State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505

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

1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa Fe, NM 87505												
Release Notification and Corrective Action												
						<b>OPERA</b>	FOR		🔲 Initi	al Report	$\boxtimes$	Final Report
Name of Co	ompany C	onocoPhillips	s Compan	y		Contact Crystal Tafoya						
Address 34	01 East 30	<u>"St, Farmin</u>	gton, NM			Telephone No.(505) 326-9837						
	Facility Name: FC State Com SA						Facility Type: Gas Well					
Surface Ow	Surface Owner State Mineral Owner St					tate			API No	0.30045322	65	
LOCATION					OF REI	LEASE	·		<del></del>			
Unit Letter	Section 36	Township 31N	Range 9W	Feet from the <b>795</b>	North/	South Line	Feet from the 1800	East/V	West Line East	County San Juan		
							107 72874	<u> </u>				
	Latitude <u>36.84939</u> Longitude <u>107.72874</u>											
Type of Relf	Pase Proc	luced Fluids		NAJ	URE	OF REL	EASE Release Unki	nown	Volume I	Recovered	34 v	
Source of Re	elease Bel	ow Grade Ta	nk			Date and H	lour of Occurrenc	e e	Date and	Hour of Dis	covery	<u>u</u>
Was Immedi	ate Notice (	Tiven?				Unknown	Whom?		April 24,	, 2013		
in us minicul			Yes 🗌	No 🛛 Not R	equired		Whom:					
By Whom?						Date and H	lour					
Was a Water	course Read	ched?	Ves 🕅 1	Jo.		If YES, Vo	lume Impacting t	the Wate	ercourse.			· ·
If a Watanaa											<u>b 1</u>	<u></u>
N/A	uise was mi	pacied, Descr	ibe runy.								. UIV ๑	9
	DIST. 3											
Describe Cause of Problem and Remedial Action Taken.*												
Facility Re-set Activities												
Describe Ard	ea Affected	and Cleanup	Action Tak			-		,				. <u> </u>
Historical h	ydrocarbor	n impacted so	il was fou	nd during the fa	acility re	-set for the s	ubject well. The	e excava	ation was 9	024 sq ft x 3'	and 3	4 yds of soil
exceeded th	e NMOCD	approved lan	diarm and	a 34 yds of clean e. Approval to l	i soit was backfill v	s transported vas received	from Brandon P	the exca Powell o	avation site	due to the k	centrat	lons lepth to
groundwate	r and the p	resence of co	mpetent s	andstone. The s	soil samp	oling report i	is attached for re	eview.				-
I hereby cert	ify that the	information g	iven above	is true and com	plete to th	ne best of my	knowledge and u	Indersta	nd that pur	suant to NM	OCD ri	ules and
regulations a	all operators	are required t	o report ar	d/or file certain	release no	otifications a	nd perform correct arked as "Final R	ctive act	ions for rel	eases which	may er	ndanger Fliability
should their	operations h	ave failed to a	adequately	investigate and	remediate	e contaminati	on that pose a thr	eat to g	round wate	r, surface wa	iter, hu	man health
or the enviro	nment. In a	ddition, NMC	OCD accep ilations.	tance of a C-141	report d	oes not reliev	e the operator of	respons	ibility for c	compliance w	ith any	y other
	<u>, , , , , , , , , , , , , , , , , , , </u>		/				OIL CON	SERV	ATION	DIVISIC	<u>N</u>	
	Conta	R.J. Tay	bya								21	
Signature:			1			Approved by	Environmental S	pecialis	t: 🖉 🖌 🕷	H6).≮	elh	
Printed Nam	e: Crystal	Tafoya									Q	
Titley Etall		ntal Spaciali		· · · · · · · · · · · · · · · · · · ·		Approval Day	1/12/20	12	Evolution	Data:		
Field	Environme	mai speciali	<u>.</u>			nppioval Da	c. K1 117 20		Expiration	Date:		
E-mail Addr	ess: crystal.	tafoya@conod	cophillips.	com	(	Conditions of	f Approval:			Attached		
Date: 6/4/20	)13	Phone: (	505) 326-9	837		,						
* Attach Addi	tional She	ets If Necess	ary				 	TK	13162	342831		··· -
	NOV1210012001											



