentrations were below the NMOCD action levels of 10 mg/kg and 50 mg/kg. Laboratory analytical results reported TPH concentrations above the NMOCD action level of 100 mg/kg. The TPH-GRO concentrations results for both samples were non-detect. However, the combined results of both TPH-DRO and TPH-MRO had concentrations of 128 mg/kg in SC-3 and 188 mg/kg in SC-5. If you have any questions please let us know.

Thanks,

Corwin Lameman

Staff Geologist/ Draft Technician

(Cell) 505.486.4062

Animas Environmental Services, LLC.

www.animasenvrionmental.com

604 W Pinon St, Farmington NM (Tel) 505.564.2281

1911 N Main St, Ste 206, Durango CO (Tel) 970.403.3084

Whitney Thomas
Natural Resource Specialist
Farmington Field Office
6251 North College Boulevard
Suite A
Farmington, NM 87402
Office: 505 564 7680

Office: 505-564-7680 Cell: 505-635-9796

email: l1thomas@blm.gov

Animas Environmental Services, LLC



June 6, 2017

Lisa Hunter and Robert Spearman ConocoPhillips San Juan Business Unit 505) 326-9786 / (505) 320-3045

Via electronic mail to:
SJBUE-Team@ConocoPhillips.com

RE: Below Grade Tank Closure, Release Assessment and Final Excavation Report San Juan 28-7 Unit 85 Rio Arriba County, New Mexico

Dear Ms. Hunter and Mr. Spearman:

On October 21 and December 5, 2016, and May 3, 2017, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling, a release assessment, and environmental clearance of the final excavation limits at the ConocoPhillips (COP) San Juan 28-7 Unit 85 located in Rio Arriba County, New Mexico. An initial release assessment was completed on December 5, 2016, and the final excavation was completed by COP contractors prior to AES' arrival on location on May 3, 2017.

1.0 Site Information

1.1 Location

Site Name – San Juan 28-7 Unit 85

Legal Description – NE¼ NE¼, Section 6, T27N, R7W, Rio Arriba County, New Mexico Well Latitude/Longitude – N36.60844 and W107.60919, respectively BGT Latitude/Longitude – N36.60854 and W107.60944, respectively Land Jurisdiction – Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, 2016 and 2017

604 W. Piñon St. Farmington, NM 87401 505-564-2281

> 1911 Main, Ste 206 Durango, CO 81301 970-403-3084

www.animasenvironmental.com

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) and New Mexico Office of the State Engineer (NMOSE) databases were reviewed, and a site-specific hydrogeology report dated December 2008 reported the depth to groundwater at 84 feet below ground surface (bgs). However, at the request of the NMOCD, the most stringent sample result criteria were applied to this BGT. Note these criteria normally apply to sites with a depth to groundwater of 0 to 50 feet.

1.3 Assessment

AES was initially contacted by Robert Spearman of COP on October 17, 2016, and on October 21, 2016, Corwin Lameman and Sam Glasses of AES traveled to the location. Soil sampling consisted of collection of one soil sample (BGT S-1) from below the former BGT footprint. Soil sample results for BGT S-1 were above the action levels, and a release was confirmed.

On December 5, 2016, AES personnel returned to the location to complete the release assessment field work. The assessment included collection and field sampling of eight samples from eight soil borings (SB-1 through SB-8). Based on field sampling results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On May 3, 2017, AES returned to the location to collect confirmation soil samples of the excavation extents. The field sampling activities included collection of five confirmation soil samples (SC-1 through SC-5) from the walls and base of the excavation. The area of the final excavation measured approximately 10 feet by 18 feet by 5 feet in depth. Note that the depth of the excavation was limited due to a confining sandstone unit around 5 feet bgs. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

Field screening for volatile organic compound (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

Soil samples were also analyzed in the field for total petroleum hydrocarbons (TPH) per U.S. Environmental Protection Agency (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' Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.

2.1.3 Chlorides

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

2.2 Laboratory Analyses

The soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto sample chain of custody records. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. Soil sample BGT S-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B;
- TPH per USEPA Method 418.1;
- TPH as gasoline range, diesel range, and motor oil range organics (GRO/DRO/MRO) per USEPA Method 8015; and
- Chlorides per USEPA Method 300.0.

Soil samples SC-1 through SC-5 were laboratory analyzed for:

- BTEX per USEPA Method 8021B; and
- TPH as gasoline range, diesel range, and motor oil range organics (GRO/DRO/MRO) per USEPA Method 8015.

2.3 Field and Laboratory Analytical Results

Field sampling results and laboratory analytical results are summarized in Tables 1 and 2, respectively, and on Figures 3 and 4. The AES Field Sampling Reports and laboratory analytical reports are attached.

Table 1. Soil Field VOCs and TPH Results
San Juan 28-7 Unit 85 Release Assessment and Final Excavation
December 2016 and May 2017

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (418.1) (mg/kg)
	NMOCD	Action Level	*	100*
SB-1	12/5/16	5	179	3,690
SB-2	12/5/16	5	0.1	<20.0
SB-3	12/5/16	2	0.0	<20.0
SB-4	12/5/16	5.75	637	2,840
SB-5	12/5/16	5	0.0	<20.0
SB-6	12/5/16	1.25	0.0	NA
SB-7	12/5/16	5.5	0.0	<20.0
SB-8	12/5/16	1.25	0.0	NA
SC-1	5/3/17	0 to 5	0.3	105
SC-2	5/3/17	0 to 5	0.0	27.6
SC-3	5/3/17	0 to 5	0.2	211
SC-4	5/3/17	0 to 5	0.4	69.2
SC-5	5/3/17	5	53.3	324

NA - not analyzed

^{*}Action level determined by NMAC 19.15.17.13 Table 1

Table 2. Soil Laboratory Analytical Results – Benzene, Total BTEX, TPH, and Chlorides
San Juan 28-7 Unit 85 BGT Closure and Final Excavation
October 2016 and May 2017

				tobel zole	dira iviay	201/			
		Sample		Total		TPH-	TPH-	TPH-	
Sample	Date	Depth	Benzene	BTEX	TPH	GRO	DRO	MRO	Chlorides
ID	Sampled	(ft bgs)	(mg/kg)	(mg/kg)	418.1	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	NMOCD Act	ion Level	10*	50*	100*		100*		600*
BGT	10/21/16	5.5	<0.024	0.21	5,000	45	2,400	1,000	<30
S-1									
SC-1	5/3/17	0 to 5	< 0.014	< 0.130	NA	<2.9	44	67	NA
SC-2	5/3/17	0 to 5	<0.015	<0.134	NA	<3.0	<9.6	<48	NA
SC-3	5/3/17	0 to 5	<0.014	<0.122	NA	<2.7	47	81	NA
SC-4	5/3/17	0 to 5	<0.017	<0.150	NA	<3.3	34	69	NA
SC-5	5/3/17	5	<0.016	<0.145	NA	<3.2	110	78	NA

NA - not analyzed

3.0 Conclusions and Recommendations

3.1 BGT Closure

On October 21, 2016, AES conducted BGT closure sampling at the location. NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13 Table 1, and for this location the most stringent action levels were utilized per NMOCD. BGT closure sampling laboratory analytical results were below the NMOCD action levels of 10 mg/kg for benzene and 50 mg/kg for total BTEX. In contrast, results exceeded the NMOCD action level of 100 mg/kg for TPH, with BGT S-1 reporting laboratory concentrations of 5,000 mg/kg (TPH 418.1) and 3,445 mg/kg (TPH as GRO/DRO/MRO). Chloride concentrations in BGT S-1 were reported below the NMOCD action level of 600 mg/kg, with less than 30 mg/kg. Based on lab concentrations, a release was confirmed at the former BGT at the San Juan 28-7 Unit 85 location.

3.2 Release Assessment and Excavation Clearance

On December 5, 2016, AES completed a release assessment at the location. Release assessment field sampling results above the NMOCD action level of 100 mg/kg TPH were reported in SB-1 and SB-4. The highest field TPH concentration was reported in SB-1, with a concentration of 3,690 mg/kg TPH. Excavation of the release area was recommended.

^{*}Action level determined by NMAC 19.15.17.13 Table 1

On May 3, 2017, final clearance of the excavation area was completed. Field sampling results of the excavation extents showed field TPH concentrations exceeded the applicable NMOCD action level of 100 mg/kg in SC-1 (north wall), SC-3 (east wall), and SC-5 (base). The highest field TPH concentration was reported in SC-5, with a concentration of 324 mg/kg TPH. Additionally, laboratory analytical results reported TPH concentrations (as GRO/DRO/MRO) in SC-1, SC-3, and SC-5, as well as SC-4 (west wall), as above NMOCD action levels. The highest laboratory TPH concentration was reported in SC-5, at a concentration of 188 mg/kg TPH. Note that the MRO concentration in SC-1, SC-3, SC-4 and SC-5 made up a significant portion of the total TPH concentration for each sample. MRO is generally considered to be significantly less mobile in the subsurface than GRO and DRO. Combined GRO/DRO concentrations for the samples were below 100 mg/kg, with the exception of SC-5 (110 mg/kg DRO). Laboratory analytical results reported benzene and total BTEX concentrations in all samples as below NMOCD action levels.

