District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

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State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr.

Form C-141 Revised August 8, 2011

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

Santa Fe, NM 87505

Release Notification and Corrective Action

		OPERATOR	🔲 Initial Repor	t 🛛 🛛 Final Report
Name of Company: BP		Contact: Jeff Peace	<i>a</i>	
Address: 200 Energy Court, Farmingt	on, NM 87401	Telephone No.: 505-326-9	479	
Facility Name: Pritchard SWD Oil Recovery Facility		Facility Type: Salt water d	isposal site	
Surface Owner: Federal	Minaral Ou	mon: Endoral	A.DI. No. 200452	0251
Surface Owner. redefal		nei. reueiai	API NO. 300434	20331

LOCATION OF RELEASE

Unit Letter D	Section 34	Township 31N	Range 9W	Feet from the 615	North/South Line North	Feet from the 1,840	East/West Line West	County: San Juan
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Latitude 36.85962 Longitude__107.773____

NATURE OF RELEASE

Type of Release: condensate and lube oil	Volume of Release: 45 bbl	Volume Recovered: 20 bbl
Source of Release: 1,000 bbl tank	Date and Hour of Occurrence:	Date and Hour of Discovery: 10/7/2013
Was Immediate Nation Civen?	If VES. To Whom? Drondon Dowell	· · · · · · · · · · · · · · · · · · ·
X Yes No Not Required	If FES, TO WHOM? Brandon Power	
Du Whan 2 Countrate Cookers	Dete and Ularen 10/9/2012, 0:00 AN	· · · · · · · · · · · · · · · · · · ·
Was a Watercourse Resched?	If VES, Volume Imposting the Wat	
was a watercourse Reaction? \Box Vec \Box No	In TES, volume impacting the wate	ercourse.
If a Watercourse was Impacted, Describe Fully.*		RCUD MAR 24'14
•		MI CANS. DIV.
		NIST 3
Describe Cause of Problem and Remedial Action Taken * Automation con	trolling tank levels and numps was di	sabled due to construction activities on the
site. Produced water from four wells continued flowing to the tank causia	ag it to overflow All oil and condense	ate was confined to the bermed
containment area and 20 bbl was recovered with a vacuum truck. Initial a	uger sampling indicated no impacts be	elow three feet.
	· · · · · · · · · · · · · · · · · · ·	
Describe Area Affected and Cleanup Action Taken.* Storage tank overfill	ed and ran into the bermed containme	nt area. Initial investigation showed
impacts were limited to three feet below the surface. Impacted soil was ex	cavated and taken to the IEI landfarm	for treatment. Approximately 90 cubic
yards were hauled to the land farm. Excavated area was backfilled with cl	lean soil.	
		•
I hareby certify that the information given above is true and complete to the	a best of my knowledge and understa	nd that pursuant to NMOCD rules and
regulations all operators are required to report and/or file certain release no	otifications and perform corrective act	ions for releases which may endanger
nublic health or the environment. The accentance of a C-141 report by the	e NMOCD marked as "Final Report" d	loes not relieve the operator of liability
should their operations have failed to adequately investigate and remediate	e contamination that pose a threat to g	round water, surface water, human health
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of responsi	ibility for compliance with any other
federal, state, or local laws and/or regulations.		
	OIL CONSERV	ATION DIVISION
a All lie		
Signature: 994 900	•	
Drinted Names Loff Dagas	Approved by Environmental Specialis	t: Carl low
Title: Field Environmental Advisor	Approval Date: 5/2///4/	Expiration Date:
E-mail Address: peace.jeffrey@bp.com	Conditions of Approval:	American [7]
Date: March 18, 2014 Phone: 505-326-9479		
Attach Additional Sheets If Necessary	NCS 14114152336)

BP AMERICA PRODUCTION COMPANY

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RELEASE INVESTIGATION & REMEDIATION OF TANK OVERFLOW Pritchard SWD Facility API 30-045-28351 Legal Description: (C) Sec. 34 - T31N - R9W, NMPM)

CHRONOLOGICAL EVENT SUMMATION

- 1. October 8, 2013: Blagg Engineering, Inc. (BEI) notified that a release had occurred at the Pritchard SWD Facility. Contact made with construction crew for NM One-Call instructions
- 2. October 9, 2013: An investigation of the extent of impacts from the release was conducted. Impacts were from overflow of floating produced oil from a water holding tank. Impacts were contained within the berm surrounding the tank battery. A hand auger was used to advance bore holes throughout the impacted area and collect soils samples for field (Organic Vapor Meter) and laboratory (Total Petroleum Hydrocarbons, BTEX and Chloride) analysis. Based on field observations, no impacts were found to extend deeper than 2-3 feet vertically at any sample point (Summary Field Notes Attached).
- 3. October 12, 2013: Review of rush laboratory analytical results confirmed that impacts did not extend deeper than 2 3 feet below grade (Laboratory Test Results Attached).
- 4. November 15, 2013: Site remediation initiated using hydro-vac, hand tools and bobcat (sub-grade electric and flow lines restricted use of larger excavation equipment).
- 5. December 6, 2013: Site remediation completed. Approximately 90 cubic yards of impacted soil removed from site and transported to BP and JFJ Crouch Mesa Landfarm for final remediation.

Table 1

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PRITCHARD SWD RELEASE INVESTIGATION SUMMARY FIELD NOTES OCTOBER 9, 2013

Sample ID	Field OVM PID	Laboratory TPH	Laboratory BTEX	Laboratory Chloride
	(PPM)	(total in mg/Kg)	(total in mg/Kg)	(total in mg/Kg)
HA-1 @ 1.5 feet	46			
HA-1 @ 3 feet	26.2	11	ND	ND
HA-1 @ 5 feet	6.5	ND	ND	ND
HA-2 @ 1.5 feet	267			
HA-2 @ 3 feet	46.3	10	ND	ND
HA-2 @ 5 feet	9.8			
HA-2 @ 7 feet	13.7	ND	ND	ND
HA-3 @ 2 feet	236	52	0.825	ND
HA-3 @ 5 feet	5.9	ND	ND	ND
HA-4 @ 2 feet	15.0	ND	ND	ND
HA-4 @ 5 feet	9.4	ND	ND	ND
HA-5 @ 2 feet	65.6	ND	ND	ND
HA-5 @ 5 feet	7.9	ND	0.2	ND
HA-6 @ 2 feet	31.8	ND	ND	ND
HA-6 @ 4.5 feet	14.6	ND	ND	ND



HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

October 15, 2013

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Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX (505) 632-3903

RE: Pritchard SWD

OrderNo.: 1310577

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/11/2013 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. 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 qualifers 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,

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Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report	
Lab Order 1310577	

Date Reported: 10/15/2013

Hall Environmental Analysis Laboratory, Inc.

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Lab ID:	1310577-001	Matrix: N	MEOH (SOIL)	Received	Date: 10/11/2013 10:40:00 AM			
Project:	Pritchard SWD		,	Collection	Date: 10/9/2013 4:41:00 PM			
CLIENT:	Blagg Engineering		Client Sample ID: HA-1 @ 5'					

EPA METHOD 8015D: DIESEL RANGE ORG	GANICS				Analyst: BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/11/2013 1:21:10 PM 9782
Surr: DNOP	89.9	63-147	%REC	1	10/11/2013 1:21:10 PM 9782
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/11/2013 12:21:32 PM R14006
Surr: BFB	87.6	80-120	%REC	1	10/11/2013 12:21:32 PM R14006
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	10/11/2013 12:21:32 PM R14006
Toluene	ND	0.050	mg/Kg	1	10/11/2013 12:21:32 PM R14006
Ethylbenzene	ND	0.050	mg/Kg	1	10/11/2013 12:21:32 PM R14006
Xylenes, Total	ND	0.10	mg/Kg	1	10/11/2013 12:21:32 PM R14006
Surr: 4-Bromofluorobenzene	100	80-120	%REC	1	10/11/2013 12:21:32 PM R14006
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	ND	30	mg/Kg	20	10/11/2013 1:30:39 PM 9786

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 1 of 10
	` O	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report
Lab Order 1310577

Date Reported: 10/15/2013

Hall Environmental Analysis Laboratory, Inc.

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CLIENT:	Blagg Engineering	Client Sample ID: HA-2 @ 7'				
Project:	Pritchard SWD	Collection Date: 10/9/2013 5:03:00 PM	1			
Lab ID:	1310577-002	Matrix: MEOH (SOIL) Received Date: 10/11/2013 10:40:00 /	AM			
	· · · · · · · · · · · · · · · · · · ·					

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS				Analyst	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/11/2013 1:43:07 PM	9782
Surr: DNOP	96.4	63-147	%REC	1	10/11/2013 1:43:07 PM	9782
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/11/2013 12:50:05 PI	M R14006
Surr: BFB	89.9	80-120	%REC	1	10/11/2013 12:50:05 PI	M R14006
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.050	mg/Kg	1	10/11/2013 12:50:05 PI	M R14006
Toluene	ND	0.050	mg/Kg	1	10/11/2013 12:50:05 PI	M R14006
Ethylbenzene	ND	0.050	mg/Kg	1	10/11/2013 12:50:05 P	M R14006
Xylenes, Total	ND	0.10	mg/Kg	1	10/11/2013 12:50:05 Pi	M R14006
Surr: 4-Bromofluorobenzene	106	80-120	%REC	1	10/11/2013 12:50:05 PI	M R14006
EPA METHOD 300.0: ANIONS					Analyst	: JRR
Chloride	ND	30	mg/Kg	20	10/11/2013 1:43:04 PM	9786

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 2 of 10
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical	Report

Lab Order 1310577

Date Reported: 10/15/2013

Hall Environmental Analysis Laboratory, Inc.

