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State of New Mexico Energy Minerals and Natural Resources

1220 Rio Brazos Road, Aztec, NM 8/410 <u>District IV</u> 1220	South	vation Divi St. Francis , NM 8750	s Dr.	Sub	omit 1 Copy ac	to appropria cordance wi	te Dist th 19.1	trict Office to 5.29 NMAC.
Release Notific	cation	and Co	rrective	Action	1			<u> </u>
		OPERAT	OR		🗌 Initia	al Report	\boxtimes	Final Report
Name of Company Burlington Resources Oil & Gas Company		Contact Cry						
Address 3401 East 30 th St, Farmington, NM		Felephone N						
Facility Name: Farmington Com 100		Facility Type						
Surface Owner State Mineral C	Wher St	tate (OG-16	49-1)		API No	.30045345'	74	
		OF REL		······				
Unit LetterSectionTownshipRangeFeet from theL3631N13W2245		South Line South	Feet from th 1040		West Line West	County San Juan		
Latitude <u>36</u> .	. <u>855203</u>	Longitude	108.16071	0				
		OF RELE						
Type of Release Produced Fluids		Volume of I		nknown	Volume F	Recovered	Non	e
Source of Release Below Grade Tank		Date and Ho Unknown	our of Occurr	rence		Hour of Disc	covery	
Was Immediate Notice Given?		If YES, To	Whom?			er 18, 2 <u>012</u>		
Yes No X Not Re	equired				R(SVD JAN 2	25 '1	с <u>т</u> е 4_Р
By Whom?		Date and Ho				<u>) IL CONS</u>	<u>DIU</u>	u
Was a Watercourse Reached?		If YES, Vol	ume Impacti	ng the Wat	ercourse.	DIST.	3	
If a Watercourse was Impacted, Describe Fully.*								
Describe Cause of Problem and Remedial Action Taken.* Below Grade Tank Closure Activities								
Describe Area Affected and Cleanup Action Taken.* The regulatory standard for closure at this site was determine analytical results for TPH, BTEX and Chlorides were below th Leaks, Spills and Release; therefore no further action is require	he regula red. The	atory standar final report i	ds set forth is attached f	in the NM or review.	OCD Guid	lelines for R	emedi	ation of
I hereby certify that the information given above is true and comp regulations all operators are required to report and/or file certain r public health or the environment. The acceptance of a C-141 reports should their operations have failed to adequately investigate and r or the environment. In addition, NMOCD acceptance of a C-141 federal, state, or local laws and/or regulations.	elease no ort by the emediate	otifications and NMOCD mai contaminatio	d perform con rked as "Fina n that pose a	rrective act al Report" of threat to g	ions for rele loes not reli round water	eases which eve the oper , surface wa	may en ator of ter, hui	ndanger Tliability man health
			OIL CC	NSERV	ATION	DIVISIO	<u>N</u>	
Signature:	A	Approved by E	Environmenta	al Specialis	t: Jovie	AD	Kel	ly-
Printed Name: Crystal Tafoya					V			V
Title: Field Environmental Specialist		Approval Date			Expiration			
E-mail Address: crystal.tafoya@conocophillips.com	c	Conditions of A	Approval: C	-144 CI	osure	Attached	П	
Date: 1/24/2013 Phone: (505) 326-9837		Permit ,	reded -	Rec BG	TClosus	2	<u>ц</u>	,
Attach Additional Sheets If Necessary		Conditions of <i>D</i>	nJ	7/13	0295	3917		



Animas Environmental Services, LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3274

December 12, 2012

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

RE: Below Grade Tank Closure Report Farmington Com #100 San Juan County, New Mexico

Dear Ms. Tafoya:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) Farmington Com #100, located in San Juan County, New Mexico. Tank removal had been completed by CoP contractors prior to AES' arrival at the location.

1.0 Site Information

1.1 Location

Site Name – Farmington Com #100 Legal Description – NW¼ SW¼, Section 36, T31N, R13W, San Juan County, New Mexico Well Latitude/Longitude – N36.85523 and W108.16136, respectively BGT Latitude/Longitude – N36.85511 and W108.16109, respectively Land Jurisdiction – State of New Mexico Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, September 2012

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a C-144 form dated May 1991 for the Farmington Com #100 reported the depth to groundwater as greater than 100 feet below ground surface (bgs). The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum Recovery

Crystal Tafoya Farmington Com #100 BGT Closure Report December 12, 2012 Page 2 of 5

Research Center online mapping tool (<u>http://ford.nmt.edu/react/project.html</u>) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet bgs. Several small drainages are located approximately 240 feet north of the location. Based on this information, the location was assessed a ranking score of 10.

1.3 BGT Closure Assessment

AES was initially contacted by Bruce Yazzie, CoP representative, on September 18, 2012, and on the same day, Heather Woods and Zachary Trujillo of AES mobilized to the location. AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample.