Animas Environmental Services, LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3084

May 17, 2013

Crystal Tafoya ConocoPhillips San Juan Business Unit Office 214-05 5525 Hwy 64 Farmington, New Mexico 87401

### RE: Final Excavation Report FC State Com #3A San Juan County, New Mexico

Dear Ms. Tafoya:

On April 24, 2012, Animas Environmental Services, LLC (AES) completed an environmental clearance of the final excavation limits at the ConocoPhillips (CoP) FC State Com #3A, located in San Juan County, New Mexico. Historical contamination was noted during a facility reset. The excavation was completed by CoP contractors while AES was on location on April 24, 2013.

#### 1.0 Site Information

#### 1.1 Location

Location - SW¼ SE¼, Section 36, T31N, R9W, San Juan County, New Mexico Well Head Latitude/Longitude - N36.84948 and W107.72953, respectively Release Location Latitude/Longitude – N36.84964 and W107.72946, respectively Land Jurisdiction – State of New Mexico Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, April 2013

#### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a Cathodic Protection Report dated February 2006 for the FC State Com #3A reported the depth to groundwater as 100 feet below ground surface (bgs). The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum Recovery Research Center online mapping tool (<u>http://ford.nmt.edu/react/project.html</u>) were accessed to aid in the identification of downgradient surface water.

Crystal Tafoya FC State Com #3A Final Excavation Report May 17, 2013 Page 2 of 5

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 100 feet bgs. An unnamed wash, which discharges to Manga Canyon, is located approximately 250 feet east of the location. Based on this information, the location was assessed a ranking score of 10 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

#### 1.3 Assessment

AES was initially contacted by Bruce Ashcroft of CoP on April 24, 2013, and on the same day, Heather Woods and Stephanie Lynn of AES collected confirmation soil samples of the excavation. Field screening activities included collection of six confirmation soil samples (SC-1 through SC-6) of the walls and base of the excavation. The area of the final excavation was approximately 924 square feet by 2.5 to 5 feet in depth. The depth of the excavation was limited by a competent sandstone layer present at about 2.5 to 5 feet bgs. Sample locations and final excavation extents are shown on Figure 3.

### 2.0 Soil Sampling

A total of six 5-point composite samples (SC-1 through SC-6) were collected during the assessment. All soil samples were field screened for volatile organic compounds (VOCs) and were also analyzed for total petroleum hydrocarbons (TPH). Two composite samples (SC-4 and SC-6) were submitted for confirmation laboratory analysis.

#### 2.1 Field Screening

#### 2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

#### 2.1.2 Total Petroleum Hydrocarbons

Field TPH samples were analyzed per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.

#### 2.2 Laboratory Analyses

The soil samples collected for laboratory analysis (SC-4 and SC-6) 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:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B; and
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B.

### 2.3 Field Screening and Laboratory Analytical Results

On April 24, 2013, field screening readings for VOCs via OVM ranged from 2.7 ppm in SC-1 up to 3,475 ppm in SC-4. Field TPH concentrations ranged from 37.7 mg/kg in SC-2 up to 3,540 mg/kg in SC-6. Results are included below in Table 1 and on Figure 3. The AES Field Screening Report is attached.

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
· NMO	CD Action Lev	el*	100	1,000
SC-1	04/24/13	1 to 2.5	2.7	161
SC-2	04/24/13	1 to 2.5	5.7	37.7
SC-3	04/24/13	1 to 5	6.7	312
SC-4	04/24/13	2.5 to 5	3,475	2,320
SC-5	04/24/13	1 to 4	. 12.5	698
SC-6	04/24/13	4	110	3,540

Table 1. Field Screening VOCs and TPH Results	
FC State Com #3A Final Excavation, April 2013	

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

Laboratory analyses for SC-4 and SC-6 were used to confirm field screening results from the excavation. Benzene concentrations were reported at less than 0.25 mg/kg in SC-4 and less than 0.050 mg/kg in SC-6. Total BTEX concentrations were reported at 11 mg/kg in SC-4 and less than 0.25 mg/kg in SC-6. TPH concentrations (as GRO/DRO) in

SC-4 and SC-6 were reported at 1,370 mg/kg and 871 mg/kg, respectively. Results are presented in Table 2 and on Figure 3. Laboratory analytical reports are attached.