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CLIENT: Blagg Engineering Client Sample ID: HA-3 @ 5' Project: Pritchard SWD Collection Date: 10/10/2013 9:50:00 Lab ID: 1310577-003 Matrix: MEOH (SOIL) Received Date: 10/11/2013 10:40:00	Б
CLIENT: Blagg EngineeringClient Sample ID: HA-3 (a) 5'Project: Pritchard SWDCollection Date: 10/10/2013 9:50:00	00 AM
CLIENT: Blagg Engineering Client Sample ID: HA-3 (a) 5') AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analyst	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/11/2013 2:05:09 PM	9782
Surr: DNOP	96.9	63-147	%REC	1	10/11/2013 2:05:09 PM	9782
EPA METHOD 8015D: GASOLINE R	ANGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/11/2013 1:18:37 PM	R14006
Surr: BFB	89.4	80-120	%REC	1	10/11/2013 1:18:37 PM	R14006
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.050	mg/Kg	1	10/11/2013 1:18:37 PM	R14006
Toluene	ND	0.050	mg/Kg	1	10/11/2013 1:18:37 PM	R14006
Ethylbenzene	ND	0.050	mg/Kg	1	10/11/2013 1:18:37 PM	R14006
Xylenes, Total	ND	0.10	mg/Kg	1	10/11/2013 1:18:37 PM	R14006
Surr: 4-Bromofluorobenzene	104	80-120	%REC	1	10/11/2013 1:18:37 PM	R14006
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	ND	30	mg/Kg	20	10/11/2013 1:55:29 PM	9786

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Ε	Value above quantitation range	н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 3 of 10
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report	
Lab Order 1310577	

Date Reported: 10/15/2013

Hall Environmental Analysis Laboratory, Inc.

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Analyses		Recult	RI Oue	I Unite	DF Data Analyzad	R	
Lab ID:	1310577-004	Matrix:	MEOH (SOIL)	Received	Date: 10/11/2013 10:40:00 AN	M	
Project:	Pritchard SWD			Collection	Date: 10/10/2013 10:12:00 AM	М	
CLIENT:	Blagg Engineering	Client Sample ID: HA-4 @ 5'					

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	SE ORGANICS				Analyst:	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/11/2013 2:27:14 PM	9782
Surr: DNOP	94.6	63-147	%REC	1	10/11/2013 2:27:14 PM	9782
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/11/2013 1:47:14 PM	R14006
Surr: BFB	88.8	80-120	%REC	1	10/11/2013 1:47:14 PM	R14006
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.050	mg/Kg	1	10/11/2013 1:47:14 PM	R14006
Toluene	ND	0.050	mg/Kg	1	10/11/2013 1:47:14 PM	R14006
Ethylbenzene	ND	0.050	mg/Kg	1	10/11/2013 1:47:14 PM	R14006
Xylenes, Total	ND	0.10	mg/Kg	1	10/11/2013 1:47:14 PM	R14006
Surr: 4-Bromofluorobenzene	104	80-120	%REC	1	10/11/2013 1:47:14 PM	R14006
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	ND	30	mg/Kg	20	10/11/2013 2:07:54 PM	9786

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 4 of 10
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report	
Lab Order 1310577	

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Date Reported: 10/15/2013

Hall Environmental Analysis Laboratory, Inc.

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Analyses		Decult	PI Qual	Unite	DF Date Analyzed	D	
Lab ID:	1310577-005	Matrix:	MEOH (SOIL)	Received	Date: 10/11/2013 10:40:00 Al	M	
Project:	Pritchard SWD			Collection	Date: 10/10/2013 10:37:00 At	М	
CLIENT:	Blagg Engineering	Client Sample ID: HA-5 @ 5'					

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS					Analyst:	BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/11/2013 2:49:22 PM	9782
Surr: DNOP	94.7	63-147		%REC	1	10/11/2013 2:49:22 PM	9782
EPA METHOD 8015D: GASOLINE R	ANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/11/2013 2:15:52 PM	R14006
Surr: BFB	127	80-120	S	%REC	1	10/11/2013 2:15:52 PM	R14006
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.050		mg/Kg	1	10/11/2013 2:15:52 PM	R14006
Toluene	ND	0.050		mg/Kg	1	10/11/2013 2:15:52 PM	R14006
Ethylbenzene	ND	0.050		mg/Kg	1	10/11/2013 2:15:52 PM	R14006
Xylenes, Total	0.20	0.10		mg/Kg	1	10/11/2013 2:15:52 PM	R14006
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	10/11/2013 2:15:52 PM	R14006
EPA METHOD 300.0: ANIONS						Analyst:	JRR
Chloride	ND	30		mg/Kg	20	10/11/2013 2:45:08 PM	9786

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	E	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 5 of 10
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report Lab Order 1310577

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/15/2013

Analyses		Result	RL Qua	l Units	DF Date Analyzed	Batch
Lab ID:	1310577-006	Matrix:	MEOH (SOIL)	Receive	d Date: 10/11/2013 10:40:00 AM	[,
Project:	Pritchard SWD			Collectio	n Date: 10/10/2013 10:59:00 AM	I
CLIENT:	Blagg Engineering			Client San	ple ID: HA-6 @ 4.5'	

EPA METHOD 8015D: DIESEL RANGE C	RGANICS				Analyst:	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/11/2013 3:11:18 PM	9782
Surr: DNOP	95.1	63-147	%REC	1	10/11/2013 3:11:18 PM	9782
EPA METHOD 8015D: GASOLINE RANG	E				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/11/2013 2:44:30 PM	R14006
Surr: BFB	92.9	80-120	%REC	1	10/11/2013 2:44:30 PM	R14006
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.050	mg/Kg	1	10/11/2013 2:44:30 PM	R14006
Toluene	ND	0.050	mg/Kg	1	10/11/2013 2:44:30 PM	R14006
Ethylbenzene	ND	0.050	mg/Kg	1	10/11/2013 2:44:30 PM	R14006
Xylenes, Total	ND	0.10	mg/Kg	1	10/11/2013 2:44:30 PM	R14006
Surr: 4-Bromofluorobenzene	108	80-120	%REC	1	10/11/2013 2:44:30 PM	R14006
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	ND	30	mg/Kg	20	10/11/2013 2:57:32 PM	9786

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated
	Ē	Value above quantitation range	Н	Holding times for preparation or a
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Lin
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VO/
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

- Spike Recovery outside accepted recovery limits S
- Method Blank
- analysis exceeded
- nit mit Page 6 of 10 A and TOC only.

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Sample ID MB-9786	SampType: MBLK	TestCode: EPA Method	300.0: Anions	
Client ID: PBS	Batch ID: 9786	RunNo: 14043		
Prep Date: 10/11/2013	Analysis Date: 10/11/2013	SeqNo: 401631	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
				·
Sample ID LCS-9786	SampType: LCS	TestCode: EPA Method	300.0: Anions	·····
Sample ID LCS-9786 Client ID: LCSS	SampType: LCS Batch ID: 9786	TestCode: EPA Method RunNo: 14043	300.0: Anions	<u> </u>
Sample ID LCS-9786 Client ID: LCSS Prep Date: 10/11/2013	SampType: LCS Batch ID: 9786 Analysis Date: 10/11/2013	TestCode: EPA Method RunNo: 14043 SeqNo: 401632	300.0: Anions Units: mg/Kg	<u></u>
Sample ID LCS-9786 Client ID: LCSS Prep Date: 10/11/2013 Analyte	SampType: LCS Batch ID: 9786 Analysis Date: 10/11/2013 Result PQL SPK value	TestCode: EPA Method RunNo: 14043 SeqNo: 401632 SPK Ref Val %REC LowLimit	300.0: Anions Units: mg/Kg HighLimit %RPD	RPDLimit Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 7 of 10

15-Oct-13

WO#: 1310577

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Blagg En Pritchard	gineering SWD							_		
Sample ID MB- Client ID: PBS	•9782 •9782	Samp1 Batcl Analysis F	"ype: ME n ID: 97	BLK 82	Tes F	tCode: El RunNo: 1	PA Method 3995 00588	8015D: Diese	el Range (Organics	
Analyte Diesel Range Organi Surr: DNOP	ics (DRO)	Result ND 9.0	PQL 10	SPK value 10.00	SPK Ref Val	%REC 90.3	LowLimit 63	HighLimit	%RPD	RPDLimit	Qual
Sample ID LCS Client ID: LCS Prep Date: 10	5-9782 5S /11/2013	SampT Batcl Analysis [ype: LC h ID: 97 Date: 10	:S 82 0/11/2013	Tes F	tCode: El RunNo: 1 SeqNo: 4	PA Method 3995 00589	8015D: Diese Units: mg/H	el Range (Drganics	
Analyte Diesel Range Organ Surr: DNOP	ics (DRO)	Result 48 4.4	PQL 10	SPK value 50.00 5.000	SPK Ref Val 0	%REC 95.2 88.9	LowLimit 77.1 63	HighLimit 128 147	%RPD	RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 8 of 10

WO#: 1310577

15-Oct-13

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WO#: 1310577

15-Oct-13

Client: Proiect:	Blagg E Pritchar	ngineering d SWD								
			MDI //	Taa						
Sample ID	MB-9772 MK	Samp Type:	MBLK	Test	Code: El	PA Method	8015D: Gasc	oiine Rang	e	
Client ID:	PBS	Batch ID:	R14006	R	lunNo: 1	4006				
Prep Date:		Analysis Date:	10/11/2013	S	eqNo: 4	00836	Units: mg/H	(g		
Analyte		Result PG	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0							
Surr: BFB		880	1000		88.4	80	120			
Sample ID	LCS-9772 MK	SampType:	LCS	Test	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch ID:	R14006	R	RunNo: 1	4006				
Prep Date:		Analysis Date:	10/11/2013	S	eqNo: 4	00837	Units: mg/k	ίg		
Analyte		Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	27	5.0 25.00	0	107	74.5	126			
Surr: BFB		1000	1000		99.5	80	120			
Sample ID	MB-9772	SampType:	MBLK	Test	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch ID:	9772	R	RunNo: 1	4006				
Prep Date:	10/10/2013	Analysis Date:	10/11/2013	S	eqNo: 4	00847	Units: %RE	с		
Analyte		Result PG	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		880	1000		88.4	80	120			
Sample ID	LCS-9772	SampType:	LCS	Test	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch ID:	9772	R	RunNo: 1	4006				
Prep Date:	10/10/2013	Analysis Date:	10/11/2013	s	eqNo: 4	00848	Units: %RE	с		
Analyte		Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1000	1000		99.5	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 9 of 10