Based on the final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 28-7 Unit 85, benzene and total BTEX were below the applicable NMOCD action levels for the final base and sidewalls. In contrast, TPH exceeded the NMOCD action level for the base and all sidewalls, except at SC-2. However, NMOCD granted approval to spray with a potassium permanganate solution and backfill the excavation, and no further work is recommended.

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

Sincerely,

David J. Reese

Environmental Scientist

David of Rem

Elizabeth McNally, P.E.

Elizabeth V MeNdly

Attachments:

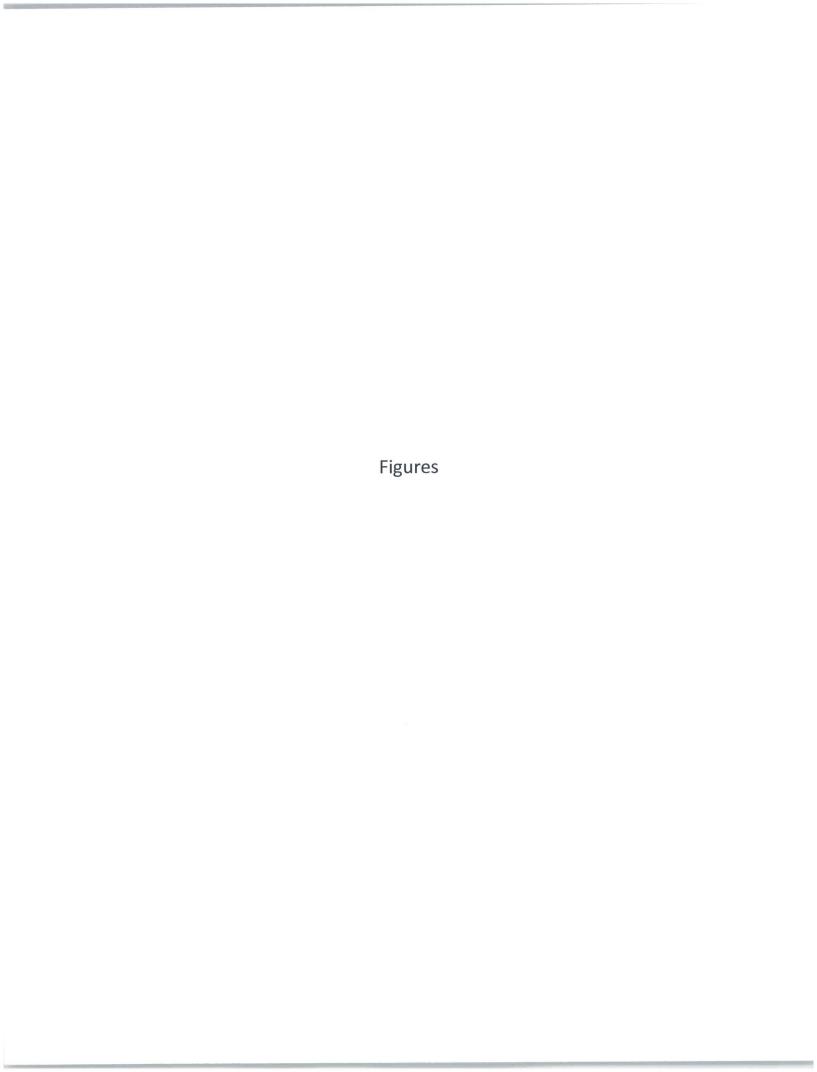
Figure 1. Topographic Site Location Map

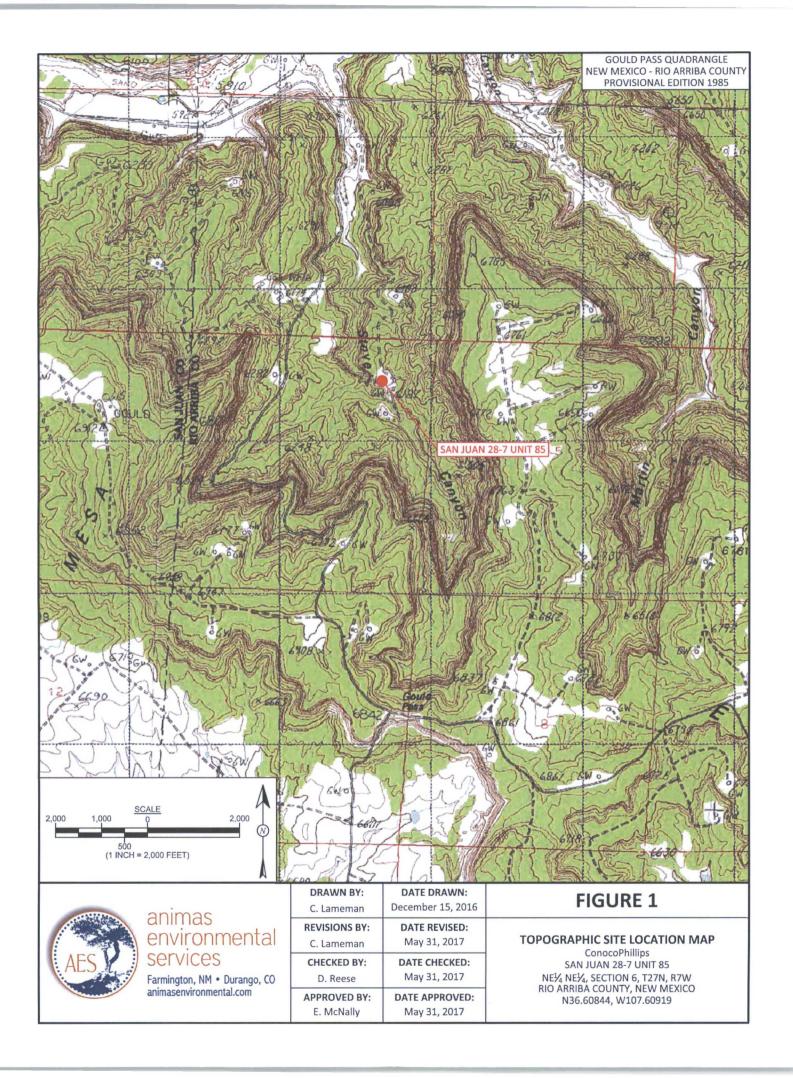
Figure 2. Aerial Site Map, 2016 and 2017

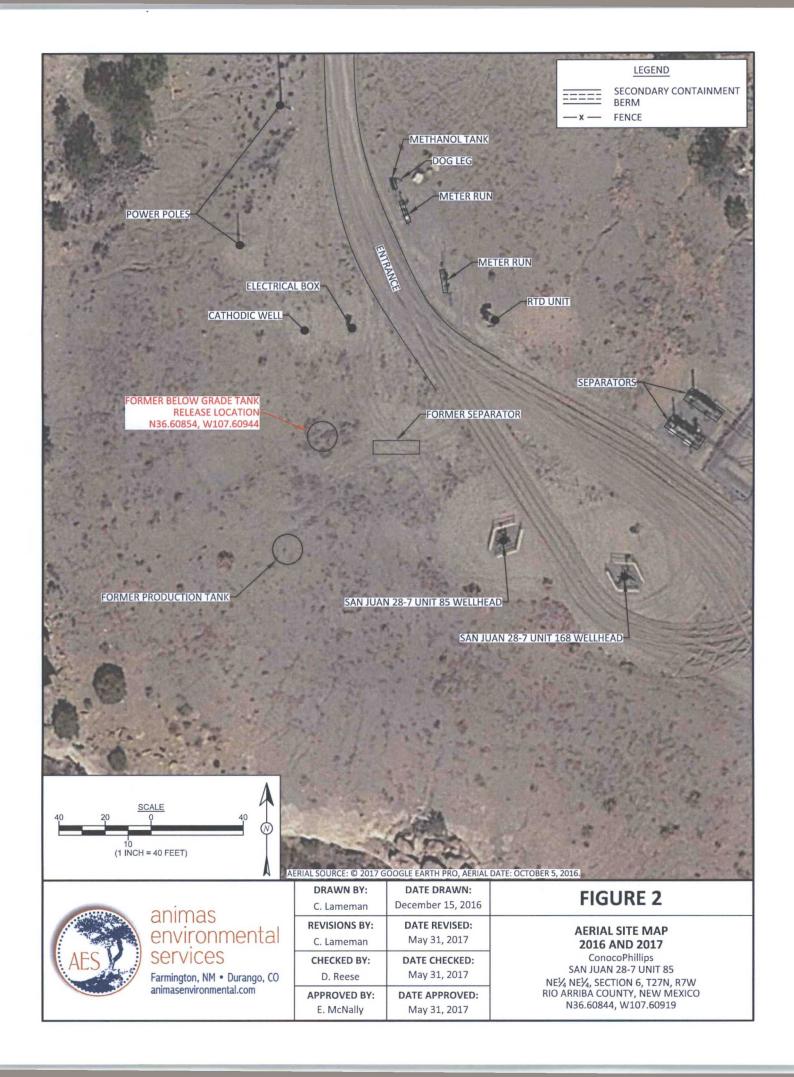
Figure 3. BGT Closure and Release Assessment Sample Locations and Results, October and December 2016 Lisa Hunter and Robert Spearman San Juan 28-7 Unit 85 BGT Closure, Release Assessment, and Final Excavation Report June 6, 2017 Page 7 of 7

