<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II District III
1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

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

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

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

**Release Notification and Corrective Action** 

Form C-141

Revised August 8, 2011

						OPERA'	ГOR		☐ Initial Report ☐ Final Report				
Name of Co	mpany: B	P				-	Contact: Ste	eve Moskal					
		Court, Farmi		M 87401		,	Telephone 1	No.: 505-326-94	197				
Facility Nar	ne: Galleg	os Canyon U	Jnit 216			]	Facility Typ	e: Natural gas v	well				
Surface Ow	ner: Feder	al/Tribal		Mit	neral Owr	ner: l	Federal			API No	. 30045116	521	
				Ţ	OCAT	IOI	OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from			South Line	Feet from the	East/	West Line	County: Sa	an Juan	ı
N	14	28N	12W	1,550	Se	outh		1,850	West				
			La	titude	36.6581	6°	Longitu	de <u>-108.083</u>	331°				
					NATUI	RE	OF REL	EASE					
Type of Rele	ase: Below	Grade Tank/F	ormer Ear	rthen Pit				Release: unknov	vn	Volume I	Recovered: n	one	
		en pit discove	red during	g removal	of below		Date and I	Hour of Occurrence	ce:	Date and	Hour of Dis	covery:	: February
grade tank – 95 bbl (A)					unknown			11, 2016					
Was Immedia	ate Notice C		17 D	1	M . D	. ,	If YES, To	Whom?					
			Yes 🗵	No 🗀	Not Requi	ired							
By Whom?							Date and I						
Was a Water	course Reac	ched?	Yes 🗵	1 No			If YES, Volume Impacting the Watercourse.						
If a Watercou	f a Watercourse was Impacted, Describe Fully.*												
Describe Cau	ise of Proble	em and Reme	dial Actio	n Taken.*	Sampling	of the	e soil beneath	the BGT was do	ne durir	ng removal.	Soil analys	is resul	ted for
								ad occurred. An e					
			hredding,	per the ap	prove reme	ediati	on plan subn	nitted on May 9, 2	2016. T	he attached	report and l	aborato	ory results
document the						10.0							
		and Cleanup A mented in the						ls of soil was exc	avated a	ind treated v	via soil shrec	lding.	The site was
Tully refliedla	ned as docu	memed in the	attacheu (	ciosure rep	on. Brie	quesi	i iio iuitiiei a	ction.					
I hereby certi	fy that the i	nformation gi	ven above	is true an	d complete	to th	ne best of my	knowledge and u	ındersta	nd that purs	suant to NM	OCD rı	ıles and
regulations a	ll operators	are required to	o report ar	nd/or file c	ertain relea	ase no	otifications a	nd perform correc	ctive act	ions for rel	eases which	may en	ndanger
								arked as "Final R					
								ion that pose a thi					
		adition, NIVIC ws and/or regu		otance of a	C-141 rep	ort a	oes not renev	ve the operator of	respons	ibility for c	ompiiance w	ntn any	otner
rederar, state.	, or local lav	ws and/or regu	nations.					OIL CON	CEDI	ATION	DIVICIO	)NI	
Signature:	Mary VI	Marie )						OIL CON	SEK V	ATION	DIVISIC	<u>/11</u>	
Signature:	Men ) "												
Printed Name	e: Steve Mo	skal					Approved by	Environmental S	specialis	t:			
Title: Field Environmental Coordinator				Approval Date:			Expiration Date:						
F-mail Addre	ecc. cteven r	noskal@bp.co	nm				Conditions o	f Approval:					
L-man Audio	255. SIC VCII.I	noskare op.C	/111			╡	Conditions 0	i rippiovai.			Attached		
Date: Novem	nher 10, 201	16	Pho	ne: 505-33	26-9497								

<sup>\*</sup> Attach Additional Sheets If Necessary





November 7, 2016

Mr. Steve Moskal Field Environmental Coordinator BP America – Lower 48 200 Energy Court Farmington, NM 87401

RE: Remediation Activity Summary and Closure Request Gallegos Canyon Unit #216 API # 30-045-11621 San Juan County, New Mexico

Dear Mr. Moskal:

LT Environmental, Inc. (LTE), under the direction of BP America-Lower 48, conducted environmental remediation of petroleum hydrocarbon impacted soil and confirmation soil sampling activities at the Gallegos Canyon Unit (GCU) #216 natural gas production well. The Site is located approximately 0.63 miles south of the intersection of County Road 5500 and United States Highway 64 in San Juan County, New Mexico. The legal site description is the southeast quarter of the southwest quarter of Section 14, Township 28 North, Range 12 West (Figure 1). This correspondence describes successful soil remediation conducted from June 13, 2016 through August 29, 2016 and proposes site closure based on laboratory analytical results from confirmation soil sampling.

#### SITE BACKGROUND

As part of closure activities for a below-grade tank (BGT), BP collected a soil sample on February 11, 2016, following removal of equipment as required by 19.15.17.13 of the New Mexico Administrative Code (2010 Pit Rule) and regulated by the New Mexico Oil Conservation Division (NMOCD). Laboratory analytical results indicated the concentration of total petroleum hydrocarbons (TPH) in the sample exceeded the regulatory closure standard. BP began excavating impacted soil on April 4, 2016, following the NMOCD's *Guidelines for Remediation of Leaks, Spills and Releases*, dated August 13, 1993. While excavating, BP encountered a second source of impact that was likely a former permitted earthen pit used during former operation of the GCU #216 and co-located GCU #250 production wells. BP investigated the extent of soil impact with test holes. Based on soil sampling results from the open excavation and test holes, BP estimated approximately 15,000 cubic yards (yds³) of soil was impacted to an estimated maximum depth of 30 feet.

Based on the extent of the estimated impact, BP proposed *ex-situ* remediation utilizing soil shredding technology in a remediation work plan submitted to the NMOCD, Bureau of Land Management (BLM), and Navajo Nation Environmental Protection Agency (NNEPA) dated May 10, 2016. The remediation scope of work included excavating clean overburden and impacted soil, separating clean soil from impacted soil, mechanically shredding the impacted soil and treating it through oxidation with hydrogen peroxide, then backfilling the excavation with treated soil and original overburden. Based on a NMOCD ranking criteria of greater than 20 for the Site, the remediation action levels were determined to be 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total BTEX, and 100 mg/kg for TPH.



### **EXCAVATION**

Remediation activities began on June 13, 2016. LTE provided a geologist trained in soil excavation to direct soil removal and segregation to preclude unnecessary soil removal using field screening methods such as a photo-ionization detector (PID) according to NMOCD field headspace techniques and a PetroFlag® field test kit. Excavation activities concluded on August 23, 2016. The extent of the final excavation is depicted on Figure 2. BP excavated a total of approximately 38,633 yds³ of impacted soil and 11,600 yds³ of clean overburden.

LTE collected composite soil samples from the sidewalls and the floor of the excavation to confirm closure standards had been met. All confirmation soil samples were collected by LTE in the presence of one or more regulatory agencies. Confirmation soil samples were representative of the excavation, typically spaced at 30-foot centers along the sidewalls. Excavation floor samples were collected approximately one sample per 625 square feet. All sample locations and pertinent excavation information were mapped using a Trimble 6000 Series GPS unit capable of sub-meter accuracy. Composite samples were collected by depositing five aliquots of soil into plastic bags, thoroughly mixing the contents and sampling into four-ounce glass jars. The samples were stored on ice and shipped to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico following strict chain-of-custody procedures. HEAL analyzed the soil samples for benzene, toluene, ethylbenzene and total xylenes (BTEX) by United States Environmental Protection Agency (EPA) Method 8021, as well as TPH-gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO) by EPA Method 8015. Results from laboratory analysis are presented on Table 1, and the complete laboratory reports are attached. Sample locations are depicted on Figure 2. Laboratory analytical results indicate all excavation confirmation samples were compliant with NMOCD standards.

### **SOIL TREATMENT**

Impacted soil removed from the excavation was processed through a shading bucket attached to an excavator to macerate, or "shred," the soil into a uniform soil size before it was emptied into a grizzly shaker screen to further segregate the soil. A hydrogen peroxide solution ranging from 1 percent (%) to 7% hydrogen peroxide by weight in water was applied to soil on a conveyor belt with multiple spray nozzles. The treated soil was stockpiled on site and left to rest for at least 24 hours to allow the hydrogen peroxide to continue oxidizing the hydrocarbons. The treated soil was stockpiled in 100 yds<sup>3</sup> intervals until successful remediation was proven and documented, and then in 500 yds<sup>3</sup>. The stockpiles of impacted soil were bermed with clean fill to prevent potential impacts from migrating offsite due to stormwater runoff.

LTE collected composite soil samples at a rate of 1 composite sample per 100 yds³ of treated soil for the first 4,700 yds³ of treated soil. Based on the performance of the first 4,700 yds³ of treated material, subsequent composite soil samples were collected every 500 yds³ of treated soil. The composite soil samples were collected in laboratory provided sample containers, placed on ice, and sent to HEAL under chain-of-custody protocol for analysis of BTEX by EPA Method 8021 and TPH- GRO, DRO, and MRO (as required in the conditions of approval of the remediation work plan) by EPA Method 8015.

As long as soil analytical results indicated treated soil and excavation confirmation soil samples met the applicable remediation action levels stated above, LTE returned the treated soil to the excavation. If treated soil did not meet applicable remediation action levels, it was retreated or allowed more time to oxidize before resampling. Table 2 presents treatment confirmation sampling results for 121 samples. The majority of the treatment confirmation samples were below NMOCD remediation action levels for BTEX and TPH. In 16 samples, variances for the TPH remediation action level were requested by BP and granted by



NMOCD, BLM, and NNEPA. In 10 samples, variances for the MRO component in the TPH concentration were requested by BP and granted by NMOCD, BLM, and NNEPA.

The area beneath where treated soil was stockpiled was sampled upon completion of all remediation activities. The top 0 to 6 inches of the vadose zone beneath any areas where impacted and treated material were stockpiled was segregated into 6 areas, representative of size. Composite soil samples were collected from each representative area. The composite soil samples were sent to HEAL for analysis of BTEX by EPA Method 8021 and TPH-GRO, DRO, and MRO by EPA Method 8015. Results are presented in Table 3 and representative areas are depicted in Figure 3. Laboratory analytical results indicated no BTEX or TPH concentrations were detected in the vadose zone.

#### **CONCLUSIONS**

BP successfully removed and treated soil impacted by petroleum hydrocarbon from a former BGT and historical earthen pit. Approximately 38,633 yds³ of impacted soil was removed from the excavation and treated via ex-situ mechanical shredding and chemical oxidation. Excavation confirmation soil sampling results indicated all soil impacted above NMOCD recommended remediation action levels was removed for chemical treatment. Laboratory analysis of TPH concentrations in treated soil confirmed oxidation of petroleum hydrocarbons had occurred and subsequently reduced TPH concentrations to below or near the NMOCD action level. Any variances to the TPH remediation action level were approved by the NMOCD, BLM, and NNEPA. The excavation was backfilled to the existing grade using the clean overburden and remediated soil. Based on the results presented in this report, LTE recommends BP request no further action at the Site and final closure status from the applicable regulatory agencies.

LTE appreciates the opportunity to provide environmental services to BP. Please call us at 970-385-1096 if you have any questions or comments regarding this report.

Sincerely,

LT ENVIRONMENTAL, INC.

Daniel Burns
Project Manager

Ushley L. Ager, M.S., P.G.

Senior Geologist

#### Attachments:

Figure 1 – Site Location Map

Figure 2 – Site Map

Figure 3 – Stockpile Vadose Zone Soil Sample Locations

Table 1 – Laboratory Analytical Results - Excavation Confirmation Soil Samples

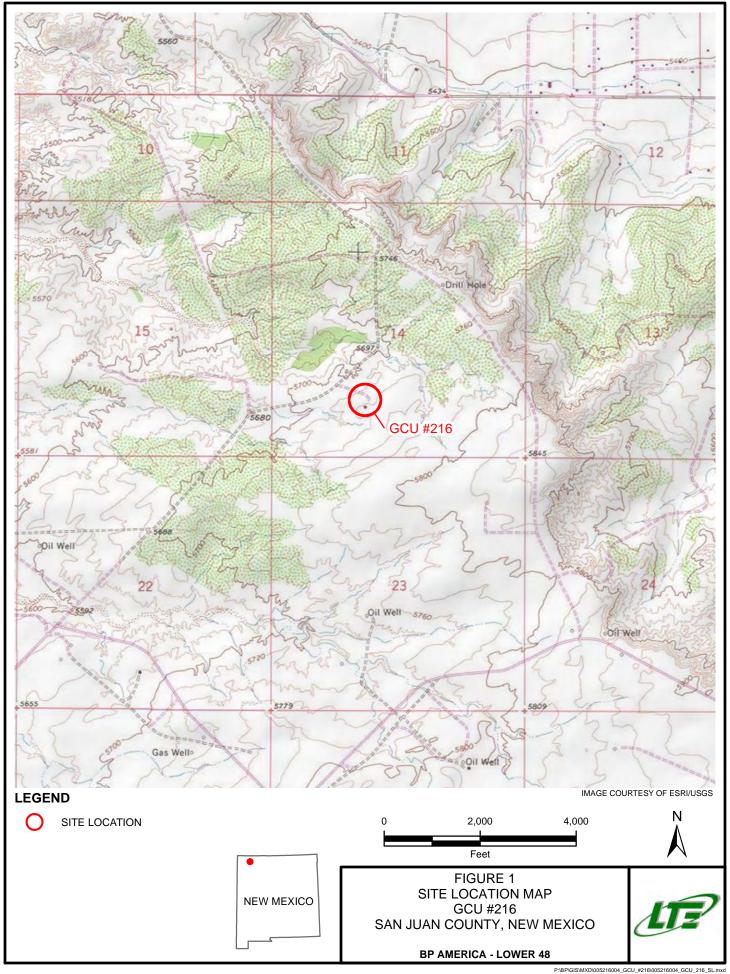
Table 2 – Laboratory Analytical Results - Treatment Soil Samples

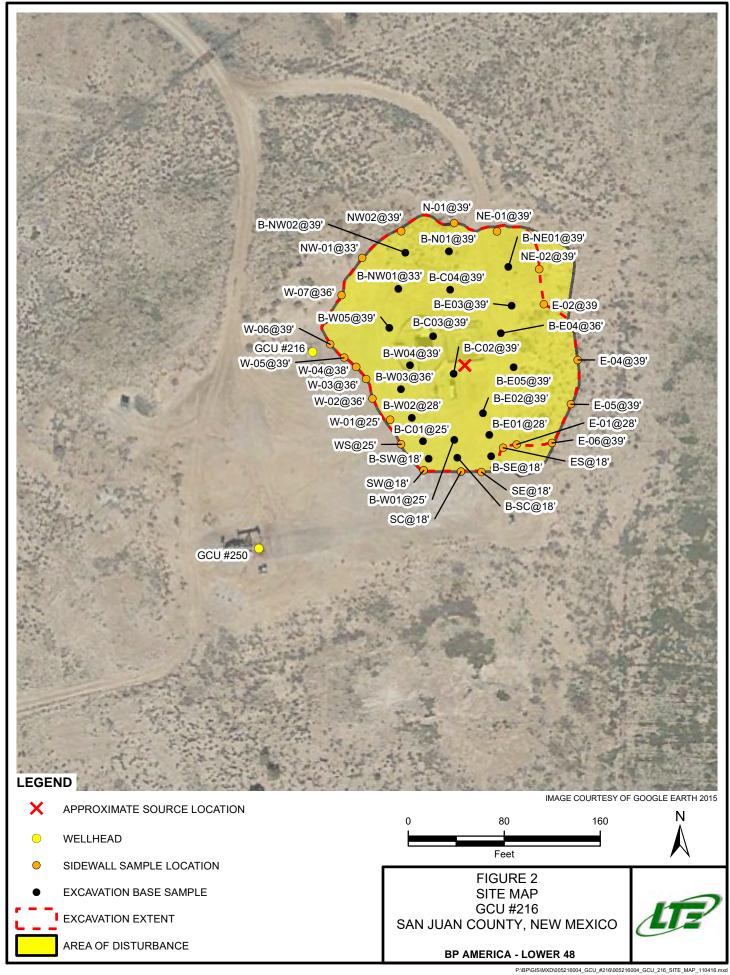
Table 3 – Laboratory Analytical Results - Stockpile Vadose Zone Soil Samples

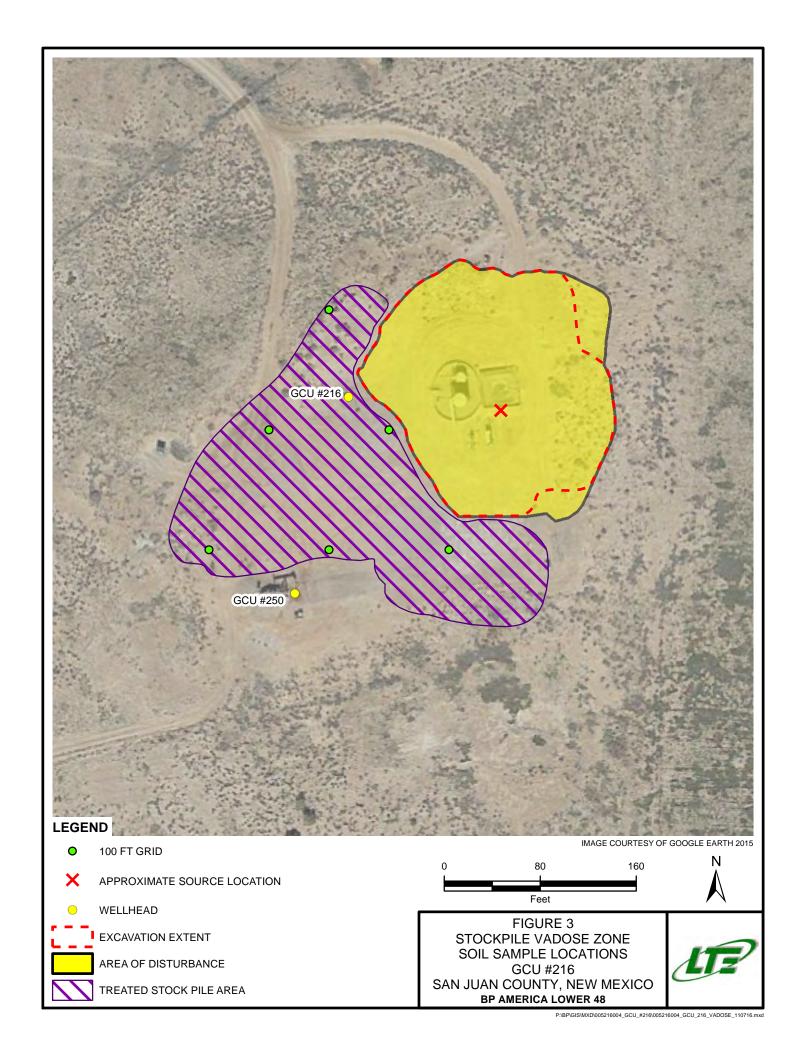
Attachment 1 – Laboratory Analytical Reports

### **FIGURES**









**TABLES** 



## TABLE 1 LABORATORY ANALYTICAL RESULTS - EXCAVATION CONFIRMATION SOIL SAMPLES

### GCU #216 SAN JUAN COUNTY, NEW MEXICO BP AMERICA - LOWER 48

Sample ID	Date	Field Headspace (ppm)	Benzene (mg/kg)	Toulene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	TPH (mg/kg)
SC @ 18'	6/13/2016	0.7	< 0.021	< 0.041	< 0.041	< 0.082	< 50	<4.1	<9.8	<49	<49
SW @ 18'	6/13/2016	0	< 0.018	< 0.037	< 0.037	< 0.073	< 50	<3.7	<9.6	<48	<48
B-SW @ 18'	6/13/2016	42.5	< 0.019	< 0.038	< 0.038	< 0.076	< 50	<3.8	13	<46	13
B-W01 @ 25'	6/14/2016	0	< 0.023	< 0.045	< 0.045	< 0.091	< 50	<4.5	<10	< 50	<50
B-SE @ 18'	6/14/2016	0	< 0.020	< 0.040	< 0.040	< 0.080	<50	<4.0	<9.9	<50	<50
B-SC @ 18'	6/14/2016	0	< 0.019	< 0.038	< 0.038	< 0.076	<50	<3.8	<9.9	<49	<49
ES @ 18'	6/14/2016	0	<0.021	<0.041	<0.041	< 0.082	<50	<4.1	<10	<50	<50
SE @ 18'	6/14/2016	0	<0.020 <0.019	<0.040	<0.040 <0.038	<0.079 <0.077	<50 <50	<4.0	<10 <9.8	<51 <49	<51 <49
WS @ 25' B-W02 @ 28'	6/14/2016 6/15/2016	48.6	< 0.019	0.038	0.038	0.077	0.97	<3.8 14	18	<49	32
B-W02 @ 28 B-C01 @ 25'	6/15/2016	19.1	< 0.017	<0.033	<0.033	< 0.065	<50	<3.3	<10	<50	<50
B-E01 @ 28'	6/15/2016	12.2	< 0.016	<0.033	<0.033	< 0.066	<50	<3.3	<9.5	<47	<47
W-01 @ 25'	6/15/2016	0.7	< 0.016	<0.033	<0.033	< 0.064	<50	<3.2	13	<47	13
E-01 @ 28'	6/15/2016	6.9	< 0.016	<0.032	< 0.032	< 0.065	<50	<3.3	<9.7	<49	<49
B-E02 @ 39'	6/27/2016	147	<0.11	<0.21	<0.21	<0.42	<50	<21	33	<50	33
B-C02 @ 39'	6/27/2016	25.7	< 0.017	< 0.034	< 0.034	< 0.068	<50	<3.4	<9.9	<49	<49
B-W03 @ 36'	6/27/2016	94.4	< 0.017	< 0.035	< 0.035	< 0.070	< 50	<3.5	12	< 50	12
W-02 @ 36'	6/27/2016	40.1	< 0.020	< 0.039	< 0.039	< 0.078	< 50	<3.9	<10	< 50	< 50
W-03 @ 36'	6/27/2016	3.4	< 0.015	< 0.031	< 0.031	< 0.062	< 50	<3.1	<10	<51	<51
B-W04 @ 39'	6/30/2016	173.8	< 0.020	< 0.041	< 0.041	< 0.082	< 50	<4.1	19	<51	19
W-04 @ 38'	6/30/2016	18.8	< 0.019	< 0.037	< 0.037	< 0.075	< 50	<3.7	<9.9	< 50	< 50
W-05 @ 39'	7/13/2016	2.1	< 0.024	< 0.048	< 0.048	< 0.097	< 50	<4.8	<9.8	<49	<49
W-06 @ 39'	7/13/2016	1.4	< 0.020	< 0.041	< 0.041	< 0.081	< 50	<4.1	<9.9	<49	<49
W-07 @ 36'	7/13/2016	0	< 0.022	< 0.044	< 0.044	< 0.087	< 50	<4.4	<9.4	<47	<47
B-W05 @ 39'	7/13/2016	1.5	< 0.020	< 0.040	< 0.040	< 0.081	< 50	<4.0	<10	<51	<51
B-C03 @ 39'	7/13/2016	4.7	< 0.020	< 0.040	< 0.040	< 0.081	< 50	<4.0	<10	< 50	<50
NW-01 @ 33'	7/14/2016	12.3	<0.020	<0.039	< 0.039	< 0.078	<50	<3.9	<9.7	<48	<48
B-NW01 @ 33	7/14/2016	25.4	< 0.020	<0.040	<0.040	<0.079	<50	<4.0	<10	<51	<51
B-NW02 @ 39	7/22/2016 7/22/2016	23.5 62.3	<0.019 <0.020	<0.038	<0.038 <0.041	<0.077 <0.082	<50 <50	<3.8 <4.1	<9.9 <10	<50 <50	<50 <50
B-N01 @ 39' B-NE01 @ 39'	7/22/2016	31.7	<0.020	< 0.041	<0.041	< 0.082	<50	<3.7	<10	<50	<50
B-E03 @ 39'	7/22/2016	60.6	<0.019	<0.037	<0.037	< 0.074	<50	<4.3	<10	<50	<50
NW-02 @ 39'	7/22/2016	0.9	<0.021	<0.043	<0.043	< 0.030	<50	<3.9	<10	<50	<50
N-01 @ 39'	7/22/2016	8.5	<0.019	<0.037	<0.037	<0.078	<50	<4.0	<9.8	<49	<49
NE-01 @ 39'	7/22/2016	2.1	< 0.018	< 0.036	< 0.036	< 0.001	<50	<3.6	<9.8	<49	<49
NE-02 @ 39'	7/22/2016	2.3	< 0.018	< 0.036	< 0.036	< 0.071	<50	<3.6	<9.8	<49	<49
B-C04 @ 39'	7/25/2016	6.5	< 0.021	< 0.041	< 0.041	< 0.083	<50	<4.1	<10	<51	<51
B-E04 @ 36'	7/28/2016	343	< 0.020	< 0.040	< 0.040	< 0.080	< 50	7.0	17	<51	24
E-02 @ 39'	7/28/2016	2.4	< 0.022	< 0.043	< 0.043	< 0.087	< 50	<4.3	<9.8	<49	<49
B-E05 @ 39'	8/5/2016	261.8	< 0.096	< 0.19	< 0.19	< 0.39	< 50	<19	27	<48	27
E-04 @ 39'	8/5/2016	301.9	< 0.020	< 0.040	< 0.040	0.11	0.11	7.5	32	<49	39.5
E-05 @ 39'	8/5/2016	13.3	< 0.020	< 0.039	< 0.039	< 0.078	< 50	< 3.9	<9.6	<48	<48
E-06 @ 39'	8/5/2016	7.9	< 0.020	< 0.040	< 0.040	< 0.079	< 50	<3.9	<9.9	<49	<49
NMOCD	Remediation A	ction Level	10				50				100

### **Notes:**

< indicates result is less than the stated laboratory method detection limit

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

ppm - parts per million

TPH - total petroleum hydrocarbons



## TABLE 2 LABORATORY ANALYTICAL RESULTS - FINAL TREATMENT SOIL SAMPLES

### GCU #216 SAN JUAN COUNTY, NEW MEXICO BP AMERICA - LOWER 48

					1						
						Total					TPH
Sample ID	Date	Cubic Yards	Benzene	Toulene	Ethylbenzene	Xylenes	BTEX	GRO	DRO	MRO	(GRO + DRO)
Sumple 15	Buie	Treated	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
						(8,8)					(8,8)
TSP-01	6/14/2016	0-100	< 0.018	0.092	0.064	0.67	0.826	33	100	63*	133*
TSP-02	6/14/2016	100-200	< 0.026	< 0.053	< 0.053	< 0.11	< 50	5.6	13	< 50	18.6
TSP-03	6/14/2016	200-300	< 0.019	< 0.038	< 0.038	< 0.076	< 50	4.6	13	<49	17.6
TSP-04	6/14/2016	300-400	< 0.018	< 0.036	< 0.036	< 0.072	< 50	<3.6	11	<49	11
TSP-05	6/14/2016	400-500	< 0.019	< 0.038	< 0.038	0.11	0.11	13	<9.6	<48	13
TSP-06	6/14/2016	500-600	< 0.019	< 0.038	0.042	0.44	0.482	16	28	<49	44
TSP-07	6/14/2016	600-700	< 0.019	< 0.038	< 0.038	< 0.076	< 50	<3.8	9.4	<47	9.4
TSP-08	6/17/2016	700-800	0.016	0.14	0.15	1.2	1.506	59	36	<49	95
TSP-09R	6/21/2016	800-900	<0.020	<0.039	< 0.039	< 0.078	<50	<3.9	63	<49	63
TSP-10R	6/21/2016	900-1,000	0.045 <0.016	< 0.037	0.070	0.44	0.555	27	50	<50	77 81
TSP-11R TSP-12R	6/21/2016	1,000-1,100		0.042	0.080	0.48	0.602 <50	29	52	<51 <49	109*
TSP-12R TSP-13R	6/28/2016 6/28/2016	1,100-1,200 1,200-1,300	<0.021	<0.041	<0.041 <0.041	<0.082	<50 <50	41 56	68 25	<49 <50	81
TSP-14	6/17/2016	1,300-1,400	< 0.020	0.041	0.041	1.3	1.56	55	41	<48	96
TSP-15R	6/21/2016	1,400-1,500	0.013	< 0.038	0.13	0.61	0.772	34	54	<46	88
TSP-16R	6/28/2016	1,500-1,600	< 0.020	< 0.038	<0.039	< 0.01	<50	49	18	<51	67
TSP-17R	6/28/2016	1,600-1,700	< 0.020	<0.037	<0.037	0.22	0.22	63	20	<50	83
TSP-18R	6/28/2016	1,700-1,800	<0.021	<0.041	<0.041	< 0.080	<50	39	54	<47	93
TSP-19R	6/28/2016	1,800-1,900	< 0.017	< 0.035	< 0.035	0.44	0.44	61	17	<51	78
TSP-20R	6/23/2016	1,900-2,000	< 0.020	< 0.039	< 0.039	< 0.078	<50	12	39	<50	51
TSP-21R	6/23/2016	2,000-2,100	< 0.018	< 0.036	< 0.036	0.076	0.076	19	22	<50	41
TSP-22R	6/23/2016	2,100-2,200	< 0.016	< 0.033	< 0.033	0.082	0.082	19	14	<48	33
TSP-23R	6/23/2016	2,200-2,300	< 0.018	< 0.036	< 0.036	0.18	0.18	33	20	<49	53
TSP-24	6/20/2016	2,300-2,400	< 0.014	< 0.029	0.097	0.59	0.687	37	44	< 50	81
TSP-25	6/22/2016	2,400-2,500	< 0.025	< 0.050	< 0.050	0.36	0.36	24	18	<48	42
TSP-26	6/22/2016	2,500-2,600	< 0.025	< 0.050	< 0.050	0.24	0.24	35	29	< 50	64
TSP-27	6/22/2016	2,600-2,700	< 0.025	< 0.050	< 0.050	< 0.10	< 50	17	23	<49	40
TSP-28	6/22/2016	2,700-2,800	< 0.025	< 0.050	< 0.050	0.13	0.13	26	47	<48	73
TSP-29	6/22/2016	2,800-2,900	< 0.025	< 0.050	< 0.050	0.22	0.22	30	41	< 50	71
TSP-30	6/22/2016	2,900-3,000	< 0.025	< 0.050	< 0.050	0.23	0.23	19	25	<48	44
TSP-31	6/22/2016	3,000-3,100	< 0.025	< 0.050	< 0.050	0.28	0.28	25	14	<48	39
TSP-32	6/23/2016	3,100-3,200	< 0.018	< 0.037	< 0.037	< 0.074	< 50	6.9	12	<51	18.9
TSP-33	6/23/2016	3,200-3,300	< 0.023	< 0.045	< 0.045	0.11	0.11	<4.5	10	<48	10
TSP-34	6/23/2016	3,300-3,400	< 0.018	< 0.035	0.047	0.45	0.497	15	11	< 50	26
TSP-35	6/23/2016	3,400-3,500	< 0.020	< 0.040	< 0.040	< 0.080	< 50	10	11	<49	21
TSP-36	6/23/2016	3,500-3,600	< 0.019	< 0.038	< 0.038	0.27	0.27	24	38	<49	62
TSP-37,38,39R	7/5/2016	3,600-3,900	<0.020	<0.039	<0.039	< 0.079	<50	<3.9	72	54*	72
TSP-40	6/24/2016	3,900-4,000	<0.021	<0.042	<0.042	<0.084	<50	<4.2	12	<50	12
TSP-41	6/24/2016	4,000-4,100		<0.043	<0.043	< 0.087	<50	20	48	<50	68
TSP-42 TSP-43	6/24/2016 6/24/2016	4,100-4,200 4,200-4,300	<0.019 <0.018	<0.039 <0.037	<0.039 0.056	<0.077 0.49	<50 0.546	5.5 37	12 20	<51 <50	17.5 57
TSP-43 TSP-44	6/27/2016	4,200-4,300	< 0.018	<0.037	< 0.034	0.49	0.546	18	56	<50 <50	74
TSP-45	6/27/2016	4,400-4,500	<0.017	< 0.034	0.052	0.12	0.12	26	64	<51	90
TSP-46	6/27/2016	4,500-4,600	<0.019	<0.038	<0.032	< 0.076	<50	12	100	54*	112*
TSP-47	6/27/2016	4,600-4,700	<0.019	< 0.040	<0.038	0.16	0.16	25	61	<51	86
TSP-48 (500)	6/29/2016	4,700-5,200	< 0.020	< 0.075	< 0.075	<0.15	<50	8.8	100	65*	108.8*
TSP-49 (200)	6/29/2016	5,200-5,400	< 0.020	< 0.039	< 0.039	< 0.078	<50	<3.9	85	62*	85
TSP-50	6/30/2016	5,400-5,900	< 0.023	< 0.046	0.049	0.2	0.249	21	66	<48	87
TSP-51R	7/5/2016	5,900-6,400	< 0.019	< 0.037	< 0.037	< 0.075	<50	<3.7	91	64*	91
TSP-52	6/30/2016	6,400-6,900	< 0.020	< 0.039	< 0.039	< 0.079	< 50	7.5	84	52*	91.5
TSP-53	6/30/2016	6,900-7,400	< 0.021	0.130	0.140	1.5	1.77	53	49	< 50	102*
TSP-54	7/5/2016	7,400-7,900	< 0.019	< 0.038	< 0.038	< 0.076	< 50	<3.8	41	<49	41
TSP-55	7/8/2016	7,900-8,400	< 0.019	< 0.038	< 0.038	< 0.075	< 50	<3.8	78	54*	78
TSP-56	7/8/2016	8,400-8,900	< 0.019	< 0.039	< 0.039	0.15	0.15	10	97	62*	107*
TSP-57	7/8/2016	8,900-9,400	< 0.020	< 0.040	< 0.040	< 0.081	< 50	6.3	95	60*	101.3*
TSP-58	7/8/2016	9,400-9,900	< 0.022	< 0.044	< 0.044	< 0.089	< 50	<4.4	38	<47	38
TSP-59	7/11/2106	9,900-10,400	< 0.022	< 0.044	< 0.044	< 0.088	< 50	<4.4	44	< 50	44



## TABLE 2 LABORATORY ANALYTICAL RESULTS - FINAL TREATMENT SOIL SAMPLES

### GCU #216 SAN JUAN COUNTY, NEW MEXICO BP AMERICA - LOWER 48

					1						
						Total					TPH
Sample ID	Date	Cubic Yards	Benzene	Toulene	Ethylbenzene	Xylenes	BTEX	GRO	DRO	MRO	(GRO + DRO)
•		Treated	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
TSP-60	7/11/2106	10,400-10,900	<0.010	<0.020	<0.020	±0.075	-50	-2.0	<i>C</i> 1	-50	61
TSP-60 TSP-61	7/11/2106 7/11/2016	10,400-10,900	<0.019	<0.038	<0.038 <0.043	<0.075 <0.087	<50 <50	<3.8	61 50	<50 <49	61 61
TSP-62	7/11/2016	11,400-11,400	<0.022	<0.043	<0.043	<0.087	<50	<4.1	63	<49	63
TSP-63	7/11/2016	11,900-12,400	<0.021	< 0.041	<0.041	<0.082	<50		52		52
TSP-64	7/11/2016	12,400-12,400	<0.019	<0.037	<0.037	0.16	0.16	<3.7 9.6	48	<50 <50	57.6
TSP-65	7/11/2016	12,900-13,400	< 0.019	< 0.038	< 0.038	<0.075	<50	4.1	42	<49	46.1
TSP-66	7/13/2016	13,400-13,900	<0.013	<0.037	<0.037	<0.073	<50	<4.4	20	<49	20
TSP-67	7/13/2016	13,900-14,400	< 0.022	< 0.044	<0.044	<0.092	<50	5.3	33	<49	38.3
TSP-68	7/13/2016	14,400-14,900	< 0.023	<0.042	<0.042	<0.092	<50	<4.2	22	<49	22
TSP-69	7/13/2016	14,900-15,400	< 0.021	< 0.041	< 0.041	<0.082	<50	<4.1	28	<49	28
TSP-70	7/13/2016	15,400-15,900	< 0.021	< 0.043	< 0.043	<0.086	<50	<4.3	29	<48	29
TSP-71	7/13/2016	15,900-16,400	< 0.021	< 0.043	< 0.043	< 0.086	<50	<4.3	28	<47	28
TSP-72	7/18/2016	16,400-16,900	< 0.021	< 0.043	< 0.043	< 0.086	<50	<4.3	<10	<50	<50
TSP-73	7/18/2016	16,900-17,400	< 0.021	< 0.042	<0.042	< 0.085	<50	<4.2	<10	<51	<51
TSP-74	7/18/2016	17,400-17,900	< 0.019	< 0.038	< 0.038	< 0.075	<50	<3.8	20	<51	<51
TSP-75	7/18/2016	17,900-18,400	< 0.020	< 0.040	< 0.040	< 0.079	<50	<4.0	<10	<50	<50
TSP-76	7/18/2016	18,400-18,900	< 0.019	< 0.039	< 0.039	< 0.077	<50	<3.9	11	<48	<48
TSP-77	7/18/2016	18,900-19,400	< 0.020	< 0.039	< 0.039	< 0.079	<50	<3.9	<9.9	<49	<49
TSP-78	7/20/2016	19,400-19,900	< 0.019	< 0.038	< 0.038	< 0.076	< 50	<3.8	<9.9	< 50	<50
TSP-79	7/20/2016	19,900-20,400	0.36	0.33	0.43	4.5	5.62	120	<9.9	<50	120*
TSP-80	7/20/2016	20,400-20,900	< 0.020	< 0.040	< 0.040	< 0.079	<50	<4.0	<10	<50	<50
TSP-81R	7/26/2016	20,900-21,400	< 0.020	< 0.041	< 0.041	< 0.082	< 50	7.6	49	<48	56.6
TSP-82	7/22/2016	21,400-21,900	< 0.12	< 0.25	< 0.25	0.64	0.64	<25	21	<48	21
TSP-83	7/26/2016	21,900-22,400	< 0.021	< 0.042	< 0.042	0.097	0.097	9.4	89	< 50	98.4
TSP-84	7/26/2016	22,400-22,900	< 0.020	< 0.039	0.045	0.46	0.505	18	17	<47	35
TSP-85	7/26/2016	22,900-23,400	< 0.020	< 0.041	< 0.041	< 0.082	< 50	10	31	<47	41
TSP-86	7/26/2016	23,400-23,900	< 0.11	< 0.22	< 0.22	< 0.43	< 50	<22	52	<49	52
TSP-87	7/26/2016	23,900-24,400	< 0.021	< 0.042	< 0.042	< 0.085	< 50	4.9	45	< 50	49.9
TSP-88	7/26/2016	24,400-24,900	< 0.095	< 0.19	< 0.19	< 0.38	< 50	<19	32	<48	32
TSP-89	7/25/2016	24,900-25,400	< 0.020	< 0.041	< 0.041	0.089	0.089	6.8	48	<49	54.8
TSP-90	7/25/2016	25,400-25,900	< 0.020	< 0.040	< 0.040	0.13	0.13	4.8	23	<48	27.8
TSP-91	7/25/2016	25,900-26,400	< 0.096	< 0.19	< 0.19	< 0.38	< 50	<19	31	< 50	31
TSP-92	7/25/2016	26,400-26,900	< 0.10	< 0.20	< 0.20	< 0.40	< 50	<20	36	<49	36
TSP-93	7/25/2016	26,900-27,400	< 0.021	< 0.042	<0.042	0.095	0.095	7.8	34	< 50	41.8
TSP-94	7/25/2016	27,400-27,900	< 0.021	< 0.041	< 0.041	0.11	0.11	12	32	<49	44
TSP-95R	8/1/2016	27,900-28,400	< 0.10	< 0.20	<0.20	<0.41	<50	<20	58	<47	58
TSP-96	7/28/2016	28,400-28,900	< 0.020	0.14	0.11	1.2	1.45	46	68	<48	114*
TSP-97	7/28/2016	28,900-29,400	<0.020	<0.039	<0.039	0.52	0.52	55	39	<48	94
TSP-98	7/28/2016	29,400-29,900	<0.021	<0.042	<0.042 <0.044	0.16	0.16	31	78	<49	109*
TSP-99 TSP-100	8/1/2016 8/1/2016	29,900-30,400	<0.022	<0.044	<0.044	0.27 <0.43	0.27 <50	29 <21	47 55	<48 <49	76 55
TSP-100	8/1/2016	30,400-30,900 30,900-31,400	<0.11	<0.21	<0.21	<0.43	<50 <50	<4.2	36	<49	36
TSP-101	8/1/2016	31,400-31,900	<0.021	<0.042	<0.042	0.46	0.46	48	85	<50	133*
TSP-102	8/1/2016	31,900-32,400	<0.021	<0.041	<0.041	< 0.080	<50	<4.0	67	<49	67
TSP-104R	8/5/2016	32,400-32,900	< 0.020	< 0.037	< 0.037	0.25	0.25	33	39	<49	72
TSP-105R	8/5/2016	32,900-33,400	< 0.010	< 0.043	<0.043	0.23	0.23	36	90	<46	126*
TSP-107	8/5/2016	33,900-34,400	< 0.024	< 0.048	<0.048	0.098	0.098	18	82	<49	100
TSP-106RT2	8/23/2016	33,400-33,900	< 0.024	< 0.047	< 0.047	< 0.094	<50	29	28	<47	57
TSP-108	8/5/2016	34,400-34,900	< 0.020	< 0.040	< 0.040	< 0.081	<50	17	66	<50	83
TSP-109	8/9/2016	34,900-35,400	< 0.018	< 0.037	< 0.037	< 0.074	<50	20	43	<50	63
TSP-110	8/9/2016	35,400-35,900	< 0.021	< 0.042	< 0.042	< 0.085	< 50	7.6	68	<51	75.6
TSP-111RT2	8/23/2016	35,900-36,330	< 0.019	< 0.039	< 0.039	< 0.077	< 50	<3.9	30	<49	30
TSP-112RT	8/23/2016	36,330-36,830	< 0.021	< 0.042	< 0.042	< 0.083	< 50	18	56	<48	74
TSP-113RT	8/23/2016	36,830-37,230	< 0.019	< 0.038	< 0.038	< 0.076	< 50	23	45	<49	68
TSP-114R	8/18/2016	37,230-37,730	< 0.019	< 0.037	< 0.037	< 0.074	< 50	12	45	<48	57
TSP-115R	8/18/2016	37,730-38,230	< 0.022	< 0.044	< 0.044	0.29	0.29	54	46	<49	100
TSP-116R	8/18/2016	38,230-38,730	< 0.024	< 0.048	< 0.048	< 0.095	< 50	27	48	< 50	75



## TABLE 2 LABORATORY ANALYTICAL RESULTS - FINAL TREATMENT SOIL SAMPLES

#### GCU #216 SAN JUAN COUNTY, NEW MEXICO BP AMERICA - LOWER 48

Sample ID	Date	Cubic Yards Treated	Benzene (mg/kg)	Toulene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	TPH (GRO + DRO) (mg/kg)
TSP-117	8/12/2016	38,730-39,230	< 0.11	< 0.11	< 0.11	< 0.22	< 50	28	130	<48	158*
TSP-118R	8/18/2016	39,230-39,730	< 0.024	< 0.047	< 0.047	< 0.094	< 50	15	36	< 50	51
TSP-119	8/12/2016	39,730-40,230	< 0.10	< 0.10	< 0.10	0.29	0.29	26	98	51*	124*
TSP-120	8/12/2016	40,230-40,730	< 0.022	< 0.043	< 0.043	0.12	0.12	19	99	<48	118*
TSP-121	8/12/2016	40,730-41,230	< 0.020	< 0.039	< 0.039	< 0.079	< 50	12	37	< 50	49
TSP-122R	8/18/2016	41,230-41,640	< 0.022	< 0.043	< 0.043	< 0.087	< 50	33	42	<48	75
NMOCI	Remediation A	ction Level	10				50				100

#### Notes:

< indicates result is less than the stated laboratory method detection limit

**Bold** - indicates values exceeding NMOCD standards

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

TPH - total petroleum hydrocarbons



<sup>\*-</sup> variance approved by NMOCD for MRO concentrations and/or TPH (GRO+DRO) remediation action level

## TABLE 3 LABROATORY ANALYTICAL RESULTS - STOCKPILE VADOSE ZONE SOIL SAMPLES

### GCU #216 SAN JUAN COUNTY, NEW MEXICO BP - LOWER 48

Sample ID	Date	Benzene (mg/kg)	Toulene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	TPH (mg/kg)
VZ-01	8/29/2016	< 0.024	< 0.047	< 0.047	< 0.094	< 0.094	<4.7	<10	< 50	< 50
VZ-02	8/29/2016	< 0.023	< 0.047	< 0.047	< 0.094	< 0.094	<4.7	<9.8	<49	<49
VZ-03	8/29/2016	< 0.023	< 0.046	< 0.046	< 0.093	< 0.093	<4.6	<9.8	<49	<49
VZ-04	8/29/2016	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	<4.8	<10	< 50	< 50
VZ-05	8/29/2016	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	<4.8	<9.7	<48	<48
VZ-06	8/29/2016	< 0.024	< 0.047	< 0.047	< 0.095	< 0.095	<4.7	<9.8	<49	<49
NMOCD Remediat	tion Action Level	10				50				100

#### **Notes:**

< indicates result is less than the stated laboratory method detection limit

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

TPH - total petroleum hydrocarbons



# ATTACHMENT 1 LABORATORY ANALYTICAL REPORTS





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

June 16, 2016

Danny Burns

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU 216 OrderNo.: 1606773

### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 7 sample(s) on 6/15/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/16/2016

CLIENT: LTE Client Sample ID: TSP-01

 Project:
 GCU 216
 Collection Date: 6/14/2016 2:35:00 PM

 Lab ID:
 1606773-001
 Matrix: MEOH (SOIL)
 Received Date: 6/15/2016 7:15:00 AM

Analyses	Result	PQL Q	Qual Uni	its	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	5				Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	100	10	mg	g/Kg	1	6/15/2016 10:40:27 AM
Motor Oil Range Organics (MRO)	63	50	mg	g/Kg	1	6/15/2016 10:40:27 AM
Surr: DNOP	96.5	70-130	%F	Rec	1	6/15/2016 10:40:27 AM
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst: NSB
Gasoline Range Organics (GRO)	33	3.5	mg	g/Kg	1	6/15/2016 10:10:23 AM
Surr: BFB	412	80-120	S %F	Rec	1	6/15/2016 10:10:23 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.018	mg	g/Kg	1	6/15/2016 10:10:23 AM
Toluene	0.092	0.035	mg	g/Kg	1	6/15/2016 10:10:23 AM
Ethylbenzene	0.064	0.035	mg	g/Kg	1	6/15/2016 10:10:23 AM
Xylenes, Total	0.67	0.070	mg	g/Kg	1	6/15/2016 10:10:23 AM
Surr: 4-Bromofluorobenzene	120	80-120	%F	Rec	1	6/15/2016 10:10:23 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/16/2016

CLIENT: LTE Client Sample ID: TSP-02

 Project:
 GCU 216
 Collection Date: 6/14/2016 2:40:00 PM

 Lab ID:
 1606773-002
 Matrix: MEOH (SOIL)
 Received Date: 6/15/2016 7:15:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	13	10	mg/Kg	1	6/15/2016 11:02:18 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/15/2016 11:02:18 AM
Surr: DNOP	96.5	70-130	%Rec	1	6/15/2016 11:02:18 AM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	5.6	5.3	mg/Kg	1	6/15/2016 10:33:48 AM
Surr: BFB	151	80-120	S %Rec	1	6/15/2016 10:33:48 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.026	mg/Kg	1	6/15/2016 10:33:48 AM
Toluene	ND	0.053	mg/Kg	1	6/15/2016 10:33:48 AM
Ethylbenzene	ND	0.053	mg/Kg	1	6/15/2016 10:33:48 AM
Xylenes, Total	ND	0.11	mg/Kg	1	6/15/2016 10:33:48 AM
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	6/15/2016 10:33:48 AM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 6/16/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: TSP-03

 Project:
 GCU 216
 Collection Date: 6/14/2016 2:45:00 PM

 Lab ID:
 1606773-003
 Matrix: MEOH (SOIL)
 Received Date: 6/15/2016 7:15:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	;			Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	13	9.9	mg/Kg	1	6/15/2016 11:24:04 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/15/2016 11:24:04 AM
Surr: DNOP	97.8	70-130	%Rec	1	6/15/2016 11:24:04 AM
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	4.6	3.8	mg/Kg	1	6/15/2016 10:57:21 AM
Surr: BFB	151	80-120	S %Rec	1	6/15/2016 10:57:21 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1	6/15/2016 10:57:21 AM
Toluene	ND	0.038	mg/Kg	1	6/15/2016 10:57:21 AM
Ethylbenzene	ND	0.038	mg/Kg	1	6/15/2016 10:57:21 AM
Xylenes, Total	ND	0.076	mg/Kg	1	6/15/2016 10:57:21 AM
Surr: 4-Bromofluorobenzene	109	80-120	%Rec	1	6/15/2016 10:57:21 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc. Date Reported: 6/16/2016