Client: Blagg Engineering

Project: Pritchard SWD

Sample ID MB-9772 MK	SampType: MBLK TestCode: EPA Method 8021B; Volatiles										
Client ID: PBS	Batch ID:	R14006	F	RunNo: 1	4006						
Pren Date:	Analysis Date:	10/11/2013	ç		00867	linits malk	(a				
	Analysis Date.	10/11/2013	· · ·	ocquo. 40000 onno. mgrig							
Analyte	Result PO	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	ND 0.0)50									
Toluene .	ND 0.0)50									
Ethylbenzene	ND 0.0)50									
Xylenes, Total	ND 0	.10									
Surr: 4-Bromofluorobenzene	1.0	1.000		103	80	120					
Sample ID LCS-9772 MK SampType: LCS TestCode: EPA Method 8021B: Volatiles											
Client ID: LCSS	Batch ID:	R14006	F	RunNo: 1	4006						
Prep Date:	Analysis Date:	10/11/2013	S	SeqNo: 4	00868	Units: mg/ł	٢g				
Analyte	Result PO	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.96 0.0	050 1.000	0	96.4	80	120					
Toluene	1.0 0.0	050 1.000	0	100	80	120					
Ethylbenzene	1.0 0.0	050 1.000	0	103	80	120					
Xylenes, Total	3.1 0	.10 3.000	0	104	80	120					
Surr: 4-Bromofluorobenzene	1.1	1.000		111	80	120	_		*		
Sample ID MB-9772	SampType	MBLK	Tes	tCode: El	PA Method	8021B: Vola	tiles				
Client ID: PBS	Batch ID:	9772	F	RunNo: 1	4006						
Prep Date: 10/10/2013	Analysis Date:	10/11/2013	S	SeqNo: 4	00878	Units: %RE	с		i i		
Analyte	Result P	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: 4-Bromofluorobenzene	1.0	1.000		103	80	120					
Sample ID LCS-9772	SampType:	LCS	Tes	tCode: El	PA Method	8021B: Vola	tiles				
Client ID: LCSS	Batch ID:	9772	F	RunNo: 14	4006						
Prep Date: 10/10/2013	Analysis Date:	10/11/2013	S	SeqNo: 4	00879	Units: %RE	с				
Analyte	Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: 4-Bromofluorobenzene	1.1	1.000		111	80	120					

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 10 of 10

15-Oct-13

1310577

WO#:

Website: w	ww.hallenvironmental	l.com	
Client Name: BLAGG Work Order Nu	mber: 1310577		RcptNo: 1
Received by/date: MS 10/11/13			
Logged By: Michelle Garcia 10/11/2013 10:40	D:00 AM	I fubill Gan	ua)
Completed By: Michelle Garcia 10/11/2013 10:55 Reviewed By: MAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	5:21 AM	Michaels Gon	un)
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>Courier</u>		
<u>Log In</u>			
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	NA
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 preserved?	Yes 🗸	No	
9. Was preservative added to bottles?	Yes	No 🖍	NÁ
10.VOA vials have zero headspace?	Yeş	No	No VOA Vials 🗸
11. Were any sample containers received broken?	Yes	No 🔽	
			# of preserved bottles checked
12.Does paperwork match bottle labels?	Yes 🗸	No	for pH:
(Note discrepancies on chain of custody)	Yee M	No i	Adjusted?
13. Are mances conectly identified on Chain of Custody?	Ves V	No 1	
15. Were all holding times able to be met?	Yes 🗸	No	Checked by:
(If no, notify customer for authorization.)			
Special Handling (if applicable)			
16. Was client notified of all discrepancies with this order?	Yes	No	NA 🗸
Person Notified	ate.	1990	
By Whom:	ia: eMail	Phone Fax	In Person
Regarding:			
Client Instructions:		a da anticipat de la composition de la	2.55.1211-211-211-211-211-211-21-21-21-21-21-

- 6			-		
- 1	4	4.0		W	
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			an a second contractor		

C	Chain-of-Custody Record			Turn-Around	Time:	SAME DAY	*		\$ 67	9-	48			NV	TE	20	ni	MF	NT	[A]	L
Client:	BLAG	- ENG	NEERWG INC.	□ Standard	≵ Rus	h				Æ	N.	<u>a</u> i	YS	STS	5 L	A	30	R/	ATC)R	Y
	BPA	MERIC		Project Name	:				е 1914 г. – С	-		v.hal	lenv	iron	ment	tal.co	om				
Mailing	Address	P.0.	Bax 87	PRIT	CHARD	SWD	4901 Hawkins NE - Albuquerque, NM 87109														
B	LODME	HELD	NM 87413	Project #:		Tel. 505-345-3975 Fax 505-345-4107															
Phone a	#: 50	05-63	52-1199	l						6. 89 ¹³	2 4 (Â	nalij	/sis	Req	ues		18.8°	1		
email o	r Fax#:			Project Manager:				nly)	â					O₄)							
QA/QC I	Package:			T BLACO			3021	iò Si	퇵			ତ		4,S(CB's						
Stan	dard		Level 4 (Full Validation)				3) S	(Ge	ß			SIM		PO'	2 P(•					
Accredi	Accreditation Instance Instance			Sampler:	T. BLAC			ТРН	0/0	8.1)	1.1)	3270		3,NO	/ 808		()				2 J
	(Type)			Sample Tem	erature **		ļ,	н Н	Я <u></u>	4	9 20	ō	tals	NO,	des	2	10/	3			° ح
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservativ Type	e HEAL NO	BTEX + MER	BTEX + MTE	TPH 8015B	TPH (Metho	EDB (Metho	PAH's (8310	RCRA 8 Met	Anions (F,CI	8081 Pestici	8260B (VOA	8270 (Semi-	CHLOR			Air Bubbles
A/13	1641	SOIL	HA-1 05	402×1	COOL	-001	×		×	1								×			
11	1703	ŧ	HA-ZQ7	êr.	ц	- 002	×		×									×			
0/10/13	0950	<i>u</i>	HA-305	ĸ	n	- (103	×		×									×		T	\top
મ	1012	۴L	HA-4@5'	Ц	Ą	- 004	×		×				_					×		T	
-N	1037	ĸ	HA-5@5'	и	Ц	- 005	×		×									X			
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Date:	Time: [2.5] Time:	Relinquish	ed by: Blegg ad by:	Received by:	Waler	Date Time 10/10/13 Date Time	Ren	narks	3:		Ĩ	Sill	Ē	3 SLA	- 66	_					
- Usila 1800 Auto by.				Mile anter the other and	L	10/11/13 10:1	10				BA	<u>ي <</u>	N77	<u>ter</u>	: 3	T <u>E</u> F	<u>= f</u>	<u>Za</u>	<u>e</u>		

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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited aboratories.² This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

October 15, 2013

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX (505) 632-3903

RE: Pritchard SWD

OrderNo.: 1310578

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/11/2013 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. 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 qualifers 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,

Andig

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

CLIENT: Blagg Engineering		(Client Samp	le ID: H/	A-1 @ 3'	
Project: Pritchard SWD			Collection	Date: 10	/9/2013 4:35:00 PM	
Lab ID: 1310578-001	Matrix:	MEOH (SOIL)	Received Date:		/11/2013 10:40:00 AM	
Analyses	Result	RL Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analyst	BCN
Diesel Range Organics (DRO)	11	10	mg/Kg	1	10/11/2013 3:55:28 PM	9782
Surr: DNOP	99.0	63-147	%REC	1	10/11/2013 3:55:28 PM	9782
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/11/2013 4:01:13 PM	R14021
Surr: BFB	104	80-120	%REC	1	10/11/2013 4:01:13 PM	R14021
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.050	mg/Kg	[.] 1	10/11/2013 4:01:13 PM	R14021
Toluene	ND	0.050	mg/Kg	1	10/11/2013 4:01:13 PM	R14021
Ethylbenzene	ND	0.050	mg/Kg	1	10/11/2013 4:01:13 PM	R14021
Xylenes, Total	ND	0.10	mg/Kg	1	10/11/2013 4:01:13 PM	R14021
Surr: 4-Bromofluorobenzene	106	80-120	%REC	1	10/11/2013 4:01:13 PM	R14021
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	ND	30	mg/Kg	20	10/11/2013 5:38:49 PM	9786

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 1 of 12
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

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Analytical Report Lab Order 1310578

Date Reported: 10/15/2013

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Lab Order 1310578

Date Reported: 10/15/2013

Hall Environmental Analysis Laboratory, Inc.

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Analyses		Docult DI	Qual	Unita	DE Data Analyzad	D
Lab ID:	1310578-002	Matrix: MEOH (S	OIL)	Received	Date: 10/11/2013 10:40:00 AM	
Project:	Pritchard SWD			Collection	Date: 10/9/2013 4:56:00 PM	
CLIENT:	Blagg Engineering	Client Sample ID: HA-2 @ 3'				

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	GE ORGANICS				Analyst:	BCN
Diesel Range Organics (DRO)	10	9.9	mg/Kg	1	10/11/2013 4:17:32 PM	9782
Surr: DNOP	100	63-147	%REC	1	10/11/2013 4:17:32 PM	9782
EPA METHOD 8015D: GASOLINE R	ANGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/11/2013 5:31:52 PM	R14021
Surr: BFB	107	80-120	%REC	1	10/11/2013 5:31:52 PM	R14021
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.050	mg/Kg	1	10/11/2013 5:31:52 PM	R14021
Toluene	ND	0.050	mg/Kg	1	10/11/2013 5:31:52 PM	R14021
Ethylbenzene	ND	0.050	mg/Kg	1	10/11/2013 5:31:52 PM	R14021
Xylenes, Total	ND	0.10	mg/Kg	1	10/11/2013 5:31:52 PM	R14021
Surr: 4-Bromofluorobenzene	112	80-120	%REC	1	10/11/2013 5:31:52 PM	R14021
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	ND	30	mg/Kg	20	10/11/2013 5:51:13 PM	9786

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	E	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 2 of 12
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report	
Lab Order 1310578	

Date Reported: 10/15/2013

Hall Environmental Analysis Laboratory, Inc.