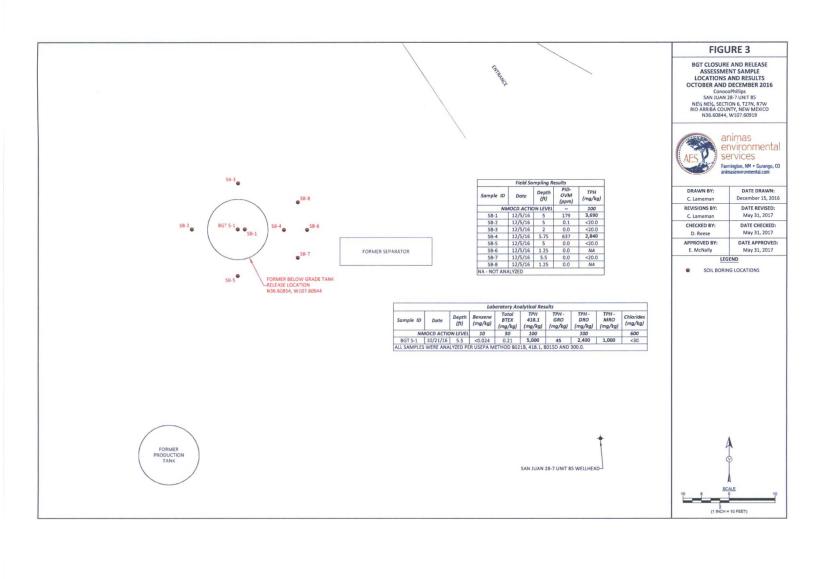
Figure 4. Final Excavation Sample Locations and Results, May 2017
AES Field Sampling Report 120516
AES Field Sampling Report 050317
Hall Laboratory Analytical Report 1610B75
Hall Laboratory Analytical Report 1705220
Hall Laboratory Analytical Report 1705221

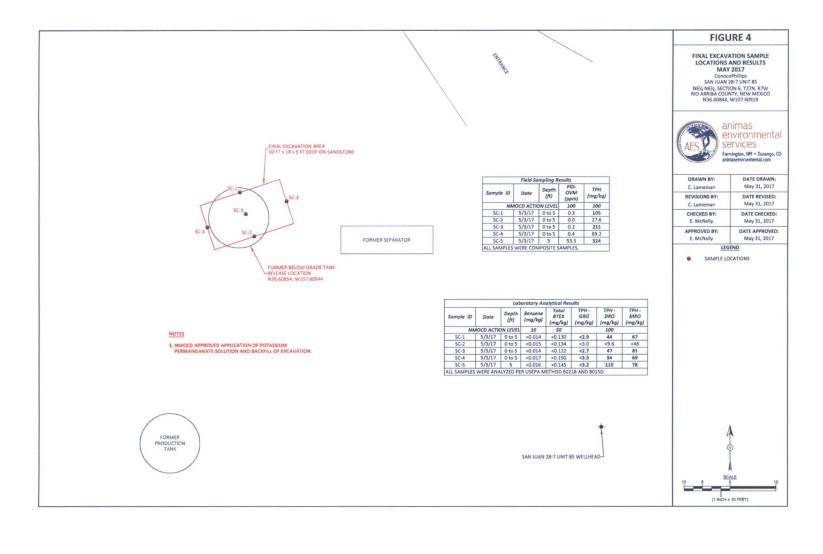
R:\Animas 2000\Dropbox (Animas Environmental)\0000 AES Server Client Projects Dropbox\2017 Client Projects\ConocoPhillips\SJ 28-7 Unit 85\San Juan 28-7 Unit 85 BGT Closure, Release, and Excavation Report 060617.docx













Field Screening Relea	ase Assessment Field	Report	Date: 12-5-16				
Client:	anoco Phillips	AES Personnel:	S. Glasses	Bill	ing Info:		
Well or Lease Name:	Client: Canoco Phillips AES Personnel: S. Glasses Billing Info: Lease Name: Sea Jan 28-7 85 Esupervisor: Comin Lamenan Beginning mileage: 52636 Arrival Time: 0930 Ending Mileage: 52712 Belease Source: Historic BCT Well Head (GPS): Be 60844, -107.60919 Activity Code: Ordered by: Bibby Spearman Delination ABS Values Delination BLM Release Location (GPS): 216.1608544, -107.60944 Concentration 50 mg/kg Callibration ABS Values October Source Bibby Spearman Site Rank: 10 Buck Machine # / Concentration 50 mg/kg 100 mg/kg 500 mg/kg Callibration ABS Values October Source Sea Anal Nap As well Horizontal (Cross-Section View):						
CoP Onsite Supervisor:	Corwin Lameman	Beginning mileage:	52636	_	Supervisor:	Schauphok	
Site Arrival Time:	0930	Ending Mileage:	52712	_	USER:	KAITLW	_
Site Departure Time:	1440	Release Source:	Historic BGT	_	Area:	7	
Well or Lease Name: San Jun 28-7 85 COP Onsite Supervisor: Cowin Lameman Beginning mileage: \$2636 Supervisor: Schanphok Site Arrival Time: O930 Ending Mileage: \$2712 USER: KAZTLW Site Departure Time: 1440 Release Source: Historic BG T Area: 7 Well Head (GPS): Bo. 100844, -107. 609 19 Land Jurisdiction: BLM Release Location (GPS): 310. 100854, -107. 609 19 County/State: San Juan / NM Site Rank: 10 Equipment in place: 2Paductims Tanks, 2 Separativs Concentration 50 mg/kg 100 mg/kg 500 mg/kg 2 WH, 1 BGT, 2 Meter Runs Photos taken: Troject Details: Loss & BGT Regulatory Sumple. Laboratory Results Were light than BGT Coosure. Site Sketch (DOES NOT REPLACE SITE MAP) and Current Excavation Dimension See Aerical Map As Well							
-		lease Location (GPS):	36.60854, -107.60944		Ordered by:	Bobby Spearman	
						,	
Site Rank:	10				7		
			Buck Machine #	/			
Equipment in place:2	Productions Tanks, 2 Sep	aretris	Concentration	50 mg/kg	100 mg/kg	500 mg/kg	
	2 WH, 186T, 2 Meter 1	Runs	Calibration ABS Values	0.075	0.131	0.653	
Photos taken:	and the second s						
Project Details: Was a BGT	Regulatory sample, Labora	tony Results	Site Sketch (DOES NOT REPLA	CE SITE MA	P) and Curren	t Excavation Dimension	ns:
Site Departure Time: 1440 Release Source: #ishnic BGT Well Head (GPS): #ishnic BGT Area: 7 Well Head (GPS): #ishnic BGT Release Location (GPS): #ishnic BGT County/State: San Juan / NM Site Rank: 10 Buck Machine # / Concentration 50 mg/kg 100 mg/kg 500 mg/kg Calibration ABS Values 0.075 0.131 0.053 Project Details: was a BGT Regulatory sample, laboratory Redults Were higher Than BGT Cossue. Delination was required. Site Sketch (DOES NOT REPLACE SITE MAP) and Current Excavation Dimensions: Sce Aerial Nap As Well Horizontal (Cross-Section View):							
Delineatin	was required.		Horizontal (Cross-Section View	v):			4
Initial Recommendations:				.58	-3	SB-8	

Animas Environmental Services, LLC 604 W Pinon St. Farmington, NM 87401 office # 505-564-2281 1911 N Main, Ste 280, Durango, CO 81301

<u>Limitiations</u>: Sandet ne and shale ranging from 1.5' to 5.5'

1 of _____

Vertical (Plan View):