Sample (D	Date Sampled	Sample Depth (ft.has)	Benzene	Total BTEX	GRO	DRO
Sumple ID NMO	CD Action Le	vel*	( <i>mg/kg</i> ) 10	( <i>mg/kg</i> ) 50	(mg/kg) 1,0	( <i>mg/kg)</i> 000
SC-4	04/24/13	2.5 to 5	<0.25	11	270	1,100

Table 2.	Laboratory	Analytical	Results ·	– Bena	zene	e, BTEX and	ТРН
	FO CHARLES	110 A 51					

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

#### 3.0 Conclusions and Recommendations

On April 24, 2013, AES conducted final assessment of an excavation of petroleum contaminated soils associated with a historical release at the FC State Com #3A. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 10. Field screening results of the excavation extents showed that VOC and TPH concentrations were below applicable NMOCD action levels for all four walls of the excavation. The base of the excavation (SC-4 and SC-6) exceeded the NMOCD action level of 100 ppm with 3,475 ppm (SC-4) and 110 ppm (SC-6). Field screening results also showed TPH concentrations above the NMOCD action level of 1,000 mg/kg TPH in SC-4 (2,320 mg/kg) and SC-6 (3,540 mg/kg). Laboratory analytical results from April 24, 2013, reported benzene and total BTEX concentrations as GRO/DRO were reported above the NMOCD action level of 1,000 mg/kg in SC-4 with 1,370 mg/kg.

Based on field screening and laboratory analytical results of the excavation of petroleum contaminated soils at the FC State Com #3A, VOC and TPH concentrations were below applicable NMOCD action levels for each of the sidewalls of the excavation. However, the base of the excavation exceeded the applicable NMOCD action level for TPH. Because of known depth to groundwater and the presence of competent sandstone at the site, Brandon Powell of NMOCD granted approval to CoP to backfill the excavation on April 25, 2013. No further work is recommended.

Crystal Tafoya FC State Com #3A Final Excavation Report May 17, 2013 Page 5 of 5

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

Sincerely,

stephanieslyn

Stephanie A. Lynn Environmental Engineer

Ulphat V Mervely

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, April 2013
Figure 3. Final Excavation Sample Locations and Results, April 2013
AES Field Screening Report 042413
Hall Laboratory Analytical Report 1304A15

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\FC State Com 3A\CoP Release and Final Excavation Report FC State Com #3A 051713.docx



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			建建管理	
COMPRE	SSOR-		•	
RELEASE				METER HOUSE
N36.84964, W107.72946			BGT	
FC STATE COM #3A WELLHEAD				
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PUMPJACK				
		42		
PRODUCT				
S S S S S S S S S S S S S S S S S S S		y FR		
			PRODUCTION	
SCALE			COLUNIANK)	
10 (1 INCH ≈ 40 FEET)				
	RIAL SOLIDO			
	DRAWN BY:	OMETRY INTERNATIONA	CORP. ONLINE, AERIAL DATE: APRIL 22	2011
HALL CRASS	C. Lameman REVISIONS BY	April 29, 2013	FIGUR	2
	C. Lameman	April 29, 2013	AERIAL SITE	MAP
Animas Enviro	D. Watson	DATE CHECKED: April 29, 2013	APRIL 201 ConocoPhill	<b>3</b>
and Services, LLC	APPROVED BY: E. McNaily	DATE APPROVED:	FC STATE COM SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> , SECTION 36, SAN III AN CONTON 36,	#3A T31N, R9W
	· · · · · · · · · · · · · · · · · · ·	April 29, 2013	N36.84948, W107.	W MÉXICO 72953