2.0 Soil Sampling

On September 18, 2012, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Soil sample SC-1 was field screened for VOCs and chloride and was submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

2.1 Field Screening

2.1.1 Volatile Organic Compounds

A portion of each sample was utilized for field screening of VOC vapors with a photoionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

2.1.2 Total Petroleum Hydrocarbons

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

Crystal Tafoya Farmington Com #100 BGT Closure Report December 12, 2012 Page 3 of 5

2.1.3 Chlorides

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

2.2 Laboratory Analyses

The composite soil sample SC-1 collected for laboratory analysis was placed into a new, clean, laboratory-supplied container, which was then labeled, placed on ice, and logged onto a sample chain of custody record. The sample was maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil sample SC-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B;
- Chloride per USEPA Method 300.0.

2.3 Field and Laboratory Analytical Results

Field screening for VOCs via OVM ranged from 2.5 ppm in S-1 up to 4.0 ppm in S-4 and S-5. Field TPH concentrations ranged from 39.8 mg/kg in S-5 up to 62.7 mg/kg in S-1. The field chloride concentration in SC-1 was 40 mg/kg. Field screening results are summarized in Table 1 and presented on Figure 2. The AES Field Screening Report is attached.

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action L	evel (NMAC 19.	.15.17.13E)		100	250
S-1	9/18/12	0.5	2.5	62.7	NA
S-2	9/18/12	0.5	2.9	49.2	NA
S-3	9/18/12	0.5	3.3	57.3	NA
S-4	9/18/12	0.5	4.0	54.6	NA
S-5	9/18/12	0.5	4.0	39.8	NA
SC-1	9/18/12	0.5	3.0	NA	40

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results Farmington Com #100 BGT Closure, September 2012

NA - not analyzed

Crystal Tafoya Farmington Com #100 BGT Closure Report December 12, 2012 Page 4 of 5

Laboratory analytical results showed that the benzene and total BTEX concentrations in SC-1 were less than 0.050 mg/kg and less than 0.25 mg/kg, respectively. The laboratory chloride concentration was 70 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. Laboratory analytical reports are attached.

Fa	Farmington Com #100 BGT Closure, September 2012										
Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	Chlorides (mg/kg)						
NMOCD Action	Level (NMAC 19.15	5.17.13E)	0.2	50	250						
SC-1	9/18/12	0.5	<0.050	<0.25	70						

Table 2 Soil Laboratory Analytical Results

Conclusions and Recommendations 3.0

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Field TPH concentrations were below the NMOCD action level of 100 mg/kg in all of the samples, with the highest concentration reported in S-1 with 62.7 mg/kg. Chloride concentrations in SC-1 were also below the NMOCD action level of 250 mg/kg. Based on field screening and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended.

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

Sincerely,

Fleather M. Woods

Heather M. Woods Staff Geologist

Upotent & Mindly

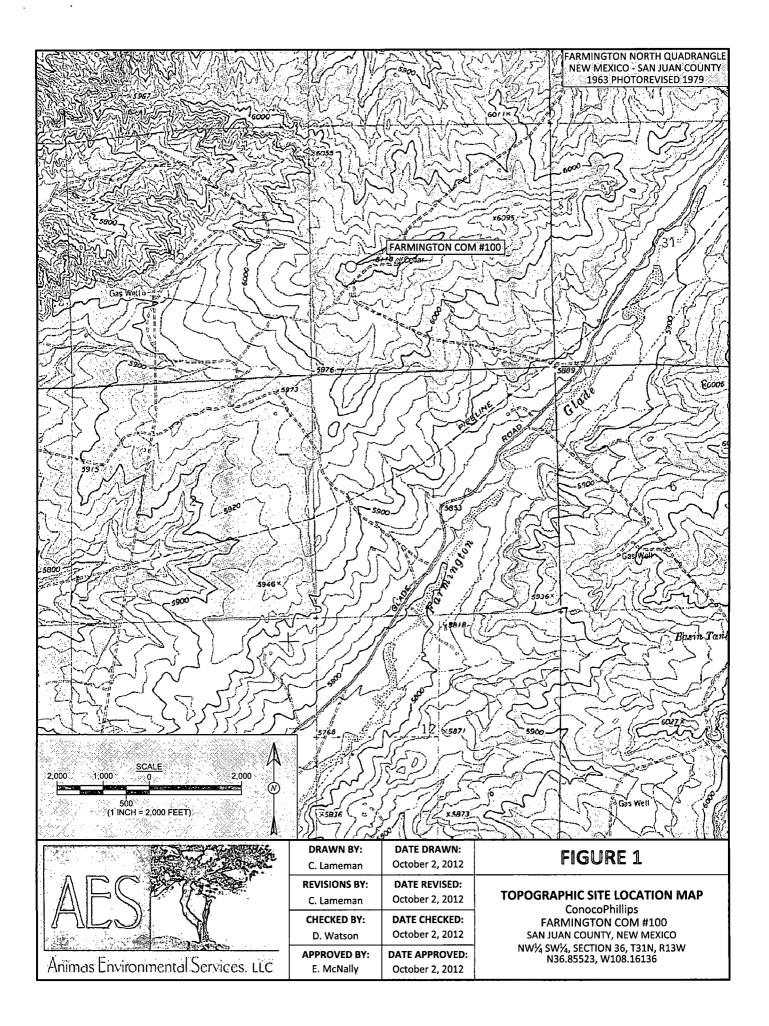
Elizabeth McNally, P.E.