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Analyses		Result	RL Qual	Units	DF Date Analyzed	Batch
Lab ID:	1310578-003	Matrix:	MEOH (SOIL)	Received	Date: 10/11/2013 10:40:00 A	M
Project:	Pritchard SWD			Collection	Date: 10/10/2013 9:45:00 AM	Л
CLIENT:	Blagg Engineering		C	Client Samp	le ID: HA-3 @ 2'	

EPA METHOD 8015D: DIESEL RANGE O	RGANICS					Analyst:	BCN
Diesel Range Organics (DRO)	32	10		mg/Kg	1	10/11/2013 4:39:28 PM	9782
Surr: DNOP	81.2	63-147		%REC	1	10/11/2013 4:39:28 PM	9782
EPA METHOD 8015D: GASOLINE RANG	E					Analyst:	NSB
Gasoline Range Organics (GRO)	20	5.0		mg/Kg	1	10/11/2013 7:02:51 PM	R14021
Surr: BFB	250	80-120	S	%REC	1	10/11/2013 7:02:51 PM	R14021
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.050		mg/Kg	1	10/11/2013 7:02:51 PM	R14021
Toluene	0.083	0.050		mg/Kg	1	10/11/2013 7:02:51 PM	R14021
Ethylbenzene	0.082	0.050		mg/Kg	1	10/11/2013 7:02:51 PM	R14021
Xylenes, Total	0.66	0.10		mg/Kg	1	10/11/2013 7:02:51 PM	R14021
Surr: 4-Bromofluorobenzene	123	80-120	S	%REC	1	10/11/2013 7:02:51 PM	R14021
EPA METHOD 300.0: ANIONS						Analyst:	JRR
Chloride	ND	30		mg/Kg	20	10/11/2013 6:03:37 PM	9786

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	E	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 3 of 12
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.					Date Reported: 10/15/2013			
CLIENT: Blagg Engineering			Client Samp	le ID: HA	A-4 @ 2'			
Project: Pritchard SWD			Collection	Date: 10,	/10/2013 10:00:00 AM			
Lab ID: 1310578-004	Matrix:	MEOH (SOIL)	Received	Date: 10	/11/2013 10:40:00 AM			
Analyses	Result	RL Qual	Units	DF	Date Analyzed	Batch		
EPA METHOD 8015D: DIESEL RANG					Analyst	BCN		
Diesel Range Organics (DRO)	. ND	9.9	mg/Kg	1	10/11/2013 5:01:46 PM	9782		
Surr: DNOP	96.1	63-147	%REC	1	10/11/2013 5:01:46 PM	9782		
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB		
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/11/2013 4:28:21 PM	R14006		
Surr: BFB	92.6	80-120	%REC	1	10/11/2013 4:28:21 PM	R14006		
EPA METHOD 8021B: VOLATILES					Analyst	NSB		
Benzene	ND	0.050	mg/Kg	1	10/11/2013 4:28:21 PM	R14006		
Toluene	ND	0.050	mg/Kg	1	10/11/2013 4:28:21 PM	R14006		
Ethylbenzene	ND	0.050	mg/Kg	1	10/11/2013 4:28:21 PM	R14006		
Xylenes, Total	ND	0.10	mg/Kg	1	10/11/2013 4:28:21 PM	R14006		
Surr: 4-Bromofluorobenzene	109	80-120	%REC	1	10/11/2013 4:28:21 PM	R14006		
EPA METHOD 300.0: ANIONS					Analyst	JRR		
Chloride	ND	30	mg/Kg	20	10/11/2013 6:16:02 PM	9786		

Analytical Report Lab Order 1310578

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	od Blank
	E	Value above quantitation range	Н	Holding times for preparation or analysi	s exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 4 of 12
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report
Lab Order 1310578

Date Reported: 10/15/2013

Hall Environmental Analysis Laboratory, Inc.

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Analyses		Result	RL Qual	Units	DF Date Analyzed	B
Lab ID:	1310578-005	Matrix: M	AEOH (SOIL)	Received	Date: 10/11/2013 10:40:00 AM	1
Project:	Pritchard SWD			Collection	Date: 10/10/2013 10:30:00 AM	I
CLIENT:	Blagg Engineering		C	lient Samp	le ID: HA-5 @ 2'	

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE OR	GANICS				Analyst:	BCN
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/11/2013 5:23:49 PM	9782
Surr: DNOP	98.5	63-147	%REC	1	10/11/2013 5:23:49 PM	9782
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/11/2013 4:56:58 PM	R14006
Surr: BFB	99.5	80-120	%REC	1	10/11/2013 4:56:58 PM	R14006
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.050	mg/Kg	1	10/11/2013 4:56:58 PM	R14006
Toluene	ND	0.050	mg/Kg	1	10/11/2013 4:56:58 PM	R14006
Ethylbenzene	ND	0.050	mg/Kg	1	10/11/2013 4:56:58 PM	R14006
Xylenes, Total	ND	0.10	mg/Kg	1	10/11/2013 4:56:58 PM	R14006
Surr: 4-Bromofluorobenzene	111	80-120	%REC	. 1	10/11/2013 4:56:58 PM	R14006
EPA METHOD 300.0: ANIONS					Analyst	JRR
Chloride	ND	30	mg/Kg	20	10/11/2013 6:28:26 PM	9786

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	E	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 5 of 12
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report Lab Order 1310578

Date Reported: 10/15/2013

Hall Environmental Analysis Laboratory, Inc.

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 CLIENT:
 Blagg Engineering
 Client Sample ID: HA-6 @ 2'

 Project:
 Pritchard SWD
 Collection Date: 10/10/2013 10:50:00 AM

 Lab ID:
 1310578-006
 Matrix:
 MEOH (SOIL)
 Received Date: 10/11/2013 10:40:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed
 F

Analyses	Result	RL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS					Analyst	BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/11/2013 5:45:59 PM	9782
Surr: DNOP	94.3	63-147		%REC	1	10/11/2013 5:45:59 PM	9782
EPA METHOD 8015D: GASOLINE R	ANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/11/2013 5:25:30 PM	R14006
Surr: BFB	79.4	80-120	S	%REC	1	10/11/2013 5:25:30 PM	R14006
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.050		mg/Kg	1	10/11/2013 5:25:30 PM	R14006
Toluene	ND	0.050		mg/Kg	1	10/11/2013 5:25:30 PM	R14006
Ethylbenzene	ND	0.050		mg/Kg	1	10/11/2013 5:25:30 PM	R14006
Xylenes, Total	ND	0.10		mg/Kg	1	10/11/2013 5:25:30 PM	R14006
Surr: 4-Bromofluorobenzene	87.3	80-120		%REC	1	10/11/2013 5:25:30 PM	R14006
EPA METHOD 300.0: ANIONS						Analyst:	JRR
Chloride	ND	30		mg/Kg	20	10/11/2013 6:40:51 PM	9786

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	E	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 6 of 12
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

WO#: 1310578

15-Oct-13

H	al		Envi	ronm	ienta	l A	Ana	lysis	s La	bora	tory	,	Inc.
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Client: Blagg Engineering

Project: Pritchard SWD

Sample ID MB-9786	SampType: MBLK	TestCode: EPA Metho	d 300.0: Anions	
Client ID: PBS	Batch ID: 9786	RunNo: 14043		
Prep Date: 10/11/2013	Analysis Date: 10/11/2	SeqNo: 401631	Units: mg/Kg	
Analyte	Result PQL SPK	value SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5	·		
Sample ID LCS-9786	SampType: LCS	TestCode: EPA Metho	d 300.0: Anions	
Client ID: LCSS	Batch ID: 9786	RunNo: 14043		
Prep Date: 10/11/2013	Analysis Date: 10/11/2	013 SeqNo: 401632	Units: mg/Kg	
Analyte	Result PQL SPK	value SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chlorido	14 15	15.00 0 06.2 00	110	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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QC SUMMARY REPORT

15-Oct-13

Hall	Envir	onmental	Analysis	Labor	atory,	Inc.
			•			

Client:	Blagg Engineering
Project:	Pritchard SWD

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Sample ID MB-9782	SampType: MBLK	TestCode: EPA Method	TestCode: EPA Method 8015D: Diesel Range Organics			
Client ID: PBS	Batch ID: 9782	RunNo: 13995				
Prep Date: 10/11/2013	Analysis Date: 10/11/201	3 SeqNo: 400588	Units: mg/Kg			
Analyte	Result PQL SPK v	alue SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual		
Diesel Range Organics (DRO)	ND 10					
Surr: DNOP	9.0 10	0.00 90.3 63	147			
Sample ID LCS-9782	SampType: LCS	TestCode: EPA Method	8015D [,] Diesel Range (
•	F . 7F		oo lob i blobel italige t	Jrganics		
Client ID: LCSS	Batch ID: 9782	RunNo: 13995	loo loo loo loo la	organics		
Client ID: LCSS Prep Date: 10/11/2013	Batch ID: 9782 Analysis Date: 10/11/201	RunNo: 13995 3 SeqNo: 400589	Units: mg/Kg	Jrganics		
Client ID: LCSS Prep Date: 10/11/2013 Analyte	Batch ID: 9782 Analysis Date: 10/11/201 Result PQL SPK v	RunNo: 13995 3 SeqNo: 400589 alue SPK Ref Val %REC LowLimit	Units: mg/Kg HighLimit %RPD	RPDLimit Qual		
Client ID: LCSS Prep Date: 10/11/2013 Analyte Diesel Range Organics (DRO)	Batch ID: 9782 Analysis Date: 10/11/201 Result PQL SPK v. 48 10 56	RunNo: 13995 3 SeqNo: 400589 alue SPK Ref Val %REC LowLimit 0.00 0 95.2 77.1	Units: mg/Kg HighLimit %RPD 128	RPDLimit Qual		

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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2 for VUA and TOC only mit

QC SUMMARY	REPORT
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WO#: 1310578