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AES Field Screening Report

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### Client: ConocoPhillips

Project Location: FC State Com #3A

Date: 4/24/2013

Matrix: Soil



Animas Environmental Services. LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3084

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	4/24/2013	14:35	North Wall	2.7	15:37	161	20.0	1	НW
SC-2	4/24/2013	14:38	West Wall	5.7	15:40	37.7	20.0	1	НW
SC-3	4/24/2013	14:41	East Wall	6.7	15:43	312	20.0	1	HW .
SC-4	4/24/2013	14:45	North Base	3,475	15:45	<sup>.</sup> 2,320	40.0	1	HW
SC-5	4/24/2013	14:48	South Wall	12.5	15:48	698	20.0	1	HW
SC-6	4/24/2013	14:52	South Base	110	15:51	3,540	40.0	1	НW

PQL Practical Quantitation Limit

Total Petroleum Hydrocarbons - USEPA 418.1

ND Not Detected at the Reporting Limit

NA Not Analyzed

DF Dilution Factor

\*Field TPH concentrations recorded may be below PQL.

Analyst: Aleathin M. Woods

## HALL ENVIRONMENTAL ANALYSIS LABORATORY

April 29, 2013

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

RE: COP FC State Com # 3A

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

OrderNo.: 1304A15

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/25/2013 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,

andige

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

# **Analytical Report**

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 1304A15 Date Reported: 4/29/2013

**CLIENT:** Animas Environmental Services

**Project:** COP FC State Com # 3A Lab ID: 1304A15-001

Collection Date: 4/24/2013 2:45:00 PM

**Client Sample ID: SC-4** 

Received Date: 4/25/2013 10:00:00 AM

Analyses	Result	RL Qual Un		Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RANG					, Analyst: GSA	
Diesel Range Organics (DRO)	1100	100		mg/Kg	10	4/25/2013 1:30:16 PM
Surr: DNOP	0	63-147 S %REC		%REC	10	4/25/2013 1:30:16 PM
EPA METHOD 8015D: GASOLINE RA					Analyst: NSB	
Gasoline Range Organics (GRO)	270	50		mg/Kg	10	4/25/2013 12:03:20 PM
Surr: BFB	387	80-120	s	%REC	10	4/25/2013 12:03:20 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.25		mg/Kg	10	4/25/2013 12:03:20 PM
Toluene	ND	0.50		mg/Kg	10	4/25/2013 12:03:20 PM
Ethylbenzene	ND	0.50		mg/Kg	10	4/25/2013 12:03:20 PM
Xylenes, Total	11	1.0		mg/Kg	10	4/25/2013 12:03:20 PM
Surr: 4-Bromofluorobenzene	117	80-120		%REC	10	4/25/2013 12:03:20 PM

Matrix: MEOH (SOIL)

Qualifiers:

\*

Value exceeds Maximum Contaminant Level.

Е Value above quantitation range

Analyte detected below quantitation limits J

Р Sample pH greater than 2

RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits S

Analytical Report Lab Order 1304A15 Date Reported: 4/29/2013

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services Client Sample 1D: SC-6 COP FC State Com # 3A **Project:** Collection Date: 4/24/2013 2:52:00 PM Lab ID: 1304A15-002 Matrix: MEOH (SOIL) Received Date: 4/25/2013 10:00:00 AM Result DF Analyses **RL** Qual Units **Date Analyzed EPA METHOD 8015D: DIESEL RANGE ORGANICS** Analyst: GSA Diesel Range Organics (DRO) 860 4/25/2013 1:51:56 PM 100 mg/Kg 10 Surr: DNOP 0 63-147 s %REC 10 4/25/2013 1:51:56 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 11 5.0 mg/Kg 1 4/25/2013 12:31:58 PM Surr: BFB 165 80-120 s %REC 4/25/2013 12:31:58 PM 1 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.050 mg/Kg 1 4/25/2013 12:31:58 PM Toluene ND 0.050 mg/Kg 1 4/25/2013 12:31:58 PM Ethylbenzene ND 0.050 mg/Kg 4/25/2013 12:31:58 PM 1 Xylenes, Total ND 0.10 mg/Kg 1 4/25/2013 12:31:58 PM Surr: 4-Bromofluorobenzene 99.3 80-120 %REC 1 4/25/2013 12:31:58 PM