Crystal Tafoya Farmington Com #100 BGT Closure Report December 12, 2012 Page 5 of 5

Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, September 2012 AES Field Screening Report 091812 Hall Analytical Report 1209778

C:\Dropbox\December 2012\ConocoPhillips\Farmington Com #100\Farmington Com #100 BGT Closure Report 121212.docx



LEGEND SAMPLE LOCATIONS

C

<u></u>		- <u> </u>	g Results	contractore
Sample ID	Date	OVM- PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCL	ACTION LEVEL		100	250
S-1 🐼	9/18/12	≈2.5×	62.7	NA
S-2	9/18/12	2.9	49.2	NA
S-3	9/18/12	3.3	Ø57.3	NA
∭S-4∭	9/18/12	4.0	⊘54.6⊗	NA NA
⊗S-5⊗⊗	9/18/12	4.0	×39.8×	NA
SC-1	9/18/12	3.0	NA	40

THROUGH S-5. NA - NO

	The c	177 - Ca	9. g I	8, ¹		<u>।</u> জা	11.2 15
	L	aboratory	Analytica	l Resúlts			
Comple ID	В	enzene	Total BTEX	TPH - GRO	TPH - DRO	Chlorides	
Sample ID	Date (i	ng/kg)		(mg/kg)	0.000	(mg/kg)	
NMOCD ACT	ION LEVEL	0.2	50	10	0	250	
SC-1	9/18/12	0.050	<0.25	NA	NA	70	
SAMPLEWAS	ANALYZED PEI	R EPA MET	HOD 8021	B AND 300	0. NA - NO	ANALYZED	

ARMINGTON COM #100 MONUMENT



10 11	a straight the	17 L	30 A.S.	1000		Sec. de	Same de	2.24	1.7
		•	<u>sc/</u>	ALE				/	A
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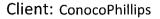
Animas Environmental Services, LLC

L SOURCE: © 2012 PIC	IOMETRY INTERNATIONAL	CORP. ONLINE, AERIAL TAKEN: APRIL 13, 2011
DRAWN BY: C. Lameman	DATE DRAWN: September 19, 2012	FIGURE 2
REVISIONS BY: C. Lameman	DATE REVISED: September 19, 2012	AERIAL SITE MAP BELOW GRADE TANK CLC SEPTEMBER 2012
CHECKED BY: D. Watson	DATE CHECKED: September 19, 2012	ConocoPhillips FARMINGTON COM #1
APPROVED BY: E. McNally	DATE APPROVED: September 19, 2012	SAN JUAN COUNTY, NEW ME NW¼ SW¼, SECTION 36, T31N N36.85523, W108.16136

FIGURE 2

AERIAL SITE MAP BELOW GRADE TANK CLOSURE SEPTEMBER 2012 ConocoPhillips FARMINGTON COM #100 SAN JUAN COUNTY, NEW MEXICO NW¼ SW¼, SECTION 36, T31N, R13W N36.85523, W108.16136

AES Field Screening Report



Project Location: Farmington Com #100

Date: 9/18/2012

Matrix: Soil



Animas Environmental Services, LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3274

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	9/18/2012	11:00	North	2.5	NA	11:09	62.7	20.0	1	нмw
S-2	9/18/2012	10:04	South	2.9	NA	10:48	49.2	20.0	1	нмw
S-3	9/18/2012	10:06	East	3.3	NA	10:50	57.3	20.0	1	нмм
S-4	9/18/2012	10:08	West	4.0	NA	10:55	54.6	20.0	1	нмw
S-5	9/18/2012	10:10	Center	4.0	NA	10:53	39.8	20.0	1	HMW
SC-1	9/18/2012	10:13	Composite	3.0	40		Not	Analyzed for Ti	PH.	

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

NA Not Analyzed

DF Dilution Factor

*Field TPH concentrations recorded may be below PQL.