Release Assessment Field Form 060215.xlsx

Well or Lease Name: San Isan 29-7 85

Date: 12-5-16

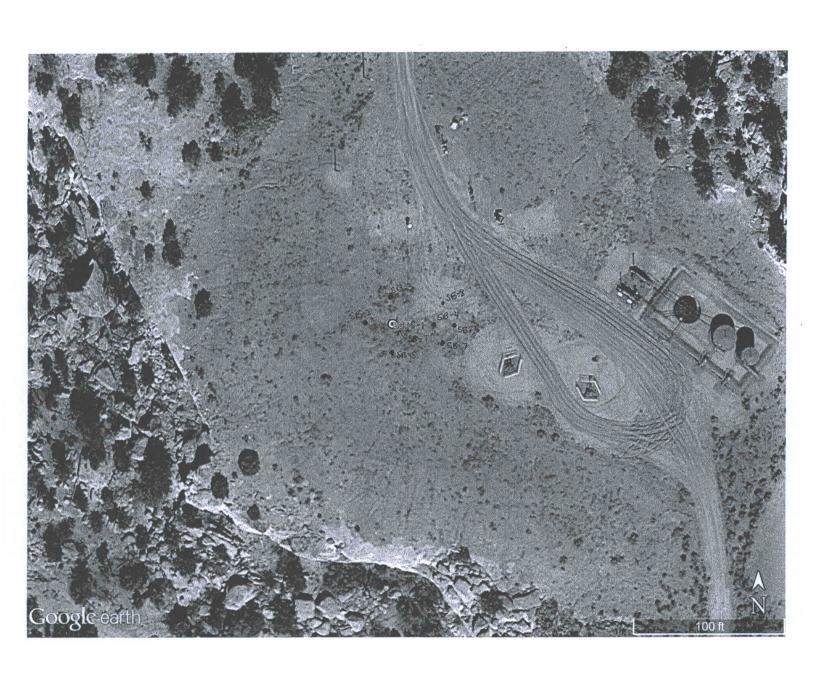
AES personnel: S.6 lasses, C. Laminan

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	OVM Time	Field TPH (mg/kg)	Field TPH Analysis Time	ABS	NOTES
53-1 e 5'	12-5-16	1033	Confes	179	1652	3693.66	1108	0.245×10	on SS. Blk Staining Sand & Clay
SB-2 e5'	\	1125	W&Ctr	0.1	1132	420.0	1140	8.008	on SS, No Staining, No Odar, Dry, Some Roots
SB-3e2'		1135	NOGGE	0.0	1147	426.0	1157		DASS No Staining or Odor, Dry Some Wood
584 6 5.75'		1205	Endr	637	1213	2,842.48	1224	0.190×10	on SS, BIK Staining, V. Stag Odor, Wist
513-50 5'		1251	Shar	0-0	1307	<20.0	1309	0.015	OASS, No Staining or Eder Maist & CL
56-be 1.25'		1300	E 4 58-4	0.0	1315	_	1	_	on SS, Bit Staining, V. Stop Odor, Wrist on SS, N. Staining or Eder, Was of & CL and on Orale, Hand, Dry No Staining or Odor ref
58-7e 5.5'		1317	15 16 SB-4	0.0	1335	120.0	1339		on 55 Sand, No Staining or Odr, Moist
5B-8 e 1.25'	1	1410	N=65B-4	0.0	1430	_	_		on SS, Tan, N. Oday No Photogramy My
- April -									
									*

^{*}Include Benzene readings in the notes section initially and transfer to Limitations if Benzene is a problem on the location.

Animas Environmental Services, LLC
604 W Pinon St. Farmington, NM 87401 office # 505-564-2281
1911 N Main, Ste 280, Durango, CO 81301

-		-	
2	0	T	



Field Screening Relea	ase Assessment Field	Report			Date	: 5-3-17
Client:	Copc	AES Personnel:	C. Lameman	Billi	ing Info:	
Well or Lease Name:	San Juan 28-7 Unit 85				WO #:	10398827
CoP Onsite Supervisor:		Beginning mileage:	54312	_	Supervisor:	Landy Swith
Site Arrival Time:	833	Ending Mileage:	54388	_	USER:	KAITLN
Site Departure Time:	1109	Release Source:	Historic BGT	_	Area:	7
		Well Head (GPS):	36.60844, 107.60919	_	Activity Code	:
Land Jurisdiction:	BLM R	elease Location (GPS):	36.60854, -107.60944		Ordered by:	Lisa Hunter/
County/State:		-	www.	_		Eduardo Mrutoya
Site Rank:	10 But under 100			1 .	1	Oper Randy
F. J. Control of the Land	Stringent per NMOCD		Buck Machine #	/	100 (1)	1500 //
	Rprod. tank, BbT, 2 Sep, 2WH,	Meter Run	Concentration Calibration ABS Values	50 mg/kg	100 mg/kg	500 mg/kg
Photos taken:	PIV			10.0.0		
Project Details: Excavation C	deargone Co History Poli	<u> </u>	Site Sketch (DOES NOT REPLA	CE SITE MA	P) and Curren	t Excavation Dimensions:
Troject Betails. On Man Ily	The work of the work of		once once and on the b	02 0712 1717	and carren	e Exparation Dimensions.
			 Horizontal (Cross-Section Vie	w).		
			Thorizontal (cross-section vie			
			1		Ran	9
Initial Recommendations:			10'	5		
initial neconfinendations.				3)		
				8'		
			Vertical (Plan View):			
Limitiations: Examatim n	55 0 5'		vertical (Flatt view).			
Ellitted College Colle						
Animas Environmental Services	•					
604 W Pinon St. Farmington, NI 1911 N Main, Ste 206, Durango		. 1 of		Re	olense Assessn	nent Field Form 012617.xlsx
zzzz A monij ste zoo, bulango	, 00 02002	. 201_	-	***		TOTAL COLOR OF THE CALLES

Edwardo called 843

Well or Lease Name: San Jan 28-7 Orif 85

Date: 5 - 3 - 17

AES personnel: C. Lome man

<100

						~ 100			_	
Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	OVM Time	Field TPH (mg/kg)	Field TPH Analysis Time	ABS		NOTES
56-1	5.3.17	843	N Wall	0,3	949	105	559	0.081	0-5'	3-Day
56-2		847	5 wall	0-0	950	27.6	1001	0,020	0-5'	3-Day
SC-3		853	E way	0.2	951	211	1004	0.165	0-5'	Same Day
56-4		902	N Wall	0.4	952	69.2	1007	0.053	0-51	3-Day
56-5	+	907	Base	53.3	953	324	1010	0.255	51	3-Day Same Day 3-Day Same Day
										6400
			-							

^{*}Include Benzene readings in the notes section initially and transfer to Limitations if Benzene is a problem on the location.

Animas Environmental Services, LLC
604 W Pinon St. Farmington, NM 87401 office # 505-564-2281
1911 N Main, Ste 206, Durango, CO 81301

2	of		





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

OrderNo.: 1610B75

November 03, 2016

Emilee Skyles Animas Environmental 604 Pinon Street Farmington, NM 87401 TEL: (505) 564-2281

FAX

RE: COPC San Juan 28-7 UNIT 85

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/22/2016 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 www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. 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. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. 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.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1610B75

Date Reported: 11/3/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Project: COPC San Juan 28-7 UNIT 85

1610B75-001 Lab ID:

Client Sample ID: BGT S-1

Collection Date: 10/21/2016 2:13:00 PM

Received Date: 10/22/2016 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst:	MAB
Petroleum Hydrocarbons, TR	5000	190		mg/Kg	10	10/26/2016	28272
EPA METHOD 300.0: ANIONS						Analyst:	LGT
Chloride	ND	30		mg/Kg	20	10/31/2016 2:12:47 PM	28379
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S				Analyst:	TOM
Diesel Range Organics (DRO)	2400	99		mg/Kg	10	10/27/2016 1:22:03 PM	28288
Motor Oil Range Organics (MRO)	1000	490		mg/Kg	10	10/27/2016 1:22:03 PM	28288
Surr: DNOP	0	70-130	S	%Rec	10	10/27/2016 1:22:03 PM	28288
EPA METHOD 8015D: GASOLINE RANGE	Ξ					Analyst:	NSB
Gasoline Range Organics (GRO)	45	4.8		mg/Kg	1	10/26/2016 1:21:45 PM	28268
Surr: BFB	321	68.3-144	S	%Rec	1	10/26/2016 1:21:45 PM	28268
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.024		mg/Kg	1	10/26/2016 1:21:45 PM	28268
Toluene	ND	0.048		mg/Kg	1	10/26/2016 1:21:45 PM	28268
Ethylbenzene	ND	0.048		mg/Kg	1	10/26/2016 1:21:45 PM	28268
Xylenes, Total	0.21	0.096		mg/Kg	1	10/26/2016 1:21:45 PM	28268
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	10/26/2016 1:21:45 PM	28268

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range
- J
- Analyte detected below quantitation limits Page 1 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1610B75

03-Nov-16

Client:

Animas Environmental

Project:

COPC San Juan 28-7 UNIT 85

Sample ID MB-28379

SampType: MBLK

TestCode: EPA Method 300.0: Anions

TestCode: EPA Method 300.0: Anions

LowLimit

Client ID:

Sample ID LCS-28379

LCSS

PBS

Batch ID: 28379

RunNo: 38358

Prep Date: 10/31/2016

Analysis Date: 10/31/2016

PQL

1.5

SeqNo: 1197670

Units: mg/Kg HighLimit

Analyte

Result

SPK value SPK Ref Val %REC LowLimit

%RPD

RPDLimit

Qual

Chloride

ND

SampType: LCS Batch ID: 28379

RunNo: 38358

Units: mg/Kg

Client ID:

Prep Date: 10/31/2016

Analysis Date: 10/31/2016

SPK value SPK Ref Val %REC

SeqNo: 1197671

RPDLimit

Analyte

PQL

15.00

0

90

HighLimit

110

%RPD

1.5

Chloride

Result 14

92.1

Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

E J

P Sample pH Not In Range

RL Reporting Detection Limit

Analyte detected below quantitation limits Page 2 of 6

Value above quantitation range

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1610B75

03-Nov-16

Client:

Animas Environmental

Project:

COPC San Juan 28-7 UNIT 85

Sample ID MB-28272

SampType: MBLK

POI

TestCode: EPA Method 418.1: TPH

Client ID:

Analyte

Analyte

PBS

Batch ID: 28272

RunNo: 38229

SPK value SPK Ref Val

SPK value SPK Ref Val

100.0

100.0

LowLimit

TestCode: EPA Method 418.1: TPH

LowLimit

80.7

80.7

%REC

Prep Date:

10/25/2016

Analysis Date: 10/26/2016

SeqNo: 1193363

Units: mg/Kg HighLimit

%RPD **RPDLimit**

Qual

Petroleum Hydrocarbons, TR

Result

ND 20

Sample ID LCS-28272

SampType: LCS Batch ID: 28272

RunNo: 38229

Client ID: LCSS Prep Date: 10/25/2016

Analysis Date: 10/26/2016

Result

110

110

SeqNo: 1193364 %REC

Units: mg/Kg HighLimit

121

%RPD **RPDLimit**

Qual

Petroleum Hydrocarbons, TR

20

0 112

TestCode: EPA Method 418.1: TPH

Qual

Sample ID LCSD-28272

Prep Date: 10/25/2016

Client ID: LCSS02

SampType: LCSD

Batch ID: 28272 Analysis Date: 10/26/2016

PQL

RunNo: 38229

SeqNo: 1193365

Units: mg/Kg

121

HighLimit

RPDLimit

Analyte Petroleum Hydrocarbons, TR Result

SPK value SPK Ref Val %REC LowLimit

0

113

%RPD 1.22

20

Value exceeds Maximum Contaminant Level.

Holding times for preparation or analysis exceeded Η

Not Detected at the Reporting Limit ND

R RPD outside accepted recovery limits

В Analyte detected in the associated Method Blank

J

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Qualifiers:

Sample Diluted Due to Matrix D

% Recovery outside of range due to dilution or matrix S

E Value above quantitation range

Analyte detected below quantitation limits

Page 3 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1610B75 03-Nov-16

Client:

Animas Environmental

Project:

COPC San Juan 28-7 UNIT 85

Sample ID LCS-28288

SampType: LCS

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS

Batch ID: 28288

RunNo: 38253

Prep Date: 10/26/2016

10/26/2016

Analysis Date: 10/27/2016

SeqNo: 1193973

%RPD

%RPD

Analyte

Units: mg/Kg HighLimit

RPDLimit Qual

Result PQL SPK value SPK Ref Val %REC LowLimit Diesel Range Organics (DRO) 49 10 50.00 0 98.4 62.6 Surr: DNOP 4.7 5.000 94.1 70

Sample ID MB-28288

SampType: MBLK

SPK value SPK Ref Val %REC LowLimit

130 TestCode: EPA Method 8015M/D: Diesel Range Organics

124

Client ID:

Prep Date:

Surr: DNOP

PBS

Batch ID: 28288 Analysis Date: 10/27/2016

PQL

SeqNo: 1193974

Units: mg/Kg

HighLimit

RPDLimit Qual

Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)

ND 10 ND

Result

10

50 10.00

103

70

130

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Analyte detected in the associated Method Blank

Page 4 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1610B75

03-Nov-16

Client:

Animas Environmental

Project:

COPC San Juan 28-7 UNIT 85

Sample ID MB-28268

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

PBS

10/25/2016

Batch ID: 28268

PQL

5.0

RunNo: 38235

Prep Date: 10/25/2016

Units: mg/Kg

Qual

Analyte Gasoline Range Organics (GRO)

Analysis Date: 10/26/2016

SPK value SPK Ref Val

SeqNo: 1193447 %REC LowLimit

HighLimit

%RPD **RPDLimit**

Surr: BFB

ND 860

Result

1000

86.3

68.3 144

Sample ID LCS-28268

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS

Batch ID: 28268 Analysis Date: 10/26/2016

PQL

5.0

RunNo: 38235 SeqNo: 1193448

Units: mg/Kg

%RPD HighLimit

RPDLimit Qual

Gasoline Range Organics (GRO)

Prep Date:

Result 26

25.00

SPK value SPK Ref Val

104

74.6

Surr: BFB

970

1000

97.1

%REC

68.3

LowLimit

144

Oualifiers:

R

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded H
- Not Detected at the Reporting Limit ND RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit Sample container temperature is out of limit as specified

Page 5 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1610B75

03-Nov-16

Client:

Animas Environmental

Project:

COPC San Juan 28-7 UNIT 85

Sample ID MB-28268	SampType: MBLK TestCode: EPA Method 8021B: Volatiles									
Client ID: PBS	Batch	n ID: 28	268	F	RunNo: 3	8235				
Prep Date: 10/25/2016 Analysis Date: 10/26/2016 SeqNo: 1193477 Units: mg/Kg										
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID LCS-28268	SampType: LCS TestCode: EPA Method 8021B: Volatiles										
Client ID: LCSS	Batch	ID: 28	268	RunNo: 38235							
Prep Date: 10/25/2016	Analysis D	ate: 10	10/26/2016 SeqNo: 1193478 Units: mg/Kg					g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.96	0.025	1.000	0	96.3	75.2	115				
Toluene	0.99	0.050	1.000	0	99.1	80.7	112				
Ethylbenzene	1.0	0.050	1.000	0	100	78.9	117				
Xylenes, Total	3.0	0.10	3.000	0	99.7	79.2	115				
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120				

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 6 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: A	Animas Environmental	Work Order Number:	1610	375		RcptN	lo: 1
Received by/date:	A	102216			• • • • • • • • • • • • • • • • • • • •		
Logged By:	Lindsay Mangin	10/22/2016 8:20:00 AM			Juney House		
Completed By:	Lindsay Mangin	10/25/2016 9:20:05 AM			Stratut House		
Reviewed By:	e 10/25/16	, , , , , , , , , , , , , , , , , , , ,			03.00		
1	1						
Chain of Custe				r 1	No [.]	Not Present	
	intact on sample bottles?		Yes		No []	Not Present	
2. Is Chain of Cu					NO	NOT Present	.1
3. How was the s	sample delivered?		Cour	ier			
Log In							
4. Was an attern	npt made to cool the sample	s?	Yes	V	No [NA L	
5. Were all samp	oles received at a temperatu	re of >0° C to 6.0°C	Yes		No []	NA L	
6 Complete in			Yes	امنا	No []		
o. Sample(s) in	proper container(s)?		res	là.	NO [_]		
7. Sufficient sam	ple volume for indicated tes	t(s)?	Yes	Y	No [
8. Are samples (except VOA and ONG) prop	erly preserved?	Yes	Y	No [
9. Was preserva	tive added to bottles?		Yes		No 🗹	NA [
				()	17		ial .
	re zero headspace?		Yes		No L	No VOA Vials	/I
11. Were any san	nple containers received bro	ken?	Yes	11	No 🗹	# of preserved	
12 Does paperwo	ork match bottle labels?		Yes	~	No []	for pH:	
	ancies on chain of custody)		100	LT. I		(<	2 or >12 unless noted)
13. Are matrices of	correctly identified on Chain	of Custody?	Yes	~	No	Adjusted?	
	t analyses were requested?		Yes	Y	No L	Charled b	
	ng times able to be met? ustomer for authorization.)		Yes	Y	No L.	Checked b	y:
(ii no, notily of	dotomor for dutionization,						
Special Handli	ing (if applicable)						
	tified of all discrepancies wit	h this order?	Yes	Li	No [NA 5	
1.	Notified:	energenergenerge gan	-				- 1
By Who	-	Date: Via:	1 01/1	H ["] E	Phone [] Fax	In Person	
Regardi		VIA.	CIVIC	1	Tione Tax		
	structions:		No. of Contrast, Name of Street, or other teams of the Contrast, Name of Street, Name of Stree				•
17. Additional ren							l'
18. Cooler Inform		Seal Intent Seal No. 6	Seel D	ate I	Signed By		
1		es Seal Mo	Cal Di	10	Oigited by		
Cooler No.			Seal Da	ate	Signed By		

Ch	ain-o	f-Cust	tody Record	Turn-Around T	ime:					Н	ALI	F	=N3	VTI	RO	N	MEI	NT	AL	
Client: Animas Environmental Services, LLC			X Standard	X Standard Rush ANALYSIS LABORATORY																
-				Project Name:																-
Mailing Ad	dress:	604 W	Pinon St.	COPC SA	AN JUAN 28-	7 UNIT 85	www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109													
			gton, NM 87401	Project #:							15-39					345-4		Jo		
Phone #:	505-564		gton, 14141 07 401					16	91. OC	/ 5- 54			ılysis				107	127		
Email or Fa			ganimasenvironmental.com	Project Manag	ier:														T	
QA/QC Pac				,	E. Skyles															
X Standar	-		□ Level 4 (Full Validation)																	
Accreditati				Sampler: CL/S									1							
□ NELAP		□ Other		On Ice:		⊠ No								1						2
□ EDD (T	ype)			Sample Temp	erature: 💍	4	_	8.1		0.0				1						ō
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALNO:	BTEX - 8021B	TPH - EPA 418.1	TPH - 8015	Chlorides - 300.0										Air Bubbles (Y or N)
10/21/16	14:13	SOIL	BGT S-1	1 - 4 oz.	cool	-001	Х	Х	Х	Х										
													-						\top	\Box
															\neg		\top	\top	\top	\top
											\dashv	\dashv	\dashv	_	\dashv	+	+	+	+	+
											\dashv	+	\dashv	-		+	+	+	+	+
											\dashv	\dashv	_	\dashv	\dashv	_	+	+	+	+
											+	1	\dashv	_	\dashv	\dashv	+	+	+	+
											_	-	-	\dashv	\dashv	-	+	+	+	+
									-		_	\dashv	\dashv	\dashv	\dashv	\dashv	+	+	+	+
								_			\dashv	\dashv	-	-	\dashv	\dashv	+	+	+	+
											\dashv	-	-	\dashv	\dashv	\dashv	+	+	+	+
Date:	Time:	Relinguish	ed by:	Received by:		Date Time	Ren	narks	s: Bil	to C	onoc	o Ph	nillips	L						
10/4/10	1622			Moder	Waste	10/21/14 /622	WO Sup	# 2 ervis	1739 sor: 5	267 Scha	aphok		•							
Date:	Time:	Relinquish		Received by:	A	Pate Time	Area	a: 7		ITLW										
10/2/16	2106	1/9Mn	t Valle		10	122/16 0820	Ord	ered	by: I	SODD	y Spe	arm	an							