Qualifiers:

\*

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	1304A15

29-Apr-13

Client:AProject:C	nimas Environmental OP FC State Com # 3	Services A							
Sample ID MB-7155	SampType	MBLK	Tes	tCode: EF	PA Method	8015D: Diese	el Range C	Drganics	
Client ID: PBS	Batch ID:	7155	F	RunNo: 10	0102				
Prep Date: 4/25/201	3 Analysis Date:	4/25/2013	S	eqNo: 2	87943	Units: mg/K	(g		
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DR	D) ND	10 <sup>-</sup>							
Surr: DNOP	10	10.00		103	63	147			
Sample ID LCS-7155	SampType	LCS	Tes	tCode: El	PA Method	8015D: Dies	el Range C	Drganics	
Client ID: LCSS	Batch ID:	7155	F	RunNo: 1	0102				
Prep Date: 4/25/201	3 Analysis Date:	4/25/2013	S	SeqNo: 2	87944	Units: mg/k	ίg		
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DR	C) 55	10 50.00	0	110	47.4	122			
Surr: DNOP	5.8	5.000		115	63	147			

#### Qualifiers:

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

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

Page 3 of 5

## **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

WO#: 1304A15

29-Apr-13

Client: Project:	Animas COP FC	Environmenta State Com #	ll Ser 3A	vices							
Sample ID	MB-7116	SampTyp	e: ME	BLK	T,est	Code: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch ID	): <b>71</b>	16	R	unNo: 1	0105				
Prep Date:	4/23/2013	Analysis Date	e: <b>4</b> /	25/2013	S	eqNo: 2	88568	Units: %RE	с		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		860		1000		85.9	80	120			
Sample ID	LCS-7116	SampTyp	e: LC	S	Tes	tCode: E	PA Method	8015D: Gasc	line Rang	e	
Client ID:	LCSS	Batch I	D: 71	16	ĥ	lunNo: 1	0105				
Prep Date:	4/23/2013	Analysis Date	e: <b>4</b> /	25/2013	S	eqNo: 2	88569	Units: %RE	с		
Analyte		Result I	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		960		1000		95.9	80	120			
Sample ID	MB-7116	SampTyp	e: ME	BLK	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e	
Sample ID Client ID:	MB-7116 PBS	SampTyp Batch II	e: ME D: R1	3LK 0105	Tes F	tCode: E RunNo: 1	PA Method 0105	8015D: Gasc	oline Rang	e	
Sample ID Client ID: Prep Date:	MB-7116 PBS 4/23/2013	SampTyp Batch II Analysis Date	e: ME D: R1 e: 4/	BLK 0105 25/2013	Tes F	tCode: E RunNo: 1 SeqNo: 2	PA Method 0105 88586	8015D: Gasc Units: mg/K	oline Rang	e	
Sample ID Client ID: Prep Date: Analyte	MB-7116 PBS 4/23/2013	SampTyp Batch II Analysis Date Result	e: ME D: R1 e: 4/ PQL	3LK 0105 25/2013 SPK value	Tes F SPK Ref Val	tCode: E RunNo: 1 SeqNo: 2 %REC	PA Method 0105 88586 LowLimit	8015D: Gasc Units: mg/K HighLimit	oline Rang (g %RPD	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang	MB-7116 PBS 4/23/2013 ge Organics (GRO)	SampTyp Batch II Analysis Date Result I ND	e: ME D: R1 e: 4/ PQL 5.0	3LK 0105 25/2013 SPK value	Tes F S SPK Ref Val	tCode: E RunNo: 1 SeqNo: 2 %REC	PA Method 0105 88586 LowLimit	8015D: Gasc Units: mg/K HighLimit	oline Rang (g %RPD	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB	MB-7116 PBS 4/23/2013 ge