CLIENT: LTE Client Sample ID: TSP-04

 Project:
 GCU 216
 Collection Date: 6/14/2016 2:50:00 PM

 Lab ID:
 1606773-004
 Matrix: MEOH (SOIL)
 Received Date: 6/15/2016 7:15:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	}			Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	11	9.9	mg/Kg	1	6/15/2016 11:45:58 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/15/2016 11:45:58 AM
Surr: DNOP	99.2	70-130	%Rec	1	6/15/2016 11:45:58 AM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	6/15/2016 11:20:51 AM
Surr: BFB	125	80-120	S %Rec	1	6/15/2016 11:20:51 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.018	mg/Kg	1	6/15/2016 11:20:51 AM
Toluene	ND	0.036	mg/Kg	1	6/15/2016 11:20:51 AM
Ethylbenzene	ND	0.036	mg/Kg	1	6/15/2016 11:20:51 AM
Xylenes, Total	ND	0.072	mg/Kg	1	6/15/2016 11:20:51 AM
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	6/15/2016 11:20:51 AM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/16/2016

CLIENT: LTE Client Sample ID: TSP-05

 Project:
 GCU 216
 Collection Date: 6/14/2016 2:55:00 PM

 Lab ID:
 1606773-005
 Matrix: MEOH (SOIL)
 Received Date: 6/15/2016 7:15:00 AM

Analyses	Result	PQL Q	Qual Uı	nits	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3				Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.6	m	ng/Kg	1	6/15/2016 12:07:40 PM
Motor Oil Range Organics (MRO)	ND	48	m	ng/Kg	1	6/15/2016 12:07:40 PM
Surr: DNOP	98.3	70-130	%	Rec	1	6/15/2016 12:07:40 PM
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst: NSB
Gasoline Range Organics (GRO)	13	3.8	m	ng/Kg	1	6/15/2016 11:44:18 AM
Surr: BFB	176	80-120	S %	Rec	1	6/15/2016 11:44:18 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.019	m	ng/Kg	1	6/15/2016 11:44:18 AM
Toluene	ND	0.038	m	ng/Kg	1	6/15/2016 11:44:18 AM
Ethylbenzene	ND	0.038	m	ng/Kg	1	6/15/2016 11:44:18 AM
Xylenes, Total	0.11	0.075	m	ng/Kg	1	6/15/2016 11:44:18 AM
Surr: 4-Bromofluorobenzene	110	80-120	%	Rec	1	6/15/2016 11:44:18 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/16/2016

CLIENT: LTE Client Sample ID: TSP-06

 Project:
 GCU 216
 Collection Date: 6/14/2016 3:00:00 PM

 Lab ID:
 1606773-006
 Matrix: MEOH (SOIL)
 Received Date: 6/15/2016 7:15:00 AM

Analyses	Result	PQL Q	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	;			Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	28	9.8	mg/Kg	1	6/15/2016 12:29:33 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/15/2016 12:29:33 PM
Surr: DNOP	98.3	70-130	%Rec	1	6/15/2016 12:29:33 PM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	16	3.8	mg/Kg	1	6/15/2016 12:07:50 PM
Surr: BFB	189	80-120	S %Rec	1	6/15/2016 12:07:50 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1	6/15/2016 12:07:50 PM
Toluene	ND	0.038	mg/Kg	1	6/15/2016 12:07:50 PM
Ethylbenzene	0.042	0.038	mg/Kg	1	6/15/2016 12:07:50 PM
Xylenes, Total	0.44	0.077	mg/Kg	1	6/15/2016 12:07:50 PM
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	1	6/15/2016 12:07:50 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/16/2016

CLIENT: LTE Client Sample ID: TSP-07

 Project:
 GCU 216
 Collection Date: 6/14/2016 3:05:00 PM

 Lab ID:
 1606773-007
 Matrix: MEOH (SOIL)
 Received Date: 6/15/2016 7:15:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	;			Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	9.4	9.4	mg/Kg	1	6/15/2016 12:51:24 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/15/2016 12:51:24 PM
Surr: DNOP	101	70-130	%Rec	1	6/15/2016 12:51:24 PM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	6/15/2016 12:31:19 PM
Surr: BFB	135	80-120	S %Rec	1	6/15/2016 12:31:19 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1	6/15/2016 12:31:19 PM
Toluene	ND	0.038	mg/Kg	1	6/15/2016 12:31:19 PM
Ethylbenzene	ND	0.038	mg/Kg	1	6/15/2016 12:31:19 PM
Xylenes, Total	ND	0.076	mg/Kg	1	6/15/2016 12:31:19 PM
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	6/15/2016 12:31:19 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

LTE

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606773** 

16-Jun-16

Chent: Project:	GCU 216										
Sample ID	LCS-25831	SampTy	/pe: <b>L(</b>	s	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	LCSS	Batch	ID: <b>25</b>	831	F	RunNo: 34	4919				
Prep Date:	6/14/2016	Analysis Da	ate: <b>6</b> /	/15/2016	S	SeqNo: 10	078596	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		6.1		5.000		122	70	130			
Sample ID	MB-25831	SampTy	/pe: <b>M</b> I	BLK	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	PBS	Batch	ID: <b>25</b>	831	F	RunNo: 34	4919				
Prep Date:	6/14/2016	Analysis Da	ate: <b>6</b> /	/15/2016	8	SeqNo: 10	078597	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		11		10.00		111	70	130			
Sample ID	MB-25864	SampTy	/pe: <b>M</b> I	BLK	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	PBS	Batch	ID: <b>25</b>	864	F	RunNo: 34	4919				
Prep Date:	6/15/2016	Analysis Da	ate: <b>6</b> /	/15/2016	S	SeqNo: 10	078598	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
_	Organics (DRO)	ND	10								
•	je Organics (MRO)	ND	50	40.00		00.7	70	400			
Surr: DNOP		10		10.00		99.7	70	130			
•	LCS-25864	SampTy						8015M/D: Di	esel Rang	e Organics	
Client ID:			ID: <b>25</b>		F	RunNo: 34	4919				
Prep Date:	6/15/2016	Analysis Da	ate: <b>6</b> /	/15/2016	8	SeqNo: 10	078832	Units: mg/k	(g		
Analyte		Result	PQL	SDK value							
Diesel Range (	Organics (DRO)				SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	organico (DINO)	48	10	50.00	SPK Ref Val	96.9	62.6	124	%RPD	RPDLimit	Qual
	organico (DIVO)	48 4.7	10						%RPD	RPDLimit	Qual
Sample ID	1606773-001AMS			50.00 5.000	0	96.9 94.7	62.6 70	124			Qual
Sample ID Client ID:	1606773-001AMS	4.7 SampTy		50.00 5.000	0 Tes	96.9 94.7	62.6 70 PA Method	124 130			Qual
Client ID:	1606773-001AMS	4.7 SampTy	/pe: <b>M</b> \$	50.00 5.000 S 864	0 Tes	96.9 94.7 tCode: <b>EF</b>	62.6 70 PA Method 4919	124 130	esel Rang		Qual
Client ID:	1606773-001AMS TSP-01	4.7 SampTy Batch	/pe: <b>M</b> \$ ID: <b>25</b> ate: <b>6</b> /	50.00 5.000 S 864 /15/2016	0 Tes	96.9 94.7 tCode: <b>EF</b> RunNo: <b>3</b> 4 SeqNo: <b>1</b> 0	62.6 70 PA Method 4919 079067	124 130 <b>8015M/D: Di</b>	esel Rang		Qual
Client ID: Prep Date: Analyte Diesel Range (	1606773-001AMS TSP-01	Analysis Da Result	/pe: <b>M</b> \$ ID: <b>25</b> ate: <b>6</b> /	50.00 5.000 S 864 /15/2016 SPK value 47.26	0 Tes F	96.9 94.7 tCode: EF RunNo: 34 SeqNo: 10 %REC 39.0	62.6 70 PA Method 4919 079067 LowLimit 33.9	124 130 <b>8015M/D: Di</b> Units: <b>mg/k</b> HighLimit 141	esel Rang	e Organics	
Client ID: Prep Date: Analyte	1606773-001AMS TSP-01 6/15/2016	4.7  SampTy  Batch  Analysis Da	/pe: <b>M\$</b> ID: <b>25</b> ate: <b>6</b> /	50.00 5.000 S 864 /15/2016 SPK value	0 Tes F S SPK Ref Val	96.9 94.7 tCode: <b>EF</b> RunNo: <b>3</b> SeqNo: <b>1</b> ( %REC	62.6 70 PA Method 4919 079067 LowLimit	124 130 <b>8015M/D: Di</b> Units: <b>mg/k</b> HighLimit	esel Rang	e Organics	
Client ID: Prep Date: Analyte Diesel Range ( Surr: DNOP	1606773-001AMS TSP-01 6/15/2016	A.7  SampTy Batch Analysis Da Result 120 4.3	ype: <b>M</b> \$ ID: <b>25</b> ate: <b>6</b> PQL 9.5	50.00 5.000 S 864 715/2016 SPK value 47.26 4.726	0 Tes F S SPK Ref Val 104.3	96.9 94.7 tCode: <b>EF</b> RunNo: <b>3</b> 4 SeqNo: <b>1</b> ( %REC 39.0 91.0	62.6 70 PA Method 4919 079067 LowLimit 33.9 70	124 130 <b>8015M/D: Di</b> Units: <b>mg/k</b> HighLimit 141	esel Rango Kg %RPD	e Organics RPDLimit	
Client ID: Prep Date: Analyte Diesel Range ( Surr: DNOP	1606773-001AMS TSP-01 6/15/2016  Drganics (DRO)	Analysis Da Result 120 4.3  SampTy	ype: <b>M</b> \$ ID: <b>25</b> ate: <b>6</b> PQL 9.5	50.00 5.000 5.000 5 864 /15/2016 SPK value 47.26 4.726	Tes F S SPK Ref Val 104.3	96.9 94.7 tCode: <b>EF</b> RunNo: <b>3</b> 4 SeqNo: <b>1</b> ( %REC 39.0 91.0	62.6 70 PA Method 4919 079067 LowLimit 33.9 70	124 130 <b>8015M/D: Di</b> Units: <b>mg/k</b> HighLimit 141 130	esel Rango Kg %RPD	e Organics RPDLimit	
Client ID: Prep Date: Analyte Diesel Range ( Surr: DNOP  Sample ID Client ID:	1606773-001AMS TSP-01 6/15/2016  Drganics (DRO)	Analysis Da Result 120 4.3  SampTy	/pe: M3 ID: 25 ate: 6/ PQL 9.5 //pe: M3	50.00 5.000 S 864 715/2016 SPK value 47.26 4.726	Tes F SPK Ref Val 104.3 Tes	96.9 94.7 tCode: EF RunNo: 34 SeqNo: 10 %REC 39.0 91.0	62.6 70 PA Method 4919 079067 LowLimit 33.9 70 PA Method 4919	124 130 <b>8015M/D: Di</b> Units: <b>mg/k</b> HighLimit 141 130	esel Rango %RPD esel Rango	e Organics RPDLimit	
Client ID: Prep Date: Analyte Diesel Range ( Surr: DNOP  Sample ID Client ID:	1606773-001AMS TSP-01 6/15/2016  Drganics (DRO)  1606773-001AMSE TSP-01	Analysis Da Result 120 4.3  SampTy Batch	/pe: M3 ID: 25 ate: 6/ PQL 9.5 //pe: M3	50.00 5.000 5.000 5.000 5.000 5.000 6.000 5.000 5.000 6.000	Tes F SPK Ref Val 104.3 Tes	96.9 94.7 tCode: EF RunNo: 34 SeqNo: 10 %REC 39.0 91.0 tCode: EF	62.6 70 PA Method 4919 079067 LowLimit 33.9 70 PA Method 4919	124 130 8015M/D: Did Units: mg/k HighLimit 141 130 8015M/D: Did	esel Rango %RPD esel Rango	e Organics RPDLimit	

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- D C----1- -II N---1- D----
- Page 8 of 11

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

4.5

WO#: **1606773** 

16-Jun-16

Client: LTE
Project: GCU 216

Surr: DNOP

Sample ID 1606773-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **TSP-01** Batch ID: **25864** RunNo: **34919** 

Prep Date: 6/15/2016 Analysis Date: 6/15/2016 SeqNo: 1079227 Units: mg/Kg

4.822

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

93.9

70

130

0

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 9 of 11

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1606773

16-Jun-16

**Client:** LTE **Project:** GCU 216

Sample ID MB-25846 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 25846 RunNo: 34934

Prep Date: 6/14/2016 Analysis Date: 6/15/2016 SeqNo: 1079435 Units: 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 1100 1000 107 80 120

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-25846 SampType: LCS

Client ID: LCSS Batch ID: 25846 RunNo: 34934

Prep Date: 6/14/2016 Analysis Date: 6/15/2016 SeqNo: 1079436 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Gasoline Range Organics (GRO) 5.0 25.00 87.1 80 120 1100 80 Surr: BFB 1000 114 120

#### Qualifiers:

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

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606773** 

16-Jun-16

Client: LTE
Project: GCU 216

Sample ID MB-25846 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 25846 RunNo: 34934 Prep Date: 6/14/2016 Analysis Date: 6/15/2016 SeqNo: 1079465 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 Toluene ND 0.050 Ethylbenzene ND 0.050 ND Xylenes, Total 0.10 104 Surr: 4-Bromofluorobenzene 1.0 1.000 80 120

Sample ID LCS-25846	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8			8021B: Vola	tiles			
Client ID: LCSS	Batcl	n ID: <b>25</b>	846	R	RunNo: 34934						
Prep Date: 6/14/2016	Analysis D	Date: <b>6/</b>	15/2016	SeqNo: <b>1079466</b>			Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.93	0.025	1.000	0	92.9	75.3	123				
Toluene	0.92	0.050	1.000	0	92.0	80	124				
Ethylbenzene	0.92	0.050	1.000	0	92.1	82.8	121				
Xylenes, Total	2.8	0.10	3.000	0	92.1	83.9	122				
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120				

#### Qualifiers:

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

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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: LTE Work Order Number: 1606773 RcptNo: 1 Received by/date: Logged By: Lindsay Mangin 6/15/2016 7:15:00 AM Completed By: Lindsay Mangin 6/15/2016 7:40:30 AM Reviewed By: 06/15/16 Chain of Custody 1 Custody seals intact on sample bottles? Yes No | | Not Present No 🗌 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In 4. Was an attempt made to cool the samples? No 🗔 NA 🗀 Yes 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗌 NA 🔲 No 🗌 Sample(s) in proper container(s)? 7. Sufficient sample volume for indicated test(s)? No 📙 8. Are samples (except VOA and ONG) properly preserved? No No 🏕 9. Was preservative added to bottles? NA 🗌 Yes 10.VOA vials have zero headspace? No 🗌 No VOA Vials Yes Yes No 🐼 11. Were any sample containers received broken? # of preserved bottles checked No 🗆 for pH: 12. Does paperwork match bottle labels? Yes (Note discrepancies on chain of custody) (<2 or >12 unless noted) Adjusted? No 🗌 13. Are matrices correctly identified on Chain of Custody? 14. Is it clear what analyses were requested? Yes Nο 15. Were all holding times able to be met? No 🗌 Checked by: Yes 🐼 (If no, notify customer for authorization.) Special Handling (if applicable) Yes 🗌 16. Was client notified of all discrepancies with this order? No  $\square$ NA 🖈 Person Notified: Date: By Whom: Via: eMail Phone Fax Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C | Condition Seal Intact Seal No Seal Date Signed By 1.7 Good Yes

Dir - Lower 18   Country	-of-Cust	Time:	HALL ENVIRONMENT	TAL
10   10   10   10   10   10   10   10	15 F - Lower 48	□ Standard 📝 Rush 「4 \	ANALYSIS LABORA	TORY
CC	77 \$		www.hallenvironmental.com	٠.
Topic   Analysis   Feet   Fe	Address;	7	- 1	
Contact   Cont		Project #:		
Cotter   C			Analysis	
Contained by   Cont	r Fax#: steven . Moskal @ bp. com	Project Manager: Stevie	(>C ∠O) ∠O)	
Container   Date   A (Full Validation)   LTE - D Burns   Aburns	Package:		s ol	
Sampler   Name			8) e <sup>5</sup> (OF	
PDF   Sample Request ID   Container Preservative   HEAL No.   TSP - O1   Hoz   Type and # Type   HEAL No.   TSP - O2		1: Daying Bu	H9T H9T (1.8 (1.4) (1.4) (1.4) (1.4) (1.4) (1.4) (1.4) (1.4)	(N
Matrix Sample Request ID		Temperature: 7	(GR/d 41 50 1 60 1 60 1 60 1 60 1 60 1 60 1 60	10 人)
TSP-01   4 ez   N 4 -00	Matrix	ative	TEX + MTE PH 604thor OH 604thor OH's (8310 CRA 8 Mer ON 8 ARC ON 1006 ON 1006 ON 1006	ir Bubbles
TSP-02   TSP-04   TSP-04   TSP-06   TSP-06   TSP-06   TSP-05   TSP-07   T	-92T SS	7 Z	T X	4
TSP-03   TSP-04   TSP-05   TSP-05   TSP-05   TSP-05   Water Time   Remarks:   CC: Off   Water   Water   Water   Water   Water   CC: Off   Water   Wa			X	
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

June 28, 2016

Danny Burns

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU 216 OrderNo.: 1606A35

### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 12 sample(s) on 6/18/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-08

 Project:
 GCU 216
 Collection Date: 6/17/2016 12:40:00 PM

 Lab ID:
 1606A35-001
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	;				Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	36	9.8		mg/Kg	1	6/20/2016 10:22:37 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/20/2016 10:22:37 AM
Surr: DNOP	94.3	70-130		%Rec	1	6/20/2016 10:22:37 AM
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst: RAA
Gasoline Range Organics (GRO)	52	2.8		mg/Kg	1	6/24/2016 8:42:24 PM
Surr: BFB	545	80-120	S	%Rec	1	6/24/2016 8:42:24 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	0.016	0.014		mg/Kg	1	6/24/2016 8:42:24 PM
Toluene	0.15	0.028		mg/Kg	1	6/24/2016 8:42:24 PM
Ethylbenzene	0.14	0.028		mg/Kg	1	6/24/2016 8:42:24 PM
Xylenes, Total	1.2	0.056		mg/Kg	1	6/24/2016 8:42:24 PM
Surr: 4-Bromofluorobenzene	122	80-120	S	%Rec	1	6/24/2016 8:42:24 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-09

 Project:
 GCU 216
 Collection Date: 6/17/2016 12:45:00 PM

 Lab ID:
 1606A35-002
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS	;				Analyst: TOM
Diesel Range Organics (DRO)	100	10		mg/Kg	1	6/20/2016 10:44:18 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/20/2016 10:44:18 AM
Surr: DNOP	98.5	70-130		%Rec	1	6/20/2016 10:44:18 AM
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst: RAA
Gasoline Range Organics (GRO)	140	2.9		mg/Kg	1	6/24/2016 9:05:50 PM
Surr: BFB	1010	80-120	S	%Rec	1	6/24/2016 9:05:50 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	0.069	0.014		mg/Kg	1	6/24/2016 9:05:50 PM
Toluene	0.89	0.029		mg/Kg	1	6/24/2016 9:05:50 PM
Ethylbenzene	0.60	0.029		mg/Kg	1	6/24/2016 9:05:50 PM
Xylenes, Total	5.2	0.058		mg/Kg	1	6/24/2016 9:05:50 PM
Surr: 4-Bromofluorobenzene	157	80-120	S	%Rec	1	6/24/2016 9:05:50 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-10

 Project:
 GCU 216
 Collection Date: 6/17/2016 12:50:00 PM

 Lab ID:
 1606A35-003
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3				Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	53	9.4		mg/Kg	1	6/20/2016 11:06:06 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/20/2016 11:06:06 AM
Surr: DNOP	97.1	70-130		%Rec	1	6/20/2016 11:06:06 AM
EPA METHOD 8015D: GASOLINE RAI	NGE					Analyst: RAA
Gasoline Range Organics (GRO)	86	3.0		mg/Kg	1	6/24/2016 9:29:13 PM
Surr: BFB	784	80-120	S	%Rec	1	6/24/2016 9:29:13 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	0.027	0.015		mg/Kg	1	6/24/2016 9:29:13 PM
Toluene	0.37	0.030		mg/Kg	1	6/24/2016 9:29:13 PM
Ethylbenzene	0.34	0.030		mg/Kg	1	6/24/2016 9:29:13 PM
Xylenes, Total	3.1	0.060		mg/Kg	1	6/24/2016 9:29:13 PM
Surr: 4-Bromofluorobenzene	139	80-120	S	%Rec	1	6/24/2016 9:29:13 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-11

 Project:
 GCU 216
 Collection Date: 6/17/2016 12:55:00 PM

 Lab ID:
 1606A35-004
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS					Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	34	10		mg/Kg	1	6/20/2016 11:27:45 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/20/2016 11:27:45 AM
Surr: DNOP	97.5	70-130		%Rec	1	6/20/2016 11:27:45 AM
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst: RAA
Gasoline Range Organics (GRO)	59	2.9		mg/Kg	1	6/24/2016 9:52:50 PM
Surr: BFB	498	80-120	S	%Rec	1	6/24/2016 9:52:50 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	0.038	0.014		mg/Kg	1	6/24/2016 9:52:50 PM
Toluene	0.68	0.029		mg/Kg	1	6/24/2016 9:52:50 PM
Ethylbenzene	0.23	0.029		mg/Kg	1	6/24/2016 9:52:50 PM
Xylenes, Total	2.2	0.058		mg/Kg	1	6/24/2016 9:52:50 PM
Surr: 4-Bromofluorobenzene	122	80-120	S	%Rec	1	6/24/2016 9:52:50 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-12

 Project:
 GCU 216
 Collection Date: 6/17/2016 1:00:00 PM

 Lab ID:
 1606A35-005
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	1				Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	52	9.5		mg/Kg	1	6/20/2016 11:49:39 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/20/2016 11:49:39 AM
Surr: DNOP	98.2	70-130		%Rec	1	6/20/2016 11:49:39 AM
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst: RAA
Gasoline Range Organics (GRO)	140	2.9		mg/Kg	1	6/24/2016 10:16:23 PM
Surr: BFB	893	80-120	S	%Rec	1	6/24/2016 10:16:23 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	0.11	0.015		mg/Kg	1	6/24/2016 10:16:23 PM
Toluene	1.8	0.029		mg/Kg	1	6/24/2016 10:16:23 PM
Ethylbenzene	0.61	0.029		mg/Kg	1	6/24/2016 10:16:23 PM
Xylenes, Total	5.7	0.059		mg/Kg	1	6/24/2016 10:16:23 PM
Surr: 4-Bromofluorobenzene	149	80-120	S	%Rec	1	6/24/2016 10:16:23 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-13

 Project:
 GCU 216
 Collection Date: 6/17/2016 1:40:00 PM

 Lab ID:
 1606A35-006
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Q	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analyst: <b>JME</b>
Diesel Range Organics (DRO)	97	9.5	mg/Kg	1	6/20/2016 10:23:50 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/20/2016 10:23:50 AM
Surr: DNOP	99.3	70-130	%Rec	1	6/20/2016 10:23:50 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	88	32	mg/Kg	10	6/22/2016 7:28:33 PM
Surr: BFB	142	80-120	S %Rec	10	6/22/2016 7:28:33 PM
EPA METHOD 8021B: VOLATILES					Analyst: <b>DJF</b>
Benzene	ND	0.16	mg/Kg	10	6/22/2016 7:28:33 PM
Toluene	0.37	0.32	mg/Kg	10	6/22/2016 7:28:33 PM
Ethylbenzene	0.43	0.32	mg/Kg	10	6/22/2016 7:28:33 PM
Xylenes, Total	3.6	0.63	mg/Kg	10	6/22/2016 7:28:33 PM
Surr: 4-Bromofluorobenzene	112	80-120	%Rec	10	6/22/2016 7:28:33 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-14

 Project:
 GCU 216
 Collection Date: 6/17/2016 1:55:00 PM

 Lab ID:
 1606A35-007
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL (	Qual Ur	nits	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;				Analyst: <b>JME</b>
Diesel Range Organics (DRO)	41	9.6	m	ıg/Kg	1	6/20/2016 10:45:36 AM
Motor Oil Range Organics (MRO)	ND	48	m	ıg/Kg	1	6/20/2016 10:45:36 AM
Surr: DNOP	96.5	70-130	%	Rec	1	6/20/2016 10:45:36 AM
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	31	3.0	m	ıg/Kg	1	6/22/2016 7:52:58 PM
Surr: BFB	412	80-120	S %	Rec	1	6/22/2016 7:52:58 PM
EPA METHOD 8021B: VOLATILES						Analyst: DJF
Benzene	ND	0.015	m	ıg/Kg	1	6/22/2016 7:52:58 PM
Toluene	0.075	0.030	m	ıg/Kg	1	6/22/2016 7:52:58 PM
Ethylbenzene	0.12	0.030	m	ıg/Kg	1	6/22/2016 7:52:58 PM
Xylenes, Total	0.97	0.061	m	ıg/Kg	1	6/22/2016 7:52:58 PM
Surr: 4-Bromofluorobenzene	115	80-120	%	Rec	1	6/22/2016 7:52:58 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-15

 Project:
 GCU 216
 Collection Date: 6/17/2016 2:05:00 PM

 Lab ID:
 1606A35-008
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL (	Qual Un	nits	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;				Analyst: <b>JME</b>
Diesel Range Organics (DRO)	83	9.8	m	g/Kg	1	6/20/2016 11:07:39 AM
Motor Oil Range Organics (MRO)	ND	49	m	g/Kg	1	6/20/2016 11:07:39 AM
Surr: DNOP	95.5	70-130	%	Rec	1	6/20/2016 11:07:39 AM
EPA METHOD 8015D: GASOLINE RAM	NGE					Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	140	32	m	g/Kg	10	6/22/2016 8:17:20 PM
Surr: BFB	177	80-120	S %	Rec	10	6/22/2016 8:17:20 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>DJF</b>
Benzene	0.18	0.16	m	g/Kg	10	6/22/2016 8:17:20 PM
Toluene	1.2	0.32	m	g/Kg	10	6/22/2016 8:17:20 PM
Ethylbenzene	0.86	0.32	m	g/Kg	10	6/22/2016 8:17:20 PM
Xylenes, Total	7.4	0.64	m	g/Kg	10	6/22/2016 8:17:20 PM
Surr: 4-Bromofluorobenzene	109	80-120	%	Rec	10	6/22/2016 8:17:20 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 8 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-16

 Project:
 GCU 216
 Collection Date: 6/17/2016 2:20:00 PM

 Lab ID:
 1606A35-009
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL (	Qual U	J <b>nits</b>	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3				Analyst: <b>JME</b>
Diesel Range Organics (DRO)	130	9.5	1	mg/Kg	1	6/20/2016 11:29:37 AM
Motor Oil Range Organics (MRO)	ND	48	1	mg/Kg	1	6/20/2016 11:29:37 AM
Surr: DNOP	89.8	70-130	(	%Rec	1	6/20/2016 11:29:37 AM
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	96	33	1	mg/Kg	10	6/22/2016 8:41:37 PM
Surr: BFB	149	80-120	S	%Rec	10	6/22/2016 8:41:37 PM
EPA METHOD 8021B: VOLATILES						Analyst: <b>DJF</b>
Benzene	ND	0.17	1	mg/Kg	10	6/22/2016 8:41:37 PM
Toluene	0.49	0.33	1	mg/Kg	10	6/22/2016 8:41:37 PM
Ethylbenzene	0.50	0.33	1	mg/Kg	10	6/22/2016 8:41:37 PM
Xylenes, Total	4.2	0.66	1	mg/Kg	10	6/22/2016 8:41:37 PM
Surr: 4-Bromofluorobenzene	106	80-120	(	%Rec	10	6/22/2016 8:41:37 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 9 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-17

 Project:
 GCU 216
 Collection Date: 6/17/2016 2:30:00 PM

 Lab ID:
 1606A35-010
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>JME</b>
Diesel Range Organics (DRO)	65	9.3	mg/Kg	1	6/20/2016 11:51:38 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/20/2016 11:51:38 AM
Surr: DNOP	96.8	70-130	%Rec	1	6/20/2016 11:51:38 AM
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	69	31	mg/Kg	10	6/24/2016 9:23:29 PM
Surr: BFB	135	80-120	S %Rec	10	6/24/2016 9:23:29 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: <b>DJF</b>
Benzene	ND	0.15	mg/Kg	10	6/22/2016 10:43:15 PM
Toluene	ND	0.31	mg/Kg	10	6/22/2016 10:43:15 PM
Ethylbenzene	0.34	0.31	mg/Kg	10	6/22/2016 10:43:15 PM
Xylenes, Total	2.6	0.62	mg/Kg	10	6/22/2016 10:43:15 PM
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	10	6/22/2016 10:43:15 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 10 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-18

 Project:
 GCU 216
 Collection Date: 6/17/2016 2:35:00 PM

 Lab ID:
 1606A35-011
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analyst: <b>JME</b>
Diesel Range Organics (DRO)	180	9.2	mg/Kg	1	6/20/2016 11:07:29 AM
Motor Oil Range Organics (MRO)	63	46	mg/Kg	1	6/20/2016 11:07:29 AM
Surr: DNOP	94.9	70-130	%Rec	1	6/20/2016 11:07:29 AM
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	110	27	mg/Kg	10	6/24/2016 9:47:46 PM
Surr: BFB	146	80-120	S %Rec	10	6/24/2016 9:47:46 PM
EPA METHOD 8021B: VOLATILES					Analyst: <b>DJF</b>
Benzene	ND	0.13	mg/Kg	10	6/22/2016 11:07:26 PM
Toluene	0.54	0.27	mg/Kg	10	6/22/2016 11:07:26 PM
Ethylbenzene	0.50	0.27	mg/Kg	10	6/22/2016 11:07:26 PM
Xylenes, Total	4.5	0.54	mg/Kg	10	6/22/2016 11:07:26 PM
Surr: 4-Bromofluorobenzene	111	80-120	%Rec	10	6/22/2016 11:07:26 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 11 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-19

 Project:
 GCU 216
 Collection Date: 6/17/2016 2:45:00 PM

 Lab ID:
 1606A35-012
 Matrix: MEOH (SOIL)
 Received Date: 6/18/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analyst: <b>JME</b>
Diesel Range Organics (DRO)	130	9.1	mg/Kg	1	6/20/2016 11:35:27 AM
Motor Oil Range Organics (MRO)	51	46	mg/Kg	1	6/20/2016 11:35:27 AM
Surr: DNOP	96.2	70-130	%Rec	1	6/20/2016 11:35:27 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	110	27	mg/Kg	10	6/24/2016 10:11:58 PM
Surr: BFB	156	80-120	S %Rec	10	6/24/2016 10:11:58 PM
EPA METHOD 8021B: VOLATILES					Analyst: DJF
Benzene	ND	0.13	mg/Kg	10	6/22/2016 11:31:39 PM
Toluene	0.43	0.27	mg/Kg	10	6/22/2016 11:31:39 PM
Ethylbenzene	0.51	0.27	mg/Kg	10	6/22/2016 11:31:39 PM
Xylenes, Total	4.4	0.53	mg/Kg	10	6/22/2016 11:31:39 PM
Surr: 4-Bromofluorobenzene	116	80-120	%Rec	10	6/22/2016 11:31:39 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 12 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1606A35

28-Jun-16

Client:	LTE
<b>Project:</b>	GCU 216

Sample ID MB											
	3-25933	SampTyp	e: <b>ME</b>	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: PB	s	Batch II	): <b>25</b> 9	933	F	RunNo: 3	5010				
Prep Date: 6/	20/2016	Analysis Date	e: <b>6/</b>	20/2016	8	SeqNo: 1	082080	Units: mg/k	<b>(</b> g		
Analyte		Result I	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organ		ND	10								
Motor Oil Range Org Surr: DNOP	ganics (MRO)	ND 9.4	50	10.00		94.4	70	130			
Sample ID LC:		SampTyp						8015M/D: Di	esel Range	e Organics	
Client ID: LC:		Batch II				RunNo: 3			_		
Prep Date: 6/	/20/2016	Analysis Date	e: <b>6/</b>	20/2016	5	SeqNo: 1	082094	Units: mg/k	<b>(</b> g		
Analyte	(000)		PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organ Surr: DNOP	nics (DRO)	45 4.4	10	50.00 5.000	0	89.6 88.8	62.6 70	124 130			
Juli. DNOI		7.7		3.000		00.0	70	100			
Sample ID MB	3-25888	SampTyp			Tes	tCode: E	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: PB:	S	Batch II	): <b>25</b> 8	888	F	RunNo: 3	5005				
Prep Date: 6/	/16/2016	Analysis Date	e: <b>6/</b>	20/2016	S	SeqNo: 1	082125	Units: %Re	С		
Analyte			PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.0		10.00		90.4	70	130			
Sample ID LC:	S-25888	SampTyp	e: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: LC:	ss	Batch II	): <b>25</b>	888	F	RunNo: 3	5005				
Prep Date: 6/						SeqNo: 1	092126	United Of De			
Titep Date. 0/	/16/2016	Analysis Date	e: <b>6/</b>	20/2016	S	eqivo. i	002120	Units: %Re	С		
Analyte	/16/2016	•	e: <b>6/</b> PQL		SPK Ref Val	%REC	LowLimit	HighLimit	c %RPD	RPDLimit	Qual
	16/2016	•				·				RPDLimit	Qual
Analyte		Result I	PQL	SPK value 5.000	SPK Ref Val	%REC 90.3	LowLimit 70	HighLimit	%RPD		Qual
Analyte Surr: DNOP	06A35-001AMS	Result I	PQL e: <b>MS</b>	SPK value 5.000	SPK Ref Val	%REC 90.3	LowLimit 70 PA Method	HighLimit 130	%RPD		Qual
Analyte Surr: DNOP Sample ID 160	06A35-001AMS P-08	Result 4.5	e: <b>MS</b>	5.000 5.000	SPK Ref Val	%REC 90.3 tCode: <b>E</b>	LowLimit 70 PA Method 5010	HighLimit 130	%RPD esel Range		Qual
Analyte Surr: DNOP  Sample ID 160 Client ID: TSI Prep Date: 6/	06A35-001AMS P-08	Result 4.5  SampTyp  Batch II	e: <b>MS</b>	SPK value 5.000 6 933 20/2016	SPK Ref Val	%REC 90.3 tCode: <b>E</b> RunNo: <b>3</b>	LowLimit 70 PA Method 5010	HighLimit 130 8015M/D: Did Units: mg/k	%RPD esel Range		Qual
Analyte Surr: DNOP  Sample ID 160 Client ID: TSI	06A35-001AMS P-08 /20/2016	Result 4.5  SampTyp  Batch II	e: <b>MS</b> e: <b>6</b> /	SPK value 5.000 6 933 20/2016	SPK Ref Val  Tes  F	%REC 90.3 tCode: El RunNo: 3 SeqNo: 1	LowLimit 70 PA Method 5010 082352	HighLimit 130 8015M/D: Did	%RPD esel Rango	e Organics	
Analyte Surr: DNOP  Sample ID 160 Client ID: TSI Prep Date: 6/	06A35-001AMS P-08 /20/2016	Result 4.5  SampTyp Batch II  Analysis Date Result	e: MS D: 259 D: 6/	SPK value 5.000 6 933 20/2016 SPK value	SPK Ref Val  Tes  F S SPK Ref Val	%REC 90.3 tCode: El RunNo: 3 SeqNo: 1 %REC	LowLimit 70 PA Method 5010 082352 LowLimit	HighLimit 130 <b>8015M/D: Di</b> Units: <b>mg/k</b> HighLimit	%RPD esel Rango	e Organics	
Analyte Surr: DNOP  Sample ID 160 Client ID: TSI Prep Date: 6/. Analyte Diesel Range Organ Surr: DNOP	06A35-001AMS P-08 /20/2016	Result 4.5  SampTyp Batch II  Analysis Date Result 91	e: MS D: 259 e: 6/ PQL 9.2	SPK value 5.000 6 933 20/2016 SPK value 45.96 4.596	SPK Ref Val  Tes  F  S  SPK Ref Val  36.14	%REC 90.3 tCode: El RunNo: 3 SeqNo: 1 %REC 119 86.3	LowLimit 70  PA Method 5010 082352 LowLimit 33.9 70	HighLimit 130  8015M/D: Did  Units: mg/k  HighLimit 141	%RPD esel Range (g %RPD	e Organics RPDLimit	
Analyte Surr: DNOP  Sample ID 160 Client ID: TSI Prep Date: 6/. Analyte Diesel Range Organ Surr: DNOP	D6A35-001AMS P-08 P20/2016 nics (DRO)	Result 4.5  SampTyp Batch II  Analysis Date Result 91 4.0	e: MS PQL 9.2	SPK value 5.000 6 933 20/2016 SPK value 45.96 4.596	SPK Ref Val  Tes  SPK Ref Val  36.14  Tes	%REC 90.3 tCode: El RunNo: 3 SeqNo: 1 %REC 119 86.3	LowLimit 70  PA Method 5010  082352  LowLimit 33.9 70  PA Method	HighLimit 130  8015M/D: Did  Units: mg/k  HighLimit 141 130	%RPD esel Range (g %RPD	e Organics RPDLimit	
Analyte Surr: DNOP  Sample ID 160 Client ID: TSI Prep Date: 6/. Analyte Diesel Range Organ Surr: DNOP  Sample ID 160 Client ID: TSI	06A35-001AMS P-08 (20/2016 nics (DRO) 06A35-001AMSD P-08	Result 4.5  SampTyp Batch II Analysis Date Result 91 4.0  SampTyp	e: MS D: 259 E: 6/ PQL 9.2 E: MS D: 259	SPK value 5.000 6 933 20/2016 SPK value 45.96 4.596	SPK Ref Val  Tes  SPK Ref Val  36.14  Tes	%REC 90.3 tCode: El RunNo: 3 SeqNo: 1 %REC 119 86.3	LowLimit 70  PA Method 5010 082352 LowLimit 33.9 70  PA Method 5010	HighLimit 130  8015M/D: Did  Units: mg/k  HighLimit 141 130	%RPD esel Range %RPD esel Range	e Organics RPDLimit	
Analyte Surr: DNOP  Sample ID 160 Client ID: TSI Prep Date: 6/ Analyte  Diesel Range Organ Surr: DNOP  Sample ID 160 Client ID: TSI Prep Date: 6/	06A35-001AMS P-08 (20/2016 nics (DRO) 06A35-001AMSD P-08	Result 4.5  SampTyp Batch II  Analysis Date 91 4.0  SampTyp Batch II  Analysis Date	e: MS D: 259 E: 6/ PQL 9.2 E: MS D: 259	SPK value 5.000 6 933 20/2016 SPK value 45.96 4.596 6D 933 20/2016	SPK Ref Val  Tes  SPK Ref Val  36.14  Tes	%REC 90.3 tCode: El RunNo: 3 SeqNo: 1 %REC 119 86.3 tCode: El RunNo: 3	LowLimit 70  PA Method 5010 082352 LowLimit 33.9 70  PA Method 5010	HighLimit 130  8015M/D: Did  Units: mg/k HighLimit 141 130  8015M/D: Did	%RPD esel Range %RPD esel Range	e Organics RPDLimit	
Analyte Surr: DNOP  Sample ID 160 Client ID: TSI Prep Date: 6/. Analyte Diesel Range Organ Surr: DNOP  Sample ID 160 Client ID: TSI	06A35-001AMS P-08 (20/2016  nics (DRO)  06A35-001AMSD P-08 (20/2016	Result 4.5  SampTyp Batch II  Analysis Date 91 4.0  SampTyp Batch II  Analysis Date	e: MS 25: 25: 6/	SPK value 5.000 6 933 20/2016 SPK value 45.96 4.596 6D 933 20/2016	SPK Ref Val  Tes SPK Ref Val 36.14  Tes F	%REC 90.3 tCode: El RunNo: 3 SeqNo: 1 %REC 119 86.3 tCode: El RunNo: 3 SeqNo: 1	LowLimit 70  PA Method 5010 082352 LowLimit 33.9 70  PA Method 5010 082373	HighLimit 130  8015M/D: Did  Units: mg/k HighLimit 141 130  8015M/D: Did  Units: mg/k	%RPD esel Range %RPD esel Range	RPDLimit  Organics  Organics	Qual

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range

J Analyte detected below quantitation limits

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Sample pH Not In Range P

RLReporting Detection Limit

Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

4.4

WO#: **1606A35** 

28-Jun-16

Client: LTE
Project: GCU 216

Sample ID 1606A35-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **TSP-08** Batch ID: **25933** RunNo: **35010** 

Prep Date: 6/20/2016 Analysis Date: 6/20/2016 SeqNo: 1082373 Units: mg/Kg

4.826

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

90.6

70

130

0

Surr: DNOP

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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LTE

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1606A35

28-Jun-16

Project: GCU 2	16								
Sample ID RB	SampType: <b>M</b>	BLK	Test	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID: PBS	Batch ID: A	35096	R	tunNo: 3	5096				
Prep Date:	Analysis Date: 6	/22/2016	S	SeqNo: 1	085629	Units: mg/l	<b>K</b> g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 990	1000		98.6	80	120			
Sample ID 2.5UG GRO LCS	S SampType: L(	cs	Test	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID: LCSS	Batch ID: A	35096	R	tunNo: 3	5096				
Prep Date:	Analysis Date: 6	/22/2016	S	SeqNo: 1	085630	Units: mg/h	<b>(</b> g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	22 5.0 1000	25.00 1000	0	88.7 104	80 80	120 120			
- Juli. Di D	1000	1000							
Sample ID 5ML-RB	SampType: <b>M</b>					8015D: Gaso	oline Rang	e	
Client ID: PBS	Batch ID: R:			tunNo: 3			_		
Prep Date:	Analysis Date: 6	/24/2016	S	eqNo: 1	087655	Units: mg/k	<b>(</b> g		
Analyte	Result PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 970	1000		97.3	80	120			
Sample ID 5ML-RB	SampType: <b>M</b>	BLK	Test	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID: PBS	Batch ID: R	35159	R	tunNo: 3	5159				
Prep Date:	Analysis Date: 6	/24/2016	S	SeqNo: 1	087679	Units: mg/h	<b>K</b> g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 890	1000		89.2	80	120			
Sample ID 2.5NG GRO LC	S SampType: L(	cs	Test	Code: El	PA Method	8015D: Gaso	oline Rano	ie	
Client ID: LCSS	Batch ID: R:			tunNo: 3				, -	
Prep Date:	Analysis Date: 6			SeqNo: 1		Units: mg/l	<b>K</b> g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	25 5.0 1100	25.00 1000	0	99.4 113	80 80	120 120			
Sample ID 2.5UG GRO LCS	S SampType: L(	cs	Test	Code: El	PA Method	8015D: Gaso	oline Rang	le	
Client ID: LCSS	Batch ID: R:	35159	R	tunNo: 3	5159				
Prep Date:	Analysis Date: 6	/24/2016	S	eqNo: 1	088058	Units: mg/l	<b>(</b> g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range

J Analyte detected below quantitation limits

Page 15 of 18

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1606A35** 

28-Jun-16

Client: LTE
Project: GCU 216

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: R35159 RunNo: 35159

Prep Date: Analysis Date: 6/24/2016 SeqNo: 1088058 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 0 80 27 5.0 25.00 109 120

Surr: BFB 960 1000 95.6 80 120

Sample ID LCS-26055 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 26055 RunNo: 35174

Prep Date: 6/24/2016 Analysis Date: 6/25/2016 SeqNo: 1088117 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 1100 1000 107 80 120

Sample ID MB-26055 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 26055 RunNo: 35174

Prep Date: 6/24/2016 Analysis Date: 6/25/2016 SeqNo: 1088118 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 970 1000 97.4 80 120

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

LTE

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1606A35

28-Jun-16

Project:	GCU 216										
Sample ID	RB	SampT	ype: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batch	n ID: <b>B3</b>	5096	F	RunNo: 3	5096				
Prep Date:		Analysis D	ate: 6/	22/2016	S	SeqNo: 1	085641	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	ofluorobenzene	1.1		1.000		105	80	120			
Sample ID	5ML-RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batch	1D: <b>A3</b>	5158	F	RunNo: 3	5158				
Prep Date:		Analysis D	ate: 6/	24/2016	8	SeqNo: 1	087658	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	ofluorobenzene	0.95		1.000		95.4	80	120			
Sample ID	100NG BTEX LCS	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Volat	tiles		
•	100NG BTEX LCS LCSS	·	ype: LC			tCode: El		8021B: Vola	tiles		
•		·	n ID: A3	5158	F		5158	8021B: Volat			
Client ID:		Batch	n ID: A3	5158 24/2016	F	RunNo: 3	5158			RPDLimit	Qual
Client ID: Prep Date:		Batch Analysis D	n ID: A3 Pate: 6/	5158 24/2016	F	RunNo: 3: SeqNo: 10	5158 088011	Units: mg/k	(g	RPDLimit	Qual
Client ID: Prep Date: Analyte		Batch Analysis D Result	n ID: A3 Pate: 6/	24/2016 SPK value 1.000 1.000	F S SPK Ref Val	RunNo: 3: SeqNo: 10 %REC	5158 088011 LowLimit	Units: <b>mg/K</b> HighLimit	(g	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene		Batch Analysis D Result 0.83 0.85 0.85	PQL 0.025	24/2016 SPK value 1.000 1.000 1.000	SPK Ref Val	RunNo: <b>3</b> : SeqNo: <b>1</b> ( %REC 83.4	5158 088011 LowLimit 75.3	Units: mg/k HighLimit 123 124 121	(g	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	LCSS	Batch Analysis D Result 0.83 0.85	PQL 0.025 0.050	24/2016 SPK value 1.000 1.000	SPK Ref Val 0 0	RunNo: 3: SeqNo: 10 %REC 83.4 85.5	5158 088011 LowLimit 75.3 80	Units: mg/k HighLimit 123 124 121 122	(g	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total		Batch Analysis D Result 0.83 0.85 0.85	PQL 0.025 0.050	24/2016 SPK value 1.000 1.000 1.000	SPK Ref Val  0 0 0	RunNo: 3: SeqNo: 10 %REC 83.4 85.5 85.5	5158 088011 LowLimit 75.3 80 82.8	Units: mg/k HighLimit 123 124 121	(g	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	ofluorobenzene	Batch Analysis D Result 0.83 0.85 0.85 2.5 1.0	PQL 0.025 0.050	5158 24/2016 SPK value 1.000 1.000 1.000 3.000 1.000	SPK Ref Val 0 0 0 0	RunNo: 3: SeqNo: 10 %REC 83.4 85.5 85.5 84.8 103	5158 088011 LowLimit 75.3 80 82.8 83.9 80	Units: mg/k HighLimit 123 124 121 122	<b>Kg</b> %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	ofluorobenzene  LCS-26055	Batch Analysis D Result 0.83 0.85 0.85 2.5 1.0 SampT	PQL 0.025 0.050 0.10	5158 /24/2016 SPK value 1.000 1.000 3.000 1.000	SPK Ref Val  0 0 0 0 Tes	RunNo: 3: SeqNo: 10 %REC 83.4 85.5 85.5 84.8 103	5158 088011 LowLimit 75.3 80 82.8 83.9 80	Units: mg/k HighLimit 123 124 121 122 120	<b>Kg</b> %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	ofluorobenzene  LCS-26055  LCSS	Batch Analysis D Result 0.83 0.85 0.85 2.5 1.0 SampT	PQL 0.025 0.050 0.10 0.1D: <b>A3</b>	5158 24/2016 SPK value 1.000 1.000 3.000 1.000 3.000 1.000	SPK Ref Val 0 0 0 0 0	RunNo: 3: SeqNo: 10 %REC 83.4 85.5 85.5 84.8 103	5158 088011 LowLimit 75.3 80 82.8 83.9 80 PA Method 5174	Units: mg/k HighLimit 123 124 121 122 120	%RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID:	ofluorobenzene  LCS-26055  LCSS	Batch Analysis D Result 0.83 0.85 0.85 2.5 1.0 SampT Batch	PQL 0.025 0.050 0.10 0.1D: <b>A3</b>	SPK value 1.000 1.000 1.000 3.000 1.000 88 055	SPK Ref Val 0 0 0 0 0	RunNo: 3: SeqNo: 10  **REC  83.4  85.5  85.5  84.8  103  **tCode: El	5158 088011 LowLimit 75.3 80 82.8 83.9 80 PA Method 5174	Units: mg/k HighLimit 123 124 121 122 120  8021B: Volate	%RPD	RPDLimit RPDLimit	Qual
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte	ofluorobenzene  LCS-26055  LCSS	Batch Analysis D Result 0.83 0.85 0.85 2.5 1.0  SampT Batch Analysis D	PQL 0.025 0.050 0.10 0.1D: <b>A3</b>	SPK value 1.000 1.000 1.000 3.000 1.000 88 055	SPK Ref Val  0 0 0 0 Tes	RunNo: 3: SeqNo: 10  **REC  83.4  85.5  85.5  84.8  103  **tCode: El	5158 088011 LowLimit 75.3 80 82.8 83.9 80 PA Method 5174 088135	Units: mg/k HighLimit 123 124 121 122 120  8021B: Volat	%RPD		
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte	ofluorobenzene  LCS-26055  LCSS 6/24/2016  ofluorobenzene	Batch Analysis D Result 0.83 0.85 0.85 2.5 1.0 SampT Batch Analysis D Result 0.99	PQL 0.025 0.050 0.10 0.1D: <b>A3</b>	5158  24/2016  SPK value  1.000 1.000 3.000 1.000  3.000 1.000  SS  055  25/2016  SPK value  1.000	SPK Ref Val  0 0 0 0 Tes F SPK Ref Val	RunNo: 3: SeqNo: 10  **REC  83.4  85.5  85.5  84.8  103  **Code: El  RunNo: 3: SeqNo: 10  **REC  98.6	5158  088011  LowLimit  75.3  80  82.8  83.9  80  PA Method  5174  088135  LowLimit  80	Units: mg/k  HighLimit  123 124 121 122 120  8021B: Volat  Units: %Rec  HighLimit	%RPD tiles c %RPD		
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte Surr: 4-Brom	ofluorobenzene  LCS-26055  LCSS 6/24/2016  ofluorobenzene  MB-26055	Batch Analysis D Result 0.83 0.85 0.85 2.5 1.0 SampT Batch Analysis D Result 0.99 SampT	PQL 0.025 0.050 0.10 vype: LC pqL 26 pqL PQL PQL	5158  24/2016  SPK value  1.000 1.000 3.000 1.000  SS  055  25/2016  SPK value 1.000  BLK	SPK Ref Val  0 0 0 0 Tes SPK Ref Val	RunNo: 3: SeqNo: 10  **REC  83.4  85.5  85.5  84.8  103  **Code: El  RunNo: 3: SeqNo: 10  **REC  98.6	5158  088011  LowLimit  75.3 80 82.8 83.9 80  PA Method  5174  088135  LowLimit 80  PA Method	Units: mg/k HighLimit 123 124 121 122 120  8021B: Volat Units: %Rea	%RPD tiles c %RPD		
Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom  Sample ID Client ID: Prep Date: Analyte Surr: 4-Brom  Sample ID	ofluorobenzene  LCS-26055  LCSS 6/24/2016  ofluorobenzene  MB-26055  PBS	Batch Analysis D Result 0.83 0.85 0.85 2.5 1.0 SampT Batch Analysis D Result 0.99 SampT	PQL 0.025 0.050 0.10 vype: LC pQL pQL pQL pQL pype: ME pQL pype: ME pQL pp. 1D: 26 pp. 2	5158  24/2016  SPK value  1.000 1.000 3.000 1.000  3.000 1.000  SS  055  25/2016  SPK value 1.000  BLK  055	SPK Ref Val  0 0 0 0 Tes SPK Ref Val  Tes	RunNo: 3: SeqNo: 16  **REC  **83.4  **85.5  **84.8  **103  **Code: EI  **REC  **98.6  **tCode: EI  **TCODE: E	5158  088011  LowLimit  75.3 80 82.8 83.9 80  PA Method 5174  088135  LowLimit 80  PA Method 5174	Units: mg/k HighLimit 123 124 121 122 120  8021B: Volat Units: %Rea	%RPD tiles c %RPD		