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

May 05, 2017

Corwin Lameman Animas Environmental 604 Pinon Street Farmington, NM 87401 TEL: (505) 564-2281

FAX

RE: COPC San Juan 28 7 Unit 85

OrderNo.: 1705220

Dear Corwin Lameman:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/4/2017 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 www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. 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. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. 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.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1705220

Date Reported: 5/5/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-3

Project: COPC San Juan 28 7 Unit 85

Collection Date: 5/3/2017 8:53:00 AM

Lab ID: 1705220-001

Matrix: MEOH (SOIL) Received Date: 5/4/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analyst	JME
Diesel Range Organics (DRO)	47	9.5	mg/Kg	1	5/4/2017 12:42:20 PM	31564
Motor Oil Range Organics (MRO)	81	47	mg/Kg	1	5/4/2017 12:42:20 PM	31564
Surr: DNOP	85.4	70-130	%Rec	1	5/4/2017 12:42:20 PM	31564
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	2.7	mg/Kg	1	5/4/2017 11:03:34 AM	G42543
Surr: BFB	93.4	54-150	%Rec	1	5/4/2017 11:03:34 AM	G42543
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.014	mg/Kg	1	5/4/2017 11:03:34 AM	B42543
Toluene	ND	0.027	mg/Kg	1	5/4/2017 11:03:34 AM	B42543
Ethylbenzene	ND	0.027	mg/Kg	1	5/4/2017 11:03:34 AM	B42543
Xylenes, Total	ND	0.054	mg/Kg	1	5/4/2017 11:03:34 AM	B42543
Surr: 4-Bromofluorobenzene	106	66.6-132	%Rec	1	5/4/2017 11:03:34 AM	B42543

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 5
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1705220

5/4/2017 11:26:57 AM

B42543

Hall Environmental Analysis Laboratory, Inc. Date Reported: 5/5/2017

Client Sample ID: SC-5 **CLIENT:** Animas Environmental

105

COPC San Juan 28 7 Unit 85 Collection Date: 5/3/2017 9:07:00 AM Project: 1705220-002 Received Date: 5/4/2017 7:00:00 AM Lab ID: Matrix: MEOH (SOIL)

Analyses Result **PQL Qual Units DF** Date Analyzed Batch Analyst: JME **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** 5/4/2017 12:14:35 PM 31564 Diesel Range Organics (DRO) 110 9.5 mg/Kg 1 Motor Oil Range Organics (MRO) 78 48 mg/Kg 5/4/2017 12:14:35 PM 31564 Surr: DNOP 85.9 70-130 %Rec 5/4/2017 12:14:35 PM 31564 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 3.2 mg/Kg 5/4/2017 11:26:57 AM G42543 Surr: BFB 96.4 54-150 %Rec 5/4/2017 11:26:57 AM G42543 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.016 mg/Kg 5/4/2017 11:26:57 AM B42543 ND 0.032 5/4/2017 11:26:57 AM B42543 Toluene mg/Kg 1 Ethylbenzene ND 0.032 mg/Kg 5/4/2017 11:26:57 AM B42543 Xylenes, Total ND 0.065 5/4/2017 11:26:57 AM B42543 mg/Kg 1

66.6-132

%Rec

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Oualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 5 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1705220

05-May-17

Client:

Animas Environmental

Project: COPC S	San Juan 28 7 Unit 85	
Sample ID MB-31564	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 31564	RunNo: 42525
Prep Date: 5/4/2017	Analysis Date: 5/4/2017	SeqNo: 1337677 Units: mg/Kg
Analyte	Result PQL 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	8.1 10.00	81.1 70 130
Sample ID LCS-31564	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 31564	RunNo: 42525
Prep Date: 5/4/2017	Analysis Date: 5/4/2017	SeqNo: 1337679 Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	45 10 50.00	0 90.6 63.8 116
Surr: DNOP	4.6 5.000	92.2 70 130
Sample ID MB-31549	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 31549	RunNo: 42525
Prep Date: 5/3/2017	Analysis Date: 5/4/2017	SeqNo: 1338403 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	8.3 10.00	83.4 70 130
Sample ID LCS-31549	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 31549	RunNo: 42525
Prep Date: 5/3/2017	Analysis Date: 5/4/2017	SeqNo: 1338404 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.5 5.000	90.5 70 130

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- B
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Analyte detected in the associated Method Blank

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1705220

05-May-17

Client:

Animas Environmental

Project:

COPC San Juan 28 7 Unit 85

Sample ID RB **PBS** SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

Batch ID: G42543

PQL

5.0

RunNo: 42543

Prep Date:

Analysis Date: 5/4/2017

SeqNo: 1338389

Analyte Gasoline Range Organics (GRO)

ND

SPK value SPK Ref Val %REC LowLimit Units: mg/Kg HighLimit

%RPD **RPDLimit**

Qual

Surr: BFB

920

Result

1000

92.0

54 150

Sample ID 2.5UG GRO LCS

SampType: LCS

RunNo: 42543

TestCode: EPA Method 8015D: Gasoline Range

%RPD

Client ID: LCSS

Batch ID: G42543

Units: mg/Kg

Prep Date: Analyte

Analysis Date: 5/4/2017

PQL

5.0

SeqNo: 1338390 SPK value SPK Ref Val %REC LowLimit

RPDLimit Qual

Gasoline Range Organics (GRO) Surr: BFB

25 1000

Result

25.00 1000 99.3 101

76.4 54 125 150

HighLimit

Oualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- J
 - Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1705220

05-May-17

Client:

Animas Environmental

Project:

COPC San Juan 28 7 Unit 85

Sample ID RB	SampT	уре: МЕ	BLK	Tes	PA Method	8021B: Volat	iles			
Client ID: PBS	Batch	h ID: B4	2543	F	RunNo: 4	2543				
Prep Date:	Analysis D	Date: 5/	4/2017	S	SeqNo: 1	338395	Units: mg/K	g		
Analyte	Result	esult PQL SPK value SPK Ref Val %REC LowLimit Hi				HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000	.000 103 66.6			132			

Sample ID 100NG BTEX LC	S Samp1	ype: LC	s	Tes						
Client ID: LCSS	Batch	n ID: B4	2543	F	RunNo: 4	2543				
Prep Date:	Analysis D	oate: 5/								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.3	80	120			
Toluene	0.92	0.050	1.000	0	92.0	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.5	80	120			
Xylenes, Total	2.8	0.10	3.000	0	95.0	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	66.6	132			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 5 of 5

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

RcptNo: 1 Client Name: Animas Environmental Work Order Number: 1705220 Received By: **Ashley Gallegos** 5/4/2017 7:00:00 AM 5/4/2017 7:50:19 AM Completed By: **Ashley Gallegos** 05/04/17 ENM Reviewed By: Chain of Custody Not Present ✓ 1. Custody seals intact on sample bottles? Yes No Not Present 2. Is Chain of Custody complete? Yes V No 3. How was the sample delivered? Courier Log In 4. Was an attempt made to cool the samples? No NA Yes V 5. Were all samples received at a temperature of >0° C to 6.0°C No NA · Yes V No Sample(s) in proper container(s)? Yes 7. Sufficient sample volume for indicated test(s)? No No 8. Are samples (except VOA and ONG) properly preserved? Yes No V 9. Was preservative added to bottles? Yes NA : No VOA Vials No 10. VOA vials have zero headspace? Yes 11. Were any sample containers received broken? Yes No # of preserved bottles checked for pH: 12. Does paperwork match bottle labels? Yes (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? 13. Are matrices correctly identified on Chain of Custody? No 14. Is it clear what analyses were requested? No Yes V Checked by: 15. Were all holding times able to be met? Yes V No (If no, notify customer for authorization.) Special Handling (if applicable) 16. Was client notified of all discrepancies with this order? No NA V Yes Person Notified: Date By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date 1.6 Good