15-Oct-13

Client: Blagg E Project: Pritchar	Engineering rd SWD					
Sample ID MB-9772 MK	SampType: MBLK		estCode: EPA Meth	nod 8015D: Gasoli	ne Range	
Client ID: PBS	Batch ID: R14006		RunNo: 14006			
Prep Date:	Analysis Date: 10/11/20	13	SeqNo: 400836	Units: mg/Kg		
Analyte	Result PQL SPK	alue SPK Ref Va	al %REC LowLii	nit HighLimit	%RPD RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 880	1000	88.4	80 120		
Sample ID LCS-9772 MK	SampType: LCS	Te	estCode: EPA Meth	od 8015D: Gasoli	ne Range	
Client ID: LCSS	Batch ID: R14006		RunNo: 14006			
Prep Date:	Analysis Date: 10/11/20	13	SeqNo: 400837	Units: mg/Kg		
Analyte	Result PQL SPK	alue SPK Ref Va	al %REC LowLi	nit HighLimit	%RPD RPDLimit	Qual
Gasoline Range Organics (GRO)	27 5.0 2	25.00 0	107 74	4.5 126		
Surr: BFB	1000	1000	99.5	80 120		
Sample ID MB-9772	SampType: MBLK	Te	estCode: EPA Meth	od 8015D: Gasoli	ne Range	
Client ID: PBS	Batch ID: 9772		RunNo: 14006			
Prep Date: 10/10/2013	Analysis Date: 10/11/20	13	SeqNo: 400847	Units: %REC		
Analyte	Result PQL SPK	value SPK Ref Va	al %REC LowLin	nit HighLimit	%RPD RPDLimit	Qual
Surr: BFB	880	1000	88.4	80 120		
Sample ID LCS-9772	SampType: LCS	Te	estCode: EPA Meth	od 8015D: Gasolin	ne Range	
Client ID: LCSS	Batch ID: 9772		RunNo: 14006			
Prep Date: 10/10/2013	Analysis Date: 10/11/20	13	SeqNo: 400848	Units: %REC		
Analyte	Result PQL SPK	alue SPK Ref Va	al %REC LowLin	nit HighLimit	%RPD RPDLimit	Qual
Surr: BFB	1000	1000	99.5	80 120		
Sample ID 5ML RB	SampType: MBLK	Τε	estCode: EPA Meth	od 8015D: Gasolir	ne Range	
Client ID: PBS	Batch ID: R14021		RunNo: 14021			
Prep Date:	Analysis Date: 10/11/20	13	SeqNo: 400893	Units: mg/Kg		
Analyte	Result PQL SPK	alue SPK Ref Va	al %REC LowLin	nit HighLimit	%RPD RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5.0			t da una ar	······	
Surr: BFB	1000	1000	101	80 120		
Sample ID 2.5UG GRO LCS	S SampType: LCS	 Te	estCode: EPA Meth	od 8015D: Gasolir	e Range	
Client ID: LCSS	Batch ID: R14021		RunNo: 14021		· .	
Prep Date:	Analysis Date: 10/11/20	13	SeqNo: 400894	Units: mg/Kg		
Analyte	Result PQL SPK v	alue SPK Ref Va	I %REC LowLir	nit HighLimit	%RPD RPDLimit	Qual
Gasoline Range Organics (GRO)	24 5.0 2	5.00 0	97.4 74	126		
Surr: BFB	1100	1000	109	80 120		

Qualifiers:

- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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^{*} Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Client: Blagg Engineering

Project: Pritchard SWD

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Sample ID 1310578-001AMS	Samp	Туре: М	5	Tes	tCode: E	PA Method	8015D: Gase	line Rang	e	
Client ID: HA-1 @ 3'	Batc	h ID: R1	4021	F	RunNo: 1	4021				
Prep Date:	Analysis (Date: 1	0/11/2013	5	SeqNo: 4	00896	Units: mg/H	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	22.79	0	89.4	76	156			
Surr: BFB	1000		911.6		111	80	120			
Sample ID 1310578-001AMS) Samp	Туре: М	SD	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	 e	
Client ID: HA-1 @ 3'	Batc	h ID: R1	4021	F	RunNo: 1	4021				
Prep Date:	Analysis I	Date: 1	0/11/2013	S	SeqNo: 4	00897	Units: mg/i	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	22.79	0	89.8	76	156	0.357	17.7	
Surr: BFB	1100		911.6		116	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
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- ND Not Detected at the Reporting Limit
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- RL Reporting Detection Limit

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Client: Project:	Blagg En Pritchard	gineering SWD									
Sample ID MB-	9772 MK	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	;	Batch	n ID: R1	4006	F	RunNo: 1	4006				
Prep Date:		Analysis D)ate: 10)/11/2013	·	SeqNo: 4	00867	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-Bromofluor	obenzene	1.0		1.000		103	80	120			<u> </u>
Sample ID LCS	-9772 MK	SampT	ype: LC	Ş	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: LCS	S	Batch	h ID: R1	4006	, F	RunNo: 1	4006				
Prep Date:		Analysis D	Date: 10)/11/2013	S	SeqNo: 4	00868	Units: mg/	٢g		
Analyte	_	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.96	0.050	1.000	0	96.4	80	120			
Toluene		1.0	0.050	1.000	0	100	80	120			
Ethylbenzene		1.0	0.050	1.000	0	103	80	120		· · · ·	
Xylenes, Total		3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluor	robenzene	1.1		1.000		111	80	120			
Sample ID MB-	9772	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: PBS	;	Batch	h ID: 97	72	F	RunNo: 1	4006				
Prep Date: 10/	/10/2013	Analysis D	Date: 10	0/11/2013	5	SeqNo: 4	00878	Units: %RE	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluor	robenzene	1.0		1.000		103	80	120			
Sample ID LCS	-9772	SampT	ype: LC	s	Tes	tCode: Ei	PA Method	8021B: Vola	tiles		
Client ID: LCS	S	Batch	h ID: 97	72	F	RunNo: 1	4006				
Prep Date: 10/	/10/2013	Analysis D)ate: 10	0/11/2013	S	SeqNo: 4	00879	Units: %RE	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluor	robenzene	1.1		1.000		111	. 80	120			
Sample ID 5ML	. RB	SampT	ype: ME	3LK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	;	Batch	h ID: R1	4021	F	RunNo: 1	4021				
Prep Date:		Analysis D	Date: 10	0/11/2013	5	SeqNo: 4	00919	Units: mg/M	٢g		
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								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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WO#: 1310578