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Е Value above quantitation range

J Analyte detected below quantitation limits

Page 17 of 18

Sample pH Not In Range P

RLReporting Detection Limit

Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1606A35** 

28-Jun-16

Client: LTE
Project: GCU 216

Sample ID MB-26055 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: **PBS** Batch ID: **26055** RunNo: **35174** 

Prep Date: 6/24/2016 Analysis Date: 6/25/2016 SeqNo: 1088136 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Surr: 4-Bromofluorobenzene
 0.94
 1.000
 94.4
 80
 120

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 18 of 18



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: LTE	Work Order Number:	1606A3	5		RcptNo:	1
						:
\1	Xe 118/16			Augh Alle Co		
Logged By: Lindsay Mangin	6/18/2016 8:00:00 AM			الا		
Completed By: Lindsay Mangin	6/18/2016 8:37:25 AM / / /.			Jimahiy Hlopiy 20		į
Reviewed By:	16/20/16					!
Chain of Custody	1 1				_	
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	1			
<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) proper	ly preserved?	Yes		No 🗌		
9. Was preservative added to bottles?		Yes [		No 🗷	NA 🗌	
10.VOA vials have zero headspace?		Yes	<b>◆</b>	No 🗆	No VOA Vials	
11. Were any sample containers received broke	en?	Yes		No 🗹	# of preserved	
		r	··· <b>X</b> 1		bottles checked	
12.Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes	æ	No 🗆	for pH: (<2	or >12 unless noted)
13. Are matrices correctly identified on Chain of	Custody?	Yes &	<b>₩</b>	No 🗆	Adjusted?	
14. Is it clear what analyses were requested?	•	Yes		No 🗆		
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes	<b>♠</b>	No 🗀	Checked by:	
Special Handling (if applicable)						
16. Was client notified of all discrepancies with	this order?	Yes		No 🗌	NA 🗹	4
Person Notified:	Date:		<u> </u>	THE STREET STREET		
By Whom:	Via:	ı □ eMaii		Phone  Fax	☐ In Person	
Regarding:						: 
Client Instructions:						İ
17. Additional remarks:						
18. Cooler Information						
Cooler No Temp °C Condition S	eal Intact   Seal No	Seal Dat	te	Signed By		
1 3.0 Good Ye	S				1	

Standard   KRush   Project Name:   C-C    #216   Project Name:   C-C    #216   Project Manager: Steve   Mose   Project Manager: Sampler:   D-Burns   Sampler:   D-Burns   D-C   Don Ice:	hain-c	f-Cu	Secord	Turn-Around Time:		Same day			_	₹	ш <u>ц</u>	2	IR	20	HALL ENVIRONMENTA	ITAI	\ _ <b>!</b> !
Project Name:   Project Name:   Project Manager: Start		Nol	er 48		X Rush	1 * 1			4	Z	7	SIS	Ĭ	BC	NA.	TOR	<b>&gt;</b>
1				Project Name:	•					www.	haller	vironi	nental	moo"			
1.17E - Downy Burns   September 2   Project ##   Project Manager: Steve   Mosk   Analysis Request   Sampler:	ress:			として	#21	6	,	49011	Hawk	ns NE	- A	nbnq	erque,	ΣN	37109		
Project Manager: Steve Moska!  Project Manager: Steve Moska!  Sample: Downy Burns  Sample: Do				Project #:				Tel. 5	05-34	5-397	5	Fax	505-3	45-41	20		
Project Manager: Steve Moskal  LTE- Downy Burns Sampler: Container Preservative Type and # Preservative Type and # Preservative Type and # Preservative Type and # Preservative Type (8021)  Received by:  Received			701-570-4727								Ana	ysis	Redu	ise			
Received by:    Container   Co	x#: \$	even.	noskal@bp.com	Project Manager:	Steve							( <sub>2</sub> O	S		-		
Contained by:   Contained by	age:	dbur			) -						(s	S' <sup>†</sup> (	CB.				
Other   Othe			(ر	LTE-Davin	y Burn	51		<u> </u>	_		WIS	Σ,ΡC	d 7				
PDF	Ľ	□ Othe		Sampler: D. On Ice: Z	Swrws es	In Fault N			$\rightarrow$				808 / \$	(0)	(\(\frac{1}{2}\)		(M 10
Matrix Sample Request ID Type and # Type   HEAL No   HEA	(be)	PDF		Sample Temperat	ure: <b>3,</b> \				_						~ ^ -		人) :
SS TSP-08		Matrix	Sample Request ID		ervative Fype	HEAL NO.									mac) 0120		Air Bubbles
TSP-10	240	SS	TSP-08	40	VA	1001				1		$\vdash$					
TSP-10	54.7	_	TSP-09	1	ļ	-002											
5 TSP-11  0 TSP-12  0 TSP-13  1 TSP-14  5 TSP-14  COS  1 TSP-14  COS  1 TSP-14  COS  1 TSP-19  2 TSP-19  2 TSP-19  2 TSP-19  2 TSP-19  3 COS  COS  Relinquished by: Received b	250					-003											
TSP-12	55		11-451			Jan 1											
5 TSP-13  5 TSP-14  6 TSP-16  6 TSP-16  7 TSP-16  7 TSP-18  7 TSP-19  7 TSP-19  8 Februarished by:  10 TSP-19  10 TSP-18	00					486								_			
5 TSP-14  5 TSP-15  6 TSP-16  6 TSP-16  7 TSP-18  5 TSP-19  6 TSP-19  7 TSP-19  8 Received by: Date Time Remarks:  C. Abuse Time Refinquished by: Received by: Received by: Relinquished by: Received by: Refinquished by: Received by: Receive	540					-000-								$\dashv$		_	
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

June 24, 2016

**Danny Burns** 

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU 216 OrderNo.: 1606B18

#### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/21/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/24/2016

CLIENT: LTE Client Sample ID: TSP-20

 Project:
 GCU 216
 Collection Date: 6/20/2016 12:30:00 PM

 Lab ID:
 1606B18-001
 Matrix: MEOH (SOIL)
 Received Date: 6/21/2016 8:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	1				Analyst: <b>TOM</b>	
Diesel Range Organics (DRO)	85	10		mg/Kg	1	6/21/2016 10:04:15 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/21/2016 10:04:15 AM
Surr: DNOP	103	70-130		%Rec	1	6/21/2016 10:04:15 AM
EPA METHOD 8015D: GASOLINE RA					Analyst: <b>DJF</b>	
Gasoline Range Organics (GRO)	74	3.3		mg/Kg	1	6/21/2016 10:50:21 AM
Surr: BFB	760	80-120	S	%Rec	1	6/21/2016 10:50:21 AM
EPA METHOD 8021B: VOLATILES						Analyst: <b>DJF</b>
Benzene	ND	0.016		mg/Kg	1	6/21/2016 10:50:21 AM
Toluene	0.11	0.033		mg/Kg	1	6/21/2016 10:50:21 AM
Ethylbenzene	0.25	0.033		mg/Kg	1	6/21/2016 10:50:21 AM
Xylenes, Total	2.2	0.066		mg/Kg	1	6/21/2016 10:50:21 AM
Surr: 4-Bromofluorobenzene	139	80-120	S	%Rec	1	6/21/2016 10:50:21 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/24/2016

CLIENT: LTE Client Sample ID: TSP-21

 Project:
 GCU 216
 Collection Date: 6/20/2016 12:35:00 PM

 Lab ID:
 1606B18-002
 Matrix: MEOH (SOIL)
 Received Date: 6/21/2016 8:30:00 AM

Analyses	Result	PQL (	Qual U	U <b>nits</b>	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAM	1				Analyst: <b>TOM</b>	
Diesel Range Organics (DRO)	79	10		mg/Kg	1	6/21/2016 10:25:51 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	6/21/2016 10:25:51 AM
Surr: DNOP	107	70-130		%Rec	1	6/21/2016 10:25:51 AM
EPA METHOD 8015D: GASOLINE RA					Analyst: DJF	
Gasoline Range Organics (GRO)	100	2.7		mg/Kg	1	6/21/2016 11:14:47 AM
Surr: BFB	754	80-120	S	%Rec	1	6/21/2016 11:14:47 AM
EPA METHOD 8021B: VOLATILES						Analyst: <b>DJF</b>
Benzene	0.074	0.014		mg/Kg	1	6/21/2016 11:14:47 AM
Toluene	0.16	0.027		mg/Kg	1	6/21/2016 11:14:47 AM
Ethylbenzene	0.47	0.027		mg/Kg	1	6/21/2016 11:14:47 AM
Xylenes, Total	4.5	0.054		mg/Kg	1	6/21/2016 11:14:47 AM
Surr: 4-Bromofluorobenzene	148	80-120	S	%Rec	1	6/21/2016 11:14:47 AM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 6/24/2016

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT: LTE** 

Client Sample ID: TSP-22

 Project:
 GCU 216
 Collection Date: 6/20/2016 12:40:00 PM

 Lab ID:
 1606B18-003
 Matrix: MEOH (SOIL)
 Received Date: 6/21/2016 8:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	;				Analyst: TOM
Diesel Range Organics (DRO)	44	9.9		mg/Kg	1	6/21/2016 10:47:50 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/21/2016 10:47:50 AM
Surr: DNOP	110	70-130		%Rec	1	6/21/2016 10:47:50 AM
EPA METHOD 8015D: GASOLINE RAN					Analyst: DJF	
Gasoline Range Organics (GRO)	95	2.7		mg/Kg	1	6/21/2016 11:39:13 AM
Surr: BFB	789	80-120	S	%Rec	1	6/21/2016 11:39:13 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>DJF</b>
Benzene	ND	0.014		mg/Kg	1	6/21/2016 11:39:13 AM
Toluene	0.54	0.027		mg/Kg	1	6/21/2016 11:39:13 AM
Ethylbenzene	0.39	0.027		mg/Kg	1	6/21/2016 11:39:13 AM
Xylenes, Total	3.7	0.054		mg/Kg	1	6/21/2016 11:39:13 AM
Surr: 4-Bromofluorobenzene	153	80-120	S	%Rec	1	6/21/2016 11:39:13 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/24/2016

CLIENT: LTE Client Sample ID: TSP-23

 Project:
 GCU 216
 Collection Date: 6/20/2016 12:45:00 PM

 Lab ID:
 1606B18-004
 Matrix: MEOH (SOIL)
 Received Date: 6/21/2016 8:30:00 AM

Analyses	Result	PQL (	Qual U	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	;				Analyst: <b>TOM</b>	
Diesel Range Organics (DRO)	37	9.8		mg/Kg	1	6/21/2016 11:09:26 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/21/2016 11:09:26 AM
Surr: DNOP	105	70-130		%Rec	1	6/21/2016 11:09:26 AM
EPA METHOD 8015D: GASOLINE RA					Analyst: <b>DJF</b>	
Gasoline Range Organics (GRO)	93	2.6		mg/Kg	1	6/21/2016 12:03:36 PM
Surr: BFB	806	80-120	S	%Rec	1	6/21/2016 12:03:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: <b>DJF</b>
Benzene	ND	0.013		mg/Kg	1	6/21/2016 12:03:36 PM
Toluene	0.080	0.026		mg/Kg	1	6/21/2016 12:03:36 PM
Ethylbenzene	0.31	0.026		mg/Kg	1	6/21/2016 12:03:36 PM
Xylenes, Total	3.9	0.052		mg/Kg	1	6/21/2016 12:03:36 PM
Surr: 4-Bromofluorobenzene	149	80-120	S	%Rec	1	6/21/2016 12:03:36 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/24/2016

CLIENT: LTE Client Sample ID: TSP-24

 Project:
 GCU 216
 Collection Date: 6/20/2016 12:50:00 PM

 Lab ID:
 1606B18-005
 Matrix: MEOH (SOIL)
 Received Date: 6/21/2016 8:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	;				Analyst: <b>TOM</b>	
Diesel Range Organics (DRO)	44	9.9		mg/Kg	1	6/21/2016 11:31:11 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/21/2016 11:31:11 AM
Surr: DNOP	105	70-130		%Rec	1	6/21/2016 11:31:11 AM
EPA METHOD 8015D: GASOLINE RAM					Analyst: <b>DJF</b>	
Gasoline Range Organics (GRO)	37	2.9		mg/Kg	1	6/21/2016 12:27:59 PM
Surr: BFB	421	80-120	S	%Rec	1	6/21/2016 12:27:59 PM
EPA METHOD 8021B: VOLATILES						Analyst: <b>DJF</b>
Benzene	ND	0.014		mg/Kg	1	6/21/2016 12:27:59 PM
Toluene	ND	0.029		mg/Kg	1	6/21/2016 12:27:59 PM
Ethylbenzene	ND	0.029		mg/Kg	1	6/21/2016 12:27:59 PM
Xylenes, Total	0.59	0.058		mg/Kg	1	6/21/2016 12:27:59 PM
Surr: 4-Bromofluorobenzene	126	80-120	S	%Rec	1	6/21/2016 12:27:59 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

110

4.9

10

50.30

5.030

84.57

51.7

98.1

33.9

70

141

130

10.5

0

20

0

WO#: **1606B18** 

24-Jun-16

Client: Project:	LTE GCU 216											
Sample ID	LCS-25964	SampTy	pe: <b>LC</b>	s	Tes	tCode: E	PA Method	d 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch I	ID: <b>25</b>	964	F	RunNo: 3	5039					
Prep Date:	6/21/2016	Analysis Da	te: 6/	21/2016	Ş	SeqNo: 1	083460	Units: mg/k	ίg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range (	Organics (DRO)	44	10	50.00	0	88.2	62.6	124				
Surr: DNOP		4.5		5.000		89.8	70	130				
Sample ID	MB-25964	SampTy	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID:	PBS	Batch I	ID: <b>25</b>	964	RunNo: 35039							
Prep Date:	6/21/2016	Analysis Da	te: <b>6/</b>	21/2016	9	SeqNo: 1	083461	Units: mg/k	(g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range (	Organics (DRO)	ND	10									
	ge Organics (MRO)	ND	50									
Surr: DNOP		10		10.00		103	70	130				
Sample ID	1606B18-001AMS	SampTy	ре: М	3	Tes	tCode: E	PA Method	8015M/D: Di	esel Range	e Organics		
Client ID:	TSP-20	Batch I	ID: <b>25</b>	964	F	RunNo: 3	5039					
Prep Date:	6/21/2016	Analysis Da	te: <b>6/</b>	21/2016	S	SeqNo: 1	083770	Units: mg/k	ζg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range (	Organics (DRO)	100	10	50.05	84.57	29.9	33.9	141			S	
Surr: DNOP		4.7		5.005		94.2	70	130				
Sample ID	1606B18-001AMSE	<b>)</b> SampTy <sub>l</sub>	pe: <b>M</b> \$	SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID:	TSP-20	Batch I	ID: <b>25</b>	964	F	RunNo: 3	5039					
Prep Date:	6/21/2016	Analysis Da	te: 6/	21/2016	5	SeqNo: 1	083771	Units: mg/k	(g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Diesel Range Organics (DRO)

Surr: DNOP

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

D. C. J. H.N. J. D.

Page 6 of 9

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

LTE

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1606B18

24-Jun-16

Project:	GCU 216	i											
Sample ID	RB	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e			
Client ID:	PBS	Batch	ID: A3	5050	F	RunNo: <b>35050</b>							
Prep Date:		Analysis Da	ate: 6/	/21/2016	5	SeqNo: 1	084217	Units: mg/k	<b>(</b> g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Rang Surr: BFB	ge Organics (GRO)	ND 1000	5.0	1000		101	80	120					
Sample ID	2.5UG GRO LCS	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е			
Client ID:	LCSS	Batch	ID: A3	35050	F	RunNo: 3	5050						
Prep Date:		Analysis D	ate: 6/	/21/2016	9	SeqNo: 1	084218	Units: mg/k	<b>(</b> g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
	ge Organics (GRO)	23	5.0	25.00	0	91.0	80	120					
Surr: BFB		1100		1000		106	80	120					
Sample ID	1606B18-001AMS	SampT	ype: <b>M</b> \$	S	TestCode: EPA Method 8015D: Gasoline Range								
Client ID:	TSP-20	Batch	ID: A3	5050	F	RunNo: 3	5050						
Prep Date:		Analysis D	ate: 6/	/21/2016	5	SeqNo: 1	084219	Units: mg/h	<b>(</b> g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
-	ge Organics (GRO)	85	3.3	16.39	73.52	70.8	59.3	143			C		
Surr: BFB		5000		655.7		765	80	120			S		
Sample ID	1606B18-001AMS	D SampT	ype: MS	SD	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е			
Client ID:	TSP-20	Batch	ID: A3	35050	F	RunNo: 3	5050						
Prep Date:		Analysis Da	ate: <b>6</b> /	/21/2016	5	SeqNo: 1	084221	Units: mg/k	<b>(</b> g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
_	ge Organics (GRO)	83	3.3	16.39	73.52	58.4	59.3	143	2.40	20	S		
Surr: BFB		4900		655.7		754	80	120	0	0	S		
Sample ID	MB-25948	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е			
Client ID:	PBS	Batch	ID: <b>25</b>	948	F	RunNo: 3	5050						
Prep Date:	6/20/2016	Analysis Da	ate: 6/	/21/2016	5	SeqNo: 1	084234	Units: %Re	С				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: BFB		1000		1000		102	80	120					
Sample ID	LCS-25948 C	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е			
Client ID:	LCSS	Batch	ID: <b>25</b>	948	F	RunNo: 3	5050						
Prep Date:		Analysis Da	ate: 6	/21/2016	\$	SeqNo: 1	084235	Units: %Re	С				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: BFB		1000		1000		105	80	120					

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range

J Analyte detected below quantitation limits

Page 7 of 9

Sample pH Not In Range P

RLReporting Detection Limit

Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1606B18** 

24-Jun-16

Client:	LTE
Project:	GCU 216

Sample ID RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: **B35050** RunNo: 35050 Prep Date: Analysis Date: 6/21/2016 SeqNo: 1084230 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.025 Benzene ND Toluene ND 0.050 0.050 Ethylbenzene ND Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 1.1 1.000 109 80 120

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: **B35050** RunNo: 35050 Prep Date: Analysis Date: 6/21/2016 SeqNo: 1084231 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result 0.95 0.025 1.000 O 95.2 75.3 123 Benzene Toluene 0.83 0.050 1.000 0 82.6 80 124 Ethylbenzene 0.81 0.050 0 80.6 82.8 121 S 1.000 83.9 S Xylenes, Total 2.4 0.10 3.000 0 81.6 122 Surr: 4-Bromofluorobenzene 1.1 1.000 112 80 120

Sample ID 1606B18-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: TSP-21 Batch ID: **B35050** RunNo: 35050 Prep Date: Analysis Date: 6/21/2016 SeqNo: 1084232 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.49 0.014 0.5426 0.07352 76.3 71.5 122 Toluene 0.55 0.027 0.5426 0.1613 71.8 71.2 123 75.2 Ethylbenzene 0.89 0.027 0.5426 0.4708 77.9 130 80.4 Xylenes, Total 5.8 0.054 1.628 4.531 72.4 131 Surr: 4-Bromofluorobenzene 0.78 0.5426 80 120 S 144

Sample ID 1606B18-002AN	<b>ISD</b> SampT	ype: <b>MS</b>	SD	Tes	PA Method	8021B: Volat	iles			
Client ID: TSP-21	Batch	1D: <b>B3</b>	5050	R	RunNo: 3	5050				
Prep Date:	Analysis D	ate: <b>6/</b> 2	21/2016	SeqNo: <b>1084233</b>			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.48	0.014	0.5426	0.07352	74.6	71.5	122	1.91	20	
Toluene	0.54	0.027	0.5426	0.1613	69.7	71.2	123	2.11	20	S
Ethylbenzene	0.89	0.027	0.5426	0.4708	76.8	75.2	130	0.695	20	
Xylenes, Total	5.8	0.054	1.628	4.531	75.9	72.4	131	1.25	20	
Surr: 4-Bromofluorobenzene	0.78		0.5426		144	80	120	0	0	S

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 8 of 9

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1606B18

24-Jun-16

**Client:** LTE **Project:** GCU 216

Sample ID MB-25948 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: **PBS** Batch ID: 25948 RunNo: 35050

Prep Date: 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1084239 Units: %Rec

Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Surr: 4-Bromofluorobenzene 1.1 1.000 113 80 120

Sample ID LCS-25948 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Batch ID: 25948 Client ID: LCSS RunNo: 35050

Prep Date: 6/20/2016 Analysis Date: 6/21/2016 SeqNo: 1084240 Units: %Rec

Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Qual

Surr: 4-Bromofluorobenzene 1.1 1.000 113 80 120

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 9 of 9



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: LTE	Work Order Number:	1606B18	eren er	RcptNo:	1
Received by/date:					:
Logged By: Lindsay Mangin	()C(\Z(\\) 6/21/2016 8:30:00 AM		Janahy Hopey D		İ
Completed By: Lindsay Mangin	6/21/2016 8:40:03 AM		Ameh Allen		
$\sim$	0/2 1/2010 0.40.00 AW				!
Reviewed By:	06/21/16				:
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 🗆	NA 🗔	
5. Were all samples received at a temperatur	e 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) prope	erly preserved?	Yes 🗹	No 🗌		
9. Was preservative added to bottles?		Yes 🗌	No 🐼	NA $\square$	
10.VOA vials have zero headspace?		Yes 🗌	No 🗆	No VOA Vials	
11. Were any sample containers received brol	ken?	Yes	No 🐼	l	
11,				# of preserved bottles checked	۵
12.Does paperwork match bottle labels?		Yes 🐼	No 🗆	for pH:	
(Note discrepancies on chain of custody)			🗖	(<2 c	or >12 unless noted)
13. Are matrices correctly identified on Chain of	of Custody?	Yes 🖢	No 📙	Adjusted:	
14. Is it clear what analyses were requested?		Yes 🕏	No ∐	Checked by:	
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🕏	No 🗆	Offected by.	
Special Handling (if applicable)					
16. Was client notified of all discrepancies with	this order?	Yes 🗌	No 🗌	NA 🗹	
Person Notified:	Date:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		!
By Whom:	Via:	eMail	Phone Fax	In Person	1
Regarding:	[				
Client Instructions:	ANNOUNCE AND AN AN AN AN AN AN AN AN AN AN AN AN AN	***************************************		entropostos esternos anticondes anticonstantes anticonstantes anticonstantes anticonstantes anticonstantes anticonstantes and a	
: 17. Additional remarks:					I
18. <u>Cooler Information</u>					
	Seal Intact   Seal No	Seal Date	Signed By		
1 5.2 Good Yo					

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.



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

June 24, 2016

Danny Burns

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU 216 OrderNo.: 1606C01

#### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/22/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/24/2016

CLIENT: LTE Client Sample ID: BL-TSP-A

 Project:
 GCU 216
 Collection Date: 6/21/2016 4:00:00 PM

 Lab ID:
 1606C01-001
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	31	10	mg/Kg	1	6/22/2016 4:31:29 PM
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	6/22/2016 4:31:29 PM
Surr: DNOP	96.2	70-130	%Rec	1	6/22/2016 4:31:29 PM
EPA METHOD 8015D: GASOLINE RAM				Analyst: <b>DJF</b>	
Gasoline Range Organics (GRO)	11	3.6	mg/Kg	1	6/22/2016 1:48:19 PM
Surr: BFB	192	80-120	S %Rec	1	6/22/2016 1:48:19 PM
EPA METHOD 8021B: VOLATILES					Analyst: <b>DJF</b>
Benzene	ND	0.018	mg/Kg	1	6/22/2016 1:48:19 PM
Toluene	ND	0.036	mg/Kg	1	6/22/2016 1:48:19 PM
Ethylbenzene	ND	0.036	mg/Kg	1	6/22/2016 1:48:19 PM
Xylenes, Total	ND	0.073	mg/Kg	1	6/22/2016 1:48:19 PM
Surr: 4-Bromofluorobenzene	98.6	80-120	%Rec	1	6/22/2016 1:48:19 PM

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

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

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/24/2016

CLIENT: LTE Client Sample ID: BL-PITW@20'

 Project:
 GCU 216
 Collection Date: 6/21/2016 4:05:00 PM

 Lab ID:
 1606C01-002
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS					Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	1300	99		mg/Kg	10	6/22/2016 4:53:48 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	6/22/2016 4:53:48 PM
Surr: DNOP	0	70-130	S	%Rec	10	6/22/2016 4:53:48 PM
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst: DJF
Gasoline Range Organics (GRO)	590	18		mg/Kg	5	6/22/2016 2:58:59 PM
Surr: BFB	845	80-120	S	%Rec	5	6/22/2016 2:58:59 PM
EPA METHOD 8021B: VOLATILES						Analyst: DJF
Benzene	ND	0.092		mg/Kg	5	6/22/2016 2:58:59 PM
Toluene	ND	0.18		mg/Kg	5	6/22/2016 2:58:59 PM
Ethylbenzene	3.6	0.18		mg/Kg	5	6/22/2016 2:58:59 PM
Xylenes, Total	24	0.37		mg/Kg	5	6/22/2016 2:58:59 PM
Surr: 4-Bromofluorobenzene	147	80-120	S	%Rec	5	6/22/2016 2:58:59 PM

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

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

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1606C01

24-Jun-16

**Client:** LTE **Project:** GCU 216

Sample ID MB-25991 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics PBS Client ID: Batch ID: 25991 RunNo: 35092 SeqNo: 1085623 Prep Date: 6/22/2016 Analysis Date: 6/22/2016 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 10.00 94.8 70 9.5 130 Sample ID I CS-25001

Sample ID LC3-23991	Sampi	ур <del>е</del> . <b>LC</b>	3	165	Code. E	PA Wethou	90 13W/D: DI	esei Kange	e Organics				
Client ID: LCSS	Batch	ID: <b>25</b> 9	991	R	tunNo: 3	5092							
Prep Date: 6/22/2016	22/2016 Analysis Date: 6/22/2016 SeqNo: 1085624						Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRO)	52	10	50.00	0	103	62.6	124						
Surr: DNOP	4.9		5.000		97.3	70	130						

#### Qualifiers:

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

Analyte detected in the associated Method Blank

Page 3 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606C01** 

24-Jun-16

Client: LTE
Project: GCU 216

Sample ID MB-25976 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 25976 RunNo: 35097

Prep Date: 6/21/2016 Analysis Date: 6/22/2016 SeqNo: 1085943 Units: 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 1000 1000 101 80 120

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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### Hall Environmental Analysis Laboratory, Inc.

0.98

WO#: **1606C01** 

24-Jun-16

Client: LTE
Project: GCU 216

Surr: 4-Bromofluorobenzene

Sample ID MB-25976 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: 25976 RunNo: 35097 Prep Date: 6/21/2016 Analysis Date: 6/22/2016 SeqNo: 1085953 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 ND 0.050 Toluene ND 0.050 Ethylbenzene Xylenes, Total ND 0.10

97.5

80

120

1.000

Sample ID LCS-25976 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 25976 RunNo: 35097 Prep Date: Analysis Date: 6/22/2016 SeqNo: 1085954 6/21/2016 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.95 0.025 1.000 0 94.7 75.3 123 Benzene Toluene 0.98 0.050 1.000 0 97.7 80 124 Ethylbenzene 0.99 0.050 1.000 0 99.4 82.8 121 98.2 83.9 Xylenes, Total 2.9 0.10 3.000 0 122 103 Surr: 4-Bromofluorobenzene 1.0 1.000 80 120

#### Qualifiers:

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

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Häll 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: LTE	Work Order Numbe	r: 1696C01		RcptNo: 1	
Received by/date:	06/33	114			
Logged By: Ashley Sallegos	6/22/2016 8:10:00 AM	,	A		
Completed By. Ashley Gallegos	6/22/2016 8:38:52 AN	1	A		
Reviewed By:	Malezlis		a		
Chain of Custody	06/10116				
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 sam	ples?	Yes 🗹	No 🗌	NA 🗆	
5. Were all samples received at a temper	ature 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	est(s)?	Yes 🗸	No 🗆		
8, Are samples (except VOA and ONG) p	operly preserved?	Yes 🗸	No 🗔		
9. Was preservative added to bottles?		Yes 🗌	No 🗸	NA 🗆	
10.VOA vials have zero headspace?		Yes 🗌	No.	No VOA Viels	
11, Were any sample containers received	oroken?	Yes -	Na 🗸	# of preserved	
12. Does paperwork match bottle labels?		Yes 🗸	No 🗆	bottles checked for pH:	
(Note discrepancies on chain of custod	0	Yes 🗸	NO L		12 unless noted)
13, Are matrices correctly identified on Cha	in of Custody?	Yes V	No 🗔	Adjusted?	
14. Is it clear what analyses were requested	1?	Yes 🗸	No 🗆		
<ol> <li>Were all holding times able to be met?</li> <li>(If no, notify customer for authorization.</li> </ol>		Yes 🗸	No 🗆	Checked by:	
Special Handling (if applicable)					
16. Was client notified of all discrepancies	with this order?	Yes 🗌	No 🗌	NA 🗸	
Person Natified:	Date				
By Whom:	Via:	eMail	Phone Fax	In Person	
Regarding:					
Client Instructions:					
17. Additional remarks:					
18. Cooler information					
Cooler No   Temp °C   Condition	Seal Intact   Seal No	Seal Date	Signed By		

	LABORATORY	tal.com	Albuquerque, NM 87109	505-345-4107	Request				()		ΟΛ-	-įwe	v) 80828 62) 0728 62) 0428											sted on the analytical report.
	ANALYSIS LABORATOR	www.hallenvironmental.com	4901 Hawkins NE - Albuquerqu	Tel. 505-345-3975 Fax 505	Analysis	(† <sub>O</sub> ()	SS (SI	SIW SIW	() () ()	(81 (87 (87 (87 (87)	I'NG	MTI B310 B310 Me ME	BTEX + TPH 801 PAH's (8 PAH's (8 PAH's (8 PAH'S	X	X						Remarks:	Validativa.		ossibility. Any sub-contracted data will be clearly not
Turn-Around Time:	□ Standard A Rush Sorine DCM	Project Name:	572 #20 	Project #:		La Light	Stewart 100 Tens Com	/m main	IM	No □	.4.3		Container Preservative HEAL No. Type and # Type	100 700	(60)						Time	Sori ulala Alda	Received by: Date Time	If necessary samples submitted to Hall Environmental may be subcerfracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
Chain-of-Custody Record	ient BD Lower 48		ailing Address:		127 375 107 Tole #:	nail or Fax#:	ige:	☐ Level 4 (Full Validation)	u.	NELAP 🗆 Other	'EDD (Type) P P		)ate Time Matrix Sample Request ID	21 1600 SS BL-TSP-A	21 1605 SS BL PITWEZO'					-	te. Time. Religionished by:	50/2)	Time: Relinqui	If necessary/samples submitted to Hall Environmental may be subc



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

June 29, 2016

Danny Burns

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU 216 OrderNo.: 1606C00

#### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 10 sample(s) on 6/22/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-09R

 Project:
 GCU 216
 Collection Date: 6/21/2016 8:55:00 AM

 Lab ID:
 1606C00-001
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	63	9.9	mg/Kg	1	6/22/2016 12:06:02 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/22/2016 12:06:02 PM
Surr: DNOP	103	70-130	%Rec	1	6/22/2016 12:06:02 PM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	6/22/2016 10:46:19 AM
Surr: BFB	92.4	80-120	%Rec	1	6/22/2016 10:46:19 AM
EPA METHOD 8021B: VOLATILES					Analyst: <b>DJF</b>
Benzene	ND	0.020	mg/Kg	1	6/22/2016 10:46:19 AM
Toluene	ND	0.039	mg/Kg	1	6/22/2016 10:46:19 AM
Ethylbenzene	ND	0.039	mg/Kg	1	6/22/2016 10:46:19 AM
Xylenes, Total	ND	0.078	mg/Kg	1	6/22/2016 10:46:19 AM
Surr: 4-Bromofluorobenzene	99.5	80-120	%Rec	1	6/22/2016 10:46:19 AM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-10R

 Project:
 GCU 216
 Collection Date: 6/21/2016 9:00:00 AM

 Lab ID:
 1606C00-002
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	;			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	50	10	mg/Kg	1	6/22/2016 12:27:49 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/22/2016 12:27:49 PM
Surr: DNOP	108	70-130	%Rec	1	6/22/2016 12:27:49 PM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	27	3.7	mg/Kg	1	6/22/2016 11:10:43 AM
Surr: BFB	228	80-120	S %Rec	1	6/22/2016 11:10:43 AM
EPA METHOD 8021B: VOLATILES					Analyst: <b>DJF</b>
Benzene	ND	0.019	mg/Kg	1	6/22/2016 11:10:43 AM
Toluene	ND	0.037	mg/Kg	1	6/22/2016 11:10:43 AM
Ethylbenzene	0.070	0.037	mg/Kg	1	6/22/2016 11:10:43 AM
Xylenes, Total	0.44	0.075	mg/Kg	1	6/22/2016 11:10:43 AM
Surr: 4-Bromofluorobenzene	114	80-120	%Rec	1	6/22/2016 11:10:43 AM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-11R

 Project:
 GCU 216
 Collection Date: 6/21/2016 9:05:00 AM

 Lab ID:
 1606C00-003
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analyst: TOM
Diesel Range Organics (DRO)	52	10	mg/Kg	1	6/22/2016 12:49:43 PM
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	6/22/2016 12:49:43 PM
Surr: DNOP	104	70-130	%Rec	1	6/22/2016 12:49:43 PM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: DJF
Gasoline Range Organics (GRO)	29	3.3	mg/Kg	1	6/22/2016 11:35:07 AM
Surr: BFB	307	80-120	S %Rec	1	6/22/2016 11:35:07 AM
EPA METHOD 8021B: VOLATILES					Analyst: DJF
Benzene	ND	0.016	mg/Kg	1	6/22/2016 11:35:07 AM
Toluene	ND	0.033	mg/Kg	1	6/22/2016 11:35:07 AM
Ethylbenzene	0.080	0.033	mg/Kg	1	6/22/2016 11:35:07 AM
Xylenes, Total	0.48	0.066	mg/Kg	1	6/22/2016 11:35:07 AM
Surr: 4-Bromofluorobenzene	116	80-120	%Rec	1	6/22/2016 11:35:07 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-12R

 Project:
 GCU 216
 Collection Date: 6/21/2016 9:10:00 AM

 Lab ID:
 1606C00-004
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL (	Qual 1	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS					Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	78	10		mg/Kg	1	6/22/2016 1:11:55 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	6/22/2016 1:11:55 PM
Surr: DNOP	105	70-130		%Rec	1	6/22/2016 1:11:55 PM
EPA METHOD 8015D: GASOLINE RAI	NGE					Analyst: RAA
Gasoline Range Organics (GRO)	720	37		mg/Kg	10	6/25/2016 7:39:04 PM
Surr: BFB	251	80-120	S	%Rec	10	6/25/2016 7:39:04 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	0.36	0.18		mg/Kg	10	6/25/2016 7:39:04 PM
Toluene	11	0.37		mg/Kg	10	6/25/2016 7:39:04 PM
Ethylbenzene	2.7	0.37		mg/Kg	10	6/25/2016 7:39:04 PM
Xylenes, Total	29	0.74		mg/Kg	10	6/25/2016 7:39:04 PM
Surr: 4-Bromofluorobenzene	125	80-120	S	%Rec	10	6/25/2016 7:39:04 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-13R

 Project:
 GCU 216
 Collection Date: 6/21/2016 9:30:00 AM

 Lab ID:
 1606C00-005
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3				Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	55	9.9		mg/Kg	1	6/22/2016 1:33:41 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/22/2016 1:33:41 PM
Surr: DNOP	94.2	70-130		%Rec	1	6/22/2016 1:33:41 PM
EPA METHOD 8015D: GASOLINE RAM	IGE					Analyst: NSB
Gasoline Range Organics (GRO)	83	3.6		mg/Kg	1	6/27/2016 11:38:29 PM
Surr: BFB	487	80-120	S	%Rec	1	6/27/2016 11:38:29 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	0.021	0.018		mg/Kg	1	6/27/2016 11:38:29 PM
Toluene	0.057	0.036		mg/Kg	1	6/27/2016 11:38:29 PM
Ethylbenzene	0.16	0.036		mg/Kg	1	6/27/2016 11:38:29 PM
Xylenes, Total	1.5	0.073		mg/Kg	1	6/27/2016 11:38:29 PM
Surr: 4-Bromofluorobenzene	122	80-120	S	%Rec	1	6/27/2016 11:38:29 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-15R

 Project:
 GCU 216
 Collection Date: 6/21/2016 9:35:00 AM

 Lab ID:
 1606C00-006
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: TOM
Diesel Range Organics (DRO)	54	9.3	mg/Kg	1	6/22/2016 1:55:50 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	6/22/2016 1:55:50 PM
Surr: DNOP	93.3	70-130	%Rec	1	6/22/2016 1:55:50 PM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	34	3.8	mg/Kg	1	6/22/2016 12:48:12 PM
Surr: BFB	232	80-120	S %Rec	1	6/22/2016 12:48:12 PM
EPA METHOD 8021B: VOLATILES					Analyst: <b>DJF</b>
Benzene	ND	0.019	mg/Kg	1	6/22/2016 12:48:12 PM
Toluene	ND	0.038	mg/Kg	1	6/22/2016 12:48:12 PM
Ethylbenzene	0.087	0.038	mg/Kg	1	6/22/2016 12:48:12 PM
Xylenes, Total	0.61	0.076	mg/Kg	1	6/22/2016 12:48:12 PM
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	1	6/22/2016 12:48:12 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-16R

 Project:
 GCU 216
 Collection Date: 6/21/2016 9:40:00 AM

 Lab ID:
 1606C00-007
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL Q	Qual Uni	ts D	F	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3				Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	110	10	mg/	Kg 1		6/22/2016 2:17:57 PM
Motor Oil Range Organics (MRO)	ND	50	mg/	Kg 1		6/22/2016 2:17:57 PM
Surr: DNOP	94.1	70-130	%R	ec 1		6/22/2016 2:17:57 PM
EPA METHOD 8015D: GASOLINE RAM	NGE					Analyst: DJF
Gasoline Range Organics (GRO)	21	3.7	mg/	Kg 1		6/22/2016 1:12:46 PM
Surr: BFB	231	80-120	S %R	ec 1		6/22/2016 1:12:46 PM
EPA METHOD 8021B: VOLATILES						Analyst: <b>DJF</b>
Benzene	ND	0.019	mg/	Kg 1		6/22/2016 1:12:46 PM
Toluene	ND	0.037	mg/	Kg 1		6/22/2016 1:12:46 PM
Ethylbenzene	ND	0.037	mg/	Kg 1		6/22/2016 1:12:46 PM
Xylenes, Total	0.23	0.074	mg/	Kg 1		6/22/2016 1:12:46 PM
Surr: 4-Bromofluorobenzene	113	80-120	%R	ec 1		6/22/2016 1:12:46 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-17R

 Project:
 GCU 216
 Collection Date: 6/21/2016 9:45:00 AM

 Lab ID:
 1606C00-008
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	150	10	mg/Kg	1	6/22/2016 3:24:30 PM
Motor Oil Range Organics (MRO)	74	50	mg/Kg	1	6/22/2016 3:24:30 PM
Surr: DNOP	98.2	70-130	%Rec	1	6/22/2016 3:24:30 PM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: DJF
Gasoline Range Organics (GRO)	22	3.9	mg/Kg	1	6/22/2016 1:37:15 PM
Surr: BFB	221	80-120	S %Rec	1	6/22/2016 1:37:15 PM
EPA METHOD 8021B: VOLATILES					Analyst: DJF
Benzene	ND	0.020	mg/Kg	1	6/22/2016 1:37:15 PM
Toluene	ND	0.039	mg/Kg	1	6/22/2016 1:37:15 PM
Ethylbenzene	ND	0.039	mg/Kg	1	6/22/2016 1:37:15 PM
Xylenes, Total	0.20	0.078	mg/Kg	1	6/22/2016 1:37:15 PM
Surr: 4-Bromofluorobenzene	113	80-120	%Rec	1	6/22/2016 1:37:15 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 8 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-18R

 Project:
 GCU 216
 Collection Date: 6/21/2016 9:50:00 AM

 Lab ID:
 1606C00-009
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;				Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	75	9.8		mg/Kg	1	6/22/2016 3:46:43 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/22/2016 3:46:43 PM
Surr: DNOP	94.6	70-130		%Rec	1	6/22/2016 3:46:43 PM
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	40	4.5		mg/Kg	1	6/22/2016 2:01:48 PM
Surr: BFB	319	80-120	S	%Rec	1	6/22/2016 2:01:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: <b>DJF</b>
Benzene	ND	0.022		mg/Kg	1	6/22/2016 2:01:48 PM
Toluene	ND	0.045		mg/Kg	1	6/22/2016 2:01:48 PM
Ethylbenzene	ND	0.045		mg/Kg	1	6/22/2016 2:01:48 PM
Xylenes, Total	0.62	0.089		mg/Kg	1	6/22/2016 2:01:48 PM
Surr: 4-Bromofluorobenzene	121	80-120	S	%Rec	1	6/22/2016 2:01:48 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 9 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-19R

 Project:
 GCU 216
 Collection Date: 6/21/2016 9:55:00 AM

 Lab ID:
 1606C00-010
 Matrix: MEOH (SOIL)
 Received Date: 6/22/2016 8:10:00 AM

Analyses	Result	PQL (	Qual U	nits	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3				Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	110	9.9	r	mg/Kg	1	6/22/2016 4:09:07 PM
Motor Oil Range Organics (MRO)	64	50	r	ng/Kg	1	6/22/2016 4:09:07 PM
Surr: DNOP	97.4	70-130	ç	%Rec	1	6/22/2016 4:09:07 PM
EPA METHOD 8015D: GASOLINE RAM	NGE					Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	11	3.6	r	ng/Kg	1	6/22/2016 2:26:18 PM
Surr: BFB	173	80-120	S 9	%Rec	1	6/22/2016 2:26:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: <b>DJF</b>
Benzene	ND	0.018	r	ng/Kg	1	6/22/2016 2:26:18 PM
Toluene	ND	0.036	r	ng/Kg	1	6/22/2016 2:26:18 PM
Ethylbenzene	ND	0.036	r	ng/Kg	1	6/22/2016 2:26:18 PM
Xylenes, Total	ND	0.072	r	ng/Kg	1	6/22/2016 2:26:18 PM
Surr: 4-Bromofluorobenzene	110	80-120	Q.	%Rec	1	6/22/2016 2:26:18 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 10 of 15
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

LTE

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

SampType: LCS

Batch ID: 25991

WO#: 1606C00

29-Jun-16

Project: GCU 21	.6									
Sample ID 1606C00-001AM	<b>S</b> SampTy	/pe: <b>M</b> \$	3	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: TSP-09R	Batch	ID: <b>25</b>	991	F	RunNo: 3	5083				
Prep Date: 6/22/2016	Analysis Da	ate: <b>6/</b>	22/2016	5	SeqNo: 1	085321	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	82	10	49.80	62.60	38.9	33.9	141			
Surr: DNOP	4.7		4.980		94.9	70	130			
Sample ID 1606C00-001AM	SD SampTy	ype: <b>M</b> \$	SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: TSP-09R	Batch	ID: <b>25</b>	991	F	RunNo: 3	5083				
Prep Date: 6/22/2016	Analysis Da	ate: <b>6/</b>	22/2016	5	SeqNo: 1	085322	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	64	9.6	47.76	62.60	3.17	33.9	141	24.4	20	RS
Surr: DNOP	4.2		4.776		88.5	70	130	0	0	
Sample ID MB-25991	SampTy	ype: <b>ME</b>	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch	ID: <b>25</b>	991	F	RunNo: 3	5092				
Prep Date: 6/22/2016	Analysis Da	ate: <b>6/</b>	22/2016	S	SeqNo: 1	085623	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		94.8	70	130			

Prep Date: 6/22/2016	Analysis Date: 6/22/2016			S	SeqNo: <b>1085624</b>			<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	103	62.6	124			
Surr: DNOP	4.9		5.000		97.3	70	130			

#### Qualifiers:

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

Sample ID LCS-25991

Client ID: LCSS

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

Analyte detected in the associated Method Blank

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

RunNo: 35092

Page 11 of 15

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606C00** 

29-Jun-16

Client: LTE Project: GCU 21	6								
Sample ID RB	SampType: I	MBLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch ID: A	<b>\35096</b>	F	RunNo: 3	5096				
Prep Date:	Analysis Date:	6/22/2016	9	SeqNo: 1	085629	Units: mg/k	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5. 990	0 1000		98.6	80	120			
Sample ID 2.5UG GRO LCS	SampType: I	_cs	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	je	
Client ID: LCSS	Batch ID:	A35096	F	RunNo: 3	5096				
Prep Date:	Analysis Date:	6/22/2016	5	SeqNo: 1	085630	Units: mg/h	ζg		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22 5.	0 25.00	0	88.7	80	120			
Surr: BFB	1000	1000		104	80	120			
Sample ID 1606C00-002AMS	SampType: I	ИS	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: TSP-10R	Batch ID:	A35096	RunNo: <b>35096</b>						
Prep Date:	Analysis Date:	6/22/2016	5	SeqNo: 1	085631	Units: mg/k	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	44 3.	7 18.70	26.51	94.3	59.3	143			
Surr: BFB	2200	747.9		296	80	120			S
Sample ID 1606C00-002AMS	SD SampType: I	MSD	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: TSP-10R	Batch ID:	A35096	F	RunNo: 3	5096				
Prep Date:	Analysis Date:	6/22/2016	9	SeqNo: 1	085632	Units: mg/k	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	41 3.	7 18.70	26.51	78.7	59.3	143	6.85	20	
Surr: BFB	1900	747.9		256	80	120	0	0	S
Sample ID MB-26054	SampType: I	//BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch ID: 2	26054	F	RunNo: 3	5243				
Prep Date: 6/24/2016	Analysis Date:	6/27/2016	5	SeqNo: 1	089910	Units: mg/k	ζg		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5. 980	0 1000		97.6	80	120			
Sample ID LCS-26054	SampType: I		Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	le	
Client ID: LCSS	Batch ID: 2		F	RunNo: 3	5243		_		
Prep Date: 6/24/2016	Analysis Date:	6/27/2016		SeqNo: 1		Units: mg/k	(g		
	D 1/ DOI	001/	00140 4141						

#### Qualifiers:

Analyte

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

Result

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

HighLimit

%RPD

E Value above quantitation range

J Analyte detected below quantitation limits

D C 1 HN I D

Page 12 of 15

Qual

**RPDLimit** 

P Sample pH Not In Range

SPK value SPK Ref Val %REC LowLimit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