Ch	ain-o	f-Cus	tody Record	Turn-Around 1	Time:									13/7	rD.	ON	245	EN'			
Client:	Anima	s Enviro	nmental Services, LLC	□ Standard	X Rush	SAME DAY	-											AT			
				Project Name		OAIL DAT												AI	UF	. 1	
Mailing Ad	dress:	004144	D' O'	00000	AN JUAN 28-	Z LINUT OF										tal.co					
			Pinon St.	Project #:	AN JUAN 28-	7 UNIT 85		49	01 H	lawk	ins I	NE .	- All	buqu	erqu	e, N	M 87	109			
			gton, NM 87401	Project #.				T	el. 5	05-3	45-3		The second			-345	410	7			
Phone #:												An	alys	is R	equ	est					4
Email or F	ax#:	eskyles@	animasenvironmental.com	Project Manag	ger:																١
QA/QC Pac	kage:	memour			C. Lamemai	n/ E. McNally															
X Standa	rd		☐ Level 4 (Full Validation)					- 8015													
Accreditat				Sampler: CL				8-(1
□ NELAP		□ Other		On Ice:	TX Yes	□ No		ARC												2	·
□ EDD (T	ype)			Sample I emp	erature: [-]	+0.5(CF)=1.4	_	S												ঠ	
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX - 8021B	TPH (GRO/DRO/MRO)												Air Bubbles (Y or N)	
5/3/17	8:53	SOIL	SC-3	1 - MeOH kit	MeOH		X	X							\vdash				\dashv	1	1
		SOIL	SC-5	1 - 4 oz. 1 - MeOH kit	MeOH	-001							-	-	\vdash		\vdash	-	\dashv	+	d
5/3/17	9:07	SUIL	30-3	1 - 4 oz.	cool	-002	Х	X		-			\vdash	-	-	-		_	+	+	4
																					1
																			\neg		1
																		\neg	\dashv	\top	1
								_						\vdash		_			\dashv	+	1
				_				_					\vdash	\vdash	-	-	-	\dashv	\dashv	+	d
								_					-	\vdash	-				\dashv	+	4
								_			_	_	-	_	-	_			_	+	4
Date: 5/3/17	Time:	Relinquish	ilu	Received by:	Lack	5/3/17 1519	WO Sup	# 10 ervis	399 301: R	to C 827 and ITLV	y Sm			S	a	all	w/ 6	lues	in		
5/3/17	Time:	Relinquish	ed by:	Received by:	-1 1	Déte Time	Area	3: 7		Lisa		erle	dund	do N	Lowbo	V A					
-	1858	1/1/1	Int Walt	4	05 04	70700										,					
1	f necessary,	amples subm	nitted to Hall Environmental may be sub	contracted to other a	coredited laborator	ies. This serves as notice of	this po	saibili	ity. An	y sub-	contra	icted d	fata wi	il be c	learly	notated	on the	e analy	ical re	port	



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

May 10, 2017

Corwin Lameman Animas Environmental 604 Pinon Street Farmington, NM 87401 TEL: (505) 564-2281

FAX

RE: COPC San Juan 28-7 Unit 85

OrderNo.: 1705221

Dear Corwin Lameman:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/4/2017 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 www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. 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. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. 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.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1705221

Date Reported: 5/10/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-1

Project: COPC San Juan 28-7 Unit 85

Collection Date: 5/3/2017 8:53:00 AM

Lab ID: 1705221-001

Matrix: MEOH (SOIL) Received Date: 5/4/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	44	9.8	mg/Kg	1	5/9/2017 12:12:10 PM	31596
Motor Oil Range Organics (MRO)	67	49	mg/Kg	1	5/9/2017 12:12:10 PM	31596
Surr: DNOP	87.5	70-130	%Rec	1	5/9/2017 12:12:10 PM	31596
EPA METHOD 8015D: GASOLINE RANG	SE .				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	2.9	mg/Kg	1	5/4/2017 2:31:16 PM	G42544
Surr: BFB	99.6	54-150	%Rec	1	5/4/2017 2:31:16 PM	G42544
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.014	mg/Kg	1	5/4/2017 2:31:16 PM	B42544
Toluene	ND	0.029	mg/Kg	1	5/4/2017 2:31:16 PM	B42544
Ethylbenzene	ND	0.029	mg/Kg	1	5/4/2017 2:31:16 PM	B42544
Xylenes, Total	ND	0.058	mg/Kg	1	5/4/2017 2:31:16 PM	B42544
Surr: 4-Bromofluorobenzene	116	66.6-132	%Rec	1	5/4/2017 2:31:16 PM	B42544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 7
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1705221

Date Reported: 5/10/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-2

COPC San Juan 28-7 Unit 85 Project:

Collection Date: 5/3/2017 9:07:00 AM

1705221-002 Lab ID:

Matrix: MEOH (SOIL)

Received Date: 5/4/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	5/9/2017 11:44:11 AM	31596
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/9/2017 11:44:11 AM	31596
Surr: DNOP	87.3	70-130	%Rec	1	5/9/2017 11:44:11 AM	31596
EPA METHOD 8015D: GASOLINE RANG	SE .				Analys	: NSB
Gasoline Range Organics (GRO)	ND	3.0	mg/Kg	1	5/4/2017 4:07:07 PM	G42544
Surr: BFB	94.5	54-150	%Rec	1	5/4/2017 4:07:07 PM	G42544
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.015	mg/Kg	1	5/4/2017 4:07:07 PM	B42544
Toluene	ND	0.030	mg/Kg	1	5/4/2017 4:07:07 PM	B42544
Ethylbenzene	ND	0.030	mg/Kg	1	5/4/2017 4:07:07 PM	B42544
Xylenes, Total	ND	0.059	mg/Kg	1	5/4/2017 4:07:07 PM	B42544
Surr: 4-Bromofluorobenzene	109	66.6-132	%Rec	1	5/4/2017 4:07:07 PM	B42544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 7 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1705221

Date Reported: 5/10/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-4

Project: COPC San Juan 28-7 Unit 85

Collection Date: 5/3/2017 9:02:00 AM

Lab ID: 1705221-003

Matrix: MEOH (SOIL)

Received Date: 5/4/2017 7:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	34	9.4	mg/Kg	1	5/9/2017 12:40:00 PM	31596
Motor Oil Range Organics (MRO)	69	47	mg/Kg	1	5/9/2017 12:40:00 PM	31596
Surr: DNOP	90.6	70-130	%Rec	1	5/9/2017 12:40:00 PM	31596
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	: NSB
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	5/4/2017 4:31:05 PM	G42544
Surr: BFB	96.6	54-150	%Rec	1	5/4/2017 4:31:05 PM	G42544
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.017	mg/Kg	1	5/4/2017 4:31:05 PM	B42544
Toluene	ND	0.033	mg/Kg	1	5/4/2017 4:31:05 PM	B42544
Ethylbenzene	ND	0.033	mg/Kg	1	5/4/2017 4:31:05 PM	B42544
Xylenes, Total	ND	0.067	mg/Kg	1	5/4/2017 4:31:05 PM	B42544
Surr: 4-Bromofluorobenzene	112	66.6-132	%Rec	1	5/4/2017 4:31:05 PM	B42544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 7
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1705221

10-May-17

Client:

Animas Environmental

Project:

COPC San Juan 28-7 Unit 85

Project:	COPC Sa	n Juan 28-7	Unit	85								
Sample ID N	MB-31596	SampTy	pe: ME	BLK	Tes	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics		
Client ID: P	PBS	Batch	ID: 31	596	F	RunNo: 4	2598					
Prep Date:	5/5/2017	Analysis Da	te: 5/	8/2017	5	SeqNo: 1	340115	Units: mg/K	(g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Org		ND	10									
	Organics (MRO)	ND	50									
Surr: DNOP		10		10.00		103	70	130				
Sample ID L	_CS-31596	SampTy	pe: LC	s	Tes	tCode: E	PA Method	8015M/D: Die	esel Range	e Organics		
Client ID: L	CSS	Batch	ID: 31	596	F	RunNo: 4	2598					
Prep Date:	5/5/2017	Analysis Da	te: 5/	8/2017	5	SeqNo: 1	340286	Units: mg/K	(g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Org	ganics (DRO)	48	10	50.00	0	95.0	63.8	116				
Surr: DNOP		4.9		5.000		97.2	70	130				
Sample ID 1705221-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics												
Client ID: S	SC-1	Batch	D: 31	596	F	RunNo: 4	2630					
Prep Date:	Prep Date: 5/5/2017 Analysis Date: 5/9/2017 SeqNo: 1341935 Units: mg/Kg											
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Org	ganics (DRO)	97	9.6	48.03	44.13	109	51.6	130				
Surr: DNOP		4.6		4.803		96.0	70	130				
Sample ID 1	705221-001AMSD	SampTy	ре: МS	SD	Tes	tCode: E	PA Method	8015M/D: Die	esel Range	Organics		
Client ID: S	SC-1	Batch	D: 31	596	F	RunNo: 4	2630					
Prep Date:	5/5/2017	Analysis Da	te: 5/	9/2017	5	SeqNo: 1	341936	Units: mg/K	g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Org	ganics (DRO)	77	9.7	48.40	44.13	66.9	51.6	130	23.2	20	R	
Surr: DNOP		4.6		4.840		95.8	70	130	0	0		
Sample ID L	CS-31616	SampTy	pe: LC	S	Tes	tCode: E	PA Method	8015M/D: Die	esel Range	Organics		
Client ID: L	css	Batch	D: 31	616	F	RunNo: 4	2630					
Prep Date:	5/8/2017	Analysis Da	te: 5/	9/2017	8	SeqNo: 1	342303	Units: %Red				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP		4.6		5.000		91.5	70	130				
		4.0										
Sample ID N	MB-31616	SampTy	pe: ME		Tes	tCode: E	PA Method	8015M/D: Die	esel Range	e Organics		
,	MB-31616 PBS			BLK		tCode: El		8015M/D: Die	esel Range	e Organics		
Client ID: P		SampTy	D: 31 0	BLK 616	F		2630	8015M/D: Die		e Organics		