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Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Aleather M. Woods Analyst:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

October 02, 2012 Debbie Watson Animas Environmental Services 624 East Comanche Farmington, NM 87401 TEL: (505) 486-4071 FAX

RE: COP Farmington COM #100

OrderNo.: 1209778

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/19/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

andif

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 1209778 Date Reported: 10/2/2012

CLIENT: Animas Environmental Service	S		Client Sample	ID: SC-1	
Project: COP Farmington COM #100			Collection D	ate: 9/18/2	012 10:18:00 AM
Lab ID: 1209778-001	Matrix:	SOIL	Received D	ate: 9/19/2	012 10:13:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	9/19/2012 12:29:45 PM
Toluene	ND	0.050	mg/Kg	1	9/19/2012 12:29:45 PM
Ethylbenzene	ND	0.050	mg/Kg	1	9/19/2012 12:29:45 PM
Xylenes, Total	ND	0.10	mg/Kg	1	9/19/2012 12:29:45 PM
Surr: 4-Bromofluorobenzene	101	80-120	%REC	1	9/19/2012 12:29:45 PM
EPA METHOD 300.0: ANIONS					Analyst: SRM
Chloride	70	30	mg/Kg	20	9/19/2012 11:05:25 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- Analyte detected below quantitation limits J
- 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

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WO#: 1209778

02-Oct-12

Client: Project:		Invironmer nington CO									
Sample ID	1209695-005AMS	SampT	ype: MS	3	TestCode: EPA Method 300.0: Anions						
Client ID:	BatchQC	14	RunNo: 5639								
Prep Date:	9/19/2012	Analysis D	ate: 9 /	19/2012	SeqNo: 161491			Units: mg/Kg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		16	7.5	15.00	2.811	87.0	64.4	117			
Sample ID	1209695-005AMSI) SampT	ype: MS	SD	Tes	tCode: El	PA Method	300.0: Anion	S		
Client ID:	BatchQC	Batch	ID: 38	14	F	lunNo: 5	639				
Prep Date:	9/19/2012	Analysis D	ate: 9 /	19/2012	S	eqNo: 1	61492	Units: mg/H	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		16	7.5	15.00	2.811	87.7	64.4	117	0.716	20	

Qualifiers:

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

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

QC SUMMARY REPORT

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Client: Project:		nvironmental nington COM								
Sample ID	MB-3808	SampType	MBLK	Tes	tCode: E	PA Method	8015B: Gaso	line Rang	e	
Client ID:	PBS	Batch ID:	3808	F	RunNo: 5	622				
Prep Date:	9/18/2012	Analysis Date:	9/19/2012	S	SeqNo: 1	61690	Units: %RE	с		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1000	1000		101	84	116			
Sample ID	LCS-3808	SampType	LCS	Tes	tCode: E	PA Method	8015B: Gaso	line Rang	e	
Client ID:	LCSS	Batch ID:	3808	F	RunNo: 5	622				
Prep Date:	9/18/2012	Analysis Date:	9/19/2012	S	SeqNo: 1	61697	Units: %RE	С		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1000	1000		105	84	116			/
Sample ID	1209534-001AMS	SampType	MS	Tes	tCode: E	PA Method	8015B: Gaso	line Rang	e	
Client ID:	BatchQC	Batch ID:	3808	F	RunNo: 5	622				
Prep Date:	9/18/2012	Analysis Date:	9/19/2012	ę	SeqNo: 1	61742	Units: %RE	с		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1000	977.5		105	84	116			
Sample ID	1209534-001AMS) SampType	MSD	Tes	tCode: E	PA Method	8015B: Gaso	line Rang	e	
Client ID:	BatchQC	Batch ID:	3808	F	RunNo: 5	622				
Prep Date:	9/18/2012	Analysis Date:	9/19/2012	5	SeqNo: 1	61743	Units: %RE	с		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	· · ·	1000	976.6		104	84	116	0	0	

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:

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

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

02-Oct-12

Animas Environmental Services

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Client:

Project:	COP Farm	nington C	OM #10	00			-				
Sample ID	MB-3808	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID:	PBS	Batch	D: 38	08	R	lunNo: 5	622				
Prep Date:	9/18/2012	Analysis D	ate: 9/	19/2012	s	eqNo: 10	61755	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.050								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	ofluorobenzene	1.0		1.000		104	80	120			
Sample ID	LCS-3808	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	CSS Batch ID: 3808				RunNo: 50	622				
Prep Date:	9/18/2012	Analysis D	nalysis Date: 9/19/2012			eqNo: 1	61756	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.97	0.050	1.000	0	96.9	76.3	117			
Toluene		0.98	0.050	1.000	0	97.9	80	120			
Ethylbenzene		1.0	0.050	1.000	0	99.7	77	116			
Xylenes, Total		3.0	0.10	3.000	0	101	76.7	117			
Surr: 4-Brom	nofluorobenzene	1.1		1.000		109	80	120			
Sample ID	1209660-001AMS	SampT	ype: MS	3	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Sample ID Client ID:	1209660-001AMS BatchQC	•	ype: MS			tCode: El		8021B: Volat	tiles		
		•	n ID: 38	08	F		622	8021B: Volat			
Client ID:	BatchQC	Batch	n ID: 38	08 19/2012	F	RunNo: 5	622			RPDLimit	Qual
Client ID: Prep Date:	BatchQC	Batch Analysis D	n ID: 38 Date: 9/	08 19/2012	F	RunNo: 50 SeqNo: 10	622 61767 LowLimit 67.2	Units: mg/k	ζg	RPDLimit	Qual
Client ID: Prep Date: Analyte	BatchQC	Batch Analysis D Result 0.98 1.0	Date: 9/ PQL 0.049 0.049	08 19/2012 SPK value	F S SPK Ref Val	RunNo: 5 SeqNo: 10 %REC	622 61767 LowLimit	Units: mg/k HighLimit	ζg	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene	BatchQC	Batch Analysis D Result 0.98 1.0 1.0	Date: 9/ PQL 0.049 0.049 0.049	08 19/2012 SPK value 0.9766 0.9766 0.9766	F S SPK Ref Val 0 0 0	RunNo: 50 SeqNo: 10 <u>%REC</u> 101	622 61767 LowLimit 67.2 62.1 67.9	Units: mg/K HighLimit 113 116 127	ζg	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	BatchQC 9/18/2012	Batch Analysis D Result 0.98 1.0 1.0 3.1	Date: 9/ PQL 0.049 0.049	08 19/2012 SPK value 0.9766 0.9766 0.9766 2.930	F S SPK Ref Val 0 0	RunNo: 50 SeqNo: 10 %REC 101 104 107 107	622 61767 LowLimit 67.2 62.1 67.9 60.6	Units: mg/K HighLimit 113 116 127 134	ζg	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	BatchQC	Batch Analysis D Result 0.98 1.0 1.0	Date: 9/ PQL 0.049 0.049 0.049	08 19/2012 SPK value 0.9766 0.9766 0.9766	F S SPK Ref Val 0 0 0	RunNo: 50 SeqNo: 10 <u>%REC</u> 101 104 107	622 61767 LowLimit 67.2 62.1 67.9	Units: mg/K HighLimit 113 116 127	ζg	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	BatchQC 9/18/2012	Batch Analysis D Result 0.98 1.0 1.0 3.1 1.1	Date: 9/ PQL 0.049 0.049 0.049	08 19/2012 SPK value 0.9766 0.9766 2.930 0.9766	F SPK Ref Val 0 0 0 0	RunNo: 5 SeqNo: 10 <u>%REC</u> 101 104 107 107 109	622 61767 LowLimit 67.2 62.1 67.9 60.6 80	Units: mg/K HighLimit 113 116 127 134	Sg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	BatchQC 9/18/2012 nofluorobenzene	Batch Analysis D Result 0.98 1.0 1.0 3.1 1.1 0 SampT	PQL 0.049 0.049 0.049 0.049	08 19/2012 SPK value 0.9766 0.9766 2.930 0.9766 2.930	F SPK Ref Val 0 0 0 0 Tes	RunNo: 5 SeqNo: 10 <u>%REC</u> 101 104 107 107 109	622 61767 LowLimit 67.2 62.1 67.9 60.6 80 PA Method	Units: mg/K HighLimit 113 116 127 134 120	Sg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID:	BatchQC 9/18/2012 nofluorobenzene 1209660-001AMSE	Batch Analysis D Result 0.98 1.0 1.0 3.1 1.1 0 SampT	PQL 0.049 0.049 0.049 0.049 0.049 0.049 0.098	08 19/2012 SPK value 0.9766 0.9766 2.930 0.9766 2.930 0.9766	F SPK Ref Val 0 0 0 0 0 Tes F	RunNo: 5 SeqNo: 1 %REC 101 104 107 107 107 109	622 61767 LowLimit 67.2 62.1 67.9 60.6 80 PA Method 622	Units: mg/K HighLimit 113 116 127 134 120	Sg %RPD tiles	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID:	BatchQC 9/18/2012 nofluorobenzene 1209660-001AMSE BatchQC	Batch Analysis D Result 0.98 1.0 1.0 3.1 1.1 0 SampT Batch Analysis D Result	PQL 0.049 0.049 0.049 0.049 0.049 0.098 0.098 0.098	08 19/2012 SPK value 0.9766 0.9766 2.930 0.9766 2.930 0.9766 50 08 19/2012 SPK value	F SPK Ref Val 0 0 0 0 Tes F SPK Ref Val	RunNo: 5 SeqNo: 10 <u>%REC</u> 101 104 107 107 109 tCode: El RunNo: 5 SeqNo: 10 %REC	622 61767 LowLimit 67.2 62.1 67.9 60.6 80 PA Method 622 61768 LowLimit	Units: mg/k HighLimit 113 116 127 134 120 8021B: Vola Units: mg/k HighLimit	Kg %RPD tiles Kg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte Benzene	BatchQC 9/18/2012 nofluorobenzene 1209660-001AMSE BatchQC	Batch Analysis D Result 0.98 1.0 1.0 3.1 1.1 0 SampT Batch Analysis D Result 0.92	PQL 0.049 0.049 0.049 0.049 0.049 0.098 0.098 Vype: MS vype: MS vate: 9/ PQL 0.049	08 19/2012 SPK value 0.9766 0.9766 2.930 0.9766 2.930 0.9766 5D 08 19/2012 SPK value 0.9766	F SPK Ref Val 0 0 0 0 Tes F SPK Ref Val 0	RunNo: 5 SeqNo: 10 <u>%REC</u> 101 104 107 107 107 109 tCode: El RunNo: 5 SeqNo: 1 <u>%REC</u> 93.9	622 61767 LowLimit 67.2 62.1 67.9 60.6 80 PA Method 622 61768 LowLimit 67.2	Units: mg/k HighLimit 113 116 127 134 120 8021B: Vola Units: mg/k HighLimit 113	(g %RPD tiles (g %RPD 6.79	RPDLimit 14.3	
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte Benzene Toluene	BatchQC 9/18/2012 nofluorobenzene 1209660-001AMSE BatchQC	Batch Analysis D Result 0.98 1.0 1.0 3.1 1.1 0 SampT Batch Analysis D Result 0.92 0.93	ID: 38 hate: 9/ PQL 0.049 0.049 0.049 0.049 0.049 0.098	08 19/2012 SPK value 0.9766 0.9766 2.930 0.9766 5D 08 19/2012 SPK value 0.9766 0.9766 0.9766	F SPK Ref Val 0 0 0 0 0 Tes F SPK Ref Val 0 0	RunNo: 5 SeqNo: 10 <u>%REC</u> 101 104 107 107 109 tCode: El RunNo: 5 SeqNo: 1 <u>%REC</u> 93.9 95.1	622 61767 LowLimit 67.2 62.1 67.9 60.6 80 PA Method 622 61768 LowLimit 67.2 62.1	Units: mg/k HighLimit 113 116 127 134 120 8021B: Volat Units: mg/k HighLimit 113 116	5g %RPD tiles 5g %RPD 6.79 8.86	RPDLimit 14.3 15.9	
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene	BatchQC 9/18/2012 nofluorobenzene 1209660-001AMSE BatchQC	Batch Analysis D Result 0.98 1.0 1.0 3.1 1.1 0 SampT Batch Analysis D Result 0.92 0.93 0.97	ID: 38 hate: 9/ PQL 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.098	08 19/2012 SPK value 0.9766 0.9766 2.930 0.9766 5D 08 19/2012 SPK value 0.9766 0.9766 0.9766 0.9766	F SPK Ref Val 0 0 0 0 0 Tes F SPK Ref Val 0 0 0 0	RunNo: 5 SeqNo: 10 %REC 101 104 107 107 107 109 tCode: El RunNo: 5 SeqNo: 1 %REC 93.9 95.1 99.4	622 61767 LowLimit 67.2 62.1 67.9 60.6 80 PA Method 622 61768 LowLimit 67.2 62.1 67.9	Units: mg/k HighLimit 113 116 127 134 120 8021B: Volat Units: mg/k HighLimit 113 116 127	5 %RPD tiles 5 %RPD 6.79 8.86 7.24	RPDLimit 14.3 15.9 14.4	
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	BatchQC 9/18/2012 nofluorobenzene 1209660-001AMSE BatchQC 9/18/2012	Batch Analysis D Result 0.98 1.0 1.0 3.1 1.1 0 SampT Batch Analysis D Result 0.92 0.93 0.97 2.9	ID: 38 hate: 9/ PQL 0.049 0.049 0.049 0.049 0.049 0.098	08 19/2012 SPK value 0.9766 0.9766 2.930 0.9766 5D 08 19/2012 SPK value 0.9766 0.9766 0.9766 0.9766 0.9766 2.930	F SPK Ref Val 0 0 0 0 0 Tes F SPK Ref Val 0 0	RunNo: 5 SeqNo: 10 %REC 101 104 107 109 tCode: El RunNo: 5 SeqNo: 1 %REC 93.9 95.1 99.4 98.7	622 61767 62.1 67.9 60.6 80 PA Method 622 61768 LowLimit 67.2 62.1 67.9 60.6	Units: mg/k HighLimit 113 116 127 134 120 8021B: Volat 8021B: Volat Units: mg/k HighLimit 113 116 127 134	59 %RPD tiles 59 %RPD 6.79 8.86 7.24 8.46	RPDLimit 14.3 15.9 14.4 12.6	
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	BatchQC 9/18/2012 nofluorobenzene 1209660-001AMSE BatchQC	Batch Analysis D Result 0.98 1.0 1.0 3.1 1.1 0 SampT Batch Analysis D Result 0.92 0.93 0.97	ID: 38 hate: 9/ PQL 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.098	08 19/2012 SPK value 0.9766 0.9766 2.930 0.9766 5D 08 19/2012 SPK value 0.9766 0.9766 0.9766 0.9766	F SPK Ref Val 0 0 0 0 0 Tes F SPK Ref Val 0 0 0 0	RunNo: 5 SeqNo: 10 %REC 101 104 107 107 107 109 tCode: El RunNo: 5 SeqNo: 1 %REC 93.9 95.1 99.4	622 61767 LowLimit 67.2 62.1 67.9 60.6 80 PA Method 622 61768 LowLimit 67.2 62.1 67.9	Units: mg/k HighLimit 113 116 127 134 120 8021B: Volat Units: mg/k HighLimit 113 116 127	5 %RPD tiles 5 %RPD 6.79 8.86 7.24	RPDLimit 14.3 15.9 14.4	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