1100

WO#: **1606C00** 

29-Jun-16

Client: LTE
Project: GCU 216

Surr: BFB

Sample ID LCS-26054 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 26054 RunNo: 35243

Prep Date: 6/24/2016 Analysis Date: 6/27/2016 SeqNo: 1089911 Units: mg/Kg

1000

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 27 5.0 25.00 0 109 80 120

109

80

120

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 13 of 15

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606C00** 

29-Jun-16

Client:	LTE
<b>Project:</b>	GCU 216

Sample ID RB	SampT	уре: МЕ	BLK	Tes	tCode: El	tiles					
Client ID: PBS	Batch	n ID: <b>B3</b>	5096	F	RunNo: 3	5096					
Prep Date:	Analysis D	ate: <b>6/</b>	22/2016	8	SeqNo: 1	085641	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.025									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120				

Sample ID 1606C00-001AMS	Samp1	SampType: MS TestCode: EPA Method 8021B: Volatiles									
Client ID: TSP-09R	Batc	h ID: <b>B3</b>	5096	F	RunNo: 3	5096					
Prep Date:	Analysis [	Date: <b>6/</b>	22/2016	S	SeqNo: 1	085643	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.70	0.020	0.7819	0	89.0	71.5	122				
Toluene	0.52	0.039	0.7819	0.005630	66.0	71.2	123			S	
Ethylbenzene	0.64	0.039	0.7819	0	82.4	75.2	130				
Xylenes, Total	2.4	0.078	2.346	0.02080	102	72.4	131				
Surr: 4-Bromofluorobenzene	0.89		0.7819		114	80	120				

Sample ID 1606C00-001AN	pple ID 1606C00-001AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles									
Client ID: TSP-09R	Batch	n ID: <b>B3</b>	5096	R	RunNo: 3	5096				
Prep Date:	Analysis D	ate: 6/	/22/2016	S	SeqNo: 1	085644	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.71	0.020	0.7819	0	90.2	71.5	122	1.33	20	
Toluene	0.53	0.039	0.7819	0.005630	67.1	71.2	123	1.71	20	S
Ethylbenzene	0.66	0.039	0.7819	0	84.7	75.2	130	2.69	20	
Xylenes, Total	2.5	0.078	2.346	0.02080	104	72.4	131	2.37	20	
Surr: 4-Bromofluorobenzene	0.93		0.7819		119	80	120	0	0	

Sample ID MB-26054	SampT	ype: ME	BLK	Tes								
Client ID: PBS	Batch	n ID: <b>26</b>	054	R	RunNo: 3	5243						
Prep Date: 6/24/2016	Analysis D	oate: 6/	27/2016	S	SeqNo: 1	089938	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	ND	0.025	•		•			•				
Toluene	ND	0.050										
Ethylbenzene	ND	0.050										
Xylenes, Total	ND	0.10										
Surr: 4-Bromofluorobenzene	0.94		1.000		94.3	80	120					

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 14 of 15

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606C00** 

29-Jun-16

Client: LTE
Project: GCU 216

Sample ID LCS-26054	S	Tes										
Client ID: LCSS	D: <b>LCSS</b> Batch ID: <b>26054</b> RunNo: <b>35243</b>											
Prep Date: 6/24/2016	Analysis [	Date: <b>6/</b>	27/2016	S	SeqNo: 1	089939	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.99	0.025	1.000	0	99.2	75.3	123					
Toluene	0.99	0.050	1.000	0	99.5	80	124					
Ethylbenzene	1.0	0.050	1.000	0	102	82.8	121					
Xylenes, Total	3.0	0.10	3.000	0	99.7	83.9	122					
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	80	120					

#### Qualifiers:

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

Page 15 of 15



tlall Environmental Analysis Laboratory 4901 Howkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

## Sample Log-In Check List

Work Order Number: 1606C00 RcptNo: 1 Client Name: Received by/date: Ashley Gallegos B/22/2016 8:10:00 AM Logged By: Completed By: Ashley Gallegos 6/22/2016 8/35:02 AM Reviewed By: Chain of Custody Not Present V No 🗔 Yes 1. Custody seals intact on sample bottles? No I Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No I NA I Yes V 4. Was an attempt made to cool the samples? No . NA . Were all samples received at a temperature of >0° C to 6.0°C Yes V No 6. Sample(s) in proper container(s)? No. Sufficient sample volume for indicated test(s)? Yes V No. 8. Are samples (except VOA and ONG) properly preserved? NA . No V 9. Was preservative added to bottles? Yes No 🗌 No VOA Vials 10. VOA vials have zero headspace? Yes No V Yes 11. Were any sample containers received broken? # of preserved bottles checked No for pH: Yes V 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No . 13. Are matrices correctly identified on Chain of Custody? No. 14. Is it clear what analyses were requested? Checked by: Yes V No 15. Were all holding times able to be met? (If no, notify customer for authorization ) Special Handling (if applicable) NA V Yes L No. 16. Was client notified of all discrepancies with this order? Person Notified: Date eMail Phone Fax In Person By Whom: Via: Regarding. Client Instructions: 17. Additional remarks: 18. Cooler Information Ccoler No Temp C Condition Seal Intact Seal No Seal Date Signed By 4.3 Good Yes

I ▼ L	TORY								(N	or 1	٧)	səlqq	n <b>8</b> ji⊦	,													report
HA!! ENVIDONMENTA!	SIS LABORATORY	www.hallenvironmental.com	Albuquerque, NM 87109	Fax 505-345-4107	Analysis Request					I, <sub>E</sub> C	I,N(	s (F,C estic	Aniona 8081 1 8260B 8250 (	,													serves as notice of this nossihility. Any sub-contracted data will be clearly notated on the analytical report
	ANALYSIS	www.halle	4901 Hawkins NE - A	Tel. 505-345-3975	An≀	(QE		KQE	() ()	81 .404 .404	0 oc	015B Wetho Netho	8 H9T I) H9T I) 803 2'HA9										<del>&gt;</del>		Ś.		Any etab betreated dus val
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Time:	- Kush		ユ 十 2 6			ager: 25%		Cammy 1	- Burns	Ø Yes	perature: 4	Preservative	-	٧٧	<u>_</u>								٧	;	A A	+ 1	10m 05
Turn-Around Time:	□ Standard	Project Name:	<u>z</u>	Project #:		<u>y</u> Project Man≀	) } -	にった	Sampler: D	On Ice:	Sample Temperature:	Container	Type and #	402									Λ		Received by:	Received by:	" Fait
Chain-of-Custody Record	BP Lower 48		ldress:		+2th 0t5 lot	$ \mathcal{A} $				□ Other	ype) <b>PDF</b>		I me Matrix Sample Request ID	0855 SS TSP-09R	0900   TSP-10R	0905 TSP-11 R	0910 TSP-12R	158-13R	095 TSP-15R	191-92T 0440	241 T8-17E	0950 J (SP. 18/L	161-181 1860		Time: Relinquished by:	Time: Relindurated by:	FOR JOHNELLE JAK WAS OGICLE
다 망	ient:		ailing Address:		lone #:	nail or Fax#:	VQC Package:	Standard	creditation	NELAP	EDD (Type		)ate	2		-			5	0	0	_	N N	:	te 7	te: Tir	7



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

June 28, 2016

Danny Burns

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU #216 OrderNo.: 1606D36

#### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 9 sample(s) on 6/24/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-32

 Project:
 GCU #216
 Collection Date: 6/23/2016 9:05:00 AM

 Lab ID:
 1606D36-001
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	12	10	mg/Kg	1	6/24/2016 10:00:35 AM
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	6/24/2016 10:00:35 AM
Surr: DNOP	113	70-130	%Rec	1	6/24/2016 10:00:35 AM
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst: RAA
Gasoline Range Organics (GRO)	6.9	3.7	mg/Kg	1	6/24/2016 12:01:24 PM
Surr: BFB	109	80-120	%Rec	1	6/24/2016 12:01:24 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.018	mg/Kg	1	6/24/2016 12:01:24 PM
Toluene	ND	0.037	mg/Kg	1	6/24/2016 12:01:24 PM
Ethylbenzene	ND	0.037	mg/Kg	1	6/24/2016 12:01:24 PM
Xylenes, Total	ND	0.074	mg/Kg	1	6/24/2016 12:01:24 PM
Surr: 4-Bromofluorobenzene	92.9	80-120	%Rec	1	6/24/2016 12:01:24 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-33

 Project:
 GCU #216
 Collection Date: 6/23/2016 9:15:00 AM

 Lab ID:
 1606D36-002
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	10	9.7	mg/Kg	1	6/24/2016 10:22:11 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/24/2016 10:22:11 AM
Surr: DNOP	98.4	70-130	%Rec	1	6/24/2016 10:22:11 AM
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.5	mg/Kg	1	6/24/2016 12:25:42 PM
Surr: BFB	103	80-120	%Rec	1	6/24/2016 12:25:42 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.023	mg/Kg	1	6/24/2016 12:25:42 PM
Toluene	ND	0.045	mg/Kg	1	6/24/2016 12:25:42 PM
Ethylbenzene	ND	0.045	mg/Kg	1	6/24/2016 12:25:42 PM
Xylenes, Total	0.11	0.091	mg/Kg	1	6/24/2016 12:25:42 PM
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	6/24/2016 12:25:42 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-34

 Project:
 GCU #216
 Collection Date: 6/23/2016 9:25:00 AM

 Lab ID:
 1606D36-003
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL (	Qual Un	nits	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	3				Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	11	10	m	g/Kg	1	6/24/2016 10:44:04 AM
Motor Oil Range Organics (MRO)	ND	50	m	g/Kg	1	6/24/2016 10:44:04 AM
Surr: DNOP	97.5	70-130	%	Rec	1	6/24/2016 10:44:04 AM
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst: RAA
Gasoline Range Organics (GRO)	15	3.5	m	g/Kg	1	6/24/2016 12:50:02 PM
Surr: BFB	155	80-120	S %	Rec	1	6/24/2016 12:50:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.018	m	g/Kg	1	6/24/2016 12:50:02 PM
Toluene	ND	0.035	m	g/Kg	1	6/24/2016 12:50:02 PM
Ethylbenzene	0.047	0.035	m	g/Kg	1	6/24/2016 12:50:02 PM
Xylenes, Total	0.45	0.071	m	g/Kg	1	6/24/2016 12:50:02 PM
Surr: 4-Bromofluorobenzene	113	80-120	%	Rec	1	6/24/2016 12:50:02 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-35

 Project:
 GCU #216
 Collection Date: 6/23/2016 9:35:00 AM

 Lab ID:
 1606D36-004
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	11	9.8	mg/Kg	1	6/24/2016 11:05:46 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/24/2016 11:05:46 AM
Surr: DNOP	101	70-130	%Rec	1	6/24/2016 11:05:46 AM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: RAA
Gasoline Range Organics (GRO)	10	4.0	mg/Kg	1	6/24/2016 1:14:21 PM
Surr: BFB	127	80-120	S %Rec	1	6/24/2016 1:14:21 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.020	mg/Kg	1	6/24/2016 1:14:21 PM
Toluene	ND	0.040	mg/Kg	1	6/24/2016 1:14:21 PM
Ethylbenzene	ND	0.040	mg/Kg	1	6/24/2016 1:14:21 PM
Xylenes, Total	ND	0.080	mg/Kg	1	6/24/2016 1:14:21 PM
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	6/24/2016 1:14:21 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-36

 Project:
 GCU #216
 Collection Date: 6/23/2016 9:45:00 AM

 Lab ID:
 1606D36-005
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	38	9.9	mg/Kg	1	6/24/2016 11:27:16 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/24/2016 11:27:16 AM
Surr: DNOP	98.0	70-130	%Rec	1	6/24/2016 11:27:16 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	24	3.8	mg/Kg	1	6/24/2016 1:38:41 PM
Surr: BFB	198	80-120	S %Rec	1	6/24/2016 1:38:41 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.019	mg/Kg	1	6/24/2016 1:38:41 PM
Toluene	ND	0.038	mg/Kg	1	6/24/2016 1:38:41 PM
Ethylbenzene	ND	0.038	mg/Kg	1	6/24/2016 1:38:41 PM
Xylenes, Total	0.27	0.076	mg/Kg	1	6/24/2016 1:38:41 PM
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	1	6/24/2016 1:38:41 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-20R

 Project:
 GCU #216
 Collection Date: 6/23/2016 10:15:00 AM

 Lab ID:
 1606D36-006
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	;			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	39	10	mg/Kg	1	6/24/2016 11:49:10 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/24/2016 11:49:10 AM
Surr: DNOP	95.8	70-130	%Rec	1	6/24/2016 11:49:10 AM
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	12	3.9	mg/Kg	1	6/24/2016 2:03:13 PM
Surr: BFB	137	80-120	S %Rec	1	6/24/2016 2:03:13 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.020	mg/Kg	1	6/24/2016 2:03:13 PM
Toluene	ND	0.039	mg/Kg	1	6/24/2016 2:03:13 PM
Ethylbenzene	ND	0.039	mg/Kg	1	6/24/2016 2:03:13 PM
Xylenes, Total	ND	0.078	mg/Kg	1	6/24/2016 2:03:13 PM
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	6/24/2016 2:03:13 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-21R

 Project:
 GCU #216
 Collection Date: 6/23/2016 10:25:00 AM

 Lab ID:
 1606D36-007
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	22	10	mg/Kg	1	6/24/2016 11:44:31 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/24/2016 11:44:31 AM
Surr: DNOP	92.7	70-130	%Rec	1	6/24/2016 11:44:31 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	19	3.6	mg/Kg	1	6/24/2016 2:27:48 PM
Surr: BFB	178	80-120	S %Rec	1	6/24/2016 2:27:48 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.018	mg/Kg	1	6/24/2016 2:27:48 PM
Toluene	ND	0.036	mg/Kg	1	6/24/2016 2:27:48 PM
Ethylbenzene	ND	0.036	mg/Kg	1	6/24/2016 2:27:48 PM
Xylenes, Total	0.076	0.073	mg/Kg	1	6/24/2016 2:27:48 PM
Surr: 4-Bromofluorobenzene	112	80-120	%Rec	1	6/24/2016 2:27:48 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-22R

 Project:
 GCU #216
 Collection Date: 6/23/2016 10:35:00 AM

 Lab ID:
 1606D36-008
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	14	9.7	mg/Kg	1	6/24/2016 12:06:21 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/24/2016 12:06:21 PM
Surr: DNOP	91.8	70-130	%Rec	1	6/24/2016 12:06:21 PM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	19	3.3	mg/Kg	1	6/24/2016 2:52:21 PM
Surr: BFB	201	80-120	S %Rec	1	6/24/2016 2:52:21 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.016	mg/Kg	1	6/24/2016 2:52:21 PM
Toluene	ND	0.033	mg/Kg	1	6/24/2016 2:52:21 PM
Ethylbenzene	ND	0.033	mg/Kg	1	6/24/2016 2:52:21 PM
Xylenes, Total	0.082	0.065	mg/Kg	1	6/24/2016 2:52:21 PM
Surr: 4-Bromofluorobenzene	115	80-120	%Rec	1	6/24/2016 2:52:21 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 8 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/28/2016

CLIENT: LTE Client Sample ID: TSP-23R

 Project:
 GCU #216
 Collection Date: 6/23/2016 10:45:00 AM

 Lab ID:
 1606D36-009
 Matrix: SOIL
 Received Date: 6/24/2016 7:47:00 AM

Analyses	Result	PQL Ç	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	20	9.8	mg/Kg	1	6/24/2016 12:28:11 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/24/2016 12:28:11 PM
Surr: DNOP	94.3	70-130	%Rec	1	6/24/2016 12:28:11 PM
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	33	3.6	mg/Kg	1	6/24/2016 3:16:53 PM
Surr: BFB	284	80-120	S %Rec	1	6/24/2016 3:16:53 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.018	mg/Kg	1	6/24/2016 3:16:53 PM
Toluene	ND	0.036	mg/Kg	1	6/24/2016 3:16:53 PM
Ethylbenzene	ND	0.036	mg/Kg	1	6/24/2016 3:16:53 PM
Xylenes, Total	0.18	0.073	mg/Kg	1	6/24/2016 3:16:53 PM
Surr: 4-Bromofluorobenzene	118	80-120	%Rec	1	6/24/2016 3:16:53 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 9 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1606D36

28-Jun-16

**Client:** LTE **Project:** GCU #216

Sample ID LCS-26050 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics LCSS Client ID: Batch ID: 26050 RunNo: 35139 Prep Date: 6/24/2016 Analysis Date: 6/24/2016 SeqNo: 1087276 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 39 50.00 0 77.9 62.6 124 Surr: DNOP 5.000 83.2 4.2 70 130

Sample ID MB-26050 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 26050 RunNo: 35139 Prep Date: Analysis Date: 6/24/2016 SeqNo: 1087277 6/24/2016 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 8.9 10.00 89.0 70 130

#### Qualifiers:

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

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606D36** 

28-Jun-16

Client: LTE
Project: GCU #216

Sample ID 5ML-RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: R35159 RunNo: 35159

Prep Date: Analysis Date: 6/24/2016 SeqNo: 1087679 Units: 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 890 1000 89.2 80 120

Sample ID 1606D36-001A MS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: **TSP-32** Batch ID: **R35159** RunNo: **35159** 

Prep Date: Analysis Date: 6/24/2016 SeqNo: 1088056 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Gasoline Range Organics (GRO)
 29
 3.7
 18.46
 6.943
 119
 59.3
 143

 Surr: BFB
 910
 738.6
 124
 80
 120
 S

Sample ID 1606D36-001A MSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: **TSP-32** Batch ID: **R35159** RunNo: **35159** 

Prep Date: Analysis Date: 6/24/2016 SeqNo: 1088057 Units: mg/Kg

SPK Ref Val SPK value %REC LowLimit %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual Gasoline Range Organics (GRO) 28 18.46 6.943 112 59.3 143 4.64 20 Surr: BFB 900 738.6 122 120 0 0 S 80

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: R35159 RunNo: 35159

Prep Date: Analysis Date: 6/24/2016 SeqNo: 1088058 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Gasoline Range Organics (GRO)
 27
 5.0
 25.00
 0
 109
 80
 120

 Surr: BFB
 960
 1000
 95.6
 80
 120

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 11 of 12

## Hall Environmental Analysis Laboratory, Inc.

1.0

WO#: 1606D36

28-Jun-16

**Client:** LTE **Project:** GCU #216

Surr: 4-Bromofluorobenzene

Sample ID 5ML-RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: A35159 RunNo: 35159

Prep Date: Analysis Date: 6/24/2016 SeqNo: 1087685 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025

Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene 1.0 1.000 102 80 120

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: A35159 RunNo: 35159 SeqNo: 1088064 Prep Date: Analysis Date: 6/24/2016 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1.0 0.025 1.000 O 101 75.3 123 Benzene Toluene 1.0 0.050 1.000 0 101 80 124 Ethylbenzene 0.97 0.050 0 97.0 82.8 121 1.000 Xylenes, Total 2.8 0.10 3.000 0 94.2 83.9 122

105

80

120

Sample ID 1606D36-002A MS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: TSP-33 Batch ID: A35159 RunNo: 35159

1.000

Prep Date: Analysis Date: 6/24/2016 SeqNo: 1088077 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.95 0.023 0.9099 105 71.5 122 Toluene 0.90 0.045 0.9099 0.01119 97.8 71.2 123 0.88 75.2 Ethylbenzene 0.045 0.9099 0.01902 95.0 130 Xylenes, Total 2.7 0.091 2.730 0.1141 94.9 72.4 131 Surr: 4-Bromofluorobenzene 0.9099 0.94 104 80 120

Sample ID 1606D36-002A MSD SampType: MSD TestCode: EPA Method 8021B: Volatiles

Client ID: TCD\_33 Batch ID: A35159 PunNo: 35150

Ciletit ID. 13F-33	3139										
Prep Date:	Analysis Date: 6/24/2016		S	SeqNo: 1	088078	Units: mg/K	/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.91	0.023	0.9099	0	100	71.5	122	4.60	20		
Toluene	0.85	0.045	0.9099	0.01119	92.3	71.2	123	5.64	20		
Ethylbenzene	0.84	0.045	0.9099	0.01902	89.9	75.2	130	5.38	20		
Xylenes, Total	2.6	0.091	2.730	0.1141	90.5	72.4	131	4.59	20		
Surr: 4-Bromofluorobenzene	0.92		0.9099		101	80	120	0	0		

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

Е Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RLReporting Detection Limit

W Sample container temperature is out of limit as specified Page 12 of 12



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: **BP AMERICA-Farmington** Work Order Number: 1606D36 RcptNo: 1 Received by/date: ame Am Logged By: **Anne Thorne** 6/24/2016 7:47:00 AM Completed By: Anne Thorne 6/24/2016 Reviewed By: Chain of Custody Yes 🗌 No 🗌 Not Present ✓ 1. Custody seals intact on sample bottles? No 🗌 Yes 🗹 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? **Courier** Log In No 🗌 NA 🗆 4. Was an attempt made to cool the samples? Yes 🗹 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No 🗌 NA 🔲 Yes 🗹 No 🗌 6. Sample(s) in proper container(s)? No 🗌 7. Sufficient sample volume for indicated test(s)? Yes 🗸 Yes 🗹 No 🗌 8. Are samples (except VOA and ONG) properly preserved? NA 🗆 Yes 🗌 No 🗹 9. Was preservative added to bottles? No VOA Vials 🗹 10. VOA vials have zero headspace? No 🗀 Yes 📙 Yes No 🗹 11. Were any sample containers received broken? # of preserved bottles checked Yes 🗸 No 🗌 for pH: 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 13. Are matrices correctly identified on Chain of Custody? Yes 🗸 No 🗌 Yes 🗹 14. Is it clear what analyses were requested? Checked by: 15. Were all holding times able to be met? Yes 🗸 No 🗀 (If no, notify customer for authorization.) Special Handling (if applicable) Yes NA 🗸 16. Was client notified of all discrepancies with this order? No 🗀 Person Notified: Date By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No. | Temp °C Condition Seal Intact | Seal No Seal Date 2.4 Good Yes

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

June 29, 2016

**Danny Burns** 

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU 216 OrderNo.: 1606E51

#### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 7 sample(s) on 6/25/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-37

 Project:
 GCU 216
 Collection Date: 6/24/2016 9:00:00 AM

 Lab ID:
 1606E51-001
 Matrix: MEOH (SOIL)
 Received Date: 6/25/2016 9:45:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	100	10	mg/Kg	1	6/27/2016 9:57:56 AM
Motor Oil Range Organics (MRO)	58	50	mg/Kg	1	6/27/2016 9:57:56 AM
Surr: DNOP	91.5	70-130	%Rec	1	6/27/2016 9:57:56 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	35	3.8	mg/Kg	1	6/26/2016 3:34:59 PM
Surr: BFB	378	80-120	S %Rec	1	6/26/2016 3:34:59 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1	6/26/2016 3:34:59 PM
Toluene	ND	0.038	mg/Kg	1	6/26/2016 3:34:59 PM
Ethylbenzene	ND	0.038	mg/Kg	1	6/26/2016 3:34:59 PM
Xylenes, Total	0.27	0.076	mg/Kg	1	6/26/2016 3:34:59 PM
Surr: 4-Bromofluorobenzene	109	80-120	%Rec	1	6/26/2016 3:34:59 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-38

 Project:
 GCU 216
 Collection Date: 6/24/2016 9:10:00 AM

 Lab ID:
 1606E51-002
 Matrix: MEOH (SOIL)
 Received Date: 6/25/2016 9:45:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	140	10	mg/Kg	1	6/27/2016 10:19:46 AM
Motor Oil Range Organics (MRO)	67	50	mg/Kg	1	6/27/2016 10:19:46 AM
Surr: DNOP	94.3	70-130	%Rec	1	6/27/2016 10:19:46 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	71	21	mg/Kg	5	6/26/2016 3:58:27 PM
Surr: BFB	182	80-120	S %Rec	5	6/26/2016 3:58:27 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.10	mg/Kg	5	6/26/2016 3:58:27 PM
Toluene	ND	0.21	mg/Kg	5	6/26/2016 3:58:27 PM
Ethylbenzene	ND	0.21	mg/Kg	5	6/26/2016 3:58:27 PM
Xylenes, Total	0.53	0.41	mg/Kg	5	6/26/2016 3:58:27 PM
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	5	6/26/2016 3:58:27 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 6/29/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: TSP-39

 Project:
 GCU 216
 Collection Date: 6/24/2016 9:20:00 AM

 Lab ID:
 1606E51-003
 Matrix: MEOH (SOIL)
 Received Date: 6/25/2016 9:45:00 AM

Analyses	Result	PQL Q	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	76	9.6	mg/Kg	1	6/27/2016 10:41:21 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/27/2016 10:41:21 AM
Surr: DNOP	94.9	70-130	%Rec	1	6/27/2016 10:41:21 AM
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	54	19	mg/Kg	5	6/26/2016 4:21:54 PM
Surr: BFB	173	80-120	S %Rec	5	6/26/2016 4:21:54 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.096	mg/Kg	5	6/26/2016 4:21:54 PM
Toluene	ND	0.19	mg/Kg	5	6/26/2016 4:21:54 PM
Ethylbenzene	ND	0.19	mg/Kg	5	6/26/2016 4:21:54 PM
Xylenes, Total	0.54	0.39	mg/Kg	5	6/26/2016 4:21:54 PM
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	5	6/26/2016 4:21:54 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-40

 Project:
 GCU 216
 Collection Date: 6/24/2016 9:30:00 AM

 Lab ID:
 1606E51-004
 Matrix: MEOH (SOIL)
 Received Date: 6/25/2016 9:45:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	12	9.9	mg/Kg	1	6/27/2016 11:03:02 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/27/2016 11:03:02 AM
Surr: DNOP	96.9	70-130	%Rec	1	6/27/2016 11:03:02 AM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	6/26/2016 4:45:29 PM
Surr: BFB	122	80-120	S %Rec	1	6/26/2016 4:45:29 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.021	mg/Kg	1	6/26/2016 4:45:29 PM
Toluene	ND	0.042	mg/Kg	1	6/26/2016 4:45:29 PM
Ethylbenzene	ND	0.042	mg/Kg	1	6/26/2016 4:45:29 PM
Xylenes, Total	ND	0.084	mg/Kg	1	6/26/2016 4:45:29 PM
Surr: 4-Bromofluorobenzene	96.6	80-120	%Rec	1	6/26/2016 4:45:29 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-41

 Project:
 GCU 216
 Collection Date: 6/24/2016 9:40:00 AM

 Lab ID:
 1606E51-005
 Matrix: MEOH (SOIL)
 Received Date: 6/25/2016 9:45:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	48	10	mg/Kg	1	6/27/2016 11:24:37 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/27/2016 11:24:37 AM
Surr: DNOP	97.8	70-130	%Rec	1	6/27/2016 11:24:37 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	20	4.3	mg/Kg	1	6/26/2016 5:09:02 PM
Surr: BFB	230	80-120	S %Rec	1	6/26/2016 5:09:02 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.022	mg/Kg	1	6/26/2016 5:09:02 PM
Toluene	ND	0.043	mg/Kg	1	6/26/2016 5:09:02 PM
Ethylbenzene	ND	0.043	mg/Kg	1	6/26/2016 5:09:02 PM
Xylenes, Total	ND	0.087	mg/Kg	1	6/26/2016 5:09:02 PM
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	6/26/2016 5:09:02 PM

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-42

 Project:
 GCU 216
 Collection Date: 6/24/2016 9:50:00 AM

 Lab ID:
 1606E51-006
 Matrix: MEOH (SOIL)
 Received Date: 6/25/2016 9:45:00 AM

Analyses	Result	PQL Q	Qual Units	s <b>DF</b>	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	12	10	mg/ł	Kg 1	6/27/2016 11:46:25 AM
Motor Oil Range Organics (MRO)	ND	51	mg/ł	<b>K</b> g 1	6/27/2016 11:46:25 AM
Surr: DNOP	91.1	70-130	%Re	ec 1	6/27/2016 11:46:25 AM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	5.5	3.9	mg/ł	Kg 1	6/26/2016 5:32:28 PM
Surr: BFB	138	80-120	S %Re	ec 1	6/26/2016 5:32:28 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/ł	Kg 1	6/26/2016 5:32:28 PM
Toluene	ND	0.039	mg/k	Kg 1	6/26/2016 5:32:28 PM
Ethylbenzene	ND	0.039	mg/k	Kg 1	6/26/2016 5:32:28 PM
Xylenes, Total	ND	0.077	mg/k	<b>(</b> g 1	6/26/2016 5:32:28 PM
Surr: 4-Bromofluorobenzene	99.3	80-120	%Re	ec 1	6/26/2016 5:32:28 PM

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-43

 Project:
 GCU 216
 Collection Date: 6/24/2016 10:00:00 AM

 Lab ID:
 1606E51-007
 Matrix: MEOH (SOIL)
 Received Date: 6/25/2016 9:45:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	;			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	20	10	mg/Kg	1	6/27/2016 12:08:00 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/27/2016 12:08:00 PM
Surr: DNOP	90.8	70-130	%Rec	1	6/27/2016 12:08:00 PM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	37	3.7	mg/Kg	1	6/26/2016 5:55:52 PM
Surr: BFB	249	80-120	S %Rec	1	6/26/2016 5:55:52 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.018	mg/Kg	1	6/26/2016 5:55:52 PM
Toluene	ND	0.037	mg/Kg	1	6/26/2016 5:55:52 PM
Ethylbenzene	0.056	0.037	mg/Kg	1	6/26/2016 5:55:52 PM
Xylenes, Total	0.49	0.074	mg/Kg	1	6/26/2016 5:55:52 PM
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	6/26/2016 5:55:52 PM

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1606E51** 

29-Jun-16

Client:	LTE
Project:	GCU 216

Sample ID LCS-26080 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 26080 RunNo: 35220 Prep Date: 6/27/2016 Analysis Date: 6/27/2016 SeqNo: 1089030 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 40 10 O 62.6 50.00 79.9 124 Surr: DNOP 4.4 5.000 87.3 70 130 Sample ID MB-26080 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 26080 RunNo: 35220 Prep Date: 6/27/2016 Analysis Date: 6/27/2016 SeqNo: 1089031 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 ND Motor Oil Range Organics (MRO) 50 Surr: DNOP 8.5 10.00 85.3 70 130

Sample ID 1606E51-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: TSP-37 Batch ID: 26080 RunNo: 35219 Prep Date: 6/27/2016 Analysis Date: 6/27/2016 SeqNo: 1089329 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 150 9.5 47.66 102.1 98.2 33.9 141 Surr: DNOP 4.766 85.5 70 130 4.1

TestCode: EPA Method 8015M/D: Diesel Range Organics Sample ID 1606E51-001AMSD SampType: MSD Client ID: TSP-37 Batch ID: 26080 RunNo: 35219 Prep Date: 6/27/2016 Analysis Date: 6/27/2016 SeqNo: 1089330 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual Diesel Range Organics (DRO) 160 9.9 49.70 102.1 108 33.9 141 4.66 20 Surr: DNOP 4.3 4.970 86.2 70 130 0 0

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 8 of 11

LTE

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1606E51** 

Page 9 of 11

29-Jun-16

Sample ID   SML-RB	Project:	GCU 216	i										
Prep Date:   Analysis   Date:   6/26/2016   SeqNo: 1089062   Units: mg/Kg	Sample ID	5ML-RB	SampTy	pe: MI	BLK	Tes	Code: El	PA Method	8015D: Gasol	ine Rang	е		
Analyte	Client ID:	PBS	Batch	ID: R3	35223	R	tunNo: 3	5223					
Sample ID   25UG LCS   SampType:   LCS   Samp	Prep Date:		Analysis Da	ate: 6/	/26/2016	S	SeqNo: 1	089062	Units: mg/Kg	g			
Sample ID   2.5UG LCS   SampType: LCS   TestCode: EPA Method 5975 GasUline Range (Papalate)   Analysis Date   626/2016   SeqNo: 1089063   Units: mg/Kg	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Sample   D   2,5Ug   LCS	-	ge Organics (GRO)		5.0									
Prep Date   Pre	Surr: BFB		1000		1000		100	80	120				
Prep Date   Analysis Date	Sample ID	2.5UG LCS	SampTy	pe: LC	cs	Tes	tCode: El	PA Method	8015D: Gasol	ine Rang	е		
Analyte	Client ID:	LCSS	Batch	ID: R3	35223	R	tunNo: 3	5223					
Sample   D   1606E51-001A MS   SampType: MS   TestCode: EPA Method 8015D: Gasoline Range   Crganics (GRO)   SampType: MS   TestCode: EPA Method 8015D: Gasoline Range   Crganics (GRO)   SampType: MS   TestCode: EPA Method 8015D: Gasoline Range   Crganics (GRO)   SampType: MS   SeqNo: 1089069   Units: mg/Kg	Prep Date:		Analysis Da	ate: 6/	/26/2016	S	SeqNo: 1	089063	Units: mg/Kg	g			
Sum: BFB         1100         1000         1009         80         120           Sample ID 1606E51-001A MS         Sample ID 179-37         Batch ID: R35223         RunNo: 35223         RunNo: 35223         RunNo: 35223         RunNo: 35223         RunNo: 35223         RunNo: 35223         RunNo: 3523         RunNo: 3523 <th colsp<="" td=""><td>Analyte</td><td></td><td>Result</td><td>PQL</td><td>SPK value</td><td>SPK Ref Val</td><td>%REC</td><td>LowLimit</td><td>HighLimit</td><td>%RPD</td><td>RPDLimit</td><td>Qual</td></th>	<td>Analyte</td> <td></td> <td>Result</td> <td>PQL</td> <td>SPK value</td> <td>SPK Ref Val</td> <td>%REC</td> <td>LowLimit</td> <td>HighLimit</td> <td>%RPD</td> <td>RPDLimit</td> <td>Qual</td>	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID 1606E51-001A MS SampType:         SampType:         Rasht ID: R3523         RunNo: 35223         RunNo: 35223         RunNo: 35223         RunNo: 35223         RunNo: 35223         Value SeqNo: 1089069         Units: mg/Ky         Prep Date: Analysis Date: 6/26/2016         SeqNo: 1089069         Units: mg/Ky         RunNo: 35223	•	ge Organics (GRO)		5.0		0							
Client ID:   TSP-37   Batch   ID:   R35223   RunNo:   35223   RunNo:	Surr: BFB		1100		1000		109	80	120				
Prep Date   Result   PQL   SPK value   SPK Ref Val   SP	Sample ID	1606E51-001A MS	SampTy	/pe: <b>M</b> \$	S	Tes	tCode: El	PA Method	8015D: Gasol	ine Rang	е		
Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Gasoline Range Organics (GRO)         57         3.8         18.91         35.15         114         59.3         143         35.15         143         394         80         120          S           Sample ID 1606E51-001A MSD SampType: MSD Samptype: MSD	Client ID:	TSP-37	Batch	ID: R3	35223	R	tunNo: 3	5223					
Gasoline Range Organics (GRO)         57         3.8         18.91         35.15         114         59.3         143         35.15         143         394         80         120         S           Sample ID 1606E51-001A MSD SumpType: MSD SampType: MSD SampNo: 35223         TestCode: EPA Method 8015D: Gasoline Range         FRange Sasoline Range         FRange Sasoline Range Sasoline Range Sasoline Range SampNo: 35223         RunNo: 35223	Prep Date:		Analysis Da	ate: 6/	/26/2016	S	SeqNo: 1	089069	Units: mg/Kg	g			
Surr: BFB         3000         756.4         394         80         120         S           Sample ID 1606E51-001A MSD SampType: MSD SampType: MSD SampType: MSD SampType: MSD SampType: MSD SampType: MSD SampType: MSD SampNo: 35223         TestCode: EPA Method 8015D: Gasoline Range Cloud International Samp MSD Samp MSD SampNo: 35223         Prep Date: Malysis Date: MSD SampNo: 35223         SPK value SPK Ref Val MREC SampNo: 1089070 Units: mg/Kg         Units: mg/Kg           Analyte Result PQL SPK value SPK Ref Val MREC Samp MBLK         TestCode: EPA Method 8015D: Gasoline Range Cloud International Spans Span	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Sample ID         1606E51-001A MSD         SampType: MSD         TestCode: EPA Method 8015D: Gasoline Range           Client ID:         TSP-37         Batch ID:         R35223         RunNo: 35223           Prep Date:         Analysis Date:         6/26/2016         SeqNo: 1089070         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Gasoline Range Organics (GRO) Surr: BFB         57         3.8         18.91         35.15         115         59.3         143         0.320         20           Sample ID MB-25994         SampType: MBLK         TestCode: EPA Method 8015D: Gasoline Range         Client ID: PBS         Batch ID: 25994         RunNo: 35223         RunN	Gasoline Rang	ge Organics (GRO)		3.8		35.15		59.3					
Client ID: TSP-37   Batch ID: R35223   RunNo: 35223   RunNo: 352	Surr: BFB		3000		756.4		394	80	120			S	
Prep Date:         Analysis Date:         6/26/2016         SeqNo:         1089070         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Gasoline Range Organics (GRO)         57         3.8         18.91         35.15         115         59.3         143         0.320         20           Surr: BFB         3000         756.4         398         80         120         0         0         0         S           Sample ID MB-25994         SampType:         MBLK         TestCode:         EPA Method         8015D:         Gasoline Range           Client ID:         PBS         Batch ID:         25994         RunNo:         35223           Prep Date:         6/22/2016         Analysis Date:         6/27/2016         SeqNo:         1089084         Units:         %REC           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Sample ID         LCS-25994         SampType:         LCS         TestCode:	Sample ID	1606E51-001A MS	<b>D</b> SampTy	/pe: <b>M</b> \$	SD	Tes	tCode: El	PA Method	8015D: Gasol	ine Rang	е		
Analyte	Client ID:	TSP-37	Batch	ID: R3	35223	R	tunNo: 3	5223					
Sample ID   MB-25994   SampType: MBLK   TestCode: EPA Method 8015D: Gasoline Range	Prep Date:		Analysis Da	ate: 6/	/26/2016	S	SeqNo: 1	089070	Units: mg/Kg	g			
Surr: BFB         3000         756.4         398         80         120         0         0         S           Sample ID         MB-25994         SampType: MBLK         TestCode: EPA Method 8015D: Gasoline Range           Client ID:         PBS         Batch ID: 25994         RunNo: 35223           Prep Date:         6/22/2016         Analysis Date:         6/27/2016         SeqNo: 1089084         Units: %Rec           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Surr: BFB         990         1000         99.1         80         120         RPDLimit         Qual           Sample ID         LCS-25994         SampType: LCS         TestCode: EPA Method 8015D: Gasoline Range         Range           Client ID:         LCSS         Batch ID: 25994         RunNo: 35223         Units: %Rec         Republication Range           Prep Date:         6/22/2016         Analysis Date:         6/27/2016         SeqNo: 1089085         Units: %Rec           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual </td <td>Analyte</td> <td></td> <td>Result</td> <td>PQL</td> <td>SPK value</td> <td>SPK Ref Val</td> <td>%REC</td> <td>LowLimit</td> <td>HighLimit</td> <td>%RPD</td> <td>RPDLimit</td> <td>Qual</td>	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Sample ID MB-25994       SampType: MBLK       TestCode: EPA Method 8015D: Gasoline Range         Client ID:       PBS       Batch ID:       25994       RunNo:       35223         Prep Date:       6/22/2016       Analysis Date:       6/27/2016       SeqNo:       1089084       Units:       %Rec         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit       Qual         Sample ID       LCS-25994       SampType:       LCS       TestCode:       EPA Method       8015D:       Gasoline Range         Client ID:       LCSS       Batch ID:       25994       RunNo:       35223         Prep Date:       6/22/2016       Analysis Date:       6/27/2016       SeqNo:       1089085       Units:       %Rec         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit       Qual	-	ge Organics (GRO)		3.8		35.15							
Client ID:         PBS         Batch ID:         25994         RunNo:         35223           Prep Date:         6/22/2016         Analysis Date:         6/27/2016         SeqNo:         1089084         Units:         %Rec           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Surr: BFB         990         1000         99.1         80         120	Surr: BFB		3000		756.4		398	80	120	0	0	S	
Prep Date:         6/22/2016         Analysis Date:         6/27/2016         SeqNo:         1089084         Units:         %Rec           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Surr:         BFB         990         1000         99.1         80         120           Sample ID LCS-25994         SampType: LCS         TestCode: EPA Method 8015D: Gasoline Range           Client ID:         LCSS         Batch ID: 25994         RunNo: 35223           Prep Date:         6/22/2016         Analysis Date: 6/27/2016         SeqNo: 1089085         Units: %Rec           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual	Sample ID	MB-25994	SampTy	/pe: <b>M</b> I	BLK	Tes	tCode: El	PA Method	8015D: Gasol	ine Rang	е		
Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Surr: BFB         990         1000         99.1         80         120<	Client ID:	PBS	Batch	ID: <b>25</b>	994	R	tunNo: 3	5223					
Surr: BFB         990         1000         99.1         80         120           Sample ID LCS-25994         SampType: LCS         TestCode: EPA Method 8015D: Gasoline Range           Client ID: LCSS         Batch ID: 25994         RunNo: 35223           Prep Date: 6/22/2016         Analysis Date: 6/27/2016         SeqNo: 1089085         Units: %Rec           Analyte         Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Prep Date:	6/22/2016	Analysis Da	ate: 6/	/27/2016	S	SeqNo: 1	089084	Units: %Rec				
Sample ID LCS-25994 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 25994 RunNo: 35223 Prep Date: 6/22/2016 Analysis Date: 6/27/2016 SeqNo: 1089085 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Client ID:         LCSS         Batch ID:         25994         RunNo:         35223           Prep Date:         6/22/2016         Analysis Date:         6/27/2016         SeqNo:         1089085         Units:         %Rec           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual	Surr: BFB		990		1000		99.1	80	120				
Client ID:         LCSS         Batch ID:         25994         RunNo:         35223           Prep Date:         6/22/2016         Analysis Date:         6/27/2016         SeqNo:         1089085         Units:         %Rec           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual	Sample ID	LCS-25994	SampTy	pe: LC	cs	Tes	Code: El	PA Method	8015D: Gasol	ine Rang	e		
Prep Date: 6/22/2016 Analysis Date: 6/27/2016 SeqNo: 1089085 Units: %Rec  Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	•									·			
·	Prep Date:		Analysis Da	ate: <b>6</b> /	/27/2016				Units: %Rec				
·													
טווו טוויס וויס וויס טוע וויס טוע וויס טוע וויס טוע וויס טוע וויס טוע וויס טוע וויס טוע וויס טוע וויס טוע וויס	l Analyte		Result	POI	SPK value	SPK Ref Val	%RFC	Lowl imit	Highl imit	%RPD	RPDI imit	Qual	

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1606E51** 

29-Jun-16

Client: LTE
Project: GCU 216

Sample ID 5ML-RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: R35223 RunNo: 35223 Prep Date: Analysis Date: 6/26/2016 SeqNo: 1089109 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 0.95 1.000 95.3 80 120

Sample ID 100NG LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: R35223 RunNo: 35223 Prep Date: Analysis Date: 6/26/2016 SeqNo: 1089110 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result LowLimit Qual 0.96 0.025 1.000 O 75.3 123 Benzene 96.3 Toluene 0.97 0.050 1.000 0 97.0 80 124 Ethylbenzene 0.050 0 101 82.8 121 1.0 1.000 Xylenes, Total 3.0 0.10 3.000 0 101 83.9 122 Surr: 4-Bromofluorobenzene 1.0 1.000 103 80 120

Sample ID 1606E51-004A MS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: TSP-40 Batch ID: R35223 RunNo: 35223 Analysis Date: 6/26/2016 SeqNo: 1089115 Prep Date: Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.74 0.021 0.8368 88.3 71.5 122 Toluene 0.77 0.042 0.8368 0.01262 90.9 71.2 123 75.2 0.82 0.042 0.8368 0.01341 96.4 130 Ethylbenzene Xylenes, Total 2.5 0.084 2.510 0.03684 96.9 72.4 131 Surr: 4-Bromofluorobenzene 0.88 0.8368 105 80 120

Sample ID 1606E51-004A MSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Client ID: TSP-40 Batch ID: R35223 RunNo: 35223 Prep Date: Analysis Date: 6/26/2016 SeqNo: 1089116 Units: mg/Kg SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual 0.86 0.021 0.8368 0 103 71.5 122 15.0 20 Benzene Toluene 0.87 0.042 0.8368 0.01262 103 71.2 123 12.3 20 Ethylbenzene 0.89 0.042 0.8368 0.01341 105 75.2 130 7 92 20 Xylenes, Total 2.6 0.084 2.510 0.03684 104 72.4 131 6.96 20 Surr: 4-Bromofluorobenzene 0.89 0.8368 106 80 120 0 0

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 10 of 11

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1606E51

29-Jun-16

**Client:** LTE **Project:** GCU 216

Sample ID MB-25994 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: **PBS** Batch ID: 25994 RunNo: 35223

SeqNo: 1089121 Prep Date: 6/22/2016 Analysis Date: 6/27/2016 Units: %Rec

Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Surr: 4-Bromofluorobenzene 0.97 1.000 96.8 80 120

Sample ID LCS-25994 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Batch ID: 25994 Client ID: LCSS RunNo: 35223

Prep Date: 6/22/2016 Analysis Date: 6/27/2016 SeqNo: 1089124 Units: %Rec

Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Qual

Surr: 4-Bromofluorobenzene 1.0 1.000 105 80 120

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Reporting Detection Limit

P Sample pH Not In Range

RL

Sample container temperature is out of limit as specified

Page 11 of 11



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

# Sample Log-In Check List

Website: www.hallenvironmental.com

Client Name: LTE	Work Order Number:	1606E	51		RcptNo:	1
Received by/date:  Logged By: Lindsay Mangin	06   25   16 6/25/2016 9:45:00 AM			struky Hlengo		
Completed By: Lindsay Mangin	6/25/2016 10:28:57 AM			Jimaby Hlefige		
Reviewed By: 5 4/26/2016	•					
Chain of Custody						
1. Custody seals intact on sample bottles?		Yes	[.]]	No 🗔	Not Present 🖈	
2. Is Chain of Custody complete?		Yes		No [	Not Present	
3. How was the sample delivered?		<u>Couri</u>	<u>er</u>			
<u>Log In</u>						
4. Was an attempt made to cool the samples?	?	Yes		No [. ]	<b>NA</b> [ .	
5. Were all samples received at a temperature	e of >0° C to 6.0°C	Yes		<b>N</b> o []]	NA [1]	
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) prope	rly preserved?	Yes		No i. i		
9. Was preservative added to bottles?		Yes	[]	No 🐼	NA i	
10.VOA vials have zero headspace?		Yes		No []	No VOA Vials 🖈	
11. Were any sample containers received brok	en?	Yes	[_]	No 🗺	# of preserved bottles checked	
12.Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes		No []	for pH: (<2	2 or >12 unless noted)
13. Are matrices correctly identified on Chain o	f Custody?	Yes	æ,	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)						
16. Was client notified of all discrepancies with	this order?	Yes	[]	No []	NA 🐱	ì
Person Notified:	Date:					
By Whom:	Via: [	]] eMa	ail [	] Phone [ ] Fax	In Person	
Regarding:						
Client Instructions:			,			
17. Additional remarks:						
	Seal Intact   Seal No   :	Seal D	ate	Signed By	_	

Chain-of-Custody Record	Turn-Around Time: SayM&	HALL ENVIRONMENTAL
lient: BP- Lower 48	K Rush	ANALYSIS LABORATORY
	Project Name:	www.hallenvironmental.com
alling Address:	GCU #216	4901 Hawkins NE - Albuquerque, NM 87109
	Project #:	10
hone #: 701-540-4727-DB		Analysis
-ax#: 9		( <sup>†</sup> C)
انج ا	ostal	OS'*(
	Daming Burns - LTE	kə) Mis
		Hd. (1)
I NELAP □ Other	Ź	1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 +
(EDD (Type) ράξ	Sample Temperature: 39	BE bo
Date Time Matrix Sample Request ID	Container Preservative HEAL No.  Type and # Type	TEX + MTE  TH + XTE  TH + XTE  TH + Wethore  TH (Methore
,-24 0900 SS TSP-37	4 02 NONE -OOI	
	700-	
0920   758-39	-03	
04-927 0660	tu-	
14-927 0400	900-	
0950 TSP-42	<i>30</i> -	
V 1000 V TSP-43	1 V V	<b>→</b>
4		
(		
ate: Time: Religquished by:	Received by: Date Time	Remarks:
ate: Time: Redutifished by:	Received two Time	
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.