15-Oct-13

Client:	Blagg En	gineering									
Project:	Pritchard	SWD									
Sample ID	5ML RB	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batc	h ID: R1	4021	Я	RunNo: 1	4021				
Prep Date:		Analysis [Date: 10)/11/2013	S	SeqNo: 4	00919	Units: mg/k	٢g		
Analyte		Result	POI	SPK value	SPK Ref Val	%REC	LowLimit	Highl imit	«RPD	RPDI imit	Qual
Surr: 4-Bron	nofluorobenzene	1.1		1.000		115	80	120			Quai
					 			0004F			
Sample ID	100NG BIEX LCS	Sampi		.5	res		PA Method	8021B: Volat	llies		
Client ID:	LUSS	Batc	n IU: R1	4021	н	KUNNO: 1	4021				
Prep Date:		Analysis L	Date: 10)/11/2013	5	SeqNo: 4	00920	Units: mg/H	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.93	0.050	1.000	0	93.0	80	120			
Toluene		0.96	0.050	1.000	0	95.8	80	120			
Ethylbenzene		0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total		3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bron	nofluorobenzene	1.2		1.000		118	80	120			
Camablé ID	1310578-002AMS	Samol			Top			0004 Di Mala	·····		
Sample ID	1310370-002AM3	Janipi	rype. wia	>	Tes	iCode: El	PA Wethoa	SUZIE: VOIA	lles		
Client ID:	HA-2 @ 3'	Batcl	hiD: R1	, 4021	F	RunNo: 1	4021	8021B: Vola	lies		
Client ID: Prep Date:	HA-2 @ 3'	Batcl Analysis [h iD: R1 Date: 1(9 4021 D/11/2013	F	RunNo: 1 SeqNo: 4	4021 00923	Units: mg/M	(iles (g		
Client ID: Prep Date: Analyte	HA-2 @ 3'	Batcl Analysis [Result	h iD: R1 Date: 1(PQL	9 4021 0/11/2013 SPK value	F SPK Ref Val	RunNo: 1 SeqNo: 4 %REC	4021 00923 LowLimit	Units: mg/k HighLimit	(g %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene	HA-2 @ 3'	Batcl Analysis I Result 0.79	h iD: R1 Date: 1(<u>PQL</u> 0.050	• 4021 0/11/2013 SPK value 0.8772	SPK Ref Val	RunNo: 1 SeqNo: 4 <u>%REC</u> 89.6	4021 00923 LowLimit 67.3	Units: mg/k HighLimit 145	(g %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene	HA-2 @ 3'	Batcl Analysis I Result 0.79 0.80	h iD: R1 Date: 10 PQL 0.050 0.050	4021 0/11/2013 SPK value 0.8772 0.8772	Fes F SPK Ref Val 0 0.01711	RunNo: 1 SeqNo: 4 %REC 89.6 89.0	4021 00923 LowLimit 67.3 66.8	Units: mg/# HighLimit 145 144	(g %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene	HA-2 @ 3'	Batcl Analysis E Result 0.79 0.80 0.82	h iD: R1 Date: 10 <u>PQL</u> 0.050 0.050 0.050	A021 0/11/2013 SPK value 0.8772 0.8772 0.8772 0.8772	SPK Ref Val 0 0.01711 0.01825	RunNo: 1 SeqNo: 4 %REC 89.6 89.0 91.5	4021 00923 LowLimit 67.3 66.8 61.9	Units: mg/# HighLimit 145 144 153	(g %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	HA-2 @ 3'	Batcl Analysis I Result 0.79 0.80 0.82 2.6	PQL 0.050 0.050 0.050 0.050 0.10	4021 0/11/2013 SPK value 0.8772 0.8772 0.8772 2.632	Fes F SPK Ref Val 0 0.01711 0.01825 0.04088	RunNo: 1 SeqNo: 4 <u>%REC</u> 89.6 89.0 91.5 97.1	4021 00923 LowLimit 67.3 66.8 61.9 65.8	Units: mg/# HighLimit 145 144 153 149	kig %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron	HA-2 @ 3'	Batcl Analysis I Result 0.79 0.80 0.82 2.6 1.0	h iD: R1 Date: 10 <u>PQL</u> 0.050 0.050 0.050 0.10	4021 0/11/2013 SPK value 0.8772 0.8772 0.8772 2.632 0.8772	F SPK Ref Val 0 0.01711 0.01825 0.04088	RunNo: 1 SeqNo: 4 %REC 89.6 89.0 91.5 97.1 118	4021 00923 LowLimit 67.3 66.8 61.9 65.8 80	Units: mg/# HighLimit 145 144 153 149 120	kijes Kg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID	nofluorobenzene 1310578-002AMS	Batcl Analysis I Result 0.79 0.80 0.82 2.6 1.0 Samp1	h ID: R1 Date: 1(<u>PQL</u> 0.050 0.050 0.050 0.050 0.10	4021 0/11/2013 SPK value 0.8772 0.8772 0.8772 2.632 0.8772 0.8772	Fes SPK Ref Val 0 0.01711 0.01825 0.04088 Tes	RunNo: 1 SeqNo: 4 %REC 89.6 89.0 91.5 97.1 118 tCode: EI	4021 00923 LowLimit 67.3 66.8 61.9 65.8 80 PA Method	Units: mg/# HighLimit 145 144 153 149 120 8021B: Volat	kig %RPD tiles	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID:	nofluorobenzene 1310578-002AMS 1310578-002AMSE HA-2 @ 3'	Batcl Analysis I Result 0.79 0.80 0.82 2.6 1.0 O Sampl Batcl	h ID: R1 Date: 10 <u>PQL</u> 0.050 0.050 0.050 0.10 Type: MS h ID: R1	4021 5/11/2013 SPK value 0.8772 0.8772 0.8772 2.632 0.8772 50 4021	Fes SPK Ref Val 0 0.01711 0.01825 0.04088 Tes F	RunNo: 1 SeqNo: 4 %REC 89.6 89.0 91.5 97.1 118 tCode: El RunNo: 1	4021 00923 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4021	Units: mg/# HighLimit 145 144 153 149 120 8021B: Volat	kijes Kg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID: Prep Date:	nofluorobenzene 1310578-002AMSE HA-2 @ 3'	Batcl Analysis I Result 0.79 0.80 0.82 2.6 1.0 D Samp Batcl Analysis I	h ID: R1 Date: 1(0.050 0.050 0.050 0.050 0.10 Fype: MS h ID: R1 Date: 1(4021 0/11/2013 SPK value 0.8772 0.8772 2.632 0.8772 0.8772 5D 4021 0/11/2013	Fes SPK Ref Val 0 0.01711 0.01825 0.04088 Tes Fes S	RunNo: 1 SeqNo: 4 %REC 89.6 89.0 91.5 97.1 118 tCode: El RunNo: 1 SeqNo: 4	4021 00923 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4021 00924	Units: mg/k HighLimit 145 144 153 149 120 8021B: Volat	kijes Kg %RPD tiles	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID: Prep Date: Analyte	HA-2 @ 3' HA-2 @ 3' 1310578-002AMSE HA-2 @ 3'	Batcl Analysis I Result 0.79 0.80 0.82 2.6 1.0 D Samp Batcl Analysis I Result	h ID: R1 Date: 10 PQL 0.050 0.050 0.050 0.10 Fype: MS h ID: R1 Date: 10 PQL	4021 3/11/2013 SPK value 0.8772 0.8772 0.8772 2.632 0.8772 5D 4021 3/11/2013 SPK value	Fes SPK Ref Val 0 0.01711 0.01825 0.04088 Tes Fes SPK Ref Val	RunNo: 1 SeqNo: 4 %REC 89.6 89.0 91.5 97.1 118 tCode: El RunNo: 1 SeqNo: 4	4021 00923 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4021 00924 LowLimit	Units: mg/k HighLimit 145 144 153 149 120 8021B: Volat Units: mg/k HighLimit	kiles Kg %RPD kiles Kg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID: Prep Date: Analyte Benzene	HA-2 @ 3' HA-2 @ 3' 1310578-002AMSE HA-2 @ 3'	Batcl Analysis I Result 0.79 0.80 0.82 2.6 1.0 D SampT Batcl Analysis I Result 0.75	h ID: R1 Date: 10 PQL 0.050 0.050 0.050 0.050 0.10 Fype: MS h ID: R1 Date: 10 PQL 0.050	4021 3/11/2013 SPK value 0.8772 0.8772 0.8772 2.632 0.8772 5D 4021 3/11/2013 SPK value 0.8772	Fes SPK Ref Val 0 0.01711 0.01825 0.04088 Tes SPK Ref Val 0	RunNo: 1 SeqNo: 4 %REC 89.6 89.0 91.5 97.1 118 tCode: El RunNo: 1 SeqNo: 4 %REC 85.9	4021 00923 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4021 00924 LowLimit 67.3	Units: mg/k HighLimit 145 144 153 149 120 8021B: Volat Units: mg/k HighLimit 145	kiles Kg %RPD tiles Kg %RPD 4.26	RPDLimit RPDLimit 20	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID: Prep Date: Analyte Benzene Toluene	HA-2 @ 3' HA-2 @ 3' 1310578-002AMSE HA-2 @ 3'	Batcl Analysis I Result 0.79 0.80 0.82 2.6 1.0 D SampT Batcl Analysis I Result 0.75 0.77	h ID: R1 Date: 10 PQL 0.050 0.050 0.050 0.050 0.10 Fype: MS h ID: R1 Date: 10 PQL 0.050 0.050	4021 3/11/2013 SPK value 0.8772 0.8772 0.8772 2.632 0.8772 5D 4021 5D 4021 5PK value 0.8772 0.8772 0.8772 0.8772 0.8772 0.8772	Fes SPK Ref Val 0 0.01711 0.01825 0.04088 Tes SPK Ref Val 0 0.01711	RunNo: 14 SeqNo: 4 %REC 89.6 89.0 91.5 97.1 118 tCode: El RunNo: 14 SeqNo: 4 %REC 85.9 85.5	4021 00923 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4021 00924 LowLimit 67.3 66.8	Units: mg/k HighLimit 145 144 153 149 120 8021B: Volat Units: mg/k HighLimit 145 144	(g %RPD tiles (g %RPD 4.26 3.91	RPDLimit RPDLimit 20 20	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bron Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene	HA-2 @ 3' HA-2 @ 3' 1310578-002AMSE HA-2 @ 3'	Batcl Analysis I Result 0.79 0.80 0.82 2.6 1.0 D SampT Batcl Analysis I Result 0.75 0.77 0.79	h ID: R1 Date: 10 PQL 0.050 0.050 0.050 0.050 0.10 Fype: MS h ID: R1 Date: 10 PQL 0.050 0.050 0.050	4021 3/11/2013 SPK value 0.8772 0.8772 0.8772 2.632 0.8772 5D 4021 5PK value 0.8772	Fes SPK Ref Val 0 0.01711 0.01825 0.04088 Tes SPK Ref Val 0 0.01711 0.01825	RunNo: 14 SeqNo: 4 %REC 89.6 89.0 91.5 97.1 118 tCode: El RunNo: 14 SeqNo: 4 %REC 85.9 85.5 87.5	A Method 4021 00923 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4021 00924 LowLimit 67.3 66.8 61.9	Units: mg/k HighLimit 145 144 153 149 120 8021B: Volat Units: mg/k HighLimit 145 144 153	(g %RPD tilles (g %RPD 4.26 3.91 4.30	RPDLimit RPDLimit 20 20 20	Qual
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	HA-2 @ 3' HA-2 @ 3' 1310578-002AMSC HA-2 @ 3'	Batcl Analysis I Result 0.79 0.80 0.82 2.6 1.0 D SampT Batcl Analysis I Result 0.75 0.77 0.79 2.5	h ID: R1 Date: 10 PQL 0.050 0.050 0.050 0.050 0.10 Fype: MS h ID: R1 Date: 10 PQL 0.050 0.050 0.050 0.050 0.050 0.050	4021 3/11/2013 SPK value 0.8772 0.8772 0.8772 2.632 0.8772 5D 4021 5/11/2013 SPK value 0.8772 0.8772 0.8772 0.8772 0.8772 0.8772 0.8772 0.8772 0.8772 0.8772 0.8772 0.8772 0.8772 0.8772 0.8726 0.8726 0.8726 0.8726 0.8726 0.8726 0.8772 0.8	Fes SPK Ref Val 0 0.01711 0.01825 0.04088 Tes SPK Ref Val 0 0.01711 0.01825 0.04088	RunNo: 1 SeqNo: 4 %REC 89.6 89.0 91.5 97.1 118 RunNo: 1 SeqNo: 4 %REC 85.9 85.5 87.5 92.8	A Method 4021 00923 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4021 00924 LowLimit 67.3 66.8 61.9 65.8	Units: mg/k HighLimit 145 144 153 149 120 8021B: Volat Units: mg/k HighLimit 145 144 153 149	(g %RPD tiles (g %RPD 4.26 3.91 4.30 4.42	RPDLimit RPDLimit 20 20 20 20 20	Qual
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 Surr: 4-Bron	hA-2 @ 3' HA-2 @ 3' 1310578-002AMSC HA-2 @ 3'	Batcl Analysis I 0.79 0.80 0.82 2.6 1.0 D Samp Batcl Analysis I Result 0.75 0.77 0.79 2.5 1.0	h ID: R1 Date: 1(0.050 0.050 0.050 0.10 Type: MS h ID: R1 Date: 10 <u>PQL</u> 0.050 0.050 0.050 0.050 0.050 0.050	4021 0/11/2013 SPK value 0.8772 0.8772 2.632 0.8772 5D 4021 0/11/2013 SPK value 0.8772 0.8	Fes SPK Ref Val 0 0.01711 0.01825 0.04088 Tes SPK Ref Val 0 0.01711 0.01825 0.04088	RunNo: 1 SeqNo: 4 %REC 89.6 89.0 91.5 97.1 118 Code: El RunNo: 1 SeqNo: 4 %REC 85.9 85.5 87.5 92.8 118	A Method 4021 00923 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4021 00924 LowLimit 67.3 66.8 61.9 65.8 80	Units: mg/k HighLimit 145 144 153 149 120 8021B: Volat Units: mg/k HighLimit 145 144 153 149 120	(g %RPD tiles (g %RPD 4.26 3.91 4.30 4.42 0	RPDLimit RPDLimit 20 20 20 20 20 20 0	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

O RSD is greater than RSDlimit

- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 12 of 12

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: E	BLAGG	Work Order Num	ber: 1310578		RcptNo: 1	
Received by/date:	May	10/11/13				
Logged By:	Michelle Garcia	10/11/2013 10:40:0	MA 0	Murul Ga	ma	
Completed By:	Michelle Garsia	/ 10/11/2013 11:02:2	27 AM	Mirel Ga	una)	
Reviewed By:	MALT	4 10/11/13				
Chain of Custo	ody UNCU	0.77				
1 Custody seals	intact on sample bottles	?	Yes	No	Not Present 🗸	
2. Is Chain of Cu	istody complete?		Yes 🗸	No	Not Present	
3. How was the s	sample delivered?		Courier			
<u>Log In</u>						
4. Was an attem	npt made to cool the sam	ples?	Yes 🗸	No	NA	
5. Were all samp	ples received at a tempe	rature of >0° C to 6.0°C	Yes 🗸	No	NA	
6. Sample(s) in	proper container(s)?		Yes 🗸	No		
7. Sufficient sam	ple volume for indicated	test(s)?	Yes 🗸	No		
8. Are samples (except VOA and ONG) p	roperly preserved?	Yes 🗸	No		
9. Was preserva	tive added to bottles?		Yes	No 🗸	NA	
10.VOA vials hav	e zero headspace?		Yes	No	No VOA Vials 🗸	
11. Were any sar	nple containers received	broken?	Yes	No 🗹	# of preserved	
12.Does paperwo (Note discreps	ork match bottle labels? ancies on chain of custod	ly)	Yes 🗸	No	for pH: (<2 or >12 unit	ss noted)
13 Are matrices of	correctly identified on Ch	ain of Custody?	Yes 🗸	No	Adjusted?	
14. Is it clear what	t analyses were requeste	:d?	Yes 🗸	No		
15. Were all holdin (If no, notify ci	ng times able to be met? ustomer for authorization	.)	Yes 🗸	No	Checked by:	