Organics (GRO)	SampTyp Batch II Analysis Date Result ND 860	e: ME D: R1 e: 4/ PQL 5.0	3LK 0105 25/2013 SPK value 1000	Tes F SPK Ref Val	tCode: E RunNo: 1 SeqNo: 2 %REC 85.9	PA Method 0105 88586 LowLimit 80	8015D: Gasc Units: mg/K HighLimit 120	oline Rang Kg %RPD	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID	MB-7116 PBS 4/23/2013 ge Organics (GRO) LCS-7116	SampTyp Batch II Analysis Date Result I ND 860 SampTyp	e: ME D: R1 e: 4/ PQL 5.0	3LK 0105 25/2013 SPK value 1000	Tes F SPK Ref Val	tCode: E RunNo: 1 SeqNo: 2 %REC 85.9 tCode: E	PA Method 0105 88586 LowLimit 80 PA Method	8015D: Gasc Units: mg/K HighLimit 120 8015D: Gasc	oline Rang Kg %RPD Dline Rang	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID:	MB-7116 PBS 4/23/2013 ge Organics (GRO) LCS-7116 LCSS	SampTyp Batch II Analysis Date Result ND 860 SampTyp Batch II	e: ME D: R1 e: 4/ PQL 5.0 e: LC D: R1	3LK 0105 25/2013 SPK value 1000 :S 0105	Tes F SPK Ref Val Tes F	tCode: E RunNo: 1 SeqNo: 2 %REC 85.9 tCode: E RunNo: 1	PA Method 0105 88586 LowLimit 80 PA Method 0105	8015D: Gasc Units: mg/# HighLimit 120 8015D: Gasc	Sine Rang %RPD	e RPDLimit e	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date:	MB-7116 PBS 4/23/2013 ge Organics (GRO) LCS-7116 LCSS 4/23/2013	SampTyp Batch II Analysis Date Result I ND 860 SampTyp Batch II Analysis Date	e: ME D: R1 e: 4/ PQL 5.0 De: LC D: R1 e: 4/	3LK 0105 25/2013 SPK value 1000 SS 0105 225/2013	Tes F SPK Ref Val Tes F S	tCode: E RunNo: 1 SeqNo: 2 %REC 85.9 tCode: E RunNo: 1 SeqNo: 2	PA Method 0105 :88586 LowLimit 80 PA Method 0105 :88587	8015D: Gasc Units: mg/H HighLimit 120 8015D: Gasc Units: mg/H	oline Rang %RPD oline Rang	e RPDLimit e	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte	MB-7116 PBS 4/23/2013 ge Organics (GRO) LCS-7116 LCSS 4/23/2013	SampTyp Batch II Analysis Date Result ND 860 SampTyp Batch II Analysis Date Result	e: ME D: R1 e: 4/ PQL 5.0 e: LC D: R1 e: 4/ PQL	3LK 0105 25/2013 SPK value 1000 SS 0105 25/2013 SPK value	Tes F SPK Ref Val Tes F SPK Ref Val	tCode: E RunNo: 1 SeqNo: 2 %REC 85.9 tCode: E RunNo: 1 SeqNo: 2 %REC	PA Method 0105 88586 LowLimit 80 PA Method 0105 88587 LowLimit	8015D: Gasc Units: mg/# HighLimit 120 8015D: Gasc Units: mg/# HighLimit	oline Rang %RPD oline Rang %RPD	e RPDLimit e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Gasoline Rang	MB-7116 PBS 4/23/2013 ge Organics (GRO) LCS-7116 LCSS 4/23/2013 ge Organics (GRO)	SampTyp Batch II Analysis Date Result ND 860 SampTyp Batch II Analysis Date Result 27	e: ME D: R1 e: 4/ PQL 5.0 De: LC D: R1 e: 4/ PQL 5.0	3LK 0105 25/2013 SPK value 1000 SS 0105 (25/2013 SPK value 25.00	Tes F SPK Ref Val Tes F SPK Ref Val 0	tCode: E RunNo: 1 SeqNo: 2 %REC 85.9 tCode: E RunNo: 1 SeqNo: 2 %REC 107	PA Method 0105 88586 LowLimit 80 PA Method 0105 88587 LowLimit 62.6	8015D: Gasc Units: mg/# HighLimit 120 8015D: Gasc Units: mg/# HighLimit 136	oline Rang %RPD oline Rang %RPD	e RPDLimit e RPDLimit	Qual