Е Value above quantitation range

- J Analyte detected below quantitation limits
- Р Sample pH greater than 2

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

ND

Page 4 of 6

02-Oct-12

1209778

WO#:

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Client: Project:		Environmental Ser mington COM #10								
Sample ID	1209794-040AMS	SampType: MS		Tes	PA Method	8021B: Volat	iles			
Client ID:	BatchQC	Batch ID: 38	50	F	tunNo: 5	692				
Prep Date:	9/20/2012	Analysis Date: 9/	22/2012	S	eqNo: 1	63556	Units: %RE	С		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Surr: 4-Bromofluorobenzene		10	9.852		101	80	120			
Sample ID	1209794-040AMSE) SampTyp	e: MSD	Test	8021B: Vola	tiles				
Client ID:	Client ID: BatchQC Batch ID: 3860 RunNo: 5692									
Prep Date: 9/20/2012		Analysis Dat	e: 9/22/2012	S	eqNo: 1	63557	Units: % RE	C		
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene		9.9	9.872		99.9	80	120	0	0	

Qualifiers:

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

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

WO#: 1209778

02-Oct-12

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	Environmenta									
Project: COP Far	nington CON	A #100							_	
Sample ID mb-3808	SampType	e: MBLK	Test	Code: EF	PA Method	8260B: VOLA	TILES			
Client ID: PBS	Batch ID	D: 3808	R	unNo: 5	671					
Prep Date: 9/18/2012	Analysis Date	e: 9/20/2012	S	eqNo: 1	62464	Units: %RE	С			
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 1,2-Dichloroethane-d4	0.39	0.5000		78.4	70	130				
Surr: 4-Bromofluorobenzene	0.42	0.5000		83.2	70	130				
Surr: Dibromofluoromethane	0.46	0.5000		92.1	70	130				
Surr: Toluene-d8	0.36	0.5000		72.8	70	130				
Sample ID Ics-3808 SampType: LCS TestCode: EPA Method 8260B: VOLATILES										
Client ID: LCSS	Batch ID	D: 3808	R	unNo: 5	671					
Prep Date: 9/18/2012	Analysis Date	e: 9/20/2012	s	eqNo: 1	62465	Units: %RE	С			
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 1,2-Dichloroethane-d4	0.42	0.5000		84.8	70	130				
Surr: 4-Bromofluorobenzene	0.41	0.5000		82.5	70	130				
Surr: Dibromofluoromethane	0.47	0.5000		94.7	70	130				
Surr: Toluene-d8	0.36	0.5000		72.3	70	130				
Sample ID 1209696-001ams	SampType	e: MS	Test	Code: El	PA Method	8260B: VOLA	TILES			
Client ID: BatchQC	Batch ID	D: 3808	R	unNo: 5	671					
Prep Date: 9/18/2012	Analysis Date	e: 9/20/2012	S	eqNo: 1	62466	Units: %RE	С			
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 1,2-Dichloroethane-d4	0.40	0.4892		82.6	70	130				
Surr: 4-Bromofluorobenzene	0.42	0.4892		85.2	70	130				
Surr: Dibromofluoromethane	0.36	0.4892		73.3	70	130				
Surr: Toluene-d8	0.35	0.4892		72.2	70	130				
Sample ID 1209696-001amsc	I SampType	e: MSD	Test	Code: El	PA Method	8260B: VOL/	ATILES			
Client ID: BatchQC	Batch ID	D: 3808	R	unNo: 5	671					
Prep Date: 9/18/2012	Analysis Date	e: 9/20/2012	S	eqNo: 1	62468	Units: %RE	с			
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 1,2-Dichloroethane-d4	0.41	0.4892		82.9	70	130	0	0		
Surr: 4-Bromofluorobenzene	0.41	0.4892		84.8	70	130	0	0		
Surr: Dibromofluoromethane	0.39	0.4892		80.0	70	130	0	0		
Surr: Toluene-d8	0.35	0.4892		72.6	70	130	0	0		

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

1209778

WO#:

02-Oct-12

HALL ENVIRONMENTAL ANALYSIS LABORATORY		Hall Environmental Analysis L 4901 Ha Albuquerque, I TEL: 505-345-3975 FAX: 505 Website: www.hallenvironn	wkins NE VM 87105 345-410; Sampl	e Log-In Check List
Client Name: Received by/date	Animas Environmental	Work Orde	r Number: 1209778	
Logged By:	Anne Thorne	9/19/2012 10:13:00 AM	am Im	
Completed By:	Anne Thome	9/19/2012	ann Hann	
Reviewed By:	AT V9/19/12			

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<u>Cha</u>	in or Custody								
1.	Were seals intact?		Yes		No		Not Present		
2.	Is Chain of Custody complete?		Yes		No	Ω.	Not Present		
3.	How was the sample delivered?		Cour	ier					
<u>Log</u>	<u>In</u>								
4.	Coolers are present? (see 19. for cooler specific information	n)	Yes	V	No		NA		
5.	Was an attempt made to cool the samples?		Yes	V	No		NA		
6.	Were all samples received at a temperature of >0° C to 6.0)°C	Yes		No		NA		
7.	Sample(s) in proper container(s)?		Yes		No				
8.	Sufficient sample volume for indicated test(s)?		Yes		No				
9.	Are samples (except VOA and ONG) properly preserved?		Yes		No				
10.	Was preservative added to bottles?		Yes		No		NA		
11.	VOA vials have zero headspace?		Yes	Ü	No		No VOA Viais		
12.	Were any sample containers received broken?		Yes		No		[
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes		No		# of pre bottles for pH:		
14.	Are matrices correctly identified on Chain of Custody?		Yes		No	Ċ		(<	2 or >12 unless noted)
15.	Is it clear what analyses were requested?		Yes		No		A	djusted?	
16.	Were all holding times able to be met? (If no, notify customer for authorization.)	•	Yes		No		Cr	ecked by	:
Spe	<u>cial Handling (if applicable)</u>								
	Was client notified of all discrepancies with this order?		Yes		No		NA		
	Person Notified:	Date		5 000 g				-	
	By Whom:	Via:] eMai	i (] Pł	none	🗌 Fax 📋 In	Person	
	Regarding:								
	Client Instructions:							An angeneral and an and	

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			
				,		

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C	Chain-of-Custody Record		Turn-Around Time:												~~						
Oliente			onmental Services	1 □ Standard	🕅 Rush	<u>Same Day</u>													INT		
<u> </u>				Project Name	<u></u>				5738- 1925-19										1.0 %	<i>9</i> IX	2
Mailing	Address	1024 F	Comancy	Cof Far	nunation (044 #100	www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109														
Care	minals	ALM	B7401	Cop Farmington COM #100 Project #:				Tel. 505-345-3975 Fax 505-345-4107													
Phone a	#: 505	- 564-	- 2201	1			2942												f Pro EM		
email o				Project Mana	iger:			(Yl	šel)												
QA/QC I	Package:]			021	ts or	Die					4°0	PCB's						
	Standard 🗆 Level 4 (Full Validation)			D. Watso	»n	•		ର୍	Gas/				(ba o	2 P(
Accreditation			Sampler:	r. Woods		THE S (8021)	+ TPH (Gas only)) BC	,	Ξ	Î	' '	b2	/ 8082						Î	
			er	Semilation	oeralure		- 1	+ ш	801	418	504	A	sle	Μĝ	es /		Q				or V
	(196)			COMPLEMENT		////		ЛТВ	рог	bel	P E	0 A	Meta	Ø	ticid	(Yo	- - -				es (
Date	Time	Matrix	Sample Request ID		Preservative	EEAL No.	(+)	4 +	Mett	Met	(Mei	N A	8	IS (F	Pes	5	(Sei				Iqqr
2410	,			Type and #	Туре	SE2379	BTEX + NEDE	BTEX + MTBE	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	SCR	Anions (F,Ch O3, NO2, PO4, SO4)	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
G /18/10	1017	50:1	SC-1	MOH Kit	Meot	The second	X					8	، جلال	X	8	8	<u></u>		-+	-+	+
1/1412	1010	3011		4 oz Jar	Non														-+-	-+-	+-
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Date:	Time:	Relinguish	ed by	Received by:		Data Tima									i						
9/18/12	V-30		•	I A.	elibele	Date Time	iken	narks	5: Bi	11 t 2 0 0) o L	iono	c0.(ph'.	llip	\$					
Date:	Time:	Near Relinquish	the M. Woods	Received by	enpete	Date Time								Use	~ ID):K rden	AIT La by	rin r'. A	പപ	V	
1/18/12 1641 Christing Libelous							Activity: c200 work ordered by: Bri Super: Harry Dee Area: 1							•462							

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This service as notice of this possibility. Any out contracted data will be also to other accredited laboratories.