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

June 29, 2016

**Danny Burns** 

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU 216 OrderNo.: 1606E98

### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/28/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc. Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-44

 Project:
 GCU 216
 Collection Date: 6/27/2016 10:30:00 AM

 Lab ID:
 1606E98-001
 Matrix: MEOH (SOIL)
 Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analys	: TOM
Diesel Range Organics (DRO)	56	10	mg/Kg	1	6/28/2016 10:26:27 AM	1 26111
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/28/2016 10:26:27 AM	1 26111
Surr: DNOP	90.6	70-130	%Rec	1	6/28/2016 10:26:27 AM	1 26111
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	: NSB
Gasoline Range Organics (GRO)	18	3.4	mg/Kg	1	6/28/2016 9:49:29 AM	26103
Surr: BFB	239	80-120	S %Rec	1	6/28/2016 9:49:29 AM	26103
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.017	mg/Kg	1	6/28/2016 9:49:29 AM	26103
Toluene	ND	0.034	mg/Kg	1	6/28/2016 9:49:29 AM	26103
Ethylbenzene	ND	0.034	mg/Kg	1	6/28/2016 9:49:29 AM	26103
Xylenes, Total	0.12	0.067	mg/Kg	1	6/28/2016 9:49:29 AM	26103
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	6/28/2016 9:49:29 AM	26103

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits		Analyte detected below quantitation limits Page 1 of 0
	ND Not Detected at the Reporting Limit P Sample pH Not In Range		Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-45

 Project:
 GCU 216
 Collection Date: 6/27/2016 10:40:00 AM

 Lab ID:
 1606E98-002
 Matrix: MEOH (SOIL)
 Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analy	st: TOM
Diesel Range Organics (DRO)	64	10	mg/Kg	1	6/28/2016 10:48:02 A	M 26111
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	6/28/2016 10:48:02 A	M 26111
Surr: DNOP	94.3	70-130	%Rec	1	6/28/2016 10:48:02 A	M 26111
EPA METHOD 8015D: GASOLINE RAI	NGE				Analy	st: NSB
Gasoline Range Organics (GRO)	26	3.8	mg/Kg	1	6/28/2016 10:12:57 A	M 26103
Surr: BFB	277	80-120	S %Rec	1	6/28/2016 10:12:57 A	M 26103
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.019	mg/Kg	1	6/28/2016 10:12:57 A	M 26103
Toluene	ND	0.038	mg/Kg	1	6/28/2016 10:12:57 A	M 26103
Ethylbenzene	0.052	0.038	mg/Kg	1	6/28/2016 10:12:57 A	M 26103
Xylenes, Total	0.45	0.075	mg/Kg	1	6/28/2016 10:12:57 A	M 26103
Surr: 4-Bromofluorobenzene	109	80-120	%Rec	1	6/28/2016 10:12:57 A	M 26103

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank	
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	preparation or analysis exceeded J Analyte detected below quantitation limits Pa		
	ND Not Detected at the Reporting Limit P Sample pH Not In Range		Analyte detected below quantitation limits  Page 2 of 0  Sample pH Not In Range		
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: TSP-46

 Project:
 GCU 216
 Collection Date: 6/27/2016 10:50:00 AM

 Lab ID:
 1606E98-003
 Matrix: MEOH (SOIL)
 Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analy	st: TOM
Diesel Range Organics (DRO)	100	9.7	mg/Kg	1	6/28/2016 11:09:44 A	M 26111
Motor Oil Range Organics (MRO)	54	49	mg/Kg	1	6/28/2016 11:09:44 A	M 26111
Surr: DNOP	96.5	70-130	%Rec	1	6/28/2016 11:09:44 A	M 26111
EPA METHOD 8015D: GASOLINE RAN	IGE				Analy	st: NSB
Gasoline Range Organics (GRO)	12	3.8	mg/Kg	1	6/28/2016 10:36:30 A	M 26103
Surr: BFB	210	80-120	S %Rec	1	6/28/2016 10:36:30 A	M 26103
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.019	mg/Kg	1	6/28/2016 10:36:30 A	M 26103
Toluene	ND	0.038	mg/Kg	1	6/28/2016 10:36:30 A	M 26103
Ethylbenzene	ND	0.038	mg/Kg	1	6/28/2016 10:36:30 A	M 26103
Xylenes, Total	ND	0.076	mg/Kg	1	6/28/2016 10:36:30 A	M 26103
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	6/28/2016 10:36:30 A	M 26103

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 3 of 0 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

Date Reported: 6/29/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: TSP-47

 Project:
 GCU 216
 Collection Date: 6/27/2016 11:00:00 AM

 Lab ID:
 1606E98-004
 Matrix: MEOH (SOIL)
 Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	61	10	mg/Kg	1	6/28/2016 11:31:37 AM	M 26111
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	6/28/2016 11:31:37 Al	M 26111
Surr: DNOP	94.8	70-130	%Rec	1	6/28/2016 11:31:37 Al	M 26111
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	25	4.0	mg/Kg	1	6/28/2016 11:00:05 AM	M 26103
Surr: BFB	271	80-120	S %Rec	1	6/28/2016 11:00:05 Al	M 26103
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.020	mg/Kg	1	6/28/2016 11:00:05 AM	M 26103
Toluene	ND	0.040	mg/Kg	1	6/28/2016 11:00:05 Af	M 26103
Ethylbenzene	ND	0.040	mg/Kg	1	6/28/2016 11:00:05 Af	M 26103
Xylenes, Total	0.16	0.079	mg/Kg	1	6/28/2016 11:00:05 Af	M 26103
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	1	6/28/2016 11:00:05 AM	M 26103

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 0
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1606E98

29-Jun-16

Client:	LTE
Project:	GCU 216

Sample ID LCS-26111	SampT	Гуре: <b>LC</b>	s	Test	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch	h ID: <b>26</b>	111	R	RunNo: 3	5258				
Prep Date: 6/28/2016	Analysis D	Date: <b>6/</b>	28/2016	S	SeqNo: 1	090496	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10	50.00	0	77.0	62.6	124			
Surr: DNOP	3.8		5.000		75.5	70	130			
Sample ID MB-26111	SampT	Гуре: МЕ	BLK	Test	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch	h ID: <b>26</b>	111	R	RunNo: 3	5258				
Prep Date: 6/28/2016	Analysis D	Date: 6/	28/2016	S	SeqNo: 1	090497	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.1		10.00		80.5	70	130			
Sample ID 1606E98-001AMS	SampT	Гуре: М\$	3	Test	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: TSP-44	Batch	h ID: <b>26</b>	111	R	RunNo: 3	5259				
Prep Date: 6/28/2016	Analysis D	Date: 6/	28/2016	S	SeqNo: 1	090733	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	110	9.5	47.26	55.89	113	33.9	141			
Surr: DNOP	4.3		4.726		90.8	70	130			
Sample ID 1606E98-001AMS	<b>D</b> SampT	Гуре: М\$	SD	Test	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: TSP-44	Batch	h ID: <b>26</b>	111	R	RunNo: 3	5259				
Prep Date: 6/28/2016	Analysis D	Date: <b>6/</b>	28/2016	S	SeqNo: 1	090819	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
					_	_				
Diesel Range Organics (DRO)	100	9.7	48.73	55.89	91.2	33.9	141	8.76	20	

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range

J

Analyte detected below quantitation limits Page 1 of 0

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1606E98** 

29-Jun-16

Client: LTE
Project: GCU 216

Sample ID MB-26103 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 26103 RunNo: 35271

Prep Date: 6/27/2016 Analysis Date: 6/28/2016 SeqNo: 1091323 Units: 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 970 1000 97.4 80 120

Sample ID LCS-26103 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 26103 RunNo: 35271

Prep Date: 6/27/2016 Analysis Date: 6/28/2016 SeqNo: 1091324 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 5.0 25.00 106 80 120 1100 1000 108 80 Surr: BFB 120

#### Qualifiers:

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

in the associated Method Blank

Page 2 of 0

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1606E98** 

29-Jun-16

Client: LTE
Project: GCU 216

Sample ID MB-26103 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 26103 RunNo: 35271

Prep Date: 6/27/2016 Analysis Date: 6/28/2016 SeqNo: 1091345 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Benzene ND 0.025

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

Surr: 4-Bromofluorobenzene 0.94 1.000 93.5 80 120

Sample ID LCS-26103	SampT	ype: <b>LC</b>	s	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batcl	h ID: <b>26</b>	103	R	RunNo: 3	5271				
Prep Date: 6/27/2016	Analysis D	Date: <b>6/</b>	28/2016	S	SeqNo: 1	091346	Units: mg/k	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.1	75.3	123			
Toluene	0.99	0.050	1.000	0	99.1	80	124			
Ethylbenzene	1.0	0.050	1.000	0	101	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	99.5	83.9	122			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 3 of 0



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL; 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

### Sample Log-In Check List

RcptNo: 1 LTE Work Order Number: 1606E98 Client Name: Received by/date: Logged By: Lindsay Mangin 6/28/2016 8:04:31 AM Completed By: Lindsay Mangin 06/28/16 Reviewed By: Chain of Custody No 🗌 Not Present Yes  $\square$ 1 Custody seals intact on sample bottles? No 🗌 Not Present Yes 🐼 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In NA 🗌 Yes 🛷 No 🗌 4. Was an attempt made to cool the samples? No 🗌 NA 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗔 Sample(s) in proper container(s)? Yes Yes 7. Sufficient sample volume for indicated test(s)? No 8. Are samples (except VOA and ONG) properly preserved? Yes NA 📋 No 🌌 9. Was preservative added to bottles? Yes No 🗌 No VOA Vials Yes 10. VOA vials have zero headspace? No 🛷 Yes 11. Were any sample containers received broken? # of preserved bottles checked Yes 🖈 No 🗔 for pH: 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 13. Are matrices correctly identified on Chain of Custody? No 🔲 14. Is it clear what analyses were requested? Yes No 🗌 Checked by: Yes 🐼 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes 🗌 No 🗌 NA 🗺 16. Was client notified of all discrepancies with this order? Person Notified: Date: In Person By Whom: Via: eMail Phone | Fax Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Seal Intact | Seal No Cooler No Temp °C Condition Seal Date Signed By Good Yes

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

June 29, 2016

**Danny Burns** 

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU 216 OrderNo.: 1606E99

### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/28/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc. Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: B-E 02 @ 39'

 Project:
 GCU 216
 Collection Date: 6/27/2016 9:20:00 AM

 Lab ID:
 1606E99-001
 Matrix: MEOH (SOIL)
 Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analy	st: TOM
Diesel Range Organics (DRO)	33	10	mg/Kg	1	6/28/2016 10:27:06 A	M 26111
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/28/2016 10:27:06 A	M 26111
Surr: DNOP	86.6	70-130	%Rec	1	6/28/2016 10:27:06 A	M 26111
EPA METHOD 8015D: GASOLINE RAN	IGE				Analy	st: NSB
Gasoline Range Organics (GRO)	ND	21	mg/Kg	5	6/28/2016 11:23:44 A	M 26103
Surr: BFB	105	80-120	%Rec	5	6/28/2016 11:23:44 A	M 26103
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.11	mg/Kg	5	6/28/2016 11:23:44 A	M 26103
Toluene	ND	0.21	mg/Kg	5	6/28/2016 11:23:44 A	M 26103
Ethylbenzene	ND	0.21	mg/Kg	5	6/28/2016 11:23:44 A	M 26103
Xylenes, Total	ND	0.42	mg/Kg	5	6/28/2016 11:23:44 A	M 26103
Surr: 4-Bromofluorobenzene	97.1	80-120	%Rec	5	6/28/2016 11:23:44 A	M 26103

				-
Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 8
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Date Reported: 6/29/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: B-C 02 @ 39'

 Project:
 GCU 216
 Collection Date: 6/27/2016 9:30:00 AM

 Lab ID:
 1606E99-002
 Matrix: MEOH (SOIL)
 Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF D	Oate Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1 (	6/28/2016 10:49:02 AM	26111
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1 6	6/28/2016 10:49:02 AM	26111
Surr: DNOP	83.7	70-130	%Rec	1 6	6/28/2016 10:49:02 AM	26111
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1 6	6/28/2016 11:47:15 AM	26103
Surr: BFB	98.0	80-120	%Rec	1 6	6/28/2016 11:47:15 AM	26103
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.017	mg/Kg	1 6	6/28/2016 11:47:15 AM	26103
Toluene	ND	0.034	mg/Kg	1 6	6/28/2016 11:47:15 AM	26103
Ethylbenzene	ND	0.034	mg/Kg	1 6	6/28/2016 11:47:15 AM	26103
Xylenes, Total	ND	0.068	mg/Kg	1 6	6/28/2016 11:47:15 AM	26103
Surr: 4-Bromofluorobenzene	94.7	80-120	%Rec	1 6	6/28/2016 11:47:15 AM	26103

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 2 of 8 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

Sample container temperature is out of limit as specified

### Date Reported: 6/29/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: B-W 03 @ 36'

 Project:
 GCU 216
 Collection Date: 6/27/2016 9:40:00 AM

 Lab ID:
 1606E99-003
 Matrix: MEOH (SOIL)
 Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	5			Analys	st: TOM
Diesel Range Organics (DRO)	12	10	mg/Kg	1	6/28/2016 11:10:48 AM	M 26111
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/28/2016 11:10:48 A	M 26111
Surr: DNOP	82.2	70-130	%Rec	1	6/28/2016 11:10:48 A	M 26111
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	6/28/2016 8:47:49 PM	26103
Surr: BFB	106	80-120	%Rec	1	6/28/2016 8:47:49 PM	26103
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.017	mg/Kg	1	6/28/2016 8:47:49 PM	26103
Toluene	ND	0.035	mg/Kg	1	6/28/2016 8:47:49 PM	26103
Ethylbenzene	ND	0.035	mg/Kg	1	6/28/2016 8:47:49 PM	26103
Xylenes, Total	ND	0.070	mg/Kg	1	6/28/2016 8:47:49 PM	26103
Surr: 4-Bromofluorobenzene	95.9	80-120	%Rec	1	6/28/2016 8:47:49 PM	26103

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 3 of 8 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit

% Recovery outside of range due to dilution or matrix

### Hall Environmental Analysis Laboratory, Inc. Date Reported: 6/29/2016

CLIENT: LTE Client Sample ID: W-02 @ 36'

 Project:
 GCU 216
 Collection Date: 6/27/2016 9:50:00 AM

 Lab ID:
 1606E99-004
 Matrix: MEOH (SOIL)
 Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3		Analys	t: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1 6/28/2016 11:32:34 AM	<i>I</i> 26111
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1 6/28/2016 11:32:34 AM	M 26111
Surr: DNOP	83.2	70-130	%Rec	1 6/28/2016 11:32:34 AM	<i>I</i> 26111
EPA METHOD 8015D: GASOLINE RAN	IGE			Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1 6/28/2016 12:34:25 PM	A 26103
Surr: BFB	98.6	80-120	%Rec	1 6/28/2016 12:34:25 PM	A 26103
EPA METHOD 8021B: VOLATILES				Analys	t: NSB
Benzene	ND	0.020	mg/Kg	1 6/28/2016 12:34:25 PM	A 26103
Toluene	ND	0.039	mg/Kg	1 6/28/2016 12:34:25 PM	M 26103
Ethylbenzene	ND	0.039	mg/Kg	1 6/28/2016 12:34:25 PM	A 26103
Xylenes, Total	ND	0.078	mg/Kg	1 6/28/2016 12:34:25 PM	A 26103
Surr: 4-Bromofluorobenzene	94.2	80-120	%Rec	1 6/28/2016 12:34:25 PM	A 26103

*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 8
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified
	D H ND	<ul> <li>D Sample Diluted Due to Matrix</li> <li>H Holding times for preparation or analysis exceeded</li> <li>ND Not Detected at the Reporting Limit</li> <li>R RPD outside accepted recovery limits</li> </ul>	D     Sample Diluted Due to Matrix     E       H     Holding times for preparation or analysis exceeded     J       ND     Not Detected at the Reporting Limit     P       R     RPD outside accepted recovery limits     RL

### Date Reported: 6/29/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: W-03 @ 36'

 Project:
 GCU 216
 Collection Date: 6/27/2016 10:00:00 AM

 Lab ID:
 1606E99-005
 Matrix: MEOH (SOIL)
 Received Date: 6/28/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analy	st: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/28/2016 11:54:23 A	M 26111
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	6/28/2016 11:54:23 A	M 26111
Surr: DNOP	83.4	70-130	%Rec	1	6/28/2016 11:54:23 A	M 26111
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	6/28/2016 12:57:56 P	M 26103
Surr: BFB	98.0	80-120	%Rec	1	6/28/2016 12:57:56 P	M 26103
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.015	mg/Kg	1	6/28/2016 12:57:56 P	M 26103
Toluene	ND	0.031	mg/Kg	1	6/28/2016 12:57:56 P	M 26103
Ethylbenzene	ND	0.031	mg/Kg	1	6/28/2016 12:57:56 P	M 26103
Xylenes, Total	ND	0.062	mg/Kg	1	6/28/2016 12:57:56 P	M 26103
Surr: 4-Bromofluorobenzene	93.3	80-120	%Rec	1	6/28/2016 12:57:56 P	M 26103

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 5 of 8 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit

% Recovery outside of range due to dilution or matrix W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1606E99** 

29-Jun-16

Client: LTE
Project: GCU 216

Sample ID LCS-26111 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics LCSS Client ID: Batch ID: 26111 RunNo: 35258 SeqNo: 1090496 Prep Date: 6/28/2016 Analysis Date: 6/28/2016 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

 Diesel Range Organics (DRO)
 38
 10
 50.00
 0
 77.0
 62.6
 124

 Surr: DNOP
 3.8
 5.000
 75.5
 70
 130

Sample ID MB-26111 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 26111 RunNo: 35258

Prep Date: 6/28/2016 Analysis Date: 6/28/2016 SeqNo: 1090497 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Diesel Range Organics (DRO) ND 10
Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 8.1 10.00 80.5 70 130

#### Qualifiers:

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

Page 6 of 8

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1606E99** 

29-Jun-16

Client: LTE
Project: GCU 216

Sample ID MB-26103 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 26103 RunNo: 35271

Prep Date: 6/27/2016 Analysis Date: 6/28/2016 SeqNo: 1091323 Units: 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 970 1000 97.4 80 120

Sample ID LCS-26103 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 26103 RunNo: 35271

Prep Date: 6/27/2016 Analysis Date: 6/28/2016 SeqNo: 1091324 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 5.0 25.00 106 80 120 1100 1000 108 80 Surr: BFB 120

#### Qualifiers:

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

Page 7 of 8

### Hall Environmental Analysis Laboratory, Inc.

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WO#: **1606E99** 

29-Jun-16

Client: LTE
Project: GCU 216

Surr: 4-Bromofluorobenzene

Sample ID MB-26103 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: 26103 RunNo: 35271 Prep Date: 6/27/2016 Analysis Date: 6/28/2016 SeqNo: 1091345 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 ND 0.050 Toluene ND 0.050 Ethylbenzene Xylenes, Total ND 0.10

93.5

80

120

Sample ID LCS-26103 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 26103 RunNo: 35271 Prep Date: Analysis Date: 6/28/2016 SeqNo: 1091346 6/27/2016 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.99 0.025 1.000 0 99.1 75.3 123 Benzene Toluene 0.99 0.050 1.000 0 99.1 80 124 Ethylbenzene 0.050 1.000 0 101 82.8 121 1.0 99.5 83.9 Xylenes, Total 3.0 0.10 3.000 0 122 101 Surr: 4-Bromofluorobenzene 1.0 1.000 80 120

1.000

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 8 of 8



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

Sample Log-In Check List

Website: www.hallenvironmental.com RcptNo: 1 Work Order Number: 1606E99 Client Name: LTE Received by/date: 6/28/2016 8:00:00 AM Logged By: Lindsay Mangin 6/28/2016 8:10:17 AM Lindsay Mangin Completed By: 06/28/16 Reviewed By: Chain of Custody Not Present No 🗌 Yes 1 Custody seals intact on sample bottles? No 🗌 Yes 🕏 Not Present 2. Is Chain of Custody complete? 3 How was the sample delivered? Courier <u>Log In</u> No 🗌 NA 🗌 Yes 🕸 4. Was an attempt made to cool the samples? NA 🗌 No 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C No  $\square$ 6. Sample(s) in proper container(s)? No 🗀 7. Sufficient sample volume for indicated test(s)? No 🗀 8. Are samples (except VOA and ONG) properly preserved? Yes No 🕏 NA 🗌 Yes 9. Was preservative added to bottles? No 🗌 No VOA Vials 🕏 Yes 🗌 10.VOA vials have zero headspace? No 🐼 Yes 11. Were any sample containers received broken? # of preserved bottles checked for pH: No 🗌 12. Does paperwork match bottle labels? Yes (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 13 Are matrices correctly identified on Chain of Custody? Yes No 🗀 14. Is it clear what analyses were requested? No 🗌 Checked by: 15. Were all holding times able to be met? Yes (If no, notify customer for authorization.) Special Handling (if applicable) Yes 🗌 No 🗌 NA 🖈 16. Was client notified of all discrepancies with this order? Person Notified: Date: By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks:

Seal Date

Signed By

1.8

18. Cooler Information

Cooler No | Temp °C | Condition | Seal Intact | Seal No |

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

June 30, 2016

**Danny Burns** 

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU 216 OrderNo.: 1606F83

### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 6 sample(s) on 6/29/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/30/2016

CLIENT: LTE Client Sample ID: TSP-12R

 Project:
 GCU 216
 Collection Date: 6/28/2016 8:10:00 AM

 Lab ID:
 1606F83-001
 Matrix: MEOH (SOIL)
 Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLII	NE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	41	4.1	mg/Kg	1	6/29/2016 10:39:34 AM	E35309
Surr: BFB	103	70-130	%Rec	1	6/29/2016 10:39:34 AM	E35309
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	68	9.8	mg/Kg	1	6/29/2016 10:03:33 AM	26141
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/29/2016 10:03:33 AM	26141
Surr: DNOP	90.2	70-130	%Rec	1	6/29/2016 10:03:33 AM	26141
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	: DJF
Benzene	ND	0.021	mg/Kg	1	6/29/2016 10:39:34 AM	C35309
Toluene	ND	0.041	mg/Kg	1	6/29/2016 10:39:34 AM	C35309
Ethylbenzene	ND	0.041	mg/Kg	1	6/29/2016 10:39:34 AM	C35309
Xylenes, Total	ND	0.082	mg/Kg	1	6/29/2016 10:39:34 AM	C35309
Surr: 1,2-Dichloroethane-d4	98.7	70-130	%Rec	1	6/29/2016 10:39:34 AM	C35309
Surr: 4-Bromofluorobenzene	107	70-130	%Rec	1	6/29/2016 10:39:34 AM	C35309
Surr: Dibromofluoromethane	91.0	70-130	%Rec	1	6/29/2016 10:39:34 AM	C35309
Surr: Toluene-d8	97.9	70-130	%Rec	1	6/29/2016 10:39:34 AM	C35309

Qualifiers:	*	Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/30/2016

CLIENT: LTE Client Sample ID: TSP-13R

 Project:
 GCU 216
 Collection Date: 6/28/2016 8:20:00 AM

 Lab ID:
 1606F83-002
 Matrix: MEOH (SOIL)
 Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLIN	E RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	56	4.1	mg/Kg	1	6/29/2016 11:07:54 AM	E35309
Surr: BFB	106	70-130	%Rec	1	6/29/2016 11:07:54 AM	E35309
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	25	10	mg/Kg	1	6/29/2016 10:25:16 AM	26141
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/29/2016 10:25:16 AM	26141
Surr: DNOP	90.6	70-130	%Rec	1	6/29/2016 10:25:16 AM	26141
EPA METHOD 8260B: VOLATILES SH	ORT LIST				Analyst	: DJF
Benzene	ND	0.020	mg/Kg	1	6/29/2016 11:07:54 AM	C35309
Toluene	ND	0.041	mg/Kg	1	6/29/2016 11:07:54 AM	C35309
Ethylbenzene	ND	0.041	mg/Kg	1	6/29/2016 11:07:54 AM	C35309
Xylenes, Total	ND	0.081	mg/Kg	1	6/29/2016 11:07:54 AM	C35309
Surr: 1,2-Dichloroethane-d4	96.1	70-130	%Rec	1	6/29/2016 11:07:54 AM	C35309
Surr: 4-Bromofluorobenzene	106	70-130	%Rec	1	6/29/2016 11:07:54 AM	C35309
Surr: Dibromofluoromethane	89.5	70-130	%Rec	1	6/29/2016 11:07:54 AM	C35309
Surr: Toluene-d8	99.8	70-130	%Rec	1	6/29/2016 11:07:54 AM	C35309

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte det
	D	Sample Diluted Due to Matrix	E	Value abov
	TT	Holding times for proportion or analysis avanaded	т	Amalusta das

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/30/2016

CLIENT: LTE Client Sample ID: TSP-16R

 Project:
 GCU 216
 Collection Date: 6/28/2016 8:30:00 AM

 Lab ID:
 1606F83-003
 Matrix: MEOH (SOIL)
 Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	49	3.9	mg/Kg	1	6/29/2016 11:36:19 AM	E35309
Surr: BFB	102	70-130	%Rec	1	6/29/2016 11:36:19 AM	E35309
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	8			Analyst	: TOM
Diesel Range Organics (DRO)	18	10	mg/Kg	1	6/29/2016 10:47:04 AM	26141
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	6/29/2016 10:47:04 AM	26141
Surr: DNOP	89.1	70-130	%Rec	1	6/29/2016 10:47:04 AM	26141
EPA METHOD 8260B: VOLATILES SHO	ORT LIST				Analyst	: DJF
Benzene	ND	0.020	mg/Kg	1	6/29/2016 11:36:19 AM	C35309
Toluene	ND	0.039	mg/Kg	1	6/29/2016 11:36:19 AM	C35309
Ethylbenzene	ND	0.039	mg/Kg	1	6/29/2016 11:36:19 AM	C35309
Xylenes, Total	ND	0.078	mg/Kg	1	6/29/2016 11:36:19 AM	C35309
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	6/29/2016 11:36:19 AM	C35309
Surr: 4-Bromofluorobenzene	105	70-130	%Rec	1	6/29/2016 11:36:19 AM	C35309
Surr: Dibromofluoromethane	90.8	70-130	%Rec	1	6/29/2016 11:36:19 AM	C35309
Surr: Toluene-d8	98.1	70-130	%Rec	1	6/29/2016 11:36:19 AM	C35309

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 10
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

W Sample container temperature is out of limit as specified

S % Recovery outside of range due to dilution or matrix

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/30/2016

CLIENT: LTE Client Sample ID: TSP-17R

 Project:
 GCU 216
 Collection Date: 6/28/2016 8:40:00 AM

 Lab ID:
 1606F83-004
 Matrix: MEOH (SOIL)
 Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	63	4.1	mg/Kg	1	6/29/2016 12:04:40 PM	E35309
Surr: BFB	109	70-130	%Rec	1	6/29/2016 12:04:40 PM	E35309
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	20	10	mg/Kg	1	6/29/2016 11:08:58 AM	26141
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/29/2016 11:08:58 AM	26141
Surr: DNOP	94.2	70-130	%Rec	1	6/29/2016 11:08:58 AM	26141
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	DJF
Benzene	ND	0.021	mg/Kg	1	6/29/2016 12:04:40 PM	C35309
Toluene	ND	0.041	mg/Kg	1	6/29/2016 12:04:40 PM	C35309
Ethylbenzene	ND	0.041	mg/Kg	1	6/29/2016 12:04:40 PM	C35309
Xylenes, Total	0.22	0.082	mg/Kg	1	6/29/2016 12:04:40 PM	C35309
Surr: 1,2-Dichloroethane-d4	99.0	70-130	%Rec	1	6/29/2016 12:04:40 PM	C35309
Surr: 4-Bromofluorobenzene	108	70-130	%Rec	1	6/29/2016 12:04:40 PM	C35309
Surr: Dibromofluoromethane	88.2	70-130	%Rec	1	6/29/2016 12:04:40 PM	C35309
Surr: Toluene-d8	100	70-130	%Rec	1	6/29/2016 12:04:40 PM	C35309

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 10
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Date Reported: 6/30/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: TSP-18R

 Project:
 GCU 216
 Collection Date: 6/28/2016 8:50:00 AM

 Lab ID:
 1606F83-005
 Matrix: MEOH (SOIL)
 Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	39	4.0	mg/Kg	1	6/29/2016 12:33:03 PM	E35309
Surr: BFB	103	70-130	%Rec	1	6/29/2016 12:33:03 PM	E35309
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	TOM
Diesel Range Organics (DRO)	54	9.5	mg/Kg	1	6/29/2016 11:30:53 AM	26141
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/29/2016 11:30:53 AM	26141
Surr: DNOP	91.2	70-130	%Rec	1	6/29/2016 11:30:53 AM	26141
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst	DJF
Benzene	ND	0.020	mg/Kg	1	6/29/2016 12:33:03 PM	C35309
Toluene	ND	0.040	mg/Kg	1	6/29/2016 12:33:03 PM	C35309
Ethylbenzene	ND	0.040	mg/Kg	1	6/29/2016 12:33:03 PM	C35309
Xylenes, Total	ND	0.080	mg/Kg	1	6/29/2016 12:33:03 PM	C35309
Surr: 1,2-Dichloroethane-d4	99.7	70-130	%Rec	1	6/29/2016 12:33:03 PM	C35309
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	6/29/2016 12:33:03 PM	C35309
Surr: Dibromofluoromethane	90.0	70-130	%Rec	1	6/29/2016 12:33:03 PM	C35309
Surr: Toluene-d8	102	70-130	%Rec	1	6/29/2016 12:33:03 PM	C35309

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 5 of 10
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Analytical Report Lab Order 1606F83

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/30/2016

CLIENT: LTE Client Sample ID: TSP-19R

 Project:
 GCU 216
 Collection Date: 6/28/2016 9:00:00 AM

 Lab ID:
 1606F83-006
 Matrix: MEOH (SOIL)
 Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	61	3.5	mg/Kg	1	6/29/2016 1:01:26 PM	E35309
Surr: BFB	118	70-130	%Rec	1	6/29/2016 1:01:26 PM	E35309
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	17	10	mg/Kg	1	6/29/2016 11:52:40 AM	26141
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	6/29/2016 11:52:40 AM	26141
Surr: DNOP	91.1	70-130	%Rec	1	6/29/2016 11:52:40 AM	26141
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	DJF
Benzene	ND	0.017	mg/Kg	1	6/29/2016 1:01:26 PM	C35309
Toluene	ND	0.035	mg/Kg	1	6/29/2016 1:01:26 PM	C35309
Ethylbenzene	ND	0.035	mg/Kg	1	6/29/2016 1:01:26 PM	C35309
Xylenes, Total	0.44	0.069	mg/Kg	1	6/29/2016 1:01:26 PM	C35309
Surr: 1,2-Dichloroethane-d4	98.3	70-130	%Rec	1	6/29/2016 1:01:26 PM	C35309
Surr: 4-Bromofluorobenzene	109	70-130	%Rec	1	6/29/2016 1:01:26 PM	C35309
Surr: Dibromofluoromethane	87.9	70-130	%Rec	1	6/29/2016 1:01:26 PM	C35309
Surr: Toluene-d8	101	70-130	%Rec	1	6/29/2016 1:01:26 PM	C35309

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 6 of 10
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

W Sample container temperature is out of limit as specified

S % Recovery outside of range due to dilution or matrix

## Hall Environmental Analysis Laboratory, Inc.

8.2

10.00

WO#: 1606F83

30-Jun-16

**Client:** LTE **Project:** GCU 216

110ject. 0C0 21			
Sample ID LCS-26141	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 26141	RunNo: <b>35297</b>	
Prep Date: 6/29/2016	Analysis Date: 6/29/2016	SeqNo: 1091683	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	42 10 50.00	0 83.1 62.6	124
Surr: DNOP	4.5 5.000	89.3 70	130
Sample ID MB-26141	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 26141	RunNo: 35297	
Prep Date: 6/29/2016	Analysis Date: 6/29/2016	SeqNo: 1091684	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND 10		
Motor Oil Range Organics (MRO)	ND 50		
Surr: DNOP	9.3 10.00	93.5 70	130
Sample ID LCS-26125	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 26125	RunNo: <b>35299</b>	
Prep Date: 6/28/2016	Analysis Date: 6/29/2016	SeqNo: 1092068	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.7 5.000	93.3 70	130
Sample ID MB-26125	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 26125	RunNo: <b>35299</b>	
Prep Date: 6/28/2016	Analysis Date: 6/29/2016	SeqNo: 1092069	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual

#### Qualifiers:

Surr: DNOP

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank

82.5

70

130

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Page 7 of 10

## Hall Environmental Analysis Laboratory, Inc.

0.87

0.51

0.51

0.51

0.47

0.050

1.000

0.5000

0.5000

0.5000

0.5000

WO#: **1606F83** 

30-Jun-16

Client:	LTE
<b>Project:</b>	GCU 216

Sample ID rb	Samp <sup>-</sup>	Гуре: МЕ	BLK	Tes	TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: PBS	Batc	h ID: <b>C3</b>	5309	F	RunNo: 3	5309						
Prep Date:	Analysis [	Date: 6/	29/2016	5	SeqNo: 1	092884	Units: mg/K	ng/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	ND	0.025										
Toluene	ND	0.050										
Ethylbenzene	ND	0.050										
Xylenes, Total	ND	0.10										
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130					
Surr: 4-Bromofluorobenzene	0.48		0.5000		97.0	70	130					
Surr: Dibromofluoromethane	0.51		0.5000		101	70	130					
Surr: Toluene-d8	0.49		0.5000		97.3	70	130					
Sample ID 100ng Ics	Samp <sup>-</sup>	Гуре: <b>LC</b>	:s	Tes	tCode: E	PA Method	8260B: Volat	iles Short	List			
Client ID: LCSS	Batc	h ID: <b>C3</b>	5309	F	RunNo: 3	5309						
Prep Date:	Analysis [	Date: 6/	29/2016	\$	SeqNo: 1	092885	Units: mg/K	g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	1.0	0.025	1.000	0	103	70	130					

0

87.2

102

102

102

94.1

Sample ID 1606f83-002ams	SampT	уре: М\$	3	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: TSP-13R	Batch	n ID: <b>C3</b>	5309	F	RunNo: 3	5309				
Prep Date:	Analysis D	ate: <b>6/</b>	29/2016	S	SeqNo: 1	092886	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.020	0.8117	0	103	49.2	155			
Toluene	0.82	0.041	0.8117	0	101	52	154			
Surr: 1,2-Dichloroethane-d4	0.40		0.4059		99.1	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.4059		107	70	130			
Surr: Dibromofluoromethane	0.37		0.4059		91.9	70	130			
Surr: Toluene-d8	0.41		0.4059		100	70	130			

Sample ID	1606f83-002amsd	SampTy	/pe: <b>M</b> \$	SD	Tes	TestCode: EPA Method 8260B: Volatiles Short List							
Client ID:	TSP-13R	Batch	ID: <b>C3</b>	5309	F	RunNo: 3	5309						
Prep Date:	Prep Date: Analysis Date: 6/29/2016					SeqNo: 1	092887	Units: mg/Kg					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene		0.83	0.020	0.8117	0	102	49.2	155	1.07	20			
Toluene		0.79	0.041	0.8117	0	97.7	52	154	3.24	20			

#### Qualifiers:

Toluene

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Surr: Toluene-d8

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

70

70

70

70

70

130

130

130

130

130

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 8 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606F83** 

30-Jun-16

Client: LTE
Project: GCU 216

Sample ID 1606f83-002amsd	SampT	уре: М\$	SD	Tes	List					
Client ID: TSP-13R	Batch	ID: <b>C3</b>	5309	F	RunNo: 3	5309				
Prep Date:	Analysis D	ate: 6/	29/2016	8	SeqNo: 1	092887	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.41		0.4059		102	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.45		0.4059		110	70	130	0	0	
Surr: Dibromofluoromethane	0.38		0.4059		92.9	70	130	0	0	
Surr: Toluene-d8	0.40		0.4059		97.9	70	130	0	0	

#### Qualifiers:

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

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606F83** 

30-Jun-16

Client: LTE
Project: GCU 216

Sample ID rb SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: PBS Batch ID: E35309 RunNo: 35309

Prep Date: Analysis Date: 6/29/2016 SeqNo: 1092926 Units: 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
 480
 500.0
 95.5
 70
 130

Sample ID 2.5ug gro Ics SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: LCSS Batch ID: E35309 RunNo: 35309

Prep Date: Analysis Date: 6/29/2016 SeqNo: 1092935 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Gasoline Range Organics (GRO)
 26
 5.0
 25.00
 0
 106
 62.9
 123

 Surr: BFB
 490
 500.0
 98.6
 70
 130

Sample ID 1606f83-001ams SampType: MS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: TSP-12R Batch ID: E35309 RunNo: 35309

Prep Date: Analysis Date: 6/29/2016 SeqNo: 1092944 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual Gasoline Range Organics (GRO) 63 20.51 41.09 107 52.3 132

 Gasoline Range Organics (GRO)
 63
 4.1
 20.51
 41.09
 107
 52.3
 132

 Surr: BFB
 450
 410.2
 109
 70
 130

Sample ID 1606f83-001amsd SampType: MSD TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: TSP-12R Batch ID: E35309 RunNo: 35309

Prep Date: Analysis Date: 6/29/2016 SeqNo: 1092953 Units: mg/Kg

%REC Analyte Result **PQL** SPK value SPK Ref Val LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 65 4.1 20.51 41.09 118 52.3 132 3.67 20 Surr: BFB 450 410.2 110 70 130 0 0

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 10 of 10

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



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

## Sample Log-In Check List

Website: www.hallenvironmental.com Work Order Number: 1606F83 RcptNo: 1 Client Name: LTE Received by/date: 6/29/2016 7:45:00 AM Lindsay Mangin Logged By: 6/29/2016 8:07:46 AM Completed By: Lindsay Mangin 6/29/16 as Reviewed By: Chain of Custody Yes No ... Not Present 1. Custody seals intact on sample bottles? No [" Yes 🖝 Not Present 2. Is Chain of Custody complete? <u>Courier</u> 3. How was the sample delivered? Log In NA i. i No 🗍 4. Was an attempt made to cool the samples? NA 🗀 No . 5. Were all samples received at a temperature of >0° C to 6.0°C 6. Sample(s) in proper container(s)? No : 7. Sufficient sample volume for indicated test(s)? No L 8. Are samples (except VOA and ONG) properly preserved? Yes NA [] No 🗷 9. Was preservative added to bottles? No ... No VOA Vials Yes 10.VOA vials have zero headspace? No 🏚 11. Were any sample containers received broken? Yes # of preserved bottles checked No :\_\_ for pH: 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? 13. Are matrices correctly identified on Chain of Custody? No 14. Is it clear what analyses were requested? Checked by: No 🛄 15. Were all holding times able to be met? Yes (If no, notify customer for authorization.) Special Handling (if applicable) 16. Was client notified of all discrepancies with this order? Yes [\_] No 📗 Person Notified: Date: eMail Phone Fax In Person Via: By Whom: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Seal Intact | Seal No | Cooler No Temp °C Condition Seal Date Signed By

Good

INTERNATED	ANALYSIS LABORATORY	mental.com	Albuquerque, NM 87109	505-345-4107	Analysis Request		CB,8	- d 7		(A(	-\\C	oitea¶ 1808 (OV) 808S8 Ima2) 07S8												
	ANALYSI	www.hallenvironmental.com	4901 Hawkins NE - Albuqu	Tel. 505-345-3975 Fax	Analysis	(6)	(SI	SIN	(1. (1.	85 904 18	bd 4 od 5 o oi o oi	TM + X∃T8 B3r08 HqT bdthd) HqT bdthg) Bd∃ brts8) s'HAq bR8 8 ARጋR	->	×	X	×	×	X					ırks:	
Same	Rush TAT		4716				BKINS 8021	(3)	(n)	- No	\@	ative HEAL No.	ļ	X 700-	X 500-	X	X	X 28-			)		101 / 126 Time Remarks:	Date Time
Turn-Around Time:	Standard	Project Name:	250 	Project #:	121	Project Manager:			er:	On Ice:	Sample Temperature:	Container Type and #	402 No					<b>&gt;</b>		1			Received by:	Received by:
Chain-of-Custody Record	BP-Lower 48				505-526-9497 (701-590-4727	steven, moskal@bp.com	aburns Ottenercom	☐ Level 4 (Full Validation)		□ Other	POF	Matrix   Sample Request ID	SS TSP-12'R	ļ <u> </u>	TSP-16R	TSP-17R	TSP-18R	JSP-19R					Refinduished by	Relinduished by:
Chain-o	lient:		ailing Address:		hone #: 505-	1 .00	 	) Standard	on	NELAP	EDD (Type)	Date Time M	0180 91/27	0820	0830	0840	0880	0060				1	ate: Time: Re / 28 ib 1700	ate: Time: Re



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

July 06, 2016

**Danny Burns** 

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU #216 OrderNo.: 1606G67

#### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/30/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

# Analytical Report Lab Order 1606G67

Date Reported: 7/6/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: TSP-48 (500)

 Project:
 GCU #216
 Collection Date: 6/29/2016 9:20:00 AM

 Lab ID:
 1606G67-001
 Matrix: SOIL
 Received Date: 6/30/2016 8:05:00 AM

Analyses	Result	PQL Q	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	100	9.8	mg/Kg	1	6/30/2016 11:01:59 AM
Motor Oil Range Organics (MRO)	65	49	mg/Kg	1	6/30/2016 11:01:59 AM
Surr: DNOP	100	70-130	%Rec	1	6/30/2016 11:01:59 AM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	8.8	7.5	mg/Kg	2	6/30/2016 10:24:05 AM
Surr: BFB	134	80-120	S %Rec	2	6/30/2016 10:24:05 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.038	mg/Kg	2	6/30/2016 10:24:05 AM
Toluene	ND	0.075	mg/Kg	2	6/30/2016 10:24:05 AM
Ethylbenzene	ND	0.075	mg/Kg	2	6/30/2016 10:24:05 AM
Xylenes, Total	ND	0.15	mg/Kg	2	6/30/2016 10:24:05 AM
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	2	6/30/2016 10:24:05 AM

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

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

# Analytical Report Lab Order 1606G67

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/6/2016

CLIENT: LTE Client Sample ID: TSP-49 (200)

 Project:
 GCU #216
 Collection Date: 6/29/2016 9:30:00 AM

 Lab ID:
 1606G67-002
 Matrix: SOIL
 Received Date: 6/30/2016 8:05:00 AM

Analyses	Result	PQL (	Qual Ur	nits	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	5				Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	85	9.9	m	g/Kg	1	6/30/2016 11:26:07 AM
Motor Oil Range Organics (MRO)	62	50	m	g/Kg	1	6/30/2016 11:26:07 AM
Surr: DNOP	97.7	70-130	%	Rec	1	6/30/2016 11:26:07 AM
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9	m	g/Kg	1	6/30/2016 10:47:38 AM
Surr: BFB	122	80-120	S %	Rec	1	6/30/2016 10:47:38 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.020	m	g/Kg	1	6/30/2016 10:47:38 AM
Toluene	ND	0.039	m	g/Kg	1	6/30/2016 10:47:38 AM
Ethylbenzene	ND	0.039	m	g/Kg	1	6/30/2016 10:47:38 AM
Xylenes, Total	ND	0.078	m	g/Kg	1	6/30/2016 10:47:38 AM
Surr: 4-Bromofluorobenzene	96.8	80-120	%	Rec	1	6/30/2016 10:47:38 AM

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

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

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606G67** 

06-Jul-16

Client: LTE
Project: GCU #216

Sample ID LCS-26166	SampT	ype: <b>LC</b>	S	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch	Batch ID: <b>26166</b> RunNo: <b>35333</b>										
Prep Date: 6/30/2016	Analysis D	ate: 6/	30/2016	SeqNo: 1093148			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	41	10	50.00	0	82.6	62.6	124					
Surr: DNOP	4.4		5.000		87.3	70	130					

Sample ID MB-26166	SampT	уре: <b>МЕ</b>	BLK	Tes	tCode: E	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch	ID: <b>26</b>	166	R	RunNo: 3	5333				
Prep Date: 6/30/2016	Analysis D	ate: 6/	30/2016	S	SeqNo: 1	093149	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.1	70	130			

#### Qualifiers:

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

limits Page 3 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606G67** 

06-Jul-16

Client: LTE
Project: GCU #216

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: A35340 RunNo: 35340

Prep Date: Analysis Date: 6/30/2016 SeqNo: 1093812 Units: 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 990 1000 99.0 80 120

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: A35340 RunNo: 35340

Prep Date: Analysis Date: 6/30/2016 SeqNo: 1093813 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Gasoline Range Organics (GRO)
 26
 5.0
 25.00
 0
 104
 80
 120

 Surr: BFB
 1100
 1000
 108
 80
 120

Sample ID 1606G67-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: TSP-48 (500) Batch ID: A35340 RunNo: 35340

Prep Date: Analysis Date: 6/30/2016 SeqNo: 1093814 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result PQL HighLimit Qual Gasoline Range Organics (GRO) 46 7.5 37.51 8.807 98.7 59.3 143

 Gasoline Range Organics (GRO)
 46
 7.5
 37.51
 8.807
 98.7
 59.3
 143

 Surr: BFB
 2100
 1500
 141
 80
 120
 S

Sample ID 1606G67-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: TSP-48 (500) Batch ID: A35340 RunNo: 35340

Prep Date: Analysis Date: 6/30/2016 SeqNo: 1093815 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 46 7.5 37.51 8.807 99.7 59.3 143 0.815 20 Surr: BFB 2100 1500 140 80 120 0 0 S

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

D C 1 HN / I D

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 4 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1606G67** 

06-Jul-16

Client: LTE
Project: GCU #216

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: **B35340** RunNo: 35340 Prep Date: Analysis Date: 6/30/2016 SeqNo: 1093842 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 0.94 1.000 93.9 80 120

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: **B35340** RunNo: 35340 Analysis Date: 6/30/2016 Prep Date: SeqNo: 1093843 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** LowLimit Qual 1.0 0.025 1.000 O 104 75.3 123 Benzene Toluene 1.0 0.050 1.000 0 103 80 124 Ethylbenzene 0.050 0 104 82.8 1.0 1.000 121 Xylenes, Total 3.1 0.10 3.000 0 102 83.9 122 Surr: 4-Bromofluorobenzene 1.1 1.000 106 80 120

Sample ID 1606G67-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: TSP-49 (200) Batch ID: **B35340** RunNo: 35340 Analysis Date: 6/30/2016 SeqNo: 1093844 Prep Date: Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.78 0.020 0.7831 100 71.5 122 Toluene 0.80 0.039 0.7831 0.01050 100 71.2 123 75.2 0.82 0.039 0.7831 0.01215 104 130 Ethylbenzene Xylenes, Total 2.5 0.078 2.349 0.06591 103 72.4 131 Surr: 4-Bromofluorobenzene 0.83 0.7831 106 80 120

Sample ID 1606G67-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Batch ID: **B35340** RunNo: 35340 Client ID: TSP-49 (200) Prep Date: Analysis Date: 6/30/2016 SeqNo: 1093845 Units: mg/Kg SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual 0.74 0.020 0.7831 0 94.3 71.5 122 6.11 20 Benzene Toluene 0.76 0.039 0.7831 0.01050 95.5 71.2 123 4.79 20 Ethylbenzene 0.79 0.039 0.7831 0.01215 99.5 75.2 130 3.91 20 Xylenes, Total 2.4 0.078 2.349 0.06591 99.8 72.4 131 2.76 20 Surr: 4-Bromofluorobenzene 0.82 0.7831 104 80 120 0 0

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 5 of 5



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

## Sample Log-in Check List

RcptNo: 1 Work Order Number: 1606G67 Client Name: **BP AMERICA-Farmington** Received by/date: anne Sham 6/30/2016 8:05:00 AM Logged By: **Anne Thorne** 6/30/2016 Completed By: Anne Thorne or bolic Reviewed By: Chain of Custody Not Present Yes 1 Custody seals intact on sample bottles? No 🗌 Not Present Yes 🛂 2. Is Chain of Custody complete? 3 How was the sample delivered? Courier Log In NA 🗍 No 🗆 Yes 🗸 4. Was an attempt made to cool the samples? NA 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗌 Yes 🗸 Sample(s) in proper container(s)? No 🔲 Yes 🗸 7. Sufficient sample volume for indicated test(s)? Yes 🗸 No 🗔 8. Are samples (except VOA and ONG) properly preserved? No 🗹 Yes 🗌 9. Was preservative added to bottles? No VOA Vials 🗹 No 🗌 Yes 🗌 10. VOA vials have zero headspace? No 🗸 Yes 11. Were any sample containers received broken? # of preserved bottles checked No 🗌 for pH: Yes 🗸 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? Yes 🗸 No 🗌 13. Are matrices correctly identified on Chain of Custody? No 🗀 14 Is it clear what analyses were requested? Checked by: No L 15. Were all holding times able to be met? Yes 🗸 (If no, notify customer for authorization.) Special Handling (if applicable) NA 🔽 Yes 🗌 No 🗌 16. Was client notified of all discrepancies with this order? Person Notified: Date 🔲 eMail 🔲 Phone 🔲 Fax 🔃 In Person By Whom: Via: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Yes Good