#### Qualifiers:

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

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

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# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	1304A15
	150 1110

29-Apr-13

Client: Project:	Animas E . COP FC	Environment State Com #	al Ser 3A	vices													
Sample ID	MB-7116	SampTy	oe: ME	BLK	Test	tCode: El	PA Method	8021B: Volat	iles		-						
Client ID:	PBS	Batch I	D: 71	16	R	RunNo: 1	0105										
Prep Date:	4/23/2013	Analysis Dat	te: 4/	25/2013	S	eqNo: 2	88597	Units: %RE	С								
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Surr: 4-Bron	nofluorobenzene	0.96		1.000		95.6	80	120									
Sample ID	LCS-7116	SampTyp	be: LC	s	Test	tCode: El	PA Method	8021B: Volat	iles								
Client ID:	LCSS	Batch I	D: 71	16	R												
Prep Date:	4/23/2013	Analysis Dat	te: <b>4</b> /	25/2013	S	eqNo: 2	88598	Units: %RE	С								
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Surr: 4-Bron	nofluorobenzene	1.1		1.000		106	80	120									
Sample ID	1304841-001AMS	SampTy	oe: MS	6	Tes	tCode: El	PA Method	8021B: Volat	iles								
Client ID:	BatchQC	Batch I	D: 71	16	R	RunNo: 1	0105										
Prep Date:	4/23/2013	Analysis Dat	te: <b>4</b> /	25/2013	S	SeqNo: 2	88625	Units: %RE	с								
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Surr: 4-Bron	nofluorobenzene	1.0		0.9515		106	80	120									
Sample ID	1304841-001AMS	D SampTy	pe: MS	5D	Tes	tCode: E	PA Method	8021B: Volat	iles								
Client ID:	BatchQC	Batch I	D: 71	16	R	RunNo: 1	0105										
Prep Date:	4/23/2013	Analysis Dat	te: 4/	25/2013	S	SeqNo: 2	88626	Units: %RE	с								
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Surr: 4-Bron	nofluorobenzene	1.0		0.9615		105	80	120	0	0							
Sample ID	MB-7116	SampTy	oe: ME	BLK	Test	tCode: El	PA Method	8021B: Volat	iles	RPD       RPDLimit       Qual         RPD       RPDLimit       Qual							
Client ID:	PBS	Batch I	D: 71	16	R	RunNo: 1	0105										
Prep Date:	4/23/2013	Analysis Dat	te: 4/	25/2013	s	eqNo: 2	88653	Units: %RE	с								
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Surr: 4-Bron	nofluorobenzene	0.96		1.000		95.6	80	120									
Sample ID	LCS-7116	SampTy	be: LC	s	Tes	tCode: El	PA Method	8021B: Volat	iles								
Client ID:	LCSS	Batch ID: 7116				RunNo: 10105											
Prep Date:	4/23/2013	Analysis Date: 4/25/2013			S	eqNo: 2	88654	Units: %RE	C ·								
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Surr: 4-Bron	nofluorobenzene	1.1		1.000		106	80	120									

#### Qualifiers:

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

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

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S Spike Recovery outside accepted recovery limits