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 4 of 7

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1705221 10-May-17

Client:

Animas Environmental

Project:

COPC San Juan 28-7 Unit 85

Sample ID MB-31616

SampType: MBLK

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID:

PBS

Batch ID: 31616

PQL

RunNo: 42630

Prep Date:

5/8/2017

Analysis Date: 5/9/2017

SeqNo: 1342304

Units: %Rec

Qual

Result

SPK value SPK Ref Val %REC

HighLimit %RPD **RPDLimit**

Analyte

10.00

88.6

70

LowLimit

130

Surr: DNOP 8.9

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank B

Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 5 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#:

1705221

10-May-17

Client:

Animas Environmental

Project:

COPC San Juan 28-7 Unit 85

Sample ID RB

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

LowLimit

Client ID: PBS

Batch ID: G42544

PQL

5.0

RunNo: 42544

Prep Date:

Analysis Date: 5/4/2017

%REC

Analyte

SeqNo: 1338370

Units: mg/Kg

HighLimit

RPDLimit

Qual

Gasoline Range Organics (GRO)

Result ND 1000

1000

SPK value SPK Ref Val

104

%RPD

Surr: BFB

SeqNo: 1338371

150

Sample ID 2.5UG GRO LCS

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS

Batch ID: G42544

Analysis Date: 5/4/2017

RunNo: 42544

Units: mg/Kg

%RPD

Analyte Gasoline Range Organics (GRO) Result

PQL SPK value SPK Ref Val 5.0 25.00

%REC 94.3

LowLimit 76.4

125 150

HighLimit

RPDLimit Qual

Surr: BFB

Prep Date:

1100

1000

111

54

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 6 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#:

1705221

10-May-17

Client:

Animas Environmental

Project:

COPC San Juan 28-7 Unit 85

Sample ID RB Client ID:

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

PBS

Batch ID: **B42544**

RunNo: 42544

TestCode: EPA Method 8021B: Volatiles

Prep Date: Analyte

Analysis Date: 5/4/2017

PQL

SeqNo: 1338380

Units: mg/Kg **HighLimit**

%RPD **RPDLimit**

RPDLimit

Qual

Qual

Benzene Toluene Ethylbenzene Xylenes, Total

0.025 ND ND 0.050 ND 0.050 ND 0.10

Result

1.000

123

66.6 132

Sample ID 100NG BTEX LCS

Surr: 4-Bromofluorobenzene

Client ID: LCSS

SampType: LCS Batch ID: **B42544**

RunNo: 42544

%RPD

Prep Date: Analysis Date: 5/4/2017 SeqNo: 1338381

SPK value SPK Ref Val %REC LowLimit

Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	
Benzene	0.94	0.025	1.000	0	93.6	80	120	
Toluene	0.95	0.050	1.000	0	95.3	80	120	
Ethylbenzene	0.96	0.050	1.000	0	96.4	80	120	
Xylenes, Total	3.0	0.10	3.000	0	98.3	80	120	
Surr: 4-Bromofluorobenzene	1.2		1.000		119	66.6	132	

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded H
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 7 of 7



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

Sample Log-In Check List

Client Name:	Animas Environmental	Work Order Number:	17052	221		RcptNo:	1
Dessitued Dur	Achley Celleres	E1412047 7:00:00 AM			AR		
Received By:	Ashley Gallegos	5/4/2017 7:00:00 AM			1		
Completed By:	Ashley Gallegos	5/4/2017 8:05:04 AM			SAF		
Reviewed By:	ENM	05/04/17					
Chain of Cus	todv						
	als intact on sample bottles?		Yes	*	No :	Not Present V	
	Custody complete?		Yes	~	No .	Not Present	
	e sample delivered?		Cour				
Log In							
4. Was an atte	empt made to cool the sample	\$?	Yes	V	No .	NA	
5. Were all san	nples received at a temperatu	re of >0° C to 6.0°C	Yes	v .	No : .	NA .	
6. Sample(s) in	n proper container(s)?		Yes	V	No		
7. Sufficient sa	mple volume for indicated test	(s)?	Yes	v	No ^f		
8. Are samples	(except VOA and ONG) prop	erly preserved?	Yes	v	No .		
9. Was preserv	vative added to bottles?		Yes		No 🗸	NA ·	
10.VOA vials ha	ave zero headspace?		Yes		No	No VOA Vials 🗸	
11. Were any sa	ample containers received bro	ken?	Yes	1. 1	No 🗸	# of preserved	
12. Does paper	work match bottle labels?		Yes	V	No	bottles checked for pH:	
	pancies on chain of custody)		100	1		(<2 (or >12 unless noted)
13. Are matrices	correctly identified on Chain	of Custody?	Yes	V	No :	Adjusted?	
	at analyses were requested?		Yes		No :	Observed by	
	ding times able to be met? customer for authorization.)		Yes	V	No L	Checked by:	
Special Hand	lling (if applicable)						
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Abb and a O				314.4	
16, was client n	otified of all discrepancies with	this order?	Yes	in	No	NA V.	,
	Notified:	Date		tan an an assert	and the re- thinks of the control of the control of		
By Wh	The state of the set with a first that the best and the set of the	Via:	eMa	ill .	Phone: Fax	In Person	
Regard Client I	Instructions:	OCLACIONICO (CONT.) A libritarraparte del 160 800 e la contacta describa de biblio del pri per de l'existe (Co	had SSE in the relation A	F 193 in 8 May 646800	D. C.	- K.E., g. hade \$5000, Lordd EURC SALFORDCONG a Wallands, *	!
17. Additional re							
18. Cooler Info							
Cooler No		Seal Intact Seal No S	Seal Da	te	Signed By		
1		es					

			tody Record	Turn-Around 1	Time:					н	AI	1	EN	IVI	De	ON	ME	EN1	CAI	
Client:	Anima	s Enviro	nmental Services, LLC	□ Standard	X Rush	3-DAY TAT	15		_		The In		u Rodrige				100	AT		
				Project Name:															JN	
Mailing Ad	idress:	CO4 141	Distance:	CORCE	AN JUAN 28-	7 LIMIT OF										tal.co				
-			Pinon St.	Project #:	AN JUAN 20-	7 UNIT 65	-									ie, Ni				
			gton, NM 87401	Project #.				T	el. 50	05-34	15-39			-		-345-	4107	1		
Phone #:	The same of the sa		St. 10.25 to 25 to						E			An	alys	is R	eque	est				
Email or F	ax#:	eskyles(Danimasenvironmental.com	Project Manag																
QA/QC Pad		ane man			C. Lamema	n/ E. McNally		10												
X Standa			☐ Level 4 (Full Validation))			-	8015												
Accreditat		- 01		Sampler: CL			-	1.												
□ NELAP		□ Other		On Ice:	☑ Yes	□No		VRC												î
□ EDD (1	(ype)	T		Sample Temp	erature. 4	0.5=1.0		Š												٥
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	X - 8021B	(GRO/DRO/MRO)												Air Bubbles (Y or N)
						1705221	BTEX	TPH	, _											Air B
5/3/17	8:53	SOIL	SC-1	1 - MeOH kit 1 - 4 oz.	MeOH	-001	X	Х												
5/3/17	9:07	SOIL	SC-2	1 - MeOH kit 1 - 4 oz.	MeOH	-002	X	Х										寸	+	
5/3/17	9:02	SOIL	SC-4	1 - MeOH kit 1 - 4 oz.	MeOH cool	-003	х	Х												
																			1	
							_									Ш		\dashv	+	\perp
	-						\vdash								_			\dashv	+	+
	-						\vdash			Н		_						\dashv	+	+
							\vdash		_									\dashv	+	+
							\vdash											\dashv	\top	+
Date: 5/3/17	Time:	Relinquish	ed by:	Received by:	- Waek	Date Time 5/3/17 1519	Sup	# io	3189 or: R	andy	Smi		hillip	8		Call	ul e	Zus	tims	
Daté: 5/3/,7	Time:	Relinquish	the Weller	Received by:	2 06	Date Time	Are	a: 7		isa i		er /c	dwa	ido f	Unt	ma				
		samples subm	nitted to Hall Environmental may be sut	poontracted to other a	ccredited laborator		f this p	ossibili	ty. An	y sub-c	contrac	ted d	ata wi	l be d	learly r	notated	on the	analyt	ical rep	port.