I I I I I I I I I I I I I I I I I I I	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis Request	(†O	io se (SN	(Gi	(1.8 (1.4 (1.4 (1.4) (1.4) (1.4)	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	BTEX + MTE BTEX + MTE TPH 8015B TPH (Metho PAH's (8310 PAH's (8310 RCRA 8 Me Anions (F,Cl 8081 Pestici 8250 (VOA 8270 (Semi-	X							Remarks:	1	Illocation will be clearly not the subconfected to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
Turn-Around Time: Scume	☐ Standard   XRush   41		GCW # 210	Project #:		Project Manager: BP-Steve Mos Ka	SACAS SAMO SALESTE	. 1	Sampler: D B wrws	Temperature: //	Acolusiner Preservative HEAL No. Type and # Type # Type # Type	Nome-	402 Name 202						Received by:    Math   AMB   163	Received by:  Date 'Time  Received by:  (20)	on water a correction of the serves as notice of this
Chain-of-Custody Record			alling Address:		10ne #: 505-326-9497 / 701-570-4727	skal @ bp, com	VOC Package: Aburns Oltenv. com	Standard □ Level 4 (Full Validation)	screditation Other	Woe) Pr	Matrix Sample Request ID	29 0920 SS TSP-48 (500)	129 0930 SS TSP-49 (200)						ite: Time: Relinquished by [29]	ate: Time: Reinquished by/	If necessary, samples submitted to Hall Environmental may be subco



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

July 06, 2016

**Danny Burns** 

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: GCU #216 OrderNo.: 1607002

#### Dear Danny Burns:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/1/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 7/6/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: TSP-50

 Project:
 GCU #216
 Collection Date: 6/30/2016 9:10:00 AM

 Lab ID:
 1607002-001
 Matrix: SOIL
 Received Date: 7/1/2016 7:45:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3		Analys	st: TOM
Diesel Range Organics (DRO)	66	9.6	mg/Kg	1 7/1/2016 9:26:59 AM	26187
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1 7/1/2016 9:26:59 AM	26187
Surr: DNOP	101	70-130	%Rec	1 7/1/2016 9:26:59 AM	26187
EPA METHOD 8015D: GASOLINE RAN	IGE			Analys	st: NSB
Gasoline Range Organics (GRO)	21	4.6	mg/Kg	1 7/1/2016 9:43:30 AM	A35389
Surr: BFB	153	80-120	S %Rec	1 7/1/2016 9:43:30 AM	A35389
EPA METHOD 8021B: VOLATILES				Analys	st: NSB
Benzene	ND	0.023	mg/Kg	1 7/1/2016 9:43:30 AM	B35389
Toluene	ND	0.046	mg/Kg	1 7/1/2016 9:43:30 AM	B35389
Ethylbenzene	0.049	0.046	mg/Kg	1 7/1/2016 9:43:30 AM	B35389
Xylenes, Total	0.20	0.093	mg/Kg	1 7/1/2016 9:43:30 AM	B35389
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1 7/1/2016 9:43:30 AM	B35389

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 1 of 9 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

Date Reported: 7/6/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: TSP-51

 Project:
 GCU #216
 Collection Date: 6/30/2016 9:20:00 AM

 Lab ID:
 1607002-002
 Matrix: SOIL
 Received Date: 7/1/2016 7:45:00 AM

Analyses	Result	PQL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analyst	: TOM
Diesel Range Organics (DRO)	90	10	mg/Kg	1	7/1/2016 9:48:30 AM	26187
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/1/2016 9:48:30 AM	26187
Surr: DNOP	100	70-130	%Rec	1	7/1/2016 9:48:30 AM	26187
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	31	4.2	mg/Kg	1	7/1/2016 10:07:50 AM	A35389
Surr: BFB	215	80-120	S %Rec	1	7/1/2016 10:07:50 AM	A35389
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.021	mg/Kg	1	7/1/2016 10:07:50 AM	B35389
Toluene	0.045	0.042	mg/Kg	1	7/1/2016 10:07:50 AM	B35389
Ethylbenzene	0.076	0.042	mg/Kg	1	7/1/2016 10:07:50 AM	B35389
Xylenes, Total	0.70	0.084	mg/Kg	1	7/1/2016 10:07:50 AM	B35389
Surr: 4-Bromofluorobenzene	109	80-120	%Rec	1	7/1/2016 10:07:50 AM	B35389

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

Qualifiers:	*	Value exceeds Maximi	um Contaminant I	_ev

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/6/2016

CLIENT: LTE Client Sample ID: TSP-52

 Project:
 GCU #216
 Collection Date: 6/30/2016 9:30:00 AM

 Lab ID:
 1607002-003
 Matrix: SOIL
 Received Date: 7/1/2016 7:45:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3		Analys	st: TOM
Diesel Range Organics (DRO)	84	10	mg/Kg	1 7/1/2016 10:10:11 AM	26187
Motor Oil Range Organics (MRO)	52	51	mg/Kg	1 7/1/2016 10:10:11 AM	26187
Surr: DNOP	102	70-130	%Rec	1 7/1/2016 10:10:11 AM	26187
EPA METHOD 8015D: GASOLINE RAN	GE			Analys	st: NSB
Gasoline Range Organics (GRO)	7.5	3.9	mg/Kg	1 7/1/2016 10:32:05 AM	A35389
Surr: BFB	130	80-120	S %Rec	1 7/1/2016 10:32:05 AM	A35389
EPA METHOD 8021B: VOLATILES				Analys	st: NSB
Benzene	ND	0.020	mg/Kg	1 7/1/2016 10:32:05 AM	B35389
Toluene	ND	0.039	mg/Kg	1 7/1/2016 10:32:05 AM	B35389
Ethylbenzene	ND	0.039	mg/Kg	1 7/1/2016 10:32:05 AM	B35389
Xylenes, Total	ND	0.079	mg/Kg	1 7/1/2016 10:32:05 AM	B35389
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1 7/1/2016 10:32:05 AM	B35389

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 3 of 9 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit

% Recovery outside of range due to dilution or matrix W Sample container temperature is out of limit as specified

Date Reported: 7/6/2016

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT: LTE** Client Sample ID: TSP-53

**Project:** GCU #216 **Collection Date:** 6/30/2016 9:40:00 AM 1607002-004 Matrix: SOIL Lab ID: Received Date: 7/1/2016 7:45:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	5			Analyst	: TOM
Diesel Range Organics (DRO)	49	10	mg/Kg	1	7/1/2016 9:23:25 AM	26187
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/1/2016 9:23:25 AM	26187
Surr: DNOP	93.2	70-130	%Rec	1	7/1/2016 9:23:25 AM	26187
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	53	4.2	mg/Kg	1	7/1/2016 10:56:29 AM	A35389
Surr: BFB	251	80-120	S %Rec	1	7/1/2016 10:56:29 AM	A35389
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.021	mg/Kg	1	7/1/2016 10:56:29 AM	B35389
Toluene	0.13	0.042	mg/Kg	1	7/1/2016 10:56:29 AM	B35389
Ethylbenzene	0.14	0.042	mg/Kg	1	7/1/2016 10:56:29 AM	B35389
Xylenes, Total	1.5	0.085	mg/Kg	1	7/1/2016 10:56:29 AM	B35389
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	1	7/1/2016 10:56:29 AM	B35389

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

### Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 9 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Date Reported: 7/6/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: B-W04@39'

 Project:
 GCU #216
 Collection Date: 6/30/2016 10:20:00 AM

 Lab ID:
 1607002-005
 Matrix: SOIL
 Received Date: 7/1/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	5			Analys	t: TOM
Diesel Range Organics (DRO)	19	10	mg/Kg	1	7/1/2016 9:44:56 AM	26187
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	7/1/2016 9:44:56 AM	26187
Surr: DNOP	97.4	70-130	%Rec	1	7/1/2016 9:44:56 AM	26187
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	7/1/2016 11:20:56 AM	A35389
Surr: BFB	91.3	80-120	%Rec	1	7/1/2016 11:20:56 AM	A35389
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.020	mg/Kg	1	7/1/2016 11:20:56 AM	B35389
Toluene	ND	0.041	mg/Kg	1	7/1/2016 11:20:56 AM	B35389
Ethylbenzene	ND	0.041	mg/Kg	1	7/1/2016 11:20:56 AM	B35389
Xylenes, Total	ND	0.082	mg/Kg	1	7/1/2016 11:20:56 AM	B35389
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	7/1/2016 11:20:56 AM	B35389

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

# Qualifiers: \* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

refer to the QC burning, report and sample rogin electrics for imaged QC dam and preservation information

Date Reported: 7/6/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: W-04@39'

 Project:
 GCU #216
 Collection Date: 6/30/2016 10:10:00 AM

 Lab ID:
 1607002-006
 Matrix: SOIL
 Received Date: 7/1/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	6		Analy	st: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1 7/1/2016 10:06:49 AM	1 26187
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1 7/1/2016 10:06:49 AM	1 26187
Surr: DNOP	88.1	70-130	%Rec	1 7/1/2016 10:06:49 AM	1 26187
EPA METHOD 8015D: GASOLINE RAN	IGE			Analys	st: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1 7/1/2016 11:45:27 AM	A35389
Surr: BFB	83.8	80-120	%Rec	1 7/1/2016 11:45:27 AM	A35389
EPA METHOD 8021B: VOLATILES				Analy	st: NSB
Benzene	ND	0.019	mg/Kg	1 7/1/2016 11:45:27 AM	B35389
Toluene	ND	0.037	mg/Kg	1 7/1/2016 11:45:27 AM	B35389
Ethylbenzene	ND	0.037	mg/Kg	1 7/1/2016 11:45:27 AM	B35389
Xylenes, Total	ND	0.075	mg/Kg	1 7/1/2016 11:45:27 AM	B35389
Surr: 4-Bromofluorobenzene	95.3	80-120	%Rec	1 7/1/2016 11:45:27 AM	B35389

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1607002

06-Jul-16

**Client:** LTE **Project:** GCU #216

Sample ID LCS-26187 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 26187 RunNo: 35379 Prep Date: 7/1/2016 Analysis Date: 7/1/2016 SeqNo: 1094626 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 41 10 O 83.0 62.6 50.00 124 Surr: DNOP 4.5 5.000 89.2 70 130 Sample ID MB-26187 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 26187 RunNo: 35379 Prep Date: 7/1/2016 Analysis Date: 7/1/2016 SeqNo: 1094627 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 ND Motor Oil Range Organics (MRO) 50 Surr: DNOP 9.7 10.00 97.4 70 130 Sample ID 1607002-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: TSP-50 Batch ID: 26187 RunNo: 35379 Prep Date: 7/1/2016 Analysis Date: 7/1/2016 SeqNo: 1094911 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 120 9.8 49.16 65.88 105 33.9 141 Surr: DNOP 4.7 4.916 70 130 94.7

Sample ID 1607002-001AMSD TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: MSD Client ID: TSP-50 Batch ID: 26187 RunNo: 35379 Prep Date: 7/1/2016 Analysis Date: 7/1/2016 SeqNo: 1094912 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual Diesel Range Organics (DRO) 130 10 50.00 65.88 119 33.9 141 6.34 20 Surr: DNOP 4.7 5.000 94.9 70 130 0 0

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits

- Page 7 of 9

- P Sample pH Not In Range
- RLReporting Detection Limit
- Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607002** 

06-Jul-16

Client: LTE
Project: GCU #216

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: A35389 RunNo: 35389

Prep Date: Analysis Date: 7/1/2016 SeqNo: 1095021 Units: 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
 890
 1000
 88.8
 80
 120

Sample ID 2.5UG GRO LCSB SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: A35389 RunNo: 35389

Prep Date: Analysis Date: 7/1/2016 SeqNo: 1095022 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Gasoline Range Organics (GRO)
 26
 5.0
 25.00
 0
 106
 80
 120

 Surr: BFB
 930
 1000
 93.3
 80
 120

Sample ID 1607002-005AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: B-W04@39' Batch ID: A35389 RunNo: 35389

Prep Date: Analysis Date: 7/1/2016 SeqNo: 1095023 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual Gasoline Range Organics (GRO) 23 20.46 114 59.3 143

Gasoline Range Organics (GRO) 23 4.1 20.46 0 114 59.3 143 Surr: BFB 760 818.3 92.4 80 120

Sample ID 1607002-005AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: B-W04@39' Batch ID: A35389 RunNo: 35389

Prep Date: Analysis Date: 7/1/2016 SeqNo: 1095024 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 4.1 20.46 123 59.3 143 7.98 20 Λ Surr: BFB 820 818.3 100 80 120 0 0

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 8 of 9

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607002** 

06-Jul-16

Client: LTE
Project: GCU #216

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: B35389 RunNo: 35389

Prep Date: Analysis Date: 7/1/2016 SeqNo: 1095111 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Benzene ND 0.025

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

 Surr: 4-Bromofluorobenzene
 1.0
 1.000
 100
 80
 120

Sample ID 100NG BTEX LC	CS Samp1	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batcl	n ID: <b>B3</b>	5389	F	RunNo: 3	5389				
Prep Date:	Analysis D	Date: 7/	1/2016	5	SeqNo: 1	095112	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	110	75.3	123			
Toluene	1.1	0.050	1.000	0	105	80	124			
Ethylbenzene	1.0	0.050	1.000	0	101	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	98.3	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 9 of 9



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

## Sample Log-In Check List

Website: www.hallenvironmental.com Work Order Number: 1607002 RcptNo: 1 Client Name: LTE AT Received by/date: 7/1/2016 7:45:00 AM Lindsay Mangin Logged By: Lindsay Mangin 7/1/2016 7:57:19 AM Completed By: 07/01/16 Reviewed By: Chain of Custody Not Present Yes No 1. Custody seals intact on sample bottles? Not Present No 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In NA 🗀 No 🗔 Yes 4. Was an attempt made to cool the samples? No 🗔 NA 🗐 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗔 6. Sample(s) in proper container(s)? No . 7. Sufficient sample volume for indicated test(s)? No . 8. Are samples (except VOA and ONG) properly preserved? NA No 🐼 Yes | 9. Was preservative added to bottles? No VOA Vials 🖈 No 1 Yes 10.VOA vials have zero headspace? Yes No 🖈 11 Were any sample containers received broken? # of preserved bottles checked No . for pH: 12. Does paperwork match bottle labels? Yes (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 13. Are matrices correctly identified on Chain of Custody? Yes No | 14. Is it clear what analyses were requested? Checked by: No L Yes 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes [\_] 16. Was client notified of all discrepancies with this order? No Date: Person Notified: In Person By Whom: eMail Phone Fax Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition | Seal Intact | Seal No Seal Date Signed By

Good

Chain-of-	Chain-of-Custody Record	Turn-Around Time:	some day					_	2 11	5	C	Z	Ī	HALL ENVIDONMENTAL	_	
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nail or Fax#: 5+4	Steven. Moskal @ bacom Project Manag	Project Manager: R	er. BP-Steve Moskal	()		<b>(</b> ОЫ			-							
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elumes ressoned il	od to Hall Environmental	may be subcontracted to other accredited laboratories	laboratories. This serves as no	ce of this pos	possibility. Any sub-contracted data will be clearly notated on the analytical report	Any sub.	contract	ed data	will be c	learly no	stated o	n the a	nalytical	report		



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

July 12, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU #216 OrderNo.: 1607405

#### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 4 sample(s) on 7/9/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/12/2016

CLIENT: BP America Client Sample ID: TSP-55

 Project:
 GCU #216
 Collection Date: 7/8/2016 9:00:00 AM

 Lab ID:
 1607405-001
 Matrix: SOIL
 Received Date: 7/9/2016 11:08:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	78	9.9	mg/Kg	1	7/11/2016 10:23:39 AM
Motor Oil Range Organics (MRO)	54	49	mg/Kg	1	7/11/2016 10:23:39 AM
Surr: DNOP	94.0	70-130	%Rec	1	7/11/2016 10:23:39 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	7/11/2016 10:07:58 AM
Surr: BFB	123	80-120	S %Rec	1	7/11/2016 10:07:58 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1	7/11/2016 10:07:58 AM
Toluene	ND	0.038	mg/Kg	1	7/11/2016 10:07:58 AM
Ethylbenzene	ND	0.038	mg/Kg	1	7/11/2016 10:07:58 AM
Xylenes, Total	ND	0.075	mg/Kg	1	7/11/2016 10:07:58 AM
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	7/11/2016 10:07:58 AM

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

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

Date Reported: 7/12/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-56

 Project:
 GCU #216
 Collection Date: 7/8/2016 9:05:00 AM

 Lab ID:
 1607405-002
 Matrix: SOIL
 Received Date: 7/9/2016 11:08:00 AM

Analyses	Result	PQL (	Qual U	nits	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3				Analyst: TOM
Diesel Range Organics (DRO)	97	9.7	m	ng/Kg	1	7/11/2016 10:45:29 AM
Motor Oil Range Organics (MRO)	62	48	n	ng/Kg	1	7/11/2016 10:45:29 AM
Surr: DNOP	94.0	70-130	%	%Rec	1	7/11/2016 10:45:29 AM
EPA METHOD 8015D: GASOLINE RAM	NGE					Analyst: NSB
Gasoline Range Organics (GRO)	10	3.9	m	ng/Kg	1	7/11/2016 10:34:15 AM
Surr: BFB	160	80-120	S %	%Rec	1	7/11/2016 10:34:15 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.019	n	ng/Kg	1	7/11/2016 10:34:15 AM
Toluene	ND	0.039	n	ng/Kg	1	7/11/2016 10:34:15 AM
Ethylbenzene	ND	0.039	n	ng/Kg	1	7/11/2016 10:34:15 AM
Xylenes, Total	0.15	0.078	m	ng/Kg	1	7/11/2016 10:34:15 AM
Surr: 4-Bromofluorobenzene	104	80-120	%	%Rec	1	7/11/2016 10:34:15 AM

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

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

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/12/2016

CLIENT: BP America Client Sample ID: TSP-57

 Project:
 GCU #216
 Collection Date: 7/8/2016 9:10:00 AM

 Lab ID:
 1607405-003
 Matrix: SOIL
 Received Date: 7/9/2016 11:08:00 AM

Analyses	Result	PQL Q	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	6			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	95	9.6	mg/K	g 1	7/11/2016 11:07:11 AM
Motor Oil Range Organics (MRO)	60	48	mg/K	g 1	7/11/2016 11:07:11 AM
Surr: DNOP	93.2	70-130	%Red	: 1	7/11/2016 11:07:11 AM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	6.3	4.0	mg/K	g 1	7/11/2016 10:57:51 AM
Surr: BFB	149	80-120	S %Red	: 1	7/11/2016 10:57:51 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/K	g 1	7/11/2016 10:57:51 AM
Toluene	ND	0.040	mg/K	g 1	7/11/2016 10:57:51 AM
Ethylbenzene	ND	0.040	mg/K	g 1	7/11/2016 10:57:51 AM
Xylenes, Total	ND	0.081	mg/K	g 1	7/11/2016 10:57:51 AM
Surr: 4-Bromofluorobenzene	106	80-120	%Red	; 1	7/11/2016 10:57:51 AM

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

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

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/12/2016

CLIENT: BP America Client Sample ID: TSP-58

 Project:
 GCU #216
 Collection Date: 7/8/2016 9:15:00 AM

 Lab ID:
 1607405-004
 Matrix: SOIL
 Received Date: 7/9/2016 11:08:00 AM

Analyses	Result	PQL (	Qual Uni	its	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	5				Analyst: TOM
Diesel Range Organics (DRO)	38	9.4	mg	g/Kg	1	7/11/2016 11:29:09 AM
Motor Oil Range Organics (MRO)	ND	47	mg	g/Kg	1	7/11/2016 11:29:09 AM
Surr: DNOP	94.4	70-130	%F	Rec	1	7/11/2016 11:29:09 AM
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.4	mg	g/Kg	1	7/11/2016 11:21:24 AM
Surr: BFB	122	80-120	S %F	Rec	1	7/11/2016 11:21:24 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.022	mg	g/Kg	1	7/11/2016 11:21:24 AM
Toluene	ND	0.044	mg	g/Kg	1	7/11/2016 11:21:24 AM
Ethylbenzene	ND	0.044	mg	g/Kg	1	7/11/2016 11:21:24 AM
Xylenes, Total	ND	0.089	mg	g/Kg	1	7/11/2016 11:21:24 AM
Surr: 4-Bromofluorobenzene	102	80-120	%F	Rec	1	7/11/2016 11:21:24 AM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 7
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607405** 

12-Jul-16

Client: BP America
Project: GCU #216

Sample ID LCS-26317	SampT	ype: <b>LC</b>	S	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch	Batch ID: <b>26317</b> RunNo: <b>35547</b>									
Prep Date: 7/11/2016	Analysis D	ate: 7/	11/2016	SeqNo: 1100746			Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	43	10	50.00	0	85.5	62.6	124				
Surr: DNOP	3.9		5.000		78.9	70	130				

Sample ID MB-26317	SampT	ype: <b>ME</b>	BLK	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch	ID: <b>26</b>	317	R	RunNo: 3	5547					
Prep Date: 7/11/2016	Analysis D	ate: 7/	11/2016	S	SeqNo: 1	100747	Units: mg/K	ίg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	9.1		10.00		91.2	70	130				

#### Qualifiers:

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

Page 5 of 7

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607405** 

12-Jul-16

Client: BP America
Project: GCU #216

Sample ID MB-26304 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 26304 RunNo: 35554

Prep Date: 7/8/2016 Analysis Date: 7/11/2016 SeqNo: 1101250 Units: 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 1000 1000 101 80 120

Sample ID LCS-26304 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 26304 RunNo: 35554

Prep Date: 7/8/2016 Analysis Date: 7/11/2016 SeqNo: 1101251 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Gasoline Range Organics (GRO)
 25
 5.0
 25.00
 0
 99.5
 80
 120

 Surr: BFB
 1100
 1000
 108
 80
 120

#### Qualifiers:

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

W Sample container temperature is out of limit as specified

Page 6 of 7

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1607405

12-Jul-16

**Client: BP** America **Project:** GCU #216

Sample ID MB-26304	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batc	Batch ID: 26304			RunNo: <b>35554</b>					
Prep Date: 7/8/2016	Analysis [	Date: 7/	11/2016	SeqNo: 1101270			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		98.8	80	120			

Sample ID LCS-26304	Samp	s	Tes	8021B: Vola	tiles					
Client ID: LCSS	Batc	h ID: <b>26</b>	304	F	RunNo: 3	5554				
Prep Date: 7/8/2016	Analysis [	Date: 7/	11/2016	S	SeqNo: 1	101271	Units: mg/k			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.7	75.3	123			
Toluene	0.96	0.050	1.000	0	95.6	80	124			
Ethylbenzene	1.0	0.050	1.000	0	100	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	99.1	83.9	122			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

E Value above quantitation range

Reporting Detection Limit

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL

Sample container temperature is out of limit as specified

Page 7 of 7



Hall Environmental Analysis Laboratary 4901 Hawkins NE Albuquerque, NM 87109

TEL: 565-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Website: www.hallenvironmental.com Client Name LTE Work Order Number: 1607405 RcptNo: 1 Received by/date: Logged By Lindsay Mangin 7/9/2016 11:08:00 AM Completed By: Lindsay Mangin 7/9/2016 11:47:23 AM Reviewed By. Chain of Custody No D Not Present ✔ 1. Custody seals intact on sample bottles? Yes \_ Not Present Yes V No 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In NA FI No. 4. Was an attempt made to cool the samples? Were all samples received at a temperature of >0° C to 6.0°C No NA . Yes No Sample(s) in proper container(s)? No. 7. Sufficient sample volume for indicated test(s)? Yes 1 8. Are samples (except VOA and ONG) properly preserved? No NA . No V 9. Was preservative added to bottles? Yes No | No VOA Vials 10. VOA viais have zero headspace? Yes No Y 11. Were any sample containers received broken? Yes # of preserved bottles checked No for pH: 12. Does paperwork match bottle labels? Yes (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No L 13. Are matrices correctly identified on Chain of Custody? No \_ 14. Is it clear what analyses were requested? No Checked by: 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) NA V 16. Was client notified of all discrepancies with this order? Yes 🗌 No Person Notified: Date By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18 Cooler Information

Seal Date

Signed By

Cooler No Temp °C

3.3

Good

Condition | Seal Intact | Seal No

Yes

Turn-Around Time: Sayme	KRush K	GCは 井Clc 4901 Hawkins NE - Albuquerque, NM 87109	Project #: Tel. 505-345-3975 Fax 505-345-4107	Anal	(\(\frac{1}{2}\)	1500 (S)	6 (3 (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	3082 3082 1) 1) 10 2 10 10 10 10 10 10 10 10 10 10 10 10 10 1	7 Yes	BE tales of 5 Or 1 Or 1 Or 1 Or 1 Or 1 Or 1 Or 1 Or	Container	Туре and # Туре ВТЕХ ВТЕХ В В В В В В В В В В В В В В В В В В В	×	X	X X X X X X X X X X X X X X X X X X X					H	Received by:    Compared the line   Remarks:	Date Til	
	KRush K	 3	ject #:		व्यक्ष	<u>}</u>	LIE-Daviny !	Δ.	⊈ Yes	nple Temperature: 3,3	ative	Type	å H			\ \ \ \ \ \					West 7	py:	(2) (2+1) (1) (1) (1)
Chain-of-Custody Record		lailing Address:	Pro	hone # 505 -326 -9497 / 701-570-4727	ax#: steven, moskal @ bp. com	3. Sburns@Itenv.com		uo	1 NELAP   Other	KEDD (Type) (DF	Oate Time Matrix Sample Regulest ID		3/4 6906 SS TSP-55	1 6905 1 TSP-56	FS-921 1010	· >			5		ate: Trime: Relinquished by IRS III IU30	Fime: Relinquished by:	る上ろーニ



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

July 13, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU #216 OrderNo.: 1607484

### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 7 sample(s) on 7/12/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 7/13/2016

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT: BP America Client Sample ID:** TSP-59

**Project:** GCU #216 **Collection Date:** 7/11/2016 9:05:00 AM Lab ID: 1607484-001 Matrix: SOIL Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analy	st: TOM
Diesel Range Organics (DRO)	44	10	mg/Kg	1	7/12/2016 10:43:28 A	M 26339
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/12/2016 10:43:28 A	M 26339
Surr: DNOP	87.9	70-130	%Rec	1	7/12/2016 10:43:28 A	M 26339
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	7/12/2016 10:46:49 A	M 26325
Surr: BFB	102	80-120	%Rec	1	7/12/2016 10:46:49 A	M 26325
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.022	mg/Kg	1	7/12/2016 10:46:49 A	M 26325
Toluene	ND	0.044	mg/Kg	1	7/12/2016 10:46:49 A	M 26325
Ethylbenzene	ND	0.044	mg/Kg	1	7/12/2016 10:46:49 A	M 26325
Xylenes, Total	ND	0.088	mg/Kg	1	7/12/2016 10:46:49 A	M 26325
Surr: 4-Bromofluorobenzene	91.2	80-120	%Rec	1	7/12/2016 10:46:49 A	M 26325

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

## Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 10 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

**Qualifiers:** 

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

CLIENT: BP America Client Sample ID: TSP-60

 Project:
 GCU #216
 Collection Date: 7/11/2016 9:10:00 AM

 Lab ID:
 1607484-002
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analy	zed Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	61	10	mg/Kg	1 7/12/2016 11	1:05:03 AM 26339
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1 7/12/2016 11	1:05:03 AM 26339
Surr: DNOP	91.4	70-130	%Rec	1 7/12/2016 11	1:05:03 AM 26339
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1 7/12/2016 11	1:10:22 AM 26325
Surr: BFB	116	80-120	%Rec	1 7/12/2016 1	1:10:22 AM 26325
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1 7/12/2016 11	1:10:22 AM 26325
Toluene	ND	0.038	mg/Kg	1 7/12/2016 11	1:10:22 AM 26325
Ethylbenzene	ND	0.038	mg/Kg	1 7/12/2016 1	1:10:22 AM 26325
Xylenes, Total	ND	0.075	mg/Kg	1 7/12/2016 11	1:10:22 AM 26325
Surr: 4-Bromofluorobenzene	93.2	80-120	%Rec	1 7/12/2016 11	1:10:22 AM 26325

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

## **Qualifiers:** \* Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

CLIENT: BP America Client Sample ID: TSP-61

 Project:
 GCU #216
 Collection Date: 7/11/2016 9:15:00 AM

 Lab ID:
 1607484-003
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	50	9.8	mg/Kg	1	7/12/2016 11:26:38 AM	1 26339
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/12/2016 11:26:38 AM	1 26339
Surr: DNOP	93.4	70-130	%Rec	1	7/12/2016 11:26:38 AM	1 26339
EPA METHOD 8015D: GASOLINE RAM	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	11	4.3	mg/Kg	1	7/12/2016 11:33:53 AM	1 26325
Surr: BFB	142	80-120	S %Rec	1	7/12/2016 11:33:53 AM	1 26325
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.022	mg/Kg	1	7/12/2016 11:33:53 AM	1 26325
Toluene	ND	0.043	mg/Kg	1	7/12/2016 11:33:53 AM	1 26325
Ethylbenzene	ND	0.043	mg/Kg	1	7/12/2016 11:33:53 AM	1 26325
Xylenes, Total	ND	0.087	mg/Kg	1	7/12/2016 11:33:53 AM	1 26325
Surr: 4-Bromofluorobenzene	97.5	80-120	%Rec	1	7/12/2016 11:33:53 AM	1 26325

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

## **Qualifiers:** \* Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

CLIENT: BP America Client Sample ID: TSP-62

 Project:
 GCU #216
 Collection Date: 7/11/2016 9:30:00 AM

 Lab ID:
 1607484-004
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	5			Analys	t: TOM
Diesel Range Organics (DRO)	63	9.9	mg/Kg	1	7/12/2016 11:48:36 AM	Л 26339
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/12/2016 11:48:36 AM	A 26339
Surr: DNOP	90.8	70-130	%Rec	1	7/12/2016 11:48:36 AM	A 26339
EPA METHOD 8015D: GASOLINE RAM	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	7/12/2016 11:57:21 AM	Л 26325
Surr: BFB	105	80-120	%Rec	1	7/12/2016 11:57:21 AM	A 26325
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.021	mg/Kg	1	7/12/2016 11:57:21 AM	И 26325
Toluene	ND	0.041	mg/Kg	1	7/12/2016 11:57:21 AM	A 26325
Ethylbenzene	ND	0.041	mg/Kg	1	7/12/2016 11:57:21 AM	A 26325
Xylenes, Total	ND	0.082	mg/Kg	1	7/12/2016 11:57:21 AM	A 26325
Surr: 4-Bromofluorobenzene	93.0	80-120	%Rec	1	7/12/2016 11:57:21 AM	A 26325

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H Holding times for preparation or analysis exceeded		J	Analyte detected below quantitation limits Page 4 of 10
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R RPD outside accepted recovery limits		RL	Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix		W	Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

CLIENT: BP America Client Sample ID: TSP-63

 Project:
 GCU #216
 Collection Date: 7/11/2016 9:35:00 AM

 Lab ID:
 1607484-005
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3		Ar	nalyst: TOM
Diesel Range Organics (DRO)	52	9.9	mg/Kg	1 7/12/2016 12:10:0	9 PM 26339
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1 7/12/2016 12:10:0	9 PM 26339
Surr: DNOP	92.7	70-130	%Rec	1 7/12/2016 12:10:0	9 PM 26339
EPA METHOD 8015D: GASOLINE RAM	IGE			Ar	nalyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1 7/12/2016 12:20:5	50 PM 26325
Surr: BFB	101	80-120	%Rec	1 7/12/2016 12:20:5	50 PM 26325
EPA METHOD 8021B: VOLATILES				Ar	nalyst: <b>NSB</b>
Benzene	ND	0.019	mg/Kg	1 7/12/2016 12:20:5	50 PM 26325
Toluene	ND	0.037	mg/Kg	1 7/12/2016 12:20:5	50 PM 26325
Ethylbenzene	ND	0.037	mg/Kg	1 7/12/2016 12:20:5	50 PM 26325
Xylenes, Total	ND	0.075	mg/Kg	1 7/12/2016 12:20:5	50 PM 26325
Surr: 4-Bromofluorobenzene	91.3	80-120	%Rec	1 7/12/2016 12:20:5	50 PM 26325

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

#### 

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

**CLIENT: BP America** Client Sample ID: TSP-64

**Project:** GCU #216 **Collection Date:** 7/11/2016 9:40:00 AM Lab ID: 1607484-006 Matrix: SOIL Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Q	Qual Units	DF Da	te Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	1			Analyst:	ТОМ
Diesel Range Organics (DRO)	48	10	mg/Kg	1 7/1	2/2016 12:32:16 PM	26339
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1 7/1	2/2016 12:32:16 PM	26339
Surr: DNOP	92.8	70-130	%Rec	1 7/1	2/2016 12:32:16 PM	26339
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	9.6	3.8	mg/Kg	1 7/1	2/2016 12:44:20 PM	26325
Surr: BFB	138	80-120	S %Rec	1 7/1	2/2016 12:44:20 PM	26325
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.019	mg/Kg	1 7/1	2/2016 12:44:20 PM	26325
Toluene	ND	0.038	mg/Kg	1 7/1	2/2016 12:44:20 PM	26325
Ethylbenzene	ND	0.038	mg/Kg	1 7/1	2/2016 12:44:20 PM	26325
Xylenes, Total	0.16	0.076	mg/Kg	1 7/1	2/2016 12:44:20 PM	26325
Surr: 4-Bromofluorobenzene	97.5	80-120	%Rec	1 7/1	2/2016 12:44:20 PM	26325

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Н Holding times for preparation or analysis exceeded J

Analyte detected below quantitation limits Page 6 of 10

ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit

% Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

CLIENT: BP America Client Sample ID: TSP-65

 Project:
 GCU #216
 Collection Date: 7/11/2016 9:45:00 AM

 Lab ID:
 1607484-007
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	42	9.7	mg/Kg	1	7/12/2016 12:53:56 PM	26339
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/12/2016 12:53:56 PM	26339
Surr: DNOP	91.4	70-130	%Rec	1	7/12/2016 12:53:56 PM	26339
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	4.1	3.7	mg/Kg	1	7/12/2016 1:07:49 PM	26325
Surr: BFB	127	80-120	S %Rec	1	7/12/2016 1:07:49 PM	26325
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	7/12/2016 1:07:49 PM	26325
Toluene	ND	0.037	mg/Kg	1	7/12/2016 1:07:49 PM	26325
Ethylbenzene	ND	0.037	mg/Kg	1	7/12/2016 1:07:49 PM	26325
Xylenes, Total	ND	0.075	mg/Kg	1	7/12/2016 1:07:49 PM	26325
Surr: 4-Bromofluorobenzene	96.7	80-120	%Rec	1	7/12/2016 1:07:49 PM	26325

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

## **Qualifiers:** \* Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

BP America

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607484** 

13-Jul-16

Project:	GCU #21	6									
Sample ID	LCS-26339	SampTy	pe: LC	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: <b>26</b>	339	F	RunNo: 3	5609				
Prep Date:	7/12/2016	Analysis Da	ate: 7/	12/2016	5	SeqNo: 1	102200	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	42	10	50.00	0	83.6	62.6	124			
Surr: DNOP		4.0		5.000		79.6	70	130			
Sample ID	MB-26339	SampTy	/pe: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: <b>26</b>	339	F	RunNo: 3	5609				
Prep Date:	7/12/2016	Analysis Da	ate: 7/	12/2016	9	SeqNo: 1	102201	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	ND	10								
Motor Oil Range	Organics (MRO)	ND	50								
Surr: DNOP		8.8		10.00		88.1	70	130			
Sample ID	1607484-001AMS	SampTy	/pe: <b>M</b> \$	 S	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	TSP-59	Batch	ID: <b>26</b>	339	F	RunNo: 3	5609				
Prep Date:	7/12/2016	Analysis Da	ate: <b>7/</b>	12/2016	5	SeqNo: 1	102271	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	110	10	49.90	44.07	123	33.9	141			
Surr: DNOP		4.4		4.990		88.2	70	130			
Sample ID	1607484-001AMSE	<b>S</b> ampTy	/pe: <b>M</b> \$	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	TSP-59	Batch	ID: <b>26</b>	339	F	RunNo: 3	5609				
Prep Date:	7/12/2016	Analysis Da	ate: 7/	12/2016	5	SeqNo: 1	102272	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	88	10	50.40	44.07	88.2	33.9	141	17.7	20	

### Qualifiers:

Surr: DNOP

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

4.5

5.040

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

D. Canada all Nat la Danas

90.0

70

130

Page 8 of 10

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607484** 

13-Jul-16

Client: BP America
Project: GCU #216

Sample ID MB-26325 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 26325 RunNo: 35619

Prep Date: 7/11/2016 Analysis Date: 7/12/2016 SeqNo: 1102390 Units: 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 950 1000 94.7 80 120

Sample ID LCS-26325 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 26325 RunNo: 35619

Prep Date: 7/11/2016 Analysis Date: 7/12/2016 SeqNo: 1102391 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Gasoline Range Organics (GRO)
 26
 5.0
 25.00
 0
 103
 80
 120

 Surr: BFB
 1000
 1000
 105
 80
 120

### Qualifiers:

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

That ye detected in the associated Method Bland

mits Page 9 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1607484

13-Jul-16

**Client: BP** America **Project:** GCU #216

Sample ID MB-26325 SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBS Client ID: Batch ID: 26325 RunNo: 35619 Prep Date: 7/11/2016 Analysis Date: 7/12/2016 SeqNo: 1102416 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 ND 0.050 ND 0.050

Toluene Ethylbenzene ND Xylenes, Total 0.10

Surr: 4-Bromofluorobenzene 0.91 1.000 91.2 80 120

Sample ID LCS-26325	Samp <sup>-</sup>	SampType: LCS			TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batc	h ID: <b>26</b>	325	F	RunNo: 3	5619						
Prep Date: 7/11/2016	Analysis Date: 7/12/2016			S	SeqNo: 1	102417	Units: mg/k	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.97	0.025	1.000	0	96.6	75.3	123					
Toluene	0.95	0.050	1.000	0	95.5	80	124					
Ethylbenzene	0.99	0.050	1.000	0	99.3	82.8	121					
Xylenes, Total	3.0	0.10	3.000	0	99.1	83.9	122					
Surr: 4-Bromofluorobenzene	0.97		1.000		97.0	80	120					

### Qualifiers:

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

Page 10 of 10



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: BP AMERICA-Farmington	Work Order Number:	160748	4		RcptNe	p: 1
Received by/date: A 01//2/16						
Logged By: Anne Thorne 7/	12/2016 7:50:00 AM		anne	Am	_	
Completed By: Anne Thorne 7/	12/2016		Dan.	Shum Shum		
Reviewed By:	11/12/16		Carra ,	<i>)</i> ,,		
Chain of Custody						
1. Custody seals intact on sample bottles?		Yes [	No		Not Present	
2. Is Chain of Custody complete?		Yes 🛚	<b>∠</b> No		Not Present	
3. How was the sample delivered?		Courier	:			
<u>Log In</u>						
4. Was an attempt made to cool the samples?		Yes 🛚	<b>∠</b> No	· 🗆	NA 🗆	]
5. Were all samples received at a temperature of	>0° C to 6.0°C	Yes <b>✓</b>	. 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 p	reserved?	Yes 🛂	. No			
9. Was preservative added to bottles?		Yes [	] No	✓	NA 🗆	
10.VOA vials have zero headspace?		Yes [	] No		No VOA Vials <b>✓</b>	
11. Were any sample containers received broken?		Yes [	□ No	<b>Y</b>		
			_	_	# of preserved bottles checked	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🛂	No No		for pH: (<2	or >12 unless noted)
13. Are matrices correctly identified on Chain of Cu	stody?	Yes 🔽	No		Adjusted?	
14. Is it clear what analyses were requested?	•	Yes 🗹	. No			
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:	Date					
By Whom:	Via:	] eMail	☐ Phone ☐	Fax	In Person	
Regarding:	and the state of t					
Client Instructions:		W120-11. 12. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	The state of the s	ment variously and	and the term of the second of	
17. Additional remarks:	<u>-</u>	_		** *		J
18. Cooler Information  Cooler No. Temp °C Condition Seal  1 1.0 Good Yes	Intact   Seal No   Se	eal Date	Signed I	Ву		

Chain-of-Custody Record Turn-A lient: \$\insert{C} \insert{C} \cdot \text{Lower}  \text{R} \\ \text{Died} \\ \text{Project} \\ \text{hole #: } \insert{Sos-326-9497} \end{Arta}  \text{Project} \\ \text{mail or Fax#: } \insert{Stevten. moskel @bp.com} \\ \text{Project} \\ \text{Moc} \\ \text{Project} \\	round Time: Salme	Rush TAT ANAL		GCL #216 4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975	Analysis Request	(\(\frac{1}{2}\))	HENE MASKED IS)	Danny (Swrms (Signal ) (Si	D & Burns, (1.2)	AO SO SI A SO SO SO SO SO SO SO SO SO SO SO SO SO	bo bo bo \( \rangle \text{\lambda} \)	Preservative HEAL No. Type //ocide	N4 201		X X 802			X X 9%					low	
Carry   Carstody   Carry   C				4901 Hav	Tel. 505-		-		_	<u>a</u> )(	วยร	3)/8	35108 H9T	X	$\searrow$	X	Z	X	X,	X				arks:	
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Adress:    Second   Turn-Around Time:   Columbia   Colu	Same	sh TAT		F216			•	Masked	Burns	· ·				102	202	8/12	1002-	2002	9,702	100		:	<b>\</b>	Date Time C7/12/16	Date Time
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Time: Relinquisher	stody Record	wer 48				~~	Moskal		□ Level 4 (Full Validation)					TSP-59	TSP-60	TSP-61	Tsp-62	TsP-63	TSP-64	188-65				Mad b	d by:
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

July 15, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU #216 OrderNo.: 1607628

### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/14/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

## Date Reported: 7/15/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-66

 Project:
 GCU #216
 Collection Date: 7/13/2016 1:05:00 PM

 Lab ID:
 1607628-001
 Matrix: MEOH (SOIL)
 Received Date: 7/14/2016 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	6		Analyst:	ТОМ
Diesel Range Organics (DRO)	20	9.7	mg/Kg	1 7/14/2016 12:19:38 PM	26392
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1 7/14/2016 12:19:38 PM	26392
Surr: DNOP	94.4	70-130	%Rec	1 7/14/2016 12:19:38 PM	26392
EPA METHOD 8015D: GASOLINE RAN	IGE			Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1 7/14/2016 11:32:10 AM	A35699
Surr: BFB	95.6	80-120	%Rec	1 7/14/2016 11:32:10 AM	A35699
EPA METHOD 8021B: VOLATILES				Analyst:	NSB
Benzene	ND	0.022	mg/Kg	1 7/14/2016 11:32:10 AM	B35699
Toluene	ND	0.044	mg/Kg	1 7/14/2016 11:32:10 AM	B35699
Ethylbenzene	ND	0.044	mg/Kg	1 7/14/2016 11:32:10 AM	B35699
Xylenes, Total	ND	0.088	mg/Kg	1 7/14/2016 11:32:10 AM	B35699
Surr: 4-Bromofluorobenzene	99.4	80-120	%Rec	1 7/14/2016 11:32:10 AM	B35699

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 1 of 9 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

## Date Reported: 7/15/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-67

 Project:
 GCU #216
 Collection Date: 7/13/2016 1:10:00 PM

 Lab ID:
 1607628-002
 Matrix: MEOH (SOIL)
 Received Date: 7/14/2016 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	6		Analysi	:: TOM
Diesel Range Organics (DRO)	33	9.8	mg/Kg	1 7/14/2016 12:41:15 PM	26392
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1 7/14/2016 12:41:15 PM	26392
Surr: DNOP	96.9	70-130	%Rec	1 7/14/2016 12:41:15 PM	26392
EPA METHOD 8015D: GASOLINE RAN	IGE			Analyst	: NSB
Gasoline Range Organics (GRO)	5.3	4.6	mg/Kg	1 7/14/2016 11:56:31 AM	A35699
Surr: BFB	105	80-120	%Rec	1 7/14/2016 11:56:31 AM	A35699
EPA METHOD 8021B: VOLATILES				Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1 7/14/2016 11:56:31 AM	B35699
Toluene	ND	0.046	mg/Kg	1 7/14/2016 11:56:31 AM	B35699
Ethylbenzene	ND	0.046	mg/Kg	1 7/14/2016 11:56:31 AM	B35699
Xylenes, Total	ND	0.092	mg/Kg	1 7/14/2016 11:56:31 AM	B35699
Surr: 4-Bromofluorobenzene	99.1	80-120	%Rec	1 7/14/2016 11:56:31 AM	B35699

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 2 of 9 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

## Date Reported: 7/15/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-68

 Project:
 GCU #216
 Collection Date: 7/13/2016 1:15:00 PM

 Lab ID:
 1607628-003
 Matrix: MEOH (SOIL)
 Received Date: 7/14/2016 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	6		Analys	t: TOM
Diesel Range Organics (DRO)	22	9.9	mg/Kg	1 7/14/2016 1:03:05 PM	26392
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1 7/14/2016 1:03:05 PM	26392
Surr: DNOP	99.5	70-130	%Rec	1 7/14/2016 1:03:05 PM	26392
EPA METHOD 8015D: GASOLINE RAN	IGE			Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1 7/14/2016 12:20:49 PM	1 A35699
Surr: BFB	88.1	80-120	%Rec	1 7/14/2016 12:20:49 PM	1 A35699
EPA METHOD 8021B: VOLATILES				Analys	t: NSB
Benzene	ND	0.021	mg/Kg	1 7/14/2016 12:20:49 PM	1 B35699
Toluene	ND	0.042	mg/Kg	1 7/14/2016 12:20:49 PM	1 B35699
Ethylbenzene	ND	0.042	mg/Kg	1 7/14/2016 12:20:49 PM	1 B35699
Xylenes, Total	ND	0.084	mg/Kg	1 7/14/2016 12:20:49 PM	1 B35699
Surr: 4-Bromofluorobenzene	89.9	80-120	%Rec	1 7/14/2016 12:20:49 PM	1 B35699

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 3 of 9 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

## Date Reported: 7/15/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-69

 Project:
 GCU #216
 Collection Date: 7/13/2016 1:20:00 PM

 Lab ID:
 1607628-004
 Matrix: MEOH (SOIL)
 Received Date: 7/14/2016 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	6		Analyst:	ТОМ
Diesel Range Organics (DRO)	28	9.8	mg/Kg	1 7/14/2016 1:25:04 PM	26392
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1 7/14/2016 1:25:04 PM	26392
Surr: DNOP	90.7	70-130	%Rec	1 7/14/2016 1:25:04 PM	26392
EPA METHOD 8015D: GASOLINE RAN	IGE			Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1 7/14/2016 12:45:06 PM	A35699
Surr: BFB	101	80-120	%Rec	1 7/14/2016 12:45:06 PM	A35699
EPA METHOD 8021B: VOLATILES				Analyst:	NSB
Benzene	ND	0.020	mg/Kg	1 7/14/2016 12:45:06 PM	B35699
Toluene	ND	0.041	mg/Kg	1 7/14/2016 12:45:06 PM	B35699
Ethylbenzene	ND	0.041	mg/Kg	1 7/14/2016 12:45:06 PM	B35699
Xylenes, Total	ND	0.082	mg/Kg	1 7/14/2016 12:45:06 PM	B35699
Surr: 4-Bromofluorobenzene	98.4	80-120	%Rec	1 7/14/2016 12:45:06 PM	B35699

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 4 of 9 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

## Date Reported: 7/15/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-70

 Project:
 GCU #216
 Collection Date: 7/13/2016 1:25:00 PM

 Lab ID:
 1607628-005
 Matrix: MEOH (SOIL)
 Received Date: 7/14/2016 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	5		Analyst	: TOM
Diesel Range Organics (DRO)	29	9.7	mg/Kg	1 7/14/2016 2:10:48 PM	26392
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1 7/14/2016 2:10:48 PM	26392
Surr: DNOP	92.6	70-130	%Rec	1 7/14/2016 2:10:48 PM	26392
EPA METHOD 8015D: GASOLINE RAN	IGE			Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1 7/14/2016 1:09:27 PM	A35699
Surr: BFB	91.3	80-120	%Rec	1 7/14/2016 1:09:27 PM	A35699
EPA METHOD 8021B: VOLATILES				Analyst	: NSB
Benzene	ND	0.021	mg/Kg	1 7/14/2016 1:09:27 PM	B35699
Toluene	ND	0.043	mg/Kg	1 7/14/2016 1:09:27 PM	B35699
Ethylbenzene	ND	0.043	mg/Kg	1 7/14/2016 1:09:27 PM	B35699
Xylenes, Total	ND	0.086	mg/Kg	1 7/14/2016 1:09:27 PM	B35699
Surr: 4-Bromofluorobenzene	90.7	80-120	%Rec	1 7/14/2016 1:09:27 PM	B35699

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	
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 5 of 9	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	8 % Recovery outside of range due to dilution or matrix W Sample container temperature is out of limit			

## Date Reported: 7/15/2016

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT: BP America** Client Sample ID: TSP-71

**Project:** GCU #216 **Collection Date:** 7/13/2016 1:30:00 PM Lab ID: 1607628-006 Matrix: MEOH (SOIL) **Received Date:** 7/14/2016 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analyst	том
Diesel Range Organics (DRO)	28	9.4	mg/Kg	1	7/14/2016 2:32:40 PM	26392
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/14/2016 2:32:40 PM	26392
Surr: DNOP	92.8	70-130	%Rec	1	7/14/2016 2:32:40 PM	26392
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	7/14/2016 1:33:46 PM	A35699
Surr: BFB	91.1	80-120	%Rec	1	7/14/2016 1:33:46 PM	A35699
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.021	mg/Kg	1	7/14/2016 1:33:46 PM	B35699
Toluene	ND	0.043	mg/Kg	1	7/14/2016 1:33:46 PM	B35699
Ethylbenzene	ND	0.043	mg/Kg	1	7/14/2016 1:33:46 PM	B35699
Xylenes, Total	ND	0.086	mg/Kg	1	7/14/2016 1:33:46 PM	B35699
Surr: 4-Bromofluorobenzene	92.7	80-120	%Rec	1	7/14/2016 1:33:46 PM	B35699