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HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Analysis Laborator) 4901 Hawkins NE Albuguergue, NM 87105 TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.com					Sample Log-In Check List								
Client Name: Animas Environmental V	Vork Order Number: 1	304A	15			RcptNo: 1								
Received by/date: AC OL	125/13	<u> </u>												
Logged By: Lindsay Mangin 4/2	5/2013 10:00:00 AM			And in the second se										
Completed By: Lindsay Mangin 4/2	5/2013 10:12:33 AM			( July H	ليهم									
Reviewed By: TO 04	1/75/2013	-			-									
Chain of Custody														
1. Custody seals intact on sample bottles?	•	Yes		No		Not Present 🗹								
2. Is Chain of Custody complete?	Yes		No		Not Present									
3. How was the sample delivered?		<u>Couri</u>	er											
Log In														
4. Was an attempt made to cool the samples?		Yes		No		NA 🗌								
5. Were all samples received at a temperature of	>0° C to 6.0°C	Yes		No										
6. Sample(s) in proper container(s)?	,	Yes		No										
7. Sufficient sample volume for indicated test(s)?		Yes		No										
8. Are samples (except VOA and ONG) properly pro	reserved?	Yes		No										
9. Was preservative added to bottles?		Yes		No		NA 🗆								
10.VOA vials have zero headspace?	•	Yes		No		No VOA Vials 🗹								
11. Were any sample containers received broken?		Yes		No		# of preserved	•							
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes		No		bottles checked for pH: (<2 or	>12 unless noted)							
13. Are matrices correctly identified on Chaln of Cus	stody?	Yes		No		Adjusted?								
14, Is it clear what analyses were requested?		Yes		No										
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		<b>No</b>		Checked by:								
Special Handling (if applicable)														
16. Was client notified of all discrepancies with this	order?	Yes		No		NA 🗹								
Person Notified: By Whom: Regarding:	Date: Via:	] eMa	ail 📋	Phone 🗌	Fax									
Client Instructions:		~				Ale Chevrola de La Calabana (C.C.) (1996) (C.C.) (2007) Ale Chevrola de La Calabana (C.C.) (1996) (C.C.) (2007) Ale Calabana (C.C.) (2007) (2007) Ale Calabana (C.C.) (2007) (2007) (2007) (2007) (2007) Ale Calabana (C.C.) (2007								
17. Additional remarks:														
18. <u>Cooler Information</u> Cooler No. Temp °C Condition Seal 1 1.3 Good Yes	Intact Seal No S	eal D	ate	Signed	Βγ									

Client: Animas Environmental Services			Turn-Around Time: Standard Ø Rush <u>Same Day</u> Project Name: Cop FC State Com # 3A Project #:						i A	-ia Imi	LL Al	E	NV Sta	/IF 5 6	20 A 1	N	ME	NT	'AL ND'	
Mailing Address: <u>624 E. Comanche</u>							4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107													
																			Phone #	t: 505
email or Fax#:			Project Manager:				<u>S</u>	(iei)					(*)		و شيرور ا	ζ <u>, 1</u> , .				
QA/QC Package:							S OL	Die					S S	B's						
ty∕Stan	dard		Level 4 (Full Validation)	D. Wats	ion		8	U S S	3as/				-	Q	50					
			Sampler: HW15L				TPH	15B ((	8.1)	4.1)	Ŧ		3, NO2	/ 8082		()				
	(Type)			Sample remperature				ц щ	80	d 41	d 50	P P	als	ĝ	des		-QA			
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Typ <del>e</del>	1202 ALS	BTEX +9	BTEX + MTE	TPH Method	TPH (Metho	EDB (Metho	8310 (PNA o	RCRA 8 Met	Anions (F,CI	8081 Pestici	8260B (VOA	8270 (Semi-\			
4/21/12	1445	50%1	5°C-4	MOH Kits	MOH / Non	-001	X		X			T								1
4/21/13	1452	5021	50-6	MeOU Kit	MeOH Non	-002	X		X											
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Date:	Time:	Relinguist	led by:	Received by:		Date Time	Rer	l nark:	<u> </u>	<u> </u>		 - مو د	<u>ן</u> מאס	 						
4/24/13	17.42	Hon	the M. Warn	Christich Joele, Wester 1742				WO. 10336758												
4 Pate!	Pate! Time: Relinquished by:			Received by:	64	Data Time	Activity: C200 Supervise: Sheldon Montaya Anoss User 10: BENALE													

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If necessary, samples submitted to Hall Environmental may be subcontracted to other active diaboratories. This serves as notice of this possibility. Any sub-contracted data will be dearly not active diaboratories and the serves as notice of this possibility.