Special Handling (if applicable)

16. Was client notified of all di	screpancies with this order?		Yes	No	· :	NA 🗸
Person Notified:	and a management of a second of the	Date:				
By Whom:		Via:	eMail	Phone	Fax	In Person
Regarding:	n na seu constante, e constante en antipara de constante e de la constante de la constante de la constante de s		ALL MATERIAL COLUMN AND AND AND AND AND AND AND AND AND AN			·
Client Instructions:						

17. Additional remarks:

18. Cooler Information

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

С	hain-	of-Cu	stody Record	Turn-Around	Time:	By MONDAY				-			-		et P				-		
Client:	BLAGO	ENG.	VEERNG INC.	□ Standard	🕱 Rush	10/14/2013					IA N	LL Ai	E Y	N N Sts	2 T 1 T k	AF	N 1 30	ЧС R/	, IN 1 1 to	AL)R	Y
Ĩ	3P An	ERICA	• • • • • • • • • • • • • • • • • • •	Project Name);			1				v hal	lenv	ironi	nent	al co	h				-
Mailing	Address	P.O.	Box 87	PRIT	CHARD	SWD		490	D1 H	awki	ns N	IE -	Alb	iuque	eraue	e. NI	M 87	'109			
I	3c com	FIELD	NM 87413	Project #:		· · · · · · · · · · · · · · · · · · ·		Te	ol. 50)5-34	5-39	975	F	- ax	505-	345-	410	7			
Phone #	#: 5	05-0	632-1199									A	naly	/sis	Req	uest				1937 1940 - 1947 1940 - 1947	s. St. 7. 8.
email or	Fax#:			Project Mana	ger:			ly)	ê					O₄)						Τ	
QA/QC F	Package: d ard		Level 4 (Full Validation)	J. 1	BLAGG	• •	s (8021	(Gas o	44/02			(SMIS)		PO4,S(PCB's					ľ	
	tation AP	□ Othe	۲	Sampler:	J- BLAG	-6 VE No		TPH	O/DF	8.1))4.1)	8270 5		3,NO ₂ ,	/ 8082		8				N)
	(Type)			Sample Tem	oerature:	1.0		нт Ш	(GR	d 41	d 50	o	tals	NN,	ides	2) N	J.			د ک
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALNO. 1310578	BTEX + ME	BTEX + MTI	TPH 8015B	TPH (Metho	EDB (Metho	PAH's (8310	RCRA 8 Me	Anions (F,C	8081 Pestici	8260B (VOA	8270 (Semi-	CHLORN			Air Bubbles
0/9/13	1635	Soil	HA-103	402×1	COUL	-001	X		X									×			Τ
u	1656	น	HA-2@3"	к	મ	$-\alpha_{1}2$	×		×									X			\square
7/10/13	0945	· 14	HA-3 C 2'	И	4	-(3)3	X		×									×			
и	1000	4	HA-4CZ	ц	ц	- 004	X		×									×			
ty .	1030	ц	HA-5 e 2'	ц	Lj	-005	×		×									X			
Li.	6050	ų 	HA-6 ez-	ţi	ä	-006	×		۶									×		_	
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Date:	Time: †2.5 (Time:	Relinquish	ed by: UBlegy ed by:	Received by:	Waller	Date Time	Rem	narks	5:		B	u	B	LA	66						
0/10/13	18DU		Hade	Mile		10/11/13 D:40	 			<u> </u>	<u>3p</u>	6	NT	Aet	-2_	Ja		= Fa	ZAC	E	

is notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report. y, -U 11119 20146 /

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

May 05, 2014

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX (505) 632-3903

RE: Pritchard SWD

OrderNo.: 1404B15

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 7 sample(s) on 4/26/2014 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. 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 qualifers 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,

andis

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1404B15

Date Reported: 5/5/2014

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Blagg Engineering
 Client Sample ID: CS-1 @ 28"

 Project:
 Pritchard SWD
 Collection Date: 4/23/2014 6:15:00 AM

 Lab ID:
 1404B15-001
 Matrix: SOIL
 Received Date: 4/26/2014 11:00:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF Date Analyzed
 Batch

			and the second se			
EPA METHOD 8015D: DIESEL RANGE C	RGANICS				Analyst	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/29/2014 6:45:23 PM	12891
Surr: DNOP	92.5	57.9-140	%REC	1	4/29/2014 6:45:23 PM	12891
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/30/2014 5:45:43 PM	12911
Surr: BFB	84.8	74.5-129	%REC	1	4/30/2014 5:45:43 PM	12911
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.048	mg/Kg	1	4/30/2014 5:45:43 PM	12911
Toluene	ND	0.048	mg/Kg	1	4/30/2014 5:45:43 PM	12911
Ethylbenzene	ND	0.048	mg/Kg	1	4/30/2014 5:45:43 PM	12911
Xylenes, Total	ND	0.096	mg/Kg	1	4/30/2014 5:45:43 PM	12911
Surr: 4-Bromofluorobenzene	98.6	80-120	%REC	1	4/30/2014 5:45:43 PM	12911

Qualifiers: * E		Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	od Blank	
		Value above quantitation range	Н	Holding times for preparation or analysis exceeded		
	J Analyte detected below quantitation limits		ND	Not Detected at the Reporting Limit	Page 1 of 10	
		RSD is greater than RSDlimit	Р	Sample pH greater than 2.	ragerorro	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit		
	S	Spike Recovery outside accepted recovery limits				

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Surr: 4-Bromofluorobenzene

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Lab Order 1404B15

Date Reported: 5/5/2014

4/30/2014 6:14:22 PM 12911

CLIENT: Blagg Engineering			Client Sampl	e ID: CS	5-2 @ 30"			
Project: Pritchard SWD			Collection 1	Date: 4/2	23/2014 6:25:00 AM			
Lab ID: 1404B15-002	Matrix:	Received 1	Received Date: 4/26/2014 11:00:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analys	BCN		
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/29/2014 7:16:30 PM	12891		
Surr: DNOP	105	57.9-140	%REC	1	4/29/2014 7:16:30 PM	12891		
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB		
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	4/30/2014 6:14:22 PM	12911		
Surr: BFB	86.5	74.5-129	%REC	1	4/30/2014 6:14:22 PM	12911		
EPA METHOD 8021B: VOLATILES					Analyst	NSB		
Benzene	ND	0.046	mg/Kg	1	4/30/2014 6:14:22 PM	12911		
Toluene	ND	0.046	mg/Kg	1	4/30/2014 6:14:22 PM	12911		
Ethylbenzene	ND	0.046	mg/Kg	1	4/30/2014 6:14:22 PM	12911		
Xylenes, Total	ND	0.092	mg/Kg	1	4/30/2014 6:14:22 PM	12911		

80-120

%REC

1

101

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	iod Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis	is exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 2 of 10
	O RSD is greater than RSD limit		Р	Sample pH greater than 2.	1 460 2 01 10
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report Lab Order 1404B15 Date Reported: 5/5/2014

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: CS-3 @ 30"

CLIENT: Blagg Engineering Project: Pritchard SWD

Lab ID:

1404B15-003

Collection Date: 4/23/2014 6:35:00 AM Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE OF	GANICS				Analyst	BCN
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/29/2014 7:47:26 PM	12891
Surr: DNOP	99.4	57.9-140	%REC	1	4/29/2014 7:47:26 PM	12891
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/30/2014 6:42:58 PM	12911
Surr: BFB	84.2	74.5-129	%REC	1	4/30/2014 6:42:58 PM	12911
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.048	mg/Kg	1	4/30/2014 6:42:58 PM	12911
Toluene	ND	0.048	mg/Kg	1	4/30/2014 6:42:58 PM	12911
Ethylbenzene	ND	0.048	mg/Kg	1	4/30/2014 6:42:58 PM	12911
Xylenes, Total	ND	0.096	mg/Kg	1	4/30/2014 6:42:58 PM	12911
Surr: 4-Bromofluorobenzene	97.1	80-120	%REC	1	4/30/2014 6:42:58 PM	12911

Matrix: SOIL

the second se					
Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	od Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analyst	is exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 3 of 10
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	1 420 5 01 10
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1404B15

Date Reported: 5/5/2014

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Blagg Engineering
 Client Sample ID: CS-4 @ 30"

 Project:
 Pritchard SWD
 Collection Date: 4/23/2014 6:45:00 AM

 Lab ID:
 1404B15-004
 Matrix: SOIL
 Received Date: 4/26/2014 11:00:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS				Analyst	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/29/2014 8:18:26 PM	12891
Surr: DNOP	98.6	57.9-140	%REC	1	4/29/2014 8:18:26 PM	12891
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/30/2014 7:11:35 PM	12911
Surr: BFB	85.6	74.5-129	%REC	1	4/30/2014 7:11:35 PM	12911
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.048	mg/Kg	1	4/30/2014 7:11:35 PM	12911
Toluene	ND	0.048	mg/Kg	1	4/30/2014 7:11:35 PM	12911
Ethylbenzene	ND	0.048	mg/Kg	1	4/30/2014 7:11:35 PM	12911
Xylenes, Total	ND	0.096	mg/Kg	1	4/30/2014 7:11:35 PM	12911
Surr: 4-Bromofluorobenzene	98.8	80-120	%REC	1	4/30/2014 7:11:35 PM	12911

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	od Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysi	is exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 4 of 10
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	1 age + 01 10
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report Lab Order 1404B15 Date Reported: 5/5/2014

Hall Environmental Analysis Laboratory, Inc.