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 9 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

**BP** America

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1607628

Qual

**RPDLimit** 

15-Jul-16

**Project:** GCU #216 Sample ID LCS-26392 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 26392 RunNo: 35684 Prep Date: 7/14/2016 Analysis Date: 7/14/2016 SeqNo: 1104052 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Diesel Range Organics (DRO) 42 10 O 62.6 50.00 84.2 124 Surr: DNOP 4.0 5.000 79.9 70 130 Sample ID MB-26392 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 26392 RunNo: 35684

Prep Date: 7/14/2016 Analysis Date: 7/14/2016 SeqNo: 1104053 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit Analyte Result **PQL** HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 ND 50 Motor Oil Range Organics (MRO) Surr: DNOP 10.00 84.5 130

Sample ID LCS-26389 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 26389 RunNo: 35685 Prep Date: 7/14/2016 Analysis Date: 7/14/2016 SeqNo: 1104054 Units: %Rec Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: DNOP 4.9 5.000 97.3 70 130

Sample ID MB-26389 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 26389 RunNo: 35685 Prep Date: 7/14/2016 Analysis Date: 7/14/2016 SeqNo: 1104055 Units: %Rec Analyte SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Surr: DNOP 9.6 10.00 95.5 70 130

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

Е Value above quantitation range

J Analyte detected below quantitation limits

Page 7 of 9

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1607628

15-Jul-16

**Client: BP** America **Project:** GCU #216

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

PBS Client ID: Batch ID: A35699 RunNo: 35699

Prep Date: Analysis Date: 7/14/2016 SeqNo: 1105050 Units: 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 860 1000 86.5 80 120

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS RunNo: 35699 Batch ID: A35699

Prep Date: Analysis Date: 7/14/2016 SeqNo: 1105051 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 5.0 25.00 99.2 80 120 870 1000 87.2 80 Surr: BFB 120

### Qualifiers:

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

Page 8 of 9

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607628** 

15-Jul-16

Client: BP America
Project: GCU #216

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBS Client ID: Batch ID: **B35699** RunNo: 35699 Prep Date: Analysis Date: 7/14/2016 SeqNo: 1105056 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 Toluene ND 0.050

120

| TestCode: FPA Method 802

Sample ID 100NG BTEX LC	TestCode: EPA Method 8021B: Volatiles											
Client ID: LCSS Batch ID: B35699				F	RunNo: <b>35699</b>							
Prep Date:	Analysis [	Date: 7/	14/2016	S	SeqNo: 1	105057	Units: mg/K	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	1.0	0.025	1.000	0	101	75.3	123					
Toluene	0.92	0.050	1.000	0	92.2	80	124					
Ethylbenzene	0.90	0.050	1.000	0	90.4	82.8	121					
Xylenes, Total	2.7	0.10	3.000	0	89.8	83.9	122					
Surr: 4-Bromofluorobenzene	0.91		1.000		91.0	80	120					

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 9 of 9



Hall Environmental Analysis Laboratory 4901 Howkins NE Albuquerque, NM 87109

Sample Log-In Check List

TEL. 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Client Name: LTE	Work Order Number:	1607628	1		ReptNo: 1
Received by/date:	857 140 KC				
Logged By: Lindsay Mangin	7/14/2016 8:15:00 AM		Charles H.	Harage	
Completed By: Lindsay Mangin	7/14/2016 8:37:31 AM		A Litt	la	
Reviewed By:	atherly		00	0	
Chain of Custody	0 1/17/10				
1 Custody seals intact on sample bottles	2	Yes -	No	Not	Present 🗸
2. Is Chain of Custody complete?		Yes V		_	Present []
3. How was the sample delivered?		Courier			
Log In					
4. Was an attempt made to cool the same	ples?	Yes 🗹	No.	0	NA L
5. Were all samples received at a temper	rature of >0° C to 6.0°C	Yes 🗸	No.	9	NA L
6 Sample(s) in proper container(s)?		Yes V	No		
7 Sufficient sample volume for indicated	test(s)?	Yes V	No		
8 Are samples (except VOA and ONG) p	roperly preserved?	Yes V	No		
9. Was preservative added to bottles?		Yes 🗌	No 1	~	NA C
10. VOA vials have zero headspace?		Yes 🗌	No. I	No VO	A Vials
11, Were any sample containers received	broken?	Yes	No		and the second s
44.30		-		bottles	eserved checked
12. Does paperwork match bottle labels? (Note discrepancies on chain of custod	v)	Yes V	No	for pH:	(<2 or >12 unless noted
13. Are matrices correctly identified on Cha	The state of the s	Yes V	No I	3 2	Adjusted?
14_ls it clear what analyses were requeste	The land of the la	Yes V	No [		
15. Were all holding times able to be met? (If no, notify customer for authorization.	1	Yes 🗸	No [	C	hecked by:
Special Handling (if applicable)					
16. Was client notified of all discrepancies	with this order?	Yes .	No.		NA 🗸
Person Notified:	Date			_	
By Whom:	Via:	eMail	Phone F	ax In Pe	erson
Regarding:					
Client Instructions:					
17. Additional remarks:					
18 Cooler Information					
Cooler No Temp °C Condition	Seal Intact   Seal No   S	eal Date	Signed By		

HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	HEAL NO.  BTEX + MTBE + TM8's (8021)  TPH 8015B (GRO) DRD (MRD)  TPH 8015B (GRO) DRD (MRD)  TPH (Method 504.1)  EDB (Method 504.1)  RCRA 8 Metals  Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )  Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )  8250 (Semi-VOA)  8270 (Semi-VOA)			Date Time Remarks:    1/3   v   v c c c c c c c c c c c c c c c c
Turn-Around Time: Sawle  Standard Krush cloud  Project Name:  (-Cu # 216  Project #:	Project Manager:  Sampler:  Sampler:  Sample Temperature:  Container  Type and #  Type  Type and #  Type  Type	T V Zoh		
Chain-of-Custody Record ient: BP- Lo wer 48 ailing Address:  חחר א א א א א א א א א א א א א א א א א א	ax#: steven. Moskal @bp.am  ckage: aburns @ ItemV.com  Ind	\$\$	1325 158-67 1325 TSP-70 1330 V TSP-71	ate: Time: Relinquished by:    13/1c   1904   Chart Lease   Received by:



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

July 18, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU 216 OrderNo.: 1607690

## Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 2 sample(s) on 7/15/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

## **Analytical Report**

## Lab Order **1607690**Date Reported: **7/18/2016**

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: NW-01@33'

 Project:
 GCU 216
 Collection Date: 7/14/2016 10:10:00 AM

 Lab ID:
 1607690-001
 Matrix: MEOH (SOIL)
 Received Date: 7/15/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/15/2016 10:25:17 AN	1 26416
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/15/2016 10:25:17 AM	1 26416
Surr: DNOP	91.5	70-130	%Rec	1	7/15/2016 10:25:17 AN	1 26416
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	7/15/2016 11:56:16 AM	1 A35730
Surr: BFB	87.2	80-120	%Rec	1	7/15/2016 11:56:16 AM	1 A35730
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.020	mg/Kg	1	7/15/2016 11:56:16 AM	1 B35730
Toluene	ND	0.039	mg/Kg	1	7/16/2016 2:11:13 PM	A35745
Ethylbenzene	ND	0.039	mg/Kg	1	7/15/2016 11:56:16 AM	B35730
Xylenes, Total	ND	0.078	mg/Kg	1	7/15/2016 11:56:16 AM	1 B35730
Surr: 4-Bromofluorobenzene	96.4	80-120	%Rec	1	7/15/2016 11:56:16 AM	1 B35730

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

### Qualifiers:

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

## **Analytical Report**

## Lab Order **1607690**Date Reported: **7/18/2016**

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: B-NW01@33'

 Project:
 GCU 216
 Collection Date: 7/14/2016 10:15:00 AM

 Lab ID:
 1607690-002
 Matrix: MEOH (SOIL)
 Received Date: 7/15/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	6		Anal	yst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1 7/15/2016 10:46:57	AM 26416
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1 7/15/2016 10:46:57	AM 26416
Surr: DNOP	87.7	70-130	%Rec	1 7/15/2016 10:46:57	AM 26416
EPA METHOD 8015D: GASOLINE RAN	IGE			Anal	yst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1 7/15/2016 12:20:39	PM A35730
Surr: BFB	88.5	80-120	%Rec	1 7/15/2016 12:20:39	PM A35730
EPA METHOD 8021B: VOLATILES				Anal	yst: <b>NSB</b>
Benzene	ND	0.020	mg/Kg	1 7/15/2016 12:20:39	PM B35730
Toluene	ND	0.040	mg/Kg	1 7/16/2016 2:34:43 P	M A35745
Ethylbenzene	ND	0.040	mg/Kg	1 7/15/2016 12:20:39	PM B35730
Xylenes, Total	ND	0.079	mg/Kg	1 7/15/2016 12:20:39	PM B35730
Surr: 4-Bromofluorobenzene	96.3	80-120	%Rec	1 7/15/2016 12:20:39	PM B35730

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 2 of 5 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1607690

18-Jul-16

**Client:** BP America **Project:** GCU 216

Sample ID LCS-26416 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 26416 RunNo: 35729 SeqNo: 1105693 Prep Date: 7/15/2016 Analysis Date: 7/15/2016 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 41 50.00 0 81.5 62.6 124 Surr: DNOP 5.000 79.1 4.0 70 130

Sample ID MB-26416 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Batch ID: 26416 Client ID: PBS RunNo: 35729 Prep Date: 7/15/2016 Analysis Date: 7/15/2016 SeqNo: 1105694 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND

Diosof Range Organios (Dico)	.,,					
Motor Oil Range Organics (MRO)	ND	50				
Surr: DNOP	8.8		10.00	88.1	70	130

### Qualifiers:

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

Page 3 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607690** 

18-Jul-16

Client: BP America
Project: GCU 216

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: A35730 RunNo: 35730

Prep Date: Analysis Date: 7/15/2016 SeqNo: 1105921 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) O 80 26 5.0 25.00 105 120

Surr: BFB 930 1000 92.8 80 120

Sample ID MB-26404 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 26404 RunNo: 35730

Prep Date: 7/14/2016 Analysis Date: 7/15/2016 SeqNo: 1105939 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 880 1000 87.5 80 120

Sample ID LCS-26404 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 26404 RunNo: 35730

Prep Date: 7/14/2016 Analysis Date: 7/15/2016 SeqNo: 1105940 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 960 1000 95.8 80 120

Sample ID B32 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: A35730 RunNo: 35730

Prep Date: Analysis Date: 7/15/2016 SeqNo: 1106031 Units: 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 890 1000 89.4 80 120

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 4 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607690** 

Qual

18-Jul-16

 Client: BP America

 Project:
 GCU 216

 Sample ID 5ML RB
 SampType: MBLK
 TestCode: EPA Method 8021B: Volatiles

 Client ID: PBS
 Batch ID: B35730
 RunNo: 35730

 Prep Date:
 Analysis Date: 7/15/2016
 SeqNo: 1105946
 Units: mg/Kg

AnalyteResultPQLSPK valueSPK Ref Val%RECLowLimitHighLimit%RPDRPDLimitBenzeneND0.025EthylbenzeneND0.050

Ethylbenzene ND 0.050

Xylenes, Total ND 0.10

 Surr: 4-Bromofluorobenzene
 0.83
 1.000
 83.5
 80
 120

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: **B35730** RunNo: 35730 Prep Date: Analysis Date: 7/15/2016 SeqNo: 1105947 Units: mg/Kg %REC **RPDLimit** Analyte Result POI SPK value SPK Ref Val LowLimit HighLimit %RPD Qual Benzene 1.1 0.025 1.000 0 105 75.3 123 0 121 0.95 0.050 94.8 82.8 Ethylbenzene 1.000 Xylenes, Total 2.8 0.10 3.000 0 95.0 83.9 122 1.000 105 80 120 Surr: 4-Bromofluorobenzene 1.1

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: A35745 RunNo: 35745 Prep Date: Analysis Date: 7/16/2016 SeqNo: 1106018 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Toluene ND 0.050
Surr: 4-Bromofluorobenzene 0.95 1.000 95.3 80

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: A35745 RunNo: 35745

Prep Date: Analysis Date: 7/16/2016 SeqNo: 1106019 Units: mg/Kg

SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result **PQL** SPK value LowLimit Qual 0.97 97.1 Toluene 0.050 1.000 0 80 124 80 Surr: 4-Bromofluorobenzene 1.0 1.000 102 120

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

120

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 5 of 5



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

## Sample Log-In Check List

Website' www.hallenvironmental.com Client Name: BP AMERICA-Farmington Work Order Number: 1607690 RoptNo: 1 Received by/date Logged By: Lindsay Mangin 7/15/2016 7:50:00 AM Completed By: Lindsay Mangin 7/15/2016 8:06:59 AM Reviewed By: Chain of Custody 1 Custody seals intact on sample bottles? Not Present 🗸 Yes 2. Is Chain of Custody complete? No Not Present Yes 3. How was the sample delivered? Couner Log In 4 Was an attempt made to cool the samples? No NA Yes V No \_ NA. 5 Were all samples received at a temperature of >0° C to 6.0°C Yes V Sample(s) in proper container(s)? Yes V No 🗌 7 Sufficient sample volume for indicated test(s)? No Yes 8. Are samples (except VOA and ONG) properly preserved? No \_ No Y 9 Was preservative added to hottles? NA I Yes No. No VOA Vials V 10. VOA vials have zero headspace? Yes 11. Were any sample containers received broken? No V Yes # of preserved bottles checked 12. Does paperwork match bottle labels? Yes V No. for pH: (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No. 13. Are matrices correctly identified on Chain of Custody? 14 is it clear what analyses were requested? No . Checked by: 15. Were all holding times able to be met? No Yes V (If no, notify customer for authorization.) Special Handling (if applicable) Yes \_\_\_ 16. Was client notified of all discrepancies with this order? No L NA V Person Notified: Date By Whom: Via: eMail Phone Fax In Person Regarding Client Instructions: 17. Additional remarks 18. Cooler Information Cooler No Temp °C Condition Seal Intact | Seal No. Seal Date Signed By

Good

HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	H's (Method 418.1)  Method 504.1)  AH's (8310 or 8270 SIMS)  AH's (8310 or 8270 SIMS)  Inions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )  Metals  Mone (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )  Mone (P,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )  Mone (P,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )  Mone (P,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> )  Mone (Semi-VOA)  The Bubbles (Y or N)	Thacted data will be clearly notated on the analytical report.
4901 Ha	Tel. 505	TEX+ MINSE + TMB's (8021) TEX + MTBE + TPH (Gas only) PH 8015B (GRO) (QRO)	
Turn-Around Time:  Standard  Riving Came  Riving Came  C. C. H. #216	Project #:	Project Manager: Steve Costal - BP  Sampler: On Ice: A Yes D No Sample Temperature: L.L.  Container Preservative HEAL No. Type and # Type	Date Time  Date Time  Date Time  Date Time  Date Time  Date Time  Itel aboratories. This serves as notice of this stress as notice of this serves.
Chain-of-Custody Record ient: Br Lower 48 ailing Address:	1000 # 78 184 4477 SS 374 9497	nail or Fax#: Steven - Mostal (2) bp. com  4/OC Package: Churns Content of the full Validation)  Standard	14    10   5   NW-0 @33' 402 - 14    10   5   8 - NW0 @33' 402 - 15    14    16



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

July 22, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU 216 OrderNo.: 1607858

## Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/19/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/22/2016

CLIENT: BP America Client Sample ID: TSP-72

 Project:
 GCU 216
 Collection Date: 7/18/2016 12:00:00 PM

 Lab ID:
 1607858-001
 Matrix: MEOH (SOIL)
 Received Date: 7/19/2016 8:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	3			Analyst: <b>TOM</b>	
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/19/2016 10:28:44 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/19/2016 10:28:44 AM
Surr: DNOP	100	70-130	%Rec	1	7/19/2016 10:28:44 AM
EPA METHOD 8015D: GASOLINE RAM				Analyst: NSB	
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	7/19/2016 10:00:13 AM
Surr: BFB	99.0	80-120	%Rec	1	7/19/2016 10:00:13 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.021	mg/Kg	1	7/19/2016 10:00:13 AM
Toluene	ND	0.043	mg/Kg	1	7/19/2016 10:00:13 AM
Ethylbenzene	ND	0.043	mg/Kg	1	7/19/2016 10:00:13 AM
Xylenes, Total	ND	0.086	mg/Kg	1	7/19/2016 10:00:13 AM
Surr: 4-Bromofluorobenzene	94.8	80-120	%Rec	1	7/19/2016 10:00:13 AM

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

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/22/2016

CLIENT: BP America Client Sample ID: TSP-73

 Project:
 GCU 216
 Collection Date: 7/18/2016 12:05:00 PM

 Lab ID:
 1607858-002
 Matrix: MEOH (SOIL)
 Received Date: 7/19/2016 8:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analyst: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/19/2016 10:50:27 AM
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	7/19/2016 10:50:27 AM
Surr: DNOP	103	70-130	%Rec	1	7/19/2016 10:50:27 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	7/19/2016 10:23:35 AM
Surr: BFB	97.7	80-120	%Rec	1	7/19/2016 10:23:35 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.021	mg/Kg	1	7/19/2016 10:23:35 AM
Toluene	ND	0.042	mg/Kg	1	7/19/2016 10:23:35 AM
Ethylbenzene	ND	0.042	mg/Kg	1	7/19/2016 10:23:35 AM
Xylenes, Total	ND	0.085	mg/Kg	1	7/19/2016 10:23:35 AM
Surr: 4-Bromofluorobenzene	89.4	80-120	%Rec	1	7/19/2016 10:23:35 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/22/2016

CLIENT: BP America Client Sample ID: TSP-74

 Project:
 GCU 216
 Collection Date: 7/18/2016 12:10:00 PM

 Lab ID:
 1607858-003
 Matrix: MEOH (SOIL)
 Received Date: 7/19/2016 8:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	20	10	mg/Kg	1	7/19/2016 11:12:17 AM
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	7/19/2016 11:12:17 AM
Surr: DNOP	103	70-130	%Rec	1	7/19/2016 11:12:17 AM
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	7/19/2016 10:47:07 AM
Surr: BFB	106	80-120	%Rec	1	7/19/2016 10:47:07 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1	7/19/2016 10:47:07 AM
Toluene	ND	0.038	mg/Kg	1	7/19/2016 10:47:07 AM
Ethylbenzene	ND	0.038	mg/Kg	1	7/19/2016 10:47:07 AM
Xylenes, Total	ND	0.075	mg/Kg	1	7/19/2016 10:47:07 AM
Surr: 4-Bromofluorobenzene	93.9	80-120	%Rec	1	7/19/2016 10:47:07 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 7/22/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-75

 Project:
 GCU 216
 Collection Date: 7/18/2016 12:15:00 PM

 Lab ID:
 1607858-004
 Matrix: MEOH (SOIL)
 Received Date: 7/19/2016 8:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/19/2016 11:33:55 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/19/2016 11:33:55 AM
Surr: DNOP	106	70-130	%Rec	1	7/19/2016 11:33:55 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	7/19/2016 11:10:40 AM
Surr: BFB	104	80-120	%Rec	1	7/19/2016 11:10:40 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	7/19/2016 11:10:40 AM
Toluene	ND	0.040	mg/Kg	1	7/19/2016 11:10:40 AM
Ethylbenzene	ND	0.040	mg/Kg	1	7/19/2016 11:10:40 AM
Xylenes, Total	ND	0.079	mg/Kg	1	7/19/2016 11:10:40 AM
Surr: 4-Bromofluorobenzene	94.7	80-120	%Rec	1	7/19/2016 11:10:40 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/22/2016

CLIENT: BP America Client Sample ID: TSP-76

 Project:
 GCU 216
 Collection Date: 7/18/2016 12:20:00 PM

 Lab ID:
 1607858-005
 Matrix: MEOH (SOIL)
 Received Date: 7/19/2016 8:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	11	9.7	mg/Kg	1	7/19/2016 11:55:40 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/19/2016 11:55:40 AM
Surr: DNOP	102	70-130	%Rec	1	7/19/2016 11:55:40 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	7/19/2016 11:34:09 AM
Surr: BFB	100	80-120	%Rec	1	7/19/2016 11:34:09 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1	7/19/2016 11:34:09 AM
Toluene	ND	0.039	mg/Kg	1	7/19/2016 11:34:09 AM
Ethylbenzene	ND	0.039	mg/Kg	1	7/19/2016 11:34:09 AM
Xylenes, Total	ND	0.077	mg/Kg	1	7/19/2016 11:34:09 AM
Surr: 4-Bromofluorobenzene	94.2	80-120	%Rec	1	7/19/2016 11:34:09 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/22/2016

CLIENT: BP America Client Sample ID: TSP-77

 Project:
 GCU 216
 Collection Date: 7/18/2016 12:25:00 PM

 Lab ID:
 1607858-006
 Matrix: MEOH (SOIL)
 Received Date: 7/19/2016 8:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/19/2016 12:17:19 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/19/2016 12:17:19 PM
Surr: DNOP	107	70-130	%Rec	1	7/19/2016 12:17:19 PM
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	7/19/2016 11:57:40 AM
Surr: BFB	102	80-120	%Rec	1	7/19/2016 11:57:40 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	7/19/2016 11:57:40 AM
Toluene	ND	0.039	mg/Kg	1	7/19/2016 11:57:40 AM
Ethylbenzene	ND	0.039	mg/Kg	1	7/19/2016 11:57:40 AM
Xylenes, Total	ND	0.079	mg/Kg	1	7/19/2016 11:57:40 AM
Surr: 4-Bromofluorobenzene	95.6	80-120	%Rec	1	7/19/2016 11:57:40 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

BP America

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1607858

22-Jul-16

Project: GCU 216	5									
Sample ID LCS-26469	SampType: L	.cs	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID: LCSS	Batch ID: 2	26469	F	RunNo: 3	5794					
Prep Date: 7/19/2016	Analysis Date:	7/19/2016	9	SeqNo: 1	107946	Units: mg/k	<b>K</b> g			
Analyte	Result PQL	. SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO) Surr: DNOP	52 1 5.3	0 50.00 5.000	0	105 106	62.6 70	124 130				
Sample ID MB-26469	SampType: I	//BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID: PBS	Batch ID: 2	26469	F	RunNo: 3	5794					
Prep Date: 7/19/2016	Analysis Date:	7/19/2016	\$	SeqNo: 1	107947	Units: mg/l	<b>K</b> g			
Analyte	Result PQL	. SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND 1	•								
Motor Oil Range Organics (MRO) Surr: DNOP	ND 5 9.3	0 10.00		93.0	70	130				
Sample ID 1607858-001AMS	SampType: I	<b>I</b> S	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID: TSP-72	Batch ID: 2	26469	RunNo: <b>35794</b>							
Prep Date: 7/19/2016	Analysis Date:	7/19/2016	9	SeqNo: 1	108007	Units: mg/k	<b>K</b> g			
Analyte	Result PQL	. SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO) Surr: DNOP	58 9. 5.3	6 48.22 4.822		103 110	33.9 70	141 130				
Sample ID 1607858-001AMS	D SampType: N	//SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID: TSP-72	Batch ID: 2	26469	F	RunNo: 3	5794					
Prep Date: 7/19/2016	Analysis Date:	7/19/2016	9	SeqNo: 1	108008	Units: mg/k	<b>K</b> g			
Analyte	Result PQL	. SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	62 9.			110	33.9	141	6.70	20		
Surr: DNOP	5.5	4.864		113	70	130	0	0		
Sample ID LCS-26455	SampType: <b>I</b>	.cs	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID: LCSS	Batch ID: 2	6455	F	RunNo: 3	5794					
Prep Date: 7/18/2016	Analysis Date:	7/20/2016	9	SeqNo: 1	108851	Units: %Re	c			
Analyte	Result PQL	. SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	5.0	5.000		99.7	70	130				
Sample ID MB-26455	SampType: I	/IBLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID: PBS	Batch ID: 2	26455	F	RunNo: 3	5794					
Prep Date: 7/18/2016	Analysis Date:	7/20/2016	\$	SeqNo: 1	108853	Units: %Re	C			
Analyte	Result PQL	. SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	

### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range

J Analyte detected below quantitation limits

Page 7 of 11

P Sample pH Not In Range

Reporting Detection Limit RL

Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607858** 

22-Jul-16

Client: BP America
Project: GCU 216

Sample ID MB-26455 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 26455 RunNo: 35794

Prep Date: 7/18/2016 Analysis Date: 7/20/2016 SeqNo: 1108853 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 10 10.00 102 70 130

Sample ID LCS-26464 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 26464 RunNo: 35794

Prep Date: 7/19/2016 Analysis Date: 7/20/2016 SeqNo: 1109636 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 5.9 5.000 118 70 130

Sample ID MB-26464 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 26464 RunNo: 35794

Prep Date: 7/19/2016 Analysis Date: 7/20/2016 SeqNo: 1109637 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 11 10.00 107 70 130

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 8 of 11

BP America

**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1607858** 

22-Jul-16

Project:	GCU 216	·									
Sample ID	5ML RB	SampT	ype: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID:	PBS	Batch	ID: <b>A3</b>	5795	R	RunNo: 3	5795				
Prep Date:		Analysis Da	ate: <b>7/</b>	/19/2016	S	SeqNo: 1	108339	Units: mg/k	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
•	ge Organics (GRO)	ND	5.0								
Surr: BFB		1000		1000		101	80	120			
Sample ID	2.5UG GRO LCS	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID:	LCSS	Batch	ID: <b>A3</b>	5795	R	RunNo: 3	5795				
Prep Date:		Analysis Da	ate: <b>7/</b>	/19/2016	S	SeqNo: 1	108342	Units: mg/k	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	25	5.0	25.00	0	99.9	80	120			
Surr: BFB		1100		1000		110	80	120			
Sample ID 1607858-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range											
Sample ID	1607858-001AMS	SampT	ype: <b>M</b> \$	S	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Sample ID Client ID:			ype: <b>M</b> \$ ID: <b>A</b> 3			tCode: El tunNo: 3		8015D: Gaso	oline Rang	e	
	TSP-72		ID: A3	5795	R		5795	8015D: Gase Units: mg/F	_	e	
Client ID:	TSP-72	Batch	ID: A3	5795 /19/2016	R	RunNo: 3	5795		_	<b>e</b> RPDLimit	Qual
Client ID: Prep Date: Analyte Gasoline Rang	TSP-72	Batch Analysis Da Result 23	ID: <b>A3</b> ate: <b>7</b> /	25795 219/2016 SPK value 21.42	R S	RunNo: <b>3</b> SeqNo: <b>1</b> %REC 108	5795 108343 LowLimit 59.3	Units: mg/F HighLimit 143	√g		Qual
Client ID: Prep Date: Analyte	TSP-72	Batch Analysis Da Result	ID: <b>A3</b> ate: <b>7</b> /	5 <b>5795</b> <b>19/2016</b> SPK value	SPK Ref Val	RunNo: 3 SeqNo: 1 %REC	5795 108343 LowLimit	Units: mg/k	√g		Qual
Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB	TSP-72	Batch Analysis Da Result 23 1000	ID: <b>A3</b> ate: <b>7</b> /	21.42 856.9	SPK Ref Val	RunNo: 3 SeqNo: 1 %REC 108 119	5795 108343 LowLimit 59.3 80	Units: mg/F HighLimit 143	<b>(g</b> %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB	TSP-72 ge Organics (GRO)	Batch Analysis Da Result 23 1000 SampTy	ID: <b>A3</b> ate: <b>7</b> / PQL 4.3	55795 /19/2016 SPK value 21.42 856.9	SPK Ref Val 0	RunNo: 3 SeqNo: 1 %REC 108 119	5795 108343 LowLimit 59.3 80 PA Method	Units: mg/k HighLimit 143 120	<b>(g</b> %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID:	rsp-72 ge Organics (GRO) MB-26450	Batch Analysis Da Result 23 1000 SampTy	PQL 4.3  ype: ME ID: 26	21.42 856.9 BLK	SPK Ref Val 0 Tes	RunNo: 3: SeqNo: 1 %REC 108 119	5795 108343 LowLimit 59.3 80 PA Method 5795	Units: mg/k HighLimit 143 120	<b>√</b> g	RPDLimit	Qual
Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID:	rsp-72 ge Organics (GRO) MB-26450 PBS	Batch Analysis Da Result 23 1000  SampTy Batch	PQL 4.3  ype: ME ID: 26	SPK value 21.42 856.9 BLK 450	SPK Ref Val 0 Tes	RunNo: 3 SeqNo: 1 %REC 108 119 tCode: El	5795 108343 LowLimit 59.3 80 PA Method 5795	Units: mg/k HighLimit 143 120 8015D: Gaso	<b>√</b> g	RPDLimit	Qual
Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date:	rsp-72 ge Organics (GRO) MB-26450 PBS	Batch Analysis Da Result 23 1000  SampTy Batch Analysis Da	PQL 4.3  ype: ME ID: 26 ate: 7/	SPK value 21.42 856.9 BLK 450	SPK Ref Val 0 Tes:	RunNo: 3 SeqNo: 1 %REC 108 119 tCode: El RunNo: 3 SeqNo: 1	5795 108343 LowLimit 59.3 80 PA Method 5795 108349	Units: mg/k HighLimit 143 120  8015D: Gasc Units: %Re	Kg %RPD Dline Rang	RPDLimit e	
Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB  Sample ID Client ID: Prep Date: Analyte Surr: BFB	rsp-72 ge Organics (GRO) MB-26450 PBS	Batch Analysis Da Result 23 1000  SampTy Batch Analysis Da Result 1000	PQL 4.3  ype: ME ID: 26 ate: 7/	21.42 856.9 BLK 450 (19/2016 SPK value 1000	SPK Ref Val  O  Tes  S  SPK Ref Val	RunNo: 3 SeqNo: 1 %REC 108 119 tCode: El RunNo: 3 SeqNo: 1 %REC 101	5795 108343 LowLimit 59.3 80 PA Method 5795 108349 LowLimit 80	Units: mg/k HighLimit 143 120  8015D: Gaso Units: %Re	%RPD  pline Rang  c  %RPD	RPDLimit  e  RPDLimit	

### Qualifiers:

Analyte

Surr: BFB

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Prep Date: 7/18/2016

H Holding times for preparation or analysis exceeded

Analysis Date: 7/19/2016

Result

1100

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

D C----1- -II N-+ I- D----

SeqNo: 1108351

111

SPK value SPK Ref Val %REC LowLimit

1000

Units: %Rec

HighLimit

120

80

%RPD

**RPDLimit** 

Qual

Page 9 of 11

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607858** 

22-Jul-16

Client: BP America
Project: GCU 216

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: **B35795** RunNo: 35795 Prep Date: Analysis Date: 7/19/2016 SeqNo: 1108400 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 0.98 1.000 98.3 80 120

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Batch ID: **B35795** Client ID: **LCSS** RunNo: 35795 Prep Date: Analysis Date: 7/19/2016 SeqNo: 1108412 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** LowLimit Qual 1.0 0.025 1.000 O 104 75.3 123 Benzene Toluene 1.0 0.050 1.000 0 102 80 124 Ethylbenzene 0.050 0 104 82.8 1.0 1.000 121 Xylenes, Total 3.1 0.10 3.000 0 103 83.9 122 Surr: 4-Bromofluorobenzene 1.0 1.000 104 80 120

SampType: MS TestCode: EPA Method 8021B: Volatiles Sample ID 1607858-002AMS TSP-73 Client ID: Batch ID: **B35795** RunNo: 35795 Analysis Date: 7/19/2016 SeaNo: 1108417 Prep Date: Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.80 0.021 0.8482 94.7 71.5 122 Λ Toluene 0.79 0.042 0.8482 0 93.3 71.2 123 75.2 0.81 0.042 0.8482 0 95.4 130 Ethylbenzene Xylenes, Total 2.4 0.085 2.545 0 94.4 72.4 131 100 Surr: 4-Bromofluorobenzene 0.85 0.8482 80 120

Sample ID MB-26450 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: 26450 RunNo: 35795 Prep Date: Analysis Date: 7/19/2016 SeqNo: 1108424 7/18/2016 Units: %Rec SPK value SPK Ref Val %RPD **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit Qual Surr: 4-Bromofluorobenzene 0.97 1.000 96.7 80 120

Sample ID LCS-26450 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: Batch ID: 26450 RunNo: 35795 **LCSS** Prep Date: 7/18/2016 Analysis Date: 7/19/2016 SeqNo: 1108425 Units: %Rec **RPDLimit** Analyte Result PQI SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Qual

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 10 of 11

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607858** 

22-Jul-16

Client: BP America
Project: GCU 216

Sample ID LCS-26450 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 26450 RunNo: 35795

Prep Date: 7/18/2016 Analysis Date: 7/19/2016 SeqNo: 1108425 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: 4-Bromofluorobenzene 0.98 1.000 97.7 80 120

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 11 of 11



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

## Sample Log-In Check List

TEL: 505-345-3975 FAX: 505-345-1107 Website: www.hallenvironmental.com BP AMERICA-Farmington Client Name: Work Order Number: 1607858 ReptNo: 1 Received by/date: Lindsay Mangin 7/19/2016 8:45:00 AM Logged By: Completed By: Lindsay Mangin 7/19/2016 8:53:41 AM 07/19/16 an Reviewed By: Chain of Custody Not Present V No. 1. Gustody seals intact on sample bottles? Yes \_ Not Present No. 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In NA-L 4. Was an attempt made to cool the samples? Yes Y No L Were all samples received at a temperature of >0°C to 6.0°C No . NA . Yes V No Sample(s) in proper container(s)? Yes V No Sufficient sample volume for indicated test(s)? Yes V No. 8. Are samples (except VOA and ONG) properly preserved? No V NA . 9. Was preservative added to bottles? Yes No VOA Viais V No . 10. VOA vials have zero headspace? Yes No V 11. Were any sample containers received broken? Yes # of preserved bottles checked No | Yes V for pH. 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No L 13 Are matrices correctly identified on Chain of Custody? Yes V No 14. Is it clear what analyses were requested? Checked by: No L 15. Were all holding times able to be met? Yes (If no, notify customer for authorization.) Special Handling (if applicable) 16. Was client notified of all discrepancies with this order? Yes \_\_ No \_ NA V Person Notified: Date By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 17 - Additional remarks:

18. Cooler Information

Ccoler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.1	Good	Yes			

HALL ENVIDONMENTAL	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis		(S	MIS	3083 3083 (1)	.81 .403 .504 .507 .804	od 44 bo bod 50 bod 1, Ndes 1, Ndes 1, Ndes 1, Ndes	PH (Methoral Methoral													TIG.	This serves as notice of this nossibility. Any sub-contracted data will be clearly notated on the analytical report
				Tel.		(Áju	IO SI	8Đ)	Hd.	<u> </u>	BE	31EX + WT		X	X	$\lambda$	X	X	•		)			e Remarks:	ار از کی	4 - 10 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
Same		ブー・ロ	世へで				Moskai	anny Burns	ک	oN 🗆	//	ve HEAL No	1	700	2007	1002-	184	-m/	)	$\left( \begin{array}{c} \\ \end{array} \right)$				Date Time	07/19/16 08	
Turn-Around Time:	ndard KRush	Project Name:	ゴ し り	#			Eve	LTE-Danny	4	X	Sample Temperature: 5	uiner Preservative	oz NA				4	<b>&gt;</b>						Wed by:	the state of the s	
		Project	-	Project #:	125.4.	Project	<u>.</u>		Sampler:	On Ice.	Sample	Container Type and #	7					<b>→</b>						Received by	Received b	
Chain-of-Custody Record	Lower 48				5-9497/7615PP-3		oburns @ I ten V. com	☐ Level 4 (Full Validation)				Sample Request ID	TSP-72	TSP-73	75P-74	759-75	9£ - JSI	15P-77					•		Mished by:  Machael Machael	
hain-of-Cu	BP		ailing Address:		585	ax#:	A/QC Package: Aburi			AP □ Other	KEDD (Type) PDF	Time Matrix	1200 SS	1205	0121	1215	0721	N 5771				)		Time: <b>1605</b>	Time: Relind	200
ပ	lient:		ailing ,		hone #:	nail or	A/QC F	Standard	ccreditation	NELAP	KEDD	Jafe	81					>						ate:	ate:  (९)।५	



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

July 25, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU 216 OrderNo.: 1607A46

### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 3 sample(s) on 7/21/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/25/2016

CLIENT: BP America Client Sample ID: TSP-78

 Project:
 GCU 216
 Collection Date: 7/20/2016 9:15:00 AM

 Lab ID:
 1607A46-001
 Matrix: MEOH (SOIL)
 Received Date: 7/21/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/21/2016 10:28:25 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/21/2016 10:28:25 AM
Surr: DNOP	100	70-130	%Rec	1	7/21/2016 10:28:25 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	7/21/2016 7:15:30 PM
Surr: BFB	102	80-120	%Rec	1	7/21/2016 7:15:30 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1	7/21/2016 7:15:30 PM
Toluene	ND	0.038	mg/Kg	1	7/21/2016 7:15:30 PM
Ethylbenzene	ND	0.038	mg/Kg	1	7/21/2016 7:15:30 PM
Xylenes, Total	ND	0.076	mg/Kg	1	7/21/2016 7:15:30 PM
Surr: 4-Bromofluorobenzene	96.9	80-120	%Rec	1	7/21/2016 7:15:30 PM

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

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

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/25/2016

CLIENT: BP America Client Sample ID: TSP-79

 Project:
 GCU 216
 Collection Date: 7/20/2016 9:20:00 AM

 Lab ID:
 1607A46-002
 Matrix: MEOH (SOIL)
 Received Date: 7/21/2016 7:45:00 AM

Analyses	Result	PQL (	Qual 1	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	3				Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/21/2016 10:49:58 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/21/2016 10:49:58 AM
Surr: DNOP	103	70-130		%Rec	1	7/21/2016 10:49:58 AM
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst: NSB
Gasoline Range Organics (GRO)	150	4.3		mg/Kg	1	7/21/2016 7:39:03 PM
Surr: BFB	371	80-120	S	%Rec	1	7/21/2016 7:39:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	0.058	0.022		mg/Kg	1	7/21/2016 7:39:03 PM
Toluene	0.51	0.043		mg/Kg	1	7/21/2016 7:39:03 PM
Ethylbenzene	0.55	0.043		mg/Kg	1	7/21/2016 7:39:03 PM
Xylenes, Total	5.0	0.087		mg/Kg	1	7/21/2016 7:39:03 PM
Surr: 4-Bromofluorobenzene	123	80-120	S	%Rec	1	7/21/2016 7:39:03 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/25/2016

CLIENT: BP America Client Sample ID: TSP-80

 Project:
 GCU 216
 Collection Date: 7/20/2016 9:25:00 AM

 Lab ID:
 1607A46-003
 Matrix: MEOH (SOIL)
 Received Date: 7/21/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/21/2016 11:11:39 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/21/2016 11:11:39 AM
Surr: DNOP	105	70-130	%Rec	1	7/21/2016 11:11:39 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	7/21/2016 8:02:32 PM
Surr: BFB	112	80-120	%Rec	1	7/21/2016 8:02:32 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	7/21/2016 8:02:32 PM
Toluene	ND	0.040	mg/Kg	1	7/21/2016 8:02:32 PM
Ethylbenzene	ND	0.040	mg/Kg	1	7/21/2016 8:02:32 PM
Xylenes, Total	ND	0.079	mg/Kg	1	7/21/2016 8:02:32 PM
Surr: 4-Bromofluorobenzene	99.8	80-120	%Rec	1	7/21/2016 8:02:32 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

BP America

**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

Batch ID: 26500

Analysis Date: 7/21/2016

9.5

WO#: 1607A46

25-Jul-16

<b>Project:</b> GCU 21	16						
Sample ID LCS-26522	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics				
Client ID: LCSS	Batch ID: 26522	RunNo: 35868					
Prep Date: 7/21/2016	Analysis Date: 7/21/2016	SeqNo: 1110402	Units: mg/Kg				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual				
Diesel Range Organics (DRO)	43 10 50.00	0 86.1 62.6	124				
Surr: DNOP	4.3 5.000	85.7 70	130				
Sample ID MB-26522	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics				
Client ID: PBS	Batch ID: 26522	Batch ID: 26522 RunNo: 35868					
Prep Date: 7/21/2016	Analysis Date: 7/21/2016	SeqNo: 1110403	Units: mg/Kg				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual				
Diesel Range Organics (DRO)	ND 10						
Motor Oil Range Organics (MRO)	ND 50						
Surr: DNOP	8.9 10.00	89.0 70	130				
Sample ID LCS-26500	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics				
Client ID: LCSS	Batch ID: 26500	RunNo: 35868					
Prep Date: 7/20/2016	Analysis Date: 7/21/2016	SeqNo: <b>1111810</b>	Units: %Rec				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual				
Surr: DNOP	5.3 5.000	106 70	130				
Sample ID MB-26500	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics				

SPK value SPK Ref Val %REC

10.00

### Qualifiers:

Client ID: PBS

Analyte

Surr: DNOP

Prep Date: 7/20/2016

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range

RunNo: 35868

94.8

SeqNo: 1111811

LowLimit

70

Units: %Rec

130

HighLimit

%RPD

**RPDLimit** 

Qual

- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Page 4 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607A46** 

25-Jul-16

Client: BP America
Project: GCU 216

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: A35871 RunNo: 35871

Prep Date: Analysis Date: 7/21/2016 SeqNo: 1110807 Units: 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 1000 1000 102 80 120

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: A35871 RunNo: 35871

Prep Date: Analysis Date: 7/21/2016 SeqNo: 1110808 Units: 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
 97.9
 80
 120

 Surr: BFB
 1100
 1000
 111
 80
 120

#### Qualifiers:

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

Third to detected in the associated Method Blank

Page 5 of 6

## Hall Environmental Analysis Laboratory, Inc.

1.0

WO#: **1607A46** 

25-Jul-16

Client: BP America
Project: GCU 216

Surr: 4-Bromofluorobenzene

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: C35871 RunNo: 35871

Prep Date: Analysis Date: 7/21/2016 SeqNo: 1110878 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Benzene ND 0.025

 Benzene
 ND
 0.025

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

Surr: 4-Bromofluorobenzene 0.98 1.000 97.9 80 120

1.000

Sample ID 100NG BTEX LCS	SampT	SampType: LCS			tCode: El					
Client ID: LCSS	Batch	Batch ID: C35871			RunNo: <b>35871</b>					
Prep Date: Analysis Date: 7/21/2016			S	SeqNo: 1	110883	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	103	75.3	123			
Toluene	1.0	0.050	1.000	0	100	80	124			
Ethylbenzene	1.0	0.050	1.000	0	103	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	99.7	83.9	122			

104

80

120

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 6 of 6



### 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: **BP AMERICA-Farmington** Work Order Number: 1607A46 RcptNo: 1 Received by/date: Logged By: Lindsay Mangin 7/21/2016 7:45:00 AM Completed By: Lindsay Mangin 7/21/2016 7:58:16 AM Reviewed By: 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 <u>Log In</u> 4. Was an attempt made to cool the samples? No 🗆 Yes 🔽 NA 🗔 5. Were all samples received at a temperature of >0° C to 6.0°C NA 🖂 Yes 🗸 No Sample(s) in proper container(s)? Yes 🗸 No 🗀 7. Sufficient sample volume for indicated test(s)? No 🗌 Yes 🗸 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 bottles checked 12. Does paperwork match bottle labels? Yes 🗸 No 🗌 for pH: (Note discrepancies on chain of custody) (<2 or >12 unless noted) 13. Are matrices correctly identified on Chain of Custody? Adjusted? Yes 🔽 No -14. Is it clear what analyses were requested? Yes 🗸 No 🗌 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: Date By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp ºC Condition Seal Intact | Seal No Seal Date Signed By 1.3 Good Yes

	HALL ENVIRONMENTAL ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	505-345-3975 Fax 505-345-4107	Analysis	(*)	os' <sup>†</sup>	ЪΟ	1) 1085 1085	.40 Z8 1,,c (A	on 6 tala tala JU,IU (/	Hoethord (Methord) B (Methord) a's (831) and (F,C,C) and (Posticial (Posticia	HAH RCI 808 808 828 828 828 825 825 825 825 825 825 82											b-contracted data will be clearly notated on the analytical report.
			4901 F	Tel. 5		ا۷)	uo s	Ga Ga	Hd.	<u> </u>	38	TM + X=	īΤΒ	X X	×	×						Remarks:		possibility. Any su
Turn-Around Time: くなm e	Standard XRush Clay	Project Name:		Project #:	·	ject Manager:	13P-Steve Mostal	LTE-Danny Buins	)- Burns	On Ice: 📉 Yes 🗀 No	Sample Temperature スターレゲールのニア	Container Preservative HEAL No.		402 NA -001	700-	V V -003						Jad yafir (L	Speived by:  Date Time  CO121// 6	ed to other accredited laboratories. This serves as notice of this
Chain-of-Custody Record			Mailing Address:	Pn	Phone #. 55-326-9497 701-570-4727	email or Fax#: Steven · moskal Ob. amproject Manag	ige: Aburns (		on	□ Other	전 EDD (Type) 환호 (	Date Time Matrix Sample Request ID C		+1216 0915 SS TSP-78	1 0920 1 75P-79	1 0925 V TSP-80					į	le lea	126/Ly 1951 Mattac Wate	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



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

July 27, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU 216 OrderNo.: 1607C95

### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 7 sample(s) on 7/26/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/27/2016

CLIENT: BP America Client Sample ID: TSP-89

 Project:
 GCU 216
 Collection Date: 7/25/2016 9:35:00 AM

 Lab ID:
 1607C95-001
 Matrix: MEOH (SOIL)
 Received Date: 7/26/2016 7:50:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	6			Analyst: TOM
Diesel Range Organics (DRO)	48	9.8	mg/Kg	1	7/26/2016 10:07:43 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/26/2016 10:07:43 AM
Surr: DNOP	91.8	70-130	%Rec	1	7/26/2016 10:07:43 AM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: RAA
Gasoline Range Organics (GRO)	6.8	4.1	mg/Kg	1	7/26/2016 10:50:23 AM
Surr: BFB	146	80-120	S %Rec	1	7/26/2016 10:50:23 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.020	mg/Kg	1	7/26/2016 10:50:23 AM
Toluene	ND	0.041	mg/Kg	1	7/26/2016 10:50:23 AM
Ethylbenzene	ND	0.041	mg/Kg	1	7/26/2016 10:50:23 AM
Xylenes, Total	0.089	0.082	mg/Kg	1	7/26/2016 10:50:23 AM
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	7/26/2016 10:50:23 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/27/2016

CLIENT: BP America Client Sample ID: TSP-90

 Project:
 GCU 216
 Collection Date: 7/25/2016 9:40:00 AM

 Lab ID:
 1607C95-002
 Matrix: MEOH (SOIL)
 Received Date: 7/26/2016 7:50:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	;			Analyst: TOM
Diesel Range Organics (DRO)	23	9.5	mg/Kg	1	7/26/2016 10:29:47 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/26/2016 10:29:47 AM
Surr: DNOP	91.4	70-130	%Rec	1	7/26/2016 10:29:47 AM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: RAA
Gasoline Range Organics (GRO)	4.8	4.0	mg/Kg	1	7/26/2016 11:13:50 AM
Surr: BFB	125	80-120	S %Rec	1	7/26/2016 11:13:50 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.020	mg/Kg	1	7/26/2016 11:13:50 AM
Toluene	ND	0.040	mg/Kg	1	7/26/2016 11:13:50 AM
Ethylbenzene	ND	0.040	mg/Kg	1	7/26/2016 11:13:50 AM
Xylenes, Total	0.13	0.080	mg/Kg	1	7/26/2016 11:13:50 AM
Surr: 4-Bromofluorobenzene	95.4	80-120	%Rec	1	7/26/2016 11:13:50 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/27/2016

CLIENT: BP America Client Sample ID: TSP-91

 Project:
 GCU 216
 Collection Date: 7/25/2016 9:45:00 AM

 Lab ID:
 1607C95-003
 Matrix: MEOH (SOIL)
 Received Date: 7/26/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	31	10	mg/Kg	1	7/26/2016 10:51:52 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/26/2016 10:51:52 AM
Surr: DNOP	91.1	70-130	%Rec	1	7/26/2016 10:51:52 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	7/26/2016 11:37:21 AM
Surr: BFB	112	80-120	%Rec	5	7/26/2016 11:37:21 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.096	mg/Kg	5	7/26/2016 11:37:21 AM
Toluene	ND	0.19	mg/Kg	5	7/26/2016 11:37:21 AM
Ethylbenzene	ND	0.19	mg/Kg	5	7/26/2016 11:37:21 AM
Xylenes, Total	ND	0.38	mg/Kg	5	7/26/2016 11:37:21 AM
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	5	7/26/2016 11:37:21 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/27/2016