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 CLIENT:
 Blagg Engineering
 Client Sample ID: CS-5 @ 26"

 Project:
 Pritchard SWD
 Collection Date: 4/23/2014 6:55:00 AM

 Lab ID:
 1404B15-005
 Matrix: SOIL
 Received Date: 4/26/2014 11:00:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed
 Batch

EPA METHOD 8015D: DIESEL RANGE ORG	ANICS				Analyst:	BCN
Diesel Range Organics (DRO)	10	10	mg/Kg	1	4/29/2014 8:49:25 PM	12891
Surr: DNOP	101	57.9-140	%REC	1	4/29/2014 8:49:25 PM	12891
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/30/2014 7:40:13 PM	12911
Surr: BFB	85.3	74.5-129	%REC	1	4/30/2014 7:40:13 PM	12911
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.048	mg/Kg	1	4/30/2014 7:40:13 PM	12911
Toluene	ND	0.048	mg/Kg	1	4/30/2014 7:40:13 PM	12911
Ethylbenzene	ND	0.048	mg/Kg	1	4/30/2014 7:40:13 PM	12911
Xylenes, Total	ND	0.096	mg/Kg	1	4/30/2014 7:40:13 PM	12911
Surr: 4-Bromofluorobenzene	99.8	80-120	%REC	1	4/30/2014 7:40:13 PM	12911

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	od Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analys	is exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 5 of 10
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	1 4 2 0 0 10
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report Lab Order 1404B15 Date Reported: 5/5/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: CS-6 @ 26" Project: Pritchard SWD Collection Date: 4/23/2014 7:05:00 AM Lab ID: 1404B15-006 Matrix: SOIL Received Date: 4/26/2014 11:00:00 AM Analyses Result RL Qual Units DF Date Analyzed Batch

EPA METHOD 8015D: DIESEL RANGE ORG	SANICS				Analyst	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/29/2014 9:51:05 PM	12891
Surr: DNOP	100	57.9-140	%REC	1	4/29/2014 9:51:05 PM	12891
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/30/2014 8:08:48 PM	12911
Surr: BFB	84.3	74.5-129	%REC	1	4/30/2014 8:08:48 PM	12911
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.048	mg/Kg	1	4/30/2014 8:08:48 PM	12911
Toluene	ND	0.048	mg/Kg	1	4/30/2014 8:08:48 PM	12911
Ethylbenzene	ND	0.048	mg/Kg	1	4/30/2014 8:08:48 PM	12911
Xylenes, Total	ND	0.096	mg/Kg	1	4/30/2014 8:08:48 PM	12911
Surr: 4-Bromofluorobenzene	97.4	80-120	%REC	1	4/30/2014 8:08:48 PM	12911

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	od Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analys	is exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 6 of 10
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report Lab Order 1404B15

Date Reported: 5/5/2014

Hall Environmental Analysis Laboratory, Inc.

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 CLIENT:
 Blagg Engineering
 Client Sample ID: CS-7 @ 30"

 Project:
 Pritchard SWD
 Collection Date: 4/23/2014 7:15:00 AM

 Lab ID:
 1404B15-007
 Matrix:
 SOIL
 Received Date: 4/26/2014 11:00:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF Date Analyzed
 Batch

EPA METHOD 8015D: DIESEL RANGE	ORGANICS				Analyst:	BCN
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/29/2014 10:22:12 PM	12891
Surr: DNOP	100	57.9-140	%REC	1	4/29/2014 10:22:12 PM	12891
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/30/2014 10:31:38 PM	12911
Surr: BFB	84.3	74.5-129	%REC	1	4/30/2014 10:31:38 PM	12911
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.050	mg/Kg	1	4/30/2014 10:31:38 PM	12911
, Toluene	ND	0.050	mg/Kg	1	4/30/2014 10:31:38 PM	12911
Ethylbenzene	ND	0.050	mg/Kg	1	4/30/2014 10:31:38 PM	12911
Xylenes, Total	ND	0.10	mg/Kg	1	4/30/2014 10:31:38 PM	12911
Surr: 4-Bromofluorobenzene	97.7	80-120	%REC	1	4/30/2014 10:31:38 PM	12911

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	od Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysi	s exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 7 of 10
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	ruge / or ro
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

4.7

Client: Blagg Project: Pritch	g Engineering ard SWD								
Sample ID MB-12891	SampT	уре: МІ	BLK	Tes	tCode: E	PA Method	8015D: Dies	el Range (Organics
Client ID: PBS	Batch	n ID: 12	891	F	RunNo: 1	8255			
Prep Date: 4/28/2014	Analysis D	ate: 4	/29/2014	S	SeqNo: 5	27432	Units: mg/#	(g	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit
Diesel Range Organics (DRO)	ND	10							
Surr: DNOP	10		10.00		102	57.9	140		
Sample ID LCS-12891	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015D: Dies	el Range (Drganics
Client ID: LCSS	Batch	ID: 12	891	F	RunNo: 1	8255			
Prep Date: 4/28/2014	Analysis D	ate: 4/	29/2014	5	SeqNo: 5	27434	Units: mg/K	٢g	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit
Diesel Range Organics (DRO)	46	10	50.00	0	91.2	60.8	145		

93.3

57.9

140

5.000

Qualifiers:

-

Surr: DNOP

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- 3 Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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WO#: 1404B15 05-May-14

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QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1404B15 05-May-14

Sample ID_MB.12911 SampType: MBLK TestCode: EPA Method 80	015D: Gasoline Range
	5
Client ID: PBS Batch ID: 12911 RunNo: 18302	
Prep Date: 4/28/2014 Analysis Date: 4/30/2014 SeqNo: 529105 L	Jnits: mg/Kg
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO) ND 5.0	
Surr: BFB 850 1000 84.8 74.5	129
Sample ID LCS-12911 SampType: LCS TestCode: EPA Method 80	015D: Gasoline Range
Client ID: LCSS Batch ID: 12911 RunNo: 18302	
Prep Date: 4/28/2014 Analysis Date: 4/30/2014 SeqNo: 529106 L	Jnits: mg/Kg
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO) 24 5.0 25.00 0 95.1 71.7	134
Surr: BFB 940 1000 93.8 74.5	129

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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QC SUMMARY REPORT

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1404B15

05-May-14

Client: Blagg D Project: Pritcha	Engineering rd SWD												
Sample ID MB-12911	SampT	ype: MB	BLK	Tes									
Client ID: PBS	Client ID: PBS Batch ID: 12911				RunNo: 18302								
Prep Date: 4/28/2014	Analysis D	ate: 4/	30/2014	S	SeqNo: 529274		Units: mg/k	٢g					
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-Bromofluorobenzene	1.0		1.000		101	80	120						
Sample ID LCS-12911	SampT	ype: LC	s	TestCode: EPA Method 8021B: Volatiles									
Client ID: LCSS	Batch	n ID: 12	911	F									
Prep Date: 4/28/2014	Analysis D	ate: 4/	30/2014	SeqNo: 529275			Units: mg/h	۲g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	1.1	0.050	1.000	0	108	80	120						
Toluene	1.0	0.050	1.000	0	99.8	80	120						
Ethylbenzene	1.0	0.050	1.000	0	101	80	120						
Xylenes, Total	3.0	0.10	3.000	0	99.0	80	120						
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120						

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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HALL HAIL ENVIR ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505- Website	onmentat Anatysis Labora 4901 Hawkin: Albuquerque, NM 83 345-3975 FAX: 505-345-4 :: www.hallenvironmental.	NOFY S NE 7109 Sam 1107 com	Sample Log-In Check List						
Client Name: BLAGG Work Order	Number: 1404B15		RcptNo: 1						
Received by/date: AF 04 26 14	·····	,		· : ;					
Logged By: Lindsay Mangin 4/26/2014 11:	00:00 AM	Junky Hongo							
Completed By: Lindsay Mangin 4/28/2014 7:4	5:47 AM	Anceber Happo							
Reviewed By: IO 64/28/10	ey.								
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?	Courier								
Log In									
4. Was an attempt made to cool the samples?	Yes 🔽	No 门	NA						
5. Were all samples received at a temperature of >0° C to 6.()°C Yes 🗹	No 🗀	NA []						
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 preserved?	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 🗆	for pH: (<2 or 2	>12 unless noted)					
13. Are matrices correctly identified on Chain of Custody?	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 ⊻	No	Checked by:	· · · · · · · · · · · ·					
Special Handling (if applicable)		_							

5. Was client	notified of a	Il discrepancie:	s with this order?		Yes 🗀		No	NA 🗹
Perso	on Notified:			Date				
By W	hom:			Via:	🔲 eMaii 🏾] Phone	Fax	[In Person
Rega	rding:							And the second
Client	t Instruction	s:					1/1/2010 10 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
7. Additional	remarks:							
Gooler	No Temp	Conditio	n Seat Intact	Seal No	Seal Date	Sigr	ned By	
1	2.7	Good	Yes		······································	1		

Page 1 of 1

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ين			Standard C Rush					ANA	L EI	SIS	LAE	NM SOR	en Lat	TA Or	L LY	
BP America		Project Name:			www.hallenvironmental.com											
Mailing Address: P.O. Box 87		Pritchard SWD				4901 Hawkins NE - Albuqueraue. NM 87109										
Bioomfield, NM 87413			Project #:			Tel. 505-345-3975 Fax 505-345-4107										
Phone #: (505)320-1183						an a	an a	tan an a	Analy	sis R	Reques	t		1 1949 - 1 1 1949 - 1	8	
email or Fax#:			Project Manager:							T					T	
QA/QC Package:			Jeff Blagg				(Q)									
Other				Sampler:	Jeff Blagg			D D								Ę
EDD (Type)			On Ice: ⊠ Yes ⊡ No Sample Temperature:				(GRO								V or t	
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO 1404BIS	BTEX (802	TPH 8015B							ľ	Air Bubhles
04/23/2014	6:15	Soil	CS-1 @ 28"	40z x 1	cool	-001	x	×								\top
04/23/2014	6:25	Soil	CS-2 @ 30"	4oz x 1	cool	-002	x	x								\top
04/23/2014	6:35	Soil	CS-3 @ 30"	4oz x 1	cool	$-\infty^2$	x	x		\top				1	1	+
04/23/2014	6:45	Soil	CS-4 @ 30"	4oz x 1	cool	-004	×	x				1		-	-	+
04/23/2014	6:55	Soil	CS-5 @ 26"	4oz x 1	cool	-005	x	x							-	\top
04/23/2014	7:05	Soil	CS-6 @ 26"	40z x 1	cool	-000	x	x		$\uparrow \uparrow$	1				-	
04/23/2014	7:15	Soil	CS-7 @ 30"	4oz x 1	cool	-007	x	x								
			·								_					
	`															
Date:	Time: 920	Relinquish	Relinquished by:		Mut Walter 1/2×1/1 920			rks: B	ill Blagg	, Engir	neerir	ng				
Date: 4 25 (4	Time:	Relinquished by: Amut Walts		Received by:	1	Date Time 426/4 11.00	•									

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