CLIENT: BP America Client Sample ID: TSP-92

 Project:
 GCU 216
 Collection Date: 7/25/2016 9:50:00 AM

 Lab ID:
 1607C95-004
 Matrix: MEOH (SOIL)
 Received Date: 7/26/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	;			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	36	9.9	mg/Kg	1	7/26/2016 11:13:53 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/26/2016 11:13:53 AM
Surr: DNOP	98.7	70-130	%Rec	1	7/26/2016 11:13:53 AM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	20	mg/Kg	5	7/26/2016 12:00:53 PM
Surr: BFB	113	80-120	%Rec	5	7/26/2016 12:00:53 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.10	mg/Kg	5	7/26/2016 12:00:53 PM
Toluene	ND	0.20	mg/Kg	5	7/26/2016 12:00:53 PM
Ethylbenzene	ND	0.20	mg/Kg	5	7/26/2016 12:00:53 PM
Xylenes, Total	ND	0.40	mg/Kg	5	7/26/2016 12:00:53 PM
Surr: 4-Bromofluorobenzene	100	80-120	%Rec	5	7/26/2016 12:00:53 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/27/2016

CLIENT: BP America Client Sample ID: TSP-93

 Project:
 GCU 216
 Collection Date: 7/25/2016 9:55:00 AM

 Lab ID:
 1607C95-005
 Matrix: MEOH (SOIL)
 Received Date: 7/26/2016 7:50:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	34	10	mg/Kg	1	7/26/2016 11:35:53 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/26/2016 11:35:53 AM
Surr: DNOP	97.2	70-130	%Rec	1	7/26/2016 11:35:53 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	7.8	4.2	mg/Kg	1	7/26/2016 12:24:19 PM
Surr: BFB	159	80-120	S %Rec	1	7/26/2016 12:24:19 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.021	mg/Kg	1	7/26/2016 12:24:19 PM
Toluene	ND	0.042	mg/Kg	1	7/26/2016 12:24:19 PM
Ethylbenzene	ND	0.042	mg/Kg	1	7/26/2016 12:24:19 PM
Xylenes, Total	0.095	0.083	mg/Kg	1	7/26/2016 12:24:19 PM
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	7/26/2016 12:24:19 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 7/27/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-94

 Project:
 GCU 216
 Collection Date: 7/25/2016 10:00:00 AM

 Lab ID:
 1607C95-006
 Matrix: MEOH (SOIL)
 Received Date: 7/26/2016 7:50:00 AM

Analyses	Result	PQL Q	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	31	9.9	mg/Kg	1	7/26/2016 11:57:50 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/26/2016 11:57:50 AM
Surr: DNOP	95.8	70-130	%Rec	1	7/26/2016 11:57:50 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	12	4.1	mg/Kg	1	7/26/2016 12:47:56 PM
Surr: BFB	171	80-120	S %Rec	1	7/26/2016 12:47:56 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.021	mg/Kg	1	7/26/2016 12:47:56 PM
Toluene	ND	0.041	mg/Kg	1	7/26/2016 12:47:56 PM
Ethylbenzene	ND	0.041	mg/Kg	1	7/26/2016 12:47:56 PM
Xylenes, Total	0.11	0.083	mg/Kg	1	7/26/2016 12:47:56 PM
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	7/26/2016 12:47:56 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/27/2016

CLIENT: BP America Client Sample ID: B-C04@39'

 Project:
 GCU 216
 Collection Date: 7/25/2016 10:25:00 AM

 Lab ID:
 1607C95-007
 Matrix: MEOH (SOIL)
 Received Date: 7/26/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/26/2016 12:19:57 PM
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	7/26/2016 12:19:57 PM
Surr: DNOP	93.1	70-130	%Rec	1	7/26/2016 12:19:57 PM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	7/26/2016 1:11:36 PM
Surr: BFB	105	80-120	%Rec	1	7/26/2016 1:11:36 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.021	mg/Kg	1	7/26/2016 1:11:36 PM
Toluene	ND	0.041	mg/Kg	1	7/26/2016 1:11:36 PM
Ethylbenzene	ND	0.041	mg/Kg	1	7/26/2016 1:11:36 PM
Xylenes, Total	ND	0.083	mg/Kg	1	7/26/2016 1:11:36 PM
Surr: 4-Bromofluorobenzene	97.5	80-120	%Rec	1	7/26/2016 1:11:36 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

BP America

**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1607C95

27-Jul-16

Project:	GCU 216	5									
Sample ID	LCS-26602	SampT	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	LCSS		ID: <b>26</b>		R	tunNo: 3	5982			-	
Prep Date:	7/26/2016	Analysis D	ate: <b>7</b> /	/26/2016	S	seqNo: 1	114066	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Surr: DNOP	Organics (DRO)	39 4.3	10	50.00 5.000	0	78.0 85.3	62.6 70	124 130			
Sample ID	MB-26602	SampT	уре: М	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: <b>26</b>	602	R	tunNo: 3	5982				
Prep Date:	7/26/2016	Analysis D	ate: <b>7</b> /	/26/2016	S	SeqNo: 1	114067	Units: mg/k	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
_	Organics (DRO)	ND	10								
Surr: DNOP	ge Organics (MRO)	ND 8.7	50	10.00		87.5	70	130			
Sample ID	1607C95-001AMS	SampT	уре: <b>М</b> \$	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: <b>TSP-89</b> Batch ID: <b>26602</b> RunNo: <b>35982</b>											
Prep Date:	7/26/2016	Analysis D	ate: 7/	/26/2016	S	SeqNo: 1	114158	Units: mg/h	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
=	Organics (DRO)	82	10	50.40	47.98	68.3	33.9	141			
Surr: DNOP		4.5		5.040		89.5	70	130			
Sample ID	1607C95-001AMS	<b>D</b> SampT	ype: MS	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	TSP-89	Batch	ID: <b>26</b>	602	R	tunNo: 3	5982				
Prep Date:	7/26/2016	Analysis D	ate: 7/	/26/2016	S	SeqNo: 1	114276	Units: mg/k	<b>(</b> g		
Analyte		Result			SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Surr: DNOP	Organics (DRO)	84 4.4	9.6	48.08 4.808	47.98	74.1 91.8	33.9 70	141 130	1.41 0	20 0	
Juli. DNOF						91.0	70	130	0	0	
Sample ID	LCS-26595	SampT	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:			ID: <b>26</b>			tunNo: 3					
Prep Date:	7/25/2016	Analysis D	ate: <b>7/</b>	/26/2016	S	seqNo: 1	115124	Units: %Re	С		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.0		5.000		99.3	70	130			
Sample ID	MB-26595	SampT	уре: <b>М</b> Е	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	Client ID: PBS Batch ID: 26595					RunNo: 35982					
Prep Date:	7/25/2016	Analysis D	ate: <b>7/</b>	/26/2016	S	SeqNo: 1	115125	Units: %Re	С		
1											

### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range

J Analyte detected below quantitation limits

Page 8 of 11

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607C95** 

27-Jul-16

Client: BP America
Project: GCU 216

Sample ID MB-26595 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 26595 RunNo: 35982

Prep Date: **7/25/2016** Analysis Date: **7/26/2016** SeqNo: **1115125** Units: **%Rec** 

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 11 10.00 106 70 130

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 9 of 11

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1607C95

27-Jul-16

**Client:** BP America **Project:** GCU 216

Sample ID LCS-26581 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 26581 RunNo: 35988

Prep Date: 7/25/2016 Analysis Date: 7/26/2016 SeqNo: 1115366 Units: 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 95.8 80 120 Surr: BFB 1000 80 1100 114 120

Sample ID MB-26581 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 26581 RunNo: 35988

Prep Date: 7/25/2016 Analysis Date: 7/26/2016 SeqNo: 1115368 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Gasoline Range Organics (GRO) ND 5.0

1000 1000 102 Surr: BFB 80 120

### Qualifiers:

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

Page 10 of 11

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1607C95** 

27-Jul-16

Client: BP America
Project: GCU 216

Sample ID LCS-26581 Client ID: LCSS	SampType: LCS  Batch ID: 26581			Tes						
Prep Date: 7/25/2016	Analysis D		26/2016	-	RunNo: 3 SeqNo: 1		Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	75.3	123			
Toluene	0.98	0.050	1.000	0	98.1	80	124			
Ethylbenzene	1.0	0.050	1.000	0	100	82.8	121			
Xylenes, Total 3.0 0.10 3.000		0	99.9	83.9	122					
Surr: 4-Bromofluorobenzene 1.0 1.000			105	80	120					

Sample ID MB-26581	SampT	уре: М	BLK	TestCode: EPA Method 8021B: Volatiles											
Client ID: PBS	Batch	n ID: <b>26</b>	581	R	RunNo: 3	5988									
Prep Date: 7/25/2016	Analysis D	Date: 7/	26/2016	S	SeqNo: 1	115490	Units: mg/K	ζg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Benzene	ND	0.025													
Toluene	ND	0.050													
Ethylbenzene	ND	0.050													
Xylenes, Total	ND	0.10													
Surr: 4-Bromofluorobenzene	0.97		1.000		97.5	80	120								

### Qualifiers:

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

Page 11 of 11



nau Environmeniai 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

**BP AMERICA-Farmington** Client Name: Work Order Number: 1607C95 RcptNo: 1 Received by/date: Logged By: Lindsay Mangin 7/26/2016 7:50:00 AM Completed By: **Lindsay Mangin** 7/26/2016 7:56:54 AM Reviewed By: - 07/26/16 Chain of Custody No 🗆 Not Present 🗹 Yes 1. Custody seals intact on sample bottles? No 🗆 Yes 🗸 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In NA 🗌 No 🗌 4. Was an attempt made to cool the samples? Yes 🗸 5. Were all samples received at a temperature of >0° C to 6.0°C NA 🗌 No 🗌 Yes 🗸 No 🗌 Sample(s) in proper container(s)? Yes 🗸 No 🗌 7. Sufficient sample volume for indicated test(s)? Yes 🔽 8. Are samples (except VOA and ONG) properly preserved? Yes 🗸 No 🗹 NA 🔲 9. Was preservative added to bottles? Yes 🗌 10. VOA vials have zero headspace? Yes 🗌 No 🗌 No VOA Vials Yes 11. Were any sample containers received broken? No 🗹 # of preserved bottles checked No 🔲 for pH: 12. Does paperwork match bottle labels? Yes 🗸 (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? Yes 🗸 No 🗆 13. Are matrices correctly identified on Chain of Custody? No 🗌 14. Is it clear what analyses were requested? 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: Date By Whom: Via: ☐ eMail ☐ Phone ☐ Fax Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp ⁰C Condition Seal Intact | Seal No Seal Date Signed By 2.7 Good

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

July 28, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU 216 OrderNo.: 1607D69

### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 7 sample(s) on 7/27/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/28/2016

CLIENT: BP America Client Sample ID: TSP-81R

 Project:
 GCU 216
 Collection Date: 7/26/2016 9:30:00 AM

 Lab ID:
 1607D69-001
 Matrix: MEOH (SOIL)
 Received Date: 7/27/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analyst: TOM
Diesel Range Organics (DRO)	49	9.7	mg/Kg	1	7/27/2016 10:53:44 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/27/2016 10:53:44 AM
Surr: DNOP	84.4	70-130	%Rec	1	7/27/2016 10:53:44 AM
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst: RAA
Gasoline Range Organics (GRO)	7.6	4.1	mg/Kg	1	7/27/2016 10:01:02 AM
Surr: BFB	119	80-120	%Rec	1	7/27/2016 10:01:02 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.020	mg/Kg	1	7/27/2016 10:01:02 AM
Toluene	ND	0.041	mg/Kg	1	7/27/2016 10:01:02 AM
Ethylbenzene	ND	0.041	mg/Kg	1	7/27/2016 10:01:02 AM
Xylenes, Total	ND	0.082	mg/Kg	1	7/27/2016 10:01:02 AM
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	7/27/2016 10:01:02 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/28/2016

CLIENT: BP America Client Sample ID: TSP-83

 Project:
 GCU 216
 Collection Date: 7/26/2016 9:35:00 AM

 Lab ID:
 1607D69-002
 Matrix: MEOH (SOIL)
 Received Date: 7/27/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	89	10	mg/Kg	1	7/27/2016 11:21:48 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/27/2016 11:21:48 AM
Surr: DNOP	87.2	70-130	%Rec	1	7/27/2016 11:21:48 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	9.4	4.2	mg/Kg	1	7/27/2016 10:25:16 AM
Surr: BFB	138	80-120	S %Rec	1	7/27/2016 10:25:16 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.021	mg/Kg	1	7/27/2016 10:25:16 AM
Toluene	ND	0.042	mg/Kg	1	7/27/2016 10:25:16 AM
Ethylbenzene	ND	0.042	mg/Kg	1	7/27/2016 10:25:16 AM
Xylenes, Total	0.097	0.084	mg/Kg	1	7/27/2016 10:25:16 AM
Surr: 4-Bromofluorobenzene	113	80-120	%Rec	1	7/27/2016 10:25:16 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/28/2016

CLIENT: BP America Client Sample ID: TSP-84

 Project:
 GCU 216
 Collection Date: 7/26/2016 9:40:00 AM

 Lab ID:
 1607D69-003
 Matrix: MEOH (SOIL)
 Received Date: 7/27/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	17	9.4	mg/Kg	1	7/27/2016 11:28:29 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/27/2016 11:28:29 AM
Surr: DNOP	103	70-130	%Rec	1	7/27/2016 11:28:29 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	18	3.9	mg/Kg	1	7/27/2016 10:49:30 AM
Surr: BFB	142	80-120	S %Rec	1	7/27/2016 10:49:30 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.020	mg/Kg	1	7/27/2016 10:49:30 AM
Toluene	ND	0.039	mg/Kg	1	7/27/2016 10:49:30 AM
Ethylbenzene	0.045	0.039	mg/Kg	1	7/27/2016 10:49:30 AM
Xylenes, Total	0.46	0.079	mg/Kg	1	7/27/2016 10:49:30 AM
Surr: 4-Bromofluorobenzene	111	80-120	%Rec	1	7/27/2016 10:49:30 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/28/2016

CLIENT: BP America Client Sample ID: TSP-85

 Project:
 GCU 216
 Collection Date: 7/26/2016 9:45:00 AM

 Lab ID:
 1607D69-004
 Matrix: MEOH (SOIL)
 Received Date: 7/27/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	;			Analyst: TOM
Diesel Range Organics (DRO)	31	9.5	mg/Kg	1	7/27/2016 11:50:05 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/27/2016 11:50:05 AM
Surr: DNOP	103	70-130	%Rec	1	7/27/2016 11:50:05 AM
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: RAA
Gasoline Range Organics (GRO)	10	4.1	mg/Kg	1	7/27/2016 11:13:47 AM
Surr: BFB	129	80-120	S %Rec	1	7/27/2016 11:13:47 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.020	mg/Kg	1	7/27/2016 11:13:47 AM
Toluene	ND	0.041	mg/Kg	1	7/27/2016 11:13:47 AM
Ethylbenzene	ND	0.041	mg/Kg	1	7/27/2016 11:13:47 AM
Xylenes, Total	ND	0.082	mg/Kg	1	7/27/2016 11:13:47 AM
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	7/27/2016 11:13:47 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/28/2016

CLIENT: BP America Client Sample ID: TSP-86

 Project:
 GCU 216
 Collection Date: 7/26/2016 9:50:00 AM

 Lab ID:
 1607D69-005
 Matrix: MEOH (SOIL)
 Received Date: 7/27/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	52	9.8	mg/Kg	1	7/27/2016 12:11:51 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/27/2016 12:11:51 PM
Surr: DNOP	102	70-130	%Rec	1	7/27/2016 12:11:51 PM
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	22	mg/Kg	5	7/27/2016 11:38:04 AM
Surr: BFB	94.4	80-120	%Rec	5	7/27/2016 11:38:04 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.11	mg/Kg	5	7/27/2016 11:38:04 AM
Toluene	ND	0.22	mg/Kg	5	7/27/2016 11:38:04 AM
Ethylbenzene	ND	0.22	mg/Kg	5	7/27/2016 11:38:04 AM
Xylenes, Total	ND	0.43	mg/Kg	5	7/27/2016 11:38:04 AM
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	5	7/27/2016 11:38:04 AM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/28/2016

CLIENT: BP America Client Sample ID: TSP-87

 Project:
 GCU 216
 Collection Date: 7/26/2016 9:55:00 AM

 Lab ID:
 1607D69-006
 Matrix: MEOH (SOIL)
 Received Date: 7/27/2016 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	;			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	45	10	mg/Kg	1	7/27/2016 12:33:25 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/27/2016 12:33:25 PM
Surr: DNOP	101	70-130	%Rec	1	7/27/2016 12:33:25 PM
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst: RAA
Gasoline Range Organics (GRO)	4.9	4.2	mg/Kg	1	7/27/2016 12:02:31 PM
Surr: BFB	131	80-120	S %Rec	1	7/27/2016 12:02:31 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.021	mg/Kg	1	7/27/2016 12:02:31 PM
Toluene	ND	0.042	mg/Kg	1	7/27/2016 12:02:31 PM
Ethylbenzene	ND	0.042	mg/Kg	1	7/27/2016 12:02:31 PM
Xylenes, Total	ND	0.085	mg/Kg	1	7/27/2016 12:02:31 PM
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	7/27/2016 12:02:31 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/28/2016

CLIENT: BP America Client Sample ID: TSP-88

 Project:
 GCU 216
 Collection Date: 7/26/2016 10:00:00 AM

 Lab ID:
 1607D69-007
 Matrix: MEOH (SOIL)
 Received Date: 7/27/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	;			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	32	9.6	mg/Kg	1	7/27/2016 12:55:08 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/27/2016 12:55:08 PM
Surr: DNOP	102	70-130	%Rec	1	7/27/2016 12:55:08 PM
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	7/27/2016 12:26:59 PM
Surr: BFB	97.7	80-120	%Rec	5	7/27/2016 12:26:59 PM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.095	mg/Kg	5	7/27/2016 12:26:59 PM
Toluene	ND	0.19	mg/Kg	5	7/27/2016 12:26:59 PM
Ethylbenzene	ND	0.19	mg/Kg	5	7/27/2016 12:26:59 PM
Xylenes, Total	ND	0.38	mg/Kg	5	7/27/2016 12:26:59 PM
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	5	7/27/2016 12:26:59 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

BP America

**Client:** 

Project.

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607D69** 

28-Jul-16

		<u> </u>											
Sample ID I	LCS-26633	SampTy	pe: <b>LC</b>	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics			
Client ID: I	LCSS	Batch	ID: <b>26</b>	633	R	RunNo: 30	6010						
Prep Date:	7/27/2016	Analysis Da	te: <b>7</b>	/27/2016	S	SeqNo: 1	115262	Units: mg/Kg					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Or	rganics (DRO)	48	10	50.00	0	95.2	62.6	124					
Surr: DNOP		4.5		5.000		90.0	70	130					
Sample ID I	MB-26633	SampTy	pe: <b>M</b> I	BLK	Tes	tCode: El	PA Method	d 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch	ID: <b>26</b>	633	R	RunNo: <b>36010</b>							
Prep Date:	7/27/2016	Analysis Da	te: <b>7</b>	/27/2016	S	SeqNo: 1115263		Units: mg/K	(g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Or	rganics (DRO)	ND	10										
ū	e Organics (MRO)	ND	50										
Surr: DNOP		8.1		10.00		81.1	70	130					
Sample ID '	1607D69-001AMS	MS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics											
Client ID:	TSP-81R	Batch	ID: <b>26</b>	633	RunNo: <b>36010</b>								
Prep Date:	7/27/2016	Analysis Da	te: <b>7</b>	/27/2016	S	SeqNo: 1115519 Units: mg/Kg							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Or	rganics (DRO)	110	9.9	49.36	48.98	114	33.9	141					
Surr: DNOP		4.6		4.936		93.4	70	130					
Sample ID '	1607D69-001AMSI	<b>D</b> SampTy	pe: <b>M</b>	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics			
Client ID:	TSP-81R	Batch	ID: <b>26</b>	633	R	RunNo: 30	6010						
	7/27/2046	Analysis Da	te: <b>7</b>	/27/2016	S	SeqNo: 1	115520	Units: mg/K	(g				
Prep Date:	1/2//2016	,											
Analyte	7/2//2016	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
·			PQL 9.2	SPK value 46.17	SPK Ref Val 48.98	%REC 67.4	LowLimit 33.9	HighLimit 141	%RPD 27.2	RPDLimit 20	Qual R		
Analyte		Result											
Analyte Diesel Range Or	rganics (DRO)	Result 80	9.2	46.17 4.617	48.98	67.4 91.9	33.9 70	141	27.2	20 0			
Analyte Diesel Range Or Surr: DNOP	rganics (DRO)	Result 80 4.2	9.2 pe: <b>M</b> I	46.17 4.617	48.98 Tes:	67.4 91.9	33.9 70 <b>PA Method</b>	141 130	27.2	20 0			

SPK value SPK Ref Val %REC

10.00

#### Qualifiers:

Analyte

Analyte

Surr: DNOP

Client ID:

Sample ID LCS-26603

Prep Date: 7/26/2016

**LCSS** 

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

Result

Result

PQL

SampType: LCS

Batch ID: 26603

Analysis Date: 7/27/2016

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

LowLimit

70

HighLimit

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

Units: %Rec

HighLimit

130

E Value above quantitation range

80.5

RunNo: 36010

SeqNo: 1115716

J Analyte detected below quantitation limits

Page 8 of 11

%RPD

%RPD

**RPDLimit** 

**RPDLimit** 

Qual

Qual

P Sample pH Not In Range

SPK value SPK Ref Val %REC LowLimit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607D69** 

28-Jul-16

Client: BP America
Project: GCU 216

Sample ID LCS-26603 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 26603 RunNo: 36010

Prep Date: 7/26/2016 Analysis Date: 7/27/2016 SeqNo: 1115716 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 4.5 5.000 90.9 70 130

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 9 of 11

BP America

**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

ND

810

5.0

1000

WO#: 1607D69

28-Jul-16

Project:	GCU 216										
Sample ID	1607D69-001A MS	SampT	ype: <b>M</b> \$	<u></u> S	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	le	
Client ID:	TSP-81R	Batch	ID: R3	36014	F	RunNo: 3	6014				
Prep Date:		Analysis Da	ate: <b>7</b> /	/27/2016	\$	SeqNo: 1	115692	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Ranç	ge Organics (GRO)	28	4.1	20.49	7.623	102	59.3	143			
Surr: BFB		1000		819.7		126	80	120			S
Sample ID	1607D69-001A MS	<b>D</b> SampT	ype: <b>M</b>	SD	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	je	
Client ID:	TSP-81R	Batch	Batch ID: <b>R36014</b> RunNo: <b>36014</b>								
Prep Date:		Analysis Da	ate: <b>7</b> /	/27/2016	\$	SeqNo: 1	115693	Units: mg/Kg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Ranç	ge Organics (GRO)	26	4.1	20.49	7.623	91.9	59.3	143	7.37	20	
Surr: BFB		1100		819.7		134	80	120	0	0	S
Sample ID	2.5UG GRO LCS	SampT	ype: <b>L(</b>	S S	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	j <b>e</b>	
Client ID:	LCSS	Batch	ID: R3	36014	F	RunNo: 3	6014				
Prep Date:		Analysis Da	ate: <b>7</b> /	/27/2016	\$	SeqNo: 1	115694	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Ranç	ge Organics (GRO)	24	5.0	25.00	0	96.0	80	120			
Surr: BFB		910		1000		90.6	80	120			
Sample ID	5ML-RB	SampT	уре: <b>М</b> !	BLK	Tes	tCode: Ef	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: R3	36014	F	RunNo: 3	6014				
Prep Date:		Analysis Da	ate: <b>7</b> /	/27/2016	5	SeqNo: 1	115695	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

#### Qualifiers:

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

Gasoline Range Organics (GRO)

Surr: BFB

- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range

80.7

80

120

- J Analyte detected below quantitation limits
- Page 10 of 11

- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1607D69

28-Jul-16

Client:	BP America
Project:	GCU 216

Sample ID 100NG BTEX LCS	SampT	ype: <b>LC</b>	S	Tes	TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch	1D: <b>A3</b>	6014	F	RunNo: <b>36014</b>					
Prep Date:	Analysis D	ate: <b>7/</b>	27/2016	5	115765	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.0	75.3	123			
Toluene	0.98	0.050	1.000	0	97.6	80	124			
Ethylbenzene	0.94	0.050	1.000	0	94.0	82.8	121			
Xylenes, Total	2.7	0.10	3.000	0	90.9	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID 1607D69-002A I	<b>MS</b> SampT	Гуре: МS	3	Tes	PA Method	8021B: Volat	tiles			
Client ID: TSP-83	Batch	Batch ID: A36014 RunNo: 36014								
Prep Date:	Analysis D	Date: <b>7/</b>	27/2016	8	SeqNo: 1	115767	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.021	0.8389	0	94.9	71.5	122			
Toluene	0.74	0.042	0.8389	0	87.7	71.2	123			
Ethylbenzene	0.76	0.042	0.8389	0	90.5	75.2	130			
Xylenes, Total	2.4	0.084	2.517	0.09673	91.4	72.4	131			
Surr: 4-Bromofluorobenzene	0.92		0.8389		110	80	120			

Sample ID 1607D69-002A	<b>MSD</b> SampT	SD SampType: MSD TestCode: EPA Method 8021B: Volatiles								
Client ID: TSP-83	Batch ID: <b>A36014</b> RunNo: <b>36014</b>									
Prep Date: Analysis Date: 7/27/2016				8	SeqNo: 1115768 Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.021	0.8389	0	92.5	71.5	122	2.53	20	
Toluene	0.70	0.042	0.8389	0	83.9	71.2	123	4.48	20	
Ethylbenzene	0.76	0.042	0.8389	0	90.2	75.2	130	0.321	20	
Xylenes, Total	2.4	0.084	2.517	0.09673	91.8	72.4	131	0.426	20	
Surr: 4-Bromofluorobenzene	0.99		0.8389		118	80	120	0	0	

Sample ID 5ML-RB	SampT	ype: ME	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch	n ID: A3	6014	R	RunNo: <b>36014</b>					
Prep Date:	Analysis D	ate: <b>7/</b>	27/2016	SeqNo: <b>1115769</b>			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		96.0	80	120			

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RPD outside accepted recovery limits R

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range

J Analyte detected below quantitation limits

P

Sample pH Not In Range

RLReporting Detection Limit Sample container temperature is out of limit as specified Page 11 of 11



#### Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NAI 87109 TEL: 505-343-3975 FAX: 505-345-410? Website: www.hollenvironmental.com

# Sample Log-In Check List

Client Name: BP AMERICA-Farmington	Work Order Number	1607069		RcptNo	4
Received by/date:	07/27/16				
Logged By: Joe Archuleta	7/27/2016 8:00:00 AM		Help		
Completed By: Joe Archuleta  Reviewed By:	7/27/2016 8:16:24 AM		1614		
Chain of Custody					
1. Custody seals intact on sample bottles?		Yes 🗆	No 🗆	Not Present 🗸	
2. Is Chain of Custody complete?		Yes V	No I	Not Present	
3. How was the sample delivered?		Courier			
Log In					
4. Was an attempt made to cool the samples	\$?	Yes 🗸	No 🗆	NA 🗆	
5. Were all samples received at a temperature	re of >0° C to 6.0°C	Yes 🗸	No 🗆	NA L	
6. Sample(s) in proper container(s)?		Yes V	No 🗌		
7. Sufficient sample volume for indicated test	(5)?	Yes 🗸	No 🗆		
8, Are samples (except VOA and ONG) proper	arly preserved?	Yes V	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 bro	ken?	Yes	No V	W.F	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗸	No 🗆	# of preserved bottles checked for pH:	nr >12 unless noted
13. Are matrices correctly identified on Chain	of Custody?	Yes V	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. ITI	Checked by:	
Special Handling (if applicable)					
16. Was client notified of all discrepancies with	this order?	Yes	No.	NA V	
Person Notified:	Date				
By Whom:	Via	eMail	Phone Fax	In Person	
Regarding					
Client Instructions					
17. Additional remarks:					
18. Cooler Information					
A Committee of the comm	Seal Intact   Seal No	Seal Date	Signed By	11.	
No. of the Control of	Seal Intact   Seal No   sea	Seal Date	Signed By		

HALL ENVIRONMENTAL	www.hallenvironmental.com	kins NE - Albuquerque, NM 87109		Analysis	(*os**	'од'	(1) S082 S808	S8 1,50 1,50 (A)	o o o o o o o o o o o o o o o o o o o	EDB (Methors (831) RCRA 8 Me Anions (F,C 8081 Pestio 8260B (VO) 8270 (Semi												
		4901 Hawkins NE -	Tel. 505-345-3975		(Kjuo s	(G9	Hd.	Ø€ 1+	38	ГМ + ХЭТВ ГМ + ХЭТВ ВՇ108 НЭТ odieM) НЭТ	×	X	X	X	X	X	X			Remarks:		
sume		16			-	UNIS		□ No	3	HEAL NO.	100-	200-	-003	600-	-005	-000	7007		1	Date Time	17	
ime:		J #216			er: Moskal	LTE-Danny BULLS	. Burns		4	Preservative Type	NA						*				1.302	1
Turn-Around Time:	Project Name:	35	Project #.		Project Manager: BP-5+eve	LTE-N	Sampler: D	On loe:	Sample Temperature:	Container Type and #	402						D	1		Received by:	Chut	V V
ody Record				TO1-570-4727	steven. moskal @bp.com oburns @ Item.com	☐ Level 4 (Full Validation)				Sample Request ID	TSP-81R	TSP-83	48-951	TSP-85	128-86	TSP-87	TSP-88			C 30	どひ	
Jewer				26-9497	steven			□ Other	PDF	Matrix	SS	1					-	1		Relineuished by		1
BP-		alling Address:		one # 805-326-9497	nail or Fax#: 5	lard			EDD (Type)	Time	08430	0935	0460	Shbo	0950	5560	0001		1	Tme:	2	-
ine ent:		ailing A		# auo	vac Pg	Standard	creditation	NELAP	EDD	ate	30	-					>			ja ja	2de	



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

August 01, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU 216 OrderNo.: 1607F21

### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 7 sample(s) on 7/29/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/1/2016

CLIENT: BP America Client Sample ID: TSP-95

 Project:
 GCU 216
 Collection Date: 7/28/2016 8:40:00 AM

 Lab ID:
 1607F21-001
 Matrix: MEOH (SOIL)
 Received Date: 7/29/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analyst: TOM
Diesel Range Organics (DRO)	75	10	mg/Kg	1	7/29/2016 12:30:13 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/29/2016 12:30:13 PM
Surr: DNOP	109	70-130	%Rec	1	7/29/2016 12:30:13 PM
<b>EPA METHOD 8260B: VOLATILES S</b>	HORT LIST				Analyst: <b>DJF</b>
Benzene	ND	0.019	mg/Kg	1	7/29/2016 11:01:15 AM
Toluene	0.68	0.038	mg/Kg	1	7/29/2016 11:01:15 AM
Ethylbenzene	0.22	0.038	mg/Kg	1	7/29/2016 11:01:15 AM
Xylenes, Total	2.6	0.077	mg/Kg	1	7/29/2016 11:01:15 AM
Surr: 1,2-Dichloroethane-d4	84.4	70-130	%Rec	1	7/29/2016 11:01:15 AM
Surr: 4-Bromofluorobenzene	108	70-130	%Rec	1	7/29/2016 11:01:15 AM
Surr: Dibromofluoromethane	84.9	70-130	%Rec	1	7/29/2016 11:01:15 AM
Surr: Toluene-d8	100	70-130	%Rec	1	7/29/2016 11:01:15 AM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	66	3.8	mg/Kg	1	7/29/2016 11:01:15 AM
Surr: BFB	83.2	70-130	%Rec	1	7/29/2016 11:01:15 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/1/2016

CLIENT: BP America Client Sample ID: TSP-96

 Project:
 GCU 216
 Collection Date: 7/28/2016 8:45:00 AM

 Lab ID:
 1607F21-002
 Matrix: MEOH (SOIL)
 Received Date: 7/29/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	68	9.6	mg/Kg	1	7/29/2016 12:52:00 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/29/2016 12:52:00 PM
Surr: DNOP	107	70-130	%Rec	1	7/29/2016 12:52:00 PM
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst: <b>DJF</b>
Benzene	ND	0.020	mg/Kg	1	7/29/2016 11:29:55 AM
Toluene	0.14	0.039	mg/Kg	1	7/29/2016 11:29:55 AM
Ethylbenzene	0.11	0.039	mg/Kg	1	7/29/2016 11:29:55 AM
Xylenes, Total	1.2	0.079	mg/Kg	1	7/29/2016 11:29:55 AM
Surr: 1,2-Dichloroethane-d4	88.7	70-130	%Rec	1	7/29/2016 11:29:55 AM
Surr: 4-Bromofluorobenzene	116	70-130	%Rec	1	7/29/2016 11:29:55 AM
Surr: Dibromofluoromethane	91.3	70-130	%Rec	1	7/29/2016 11:29:55 AM
Surr: Toluene-d8	96.2	70-130	%Rec	1	7/29/2016 11:29:55 AM
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	46	3.9	mg/Kg	1	7/29/2016 11:29:55 AM
Surr: BFB	86.8	70-130	%Rec	1	7/29/2016 11:29:55 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/1/2016

CLIENT: BP America Client Sample ID: TSP-97

 Project:
 GCU 216
 Collection Date: 7/28/2016 8:50:00 AM

 Lab ID:
 1607F21-003
 Matrix: MEOH (SOIL)
 Received Date: 7/29/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	39	9.6	mg/Kg	1	7/29/2016 1:13:48 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/29/2016 1:13:48 PM
Surr: DNOP	108	70-130	%Rec	1	7/29/2016 1:13:48 PM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: DJF
Benzene	ND	0.020	mg/Kg	1	7/29/2016 11:58:42 AM
Toluene	ND	0.039	mg/Kg	1	7/29/2016 11:58:42 AM
Ethylbenzene	ND	0.039	mg/Kg	1	7/29/2016 11:58:42 AM
Xylenes, Total	0.52	0.078	mg/Kg	1	7/29/2016 11:58:42 AM
Surr: 1,2-Dichloroethane-d4	85.6	70-130	%Rec	1	7/29/2016 11:58:42 AM
Surr: 4-Bromofluorobenzene	117	70-130	%Rec	1	7/29/2016 11:58:42 AM
Surr: Dibromofluoromethane	90.3	70-130	%Rec	1	7/29/2016 11:58:42 AM
Surr: Toluene-d8	101	70-130	%Rec	1	7/29/2016 11:58:42 AM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: DJF
Gasoline Range Organics (GRO)	55	3.9	mg/Kg	1	7/29/2016 11:58:42 AM
Surr: BFB	90.8	70-130	%Rec	1	7/29/2016 11:58:42 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/1/2016

CLIENT: BP America Client Sample ID: TSP-98

 Project:
 GCU 216
 Collection Date: 7/28/2016 8:55:00 AM

 Lab ID:
 1607F21-004
 Matrix: MEOH (SOIL)
 Received Date: 7/29/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	78	9.8	mg/Kg	1	7/29/2016 1:35:22 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/29/2016 1:35:22 PM
Surr: DNOP	109	70-130	%Rec	1	7/29/2016 1:35:22 PM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: <b>DJF</b>
Benzene	ND	0.021	mg/Kg	1	7/29/2016 12:27:23 PM
Toluene	ND	0.042	mg/Kg	1	7/29/2016 12:27:23 PM
Ethylbenzene	ND	0.042	mg/Kg	1	7/29/2016 12:27:23 PM
Xylenes, Total	0.16	0.085	mg/Kg	1	7/29/2016 12:27:23 PM
Surr: 1,2-Dichloroethane-d4	89.5	70-130	%Rec	1	7/29/2016 12:27:23 PM
Surr: 4-Bromofluorobenzene	112	70-130	%Rec	1	7/29/2016 12:27:23 PM
Surr: Dibromofluoromethane	99.6	70-130	%Rec	1	7/29/2016 12:27:23 PM
Surr: Toluene-d8	98.4	70-130	%Rec	1	7/29/2016 12:27:23 PM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	31	4.2	mg/Kg	1	7/29/2016 12:27:23 PM
Surr: BFB	84.8	70-130	%Rec	1	7/29/2016 12:27:23 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 8/1/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: B-E04@36'

 Project:
 GCU 216
 Collection Date: 7/28/2016 10:00:00 AM

 Lab ID:
 1607F21-005
 Matrix: MEOH (SOIL)
 Received Date: 7/29/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	17	10	mg/Kg	1	7/29/2016 1:57:05 PM
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	7/29/2016 1:57:05 PM
Surr: DNOP	111	70-130	%Rec	1	7/29/2016 1:57:05 PM
<b>EPA METHOD 8260B: VOLATILES S</b>	HORT LIST				Analyst: DJF
Benzene	ND	0.020	mg/Kg	1	7/29/2016 12:56:10 PM
Toluene	ND	0.040	mg/Kg	1	7/29/2016 12:56:10 PM
Ethylbenzene	ND	0.040	mg/Kg	1	7/29/2016 12:56:10 PM
Xylenes, Total	ND	0.080	mg/Kg	1	7/29/2016 12:56:10 PM
Surr: 1,2-Dichloroethane-d4	94.9	70-130	%Rec	1	7/29/2016 12:56:10 PM
Surr: 4-Bromofluorobenzene	99.3	70-130	%Rec	1	7/29/2016 12:56:10 PM
Surr: Dibromofluoromethane	101	70-130	%Rec	1	7/29/2016 12:56:10 PM
Surr: Toluene-d8	96.0	70-130	%Rec	1	7/29/2016 12:56:10 PM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: DJF
Gasoline Range Organics (GRO)	7.0	4.0	mg/Kg	1	7/29/2016 12:56:10 PM
Surr: BFB	75.9	70-130	%Rec	1	7/29/2016 12:56:10 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: **8/1/2016** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: E-02@39'

 Project:
 GCU 216
 Collection Date: 7/28/2016 10:05:00 AM

 Lab ID:
 1607F21-006
 Matrix: MEOH (SOIL)
 Received Date: 7/29/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/29/2016 2:18:44 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/29/2016 2:18:44 PM
Surr: DNOP	111	70-130	%Rec	1	7/29/2016 2:18:44 PM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: DJF
Benzene	ND	0.022	mg/Kg	1	7/29/2016 1:24:55 PM
Toluene	ND	0.043	mg/Kg	1	7/29/2016 1:24:55 PM
Ethylbenzene	ND	0.043	mg/Kg	1	7/29/2016 1:24:55 PM
Xylenes, Total	ND	0.087	mg/Kg	1	7/29/2016 1:24:55 PM
Surr: 1,2-Dichloroethane-d4	97.7	70-130	%Rec	1	7/29/2016 1:24:55 PM
Surr: 4-Bromofluorobenzene	96.6	70-130	%Rec	1	7/29/2016 1:24:55 PM
Surr: Dibromofluoromethane	107	70-130	%Rec	1	7/29/2016 1:24:55 PM
Surr: Toluene-d8	96.8	70-130	%Rec	1	7/29/2016 1:24:55 PM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	7/29/2016 1:24:55 PM
Surr: BFB	75.7	70-130	%Rec	1	7/29/2016 1:24:55 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/1/2016

CLIENT: BP America Client Sample ID: E-03@36'

 Project:
 GCU 216
 Collection Date: 7/28/2016 10:10:00 AM

 Lab ID:
 1607F21-007
 Matrix: MEOH (SOIL)
 Received Date: 7/29/2016 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst: TOM
Diesel Range Organics (DRO)	350	97		mg/Kg	10	7/29/2016 3:24:15 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	7/29/2016 3:24:15 PM
Surr: DNOP	0	70-130	S	%Rec	10	7/29/2016 3:24:15 PM
EPA METHOD 8260B: VOLATILES SHOP	RT LIST					Analyst: DJF
Benzene	0.15	0.017		mg/Kg	1	7/29/2016 1:53:42 PM
Toluene	2.0	0.034		mg/Kg	1	7/29/2016 1:53:42 PM
Ethylbenzene	0.96	0.034		mg/Kg	1	7/29/2016 1:53:42 PM
Xylenes, Total	11	0.69		mg/Kg	10	7/29/2016 2:51:26 PM
Surr: 1,2-Dichloroethane-d4	69.2	70-130	S	%Rec	1	7/29/2016 1:53:42 PM
Surr: 4-Bromofluorobenzene	159	70-130	S	%Rec	1	7/29/2016 1:53:42 PM
Surr: Dibromofluoromethane	70.6	70-130		%Rec	1	7/29/2016 1:53:42 PM
Surr: Toluene-d8	105	70-130		%Rec	1	7/29/2016 1:53:42 PM
EPA METHOD 8015D MOD: GASOLINE F	RANGE					Analyst: DJF
Gasoline Range Organics (GRO)	330	34		mg/Kg	10	7/29/2016 2:51:26 PM
Surr: BFB	85.6	70-130		%Rec	10	7/29/2016 2:51:26 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1607F21

01-Aug-16

**Client:** BP America **Project:** GCU 216

Sample ID LCS-26683

Sample ID MB-26674 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **PBS** Batch ID: 26674 RunNo: 36082

Prep Date: 7/28/2016 Analysis Date: 7/29/2016 SeqNo: 1117403 Units: %Rec

Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Surr: DNOP 9.2 10.00 91.7 70 130

SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 26683 RunNo: 36083 Units: mg/Kg Prep Date: 7/29/2016 Analysis Date: 7/29/2016 SeqNo: 1117593 **PQL** SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual

Diesel Range Organics (DRO) 36 10 50.00 0 71.7 62.6 124 Surr: DNOP 4.5 5.000 89.7 70 130

Sample ID MB-26683 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 26683 RunNo: 36083

Analysis Date: 7/29/2016 Prep Date: 7/29/2016 SeqNo: 1117594 Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte

ND Diesel Range Organics (DRO) 10 Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 10 10.00 100 70 130

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Η

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

Е Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

Page 8 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607F21** 

01-Aug-16

Client: BP America
Project: GCU 216

Sample ID mb-26581 SampType: MBLK TestCode: EPA Method 8260B: Volatiles Short List **PBS** Client ID: Batch ID: 26581 RunNo: 36100 Prep Date: 7/25/2016 Analysis Date: 7/29/2016 SeqNo: 1118409 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 ND 0.050 Toluene ND 0.050 Ethylbenzene Xylenes, Total ND 0.10 Surr: 1,2-Dichloroethane-d4 0.48 0.5000 96.6 70 130 Surr: 4-Bromofluorobenzene 0.50 0.5000 99.9 70 130 Surr: Dibromofluoromethane 0.54 0.5000 108 70 130 0.47 Surr: Toluene-d8 0.5000 94.8 70 130

Sample ID Ics-26581	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: LCSS	Batch	n ID: <b>26</b>	581	RunNo: <b>36100</b>						
Prep Date: 7/25/2016	Analysis D	oate: 7/	29/2016	S	SeqNo: 1	118410	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	70	130			
Toluene	0.96	0.050	1.000	0	95.8	70	130			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 9 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#: 10

1607F21 01-Aug-16

Client: BP America
Project: GCU 216

Sample ID rb SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: PBS Batch ID: G36100 RunNo: 36100

Prep Date: Analysis Date: 7/29/2016 SeqNo: 1118413 Units: 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 400 500.0 80.1 70 130

Sample ID 2.5ug gro Ics SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: LCSS Batch ID: G36100 RunNo: 36100

Prep Date: Analysis Date: 7/29/2016 SeqNo: 1118415 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 5.0 25.00 89.8 62.9 123

Surr: BFB 380 500.0 75.2 70 130

Sample ID 1607f21-001ams SampType: MS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: TSP-95 Batch ID: G36100 RunNo: 36100

Prep Date: Analysis Date: 7/29/2016 SeqNo: 1118417 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual Gasoline Range Organics (GRO) 90 19.23 65.70 126 52.3 132

Surr: BFB 350 384.6 90.4 70 130

Sample ID 1607f21-001amsd SampType: MSD TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: TSP-95 Batch ID: G36100 RunNo: 36100

Prep Date: Analysis Date: 7/29/2016 SeqNo: 1118418 Units: mg/Kg

%REC Analyte Result **PQL** SPK value SPK Ref Val LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 85 3.8 19.23 65.70 100 52.3 132 5.76 20 Surr: BFB 350 384.6 91.0 70 130 0 0

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 10 of 10

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: BP AMERICA-Farmington Work Order Number: 1607F21 RcptNo: 1 Received by/date: Logged By: Lindsay Mangin 7/29/2016 7:30:00 AM Completed By: **Lindsay Mangin** 7/29/2016 7:53:22 AM Reviewed By: Chain of Custody Yes No 🗍 Not Present 1. Custody seals intact on sample bottles? No  $\square$ Yes 🗸 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In Yes 🗹 No 🗌 NA 🗌 4. Was an attempt made to cool the samples? 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🔽 No 🗌 NA 🗌 Yes 🗸 No Sample(s) in proper container(s)? No 🗌 7. Sufficient sample volume for indicated test(s)? Yes 🗸 No 🗆 8. Are samples (except VOA and ONG) properly preserved? Yes 🗸 No 🗹 Yes 🗌 NA 🗌 9. Was preservative added to bottles? No 🗌 No VOA Vials 🗹 Yes 🗌 10. VOA vials have zero headspace? Yes  $\square$ No 🗹 11. Were any sample containers received broken? # of preserved bottles checked for pH: 12. Does paperwork match bottle labels? Yes 🗸 No ... (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? 13. Are matrices correctly identified on Chain of Custody? No 🗌 Yes 🗸 **✓** No 🗌 14. Is it clear what analyses were requested? Checked by: 15. Were all holding times able to be met? Yes 🗸 No 🗌 (If no, notify customer for authorization.) Special Handling (if applicable) NA 🗹 16. Was client notified of all discrepancies with this order? Yes No 🗌 Person Notified: Date By Whom: Via: eMail Phone Fax Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp ºC | Condition Seal Intact | Seal No Seal Date Signed By 3.2 Good Yes

HALL ENVIRONMENTAL	SIS LABORATORY	www.hallenvironmental.com	Albuquerque, NM 87109	Fax 505-345-4107					(808	/ se	əbic (A )V-i	D,4) anoinA 1808 1808 OV) 80858 meS) 0728											
	ANALYSIS	www.hallen	4901 Hawkins NE - All	10	Anal	uJA)	is oi	36) (GR	НЧТ (1.8 (1.4)	+ : 314 505	0 0 po po (C	######################################			X	X		×				Remarks:	
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Chain-of-Custody Record	BP-Lower 48		:SS:		1000 #: 505-326-9497 701-57	E steven. moskal @ bp. com	ge: aburns @ Itenv.com	☐ Level 4 (Ft	Ç		9) PDF	Matrix	29-957 SS 01	3P-98 1 21	TP-927 00	5 TSP-98	6 B-604 @36'		>			Reindwished by:	Relinduished by:
Chai	ient:		ailing Address:		10ne #: 505	nail or Fax#:	VQC Package:	Standard	creditation	NELAP	EDD (Type)	)ate Time	28/16 0840	5 180	0%20	9855	1006	5001	0101			ate: Time: 28/16/15/4/	38   Time:



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

August 03, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401 TEL: (505) 326-9457

FAX

RE: GCU 216 OrderNo.: 1608068

### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 9 sample(s) on 8/2/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/3/2016

CLIENT: BP America Client Sample ID: TSP-95R

 Project:
 GCU 216
 Collection Date: 8/1/2016 9:00:00 AM

 Lab ID:
 1608068-001
 Matrix: MEOH (SOIL)
 Received Date: 8/2/2016 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed					
EPA METHOD 8015M/D: DIESEL RAN	EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: KJH									
Diesel Range Organics (DRO)	58	9.4	mg/Kg	1	8/2/2016 10:32:49 AM					
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/2/2016 10:32:49 AM					
Surr: DNOP	99.2	70-130	%Rec	1	8/2/2016 10:32:49 AM					
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst: NSB					
Gasoline Range Organics (GRO)	ND	20	mg/Kg	5	8/2/2016 9:34:38 AM					
Surr: BFB	102	49.4-163	%Rec	5	8/2/2016 9:34:38 AM					
EPA METHOD 8021B: VOLATILES					Analyst: NSB					
Benzene	ND	0.10	mg/Kg	5	8/2/2016 9:34:38 AM					
Toluene	ND	0.20	mg/Kg	5	8/2/2016 9:34:38 AM					
Ethylbenzene	ND	0.20	mg/Kg	5	8/2/2016 9:34:38 AM					
Xylenes, Total	ND	0.41	mg/Kg	5	8/2/2016 9:34:38 AM					
Surr: 4-Bromofluorobenzene	91.2	80-120	%Rec	5	8/2/2016 9:34:38 AM					

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/3/2016

CLIENT: BP America Client Sample ID: TSP-99

 Project:
 GCU 216
 Collection Date: 8/1/2016 9:05:00 AM

 Lab ID:
 1608068-002
 Matrix: MEOH (SOIL)
 Received Date: 8/2/2016 7:00:00 AM

Analyses	Result	PQL (	Qual U	J <b>nits</b>	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: KJH									
Diesel Range Organics (DRO)	47	9.7		mg/Kg	1	8/2/2016 10:54:27 AM			
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/2/2016 10:54:27 AM			
Surr: DNOP	97.4	70-130		%Rec	1	8/2/2016 10:54:27 AM			
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst: NSB			
Gasoline Range Organics (GRO)	29	4.4		mg/Kg	1	8/2/2016 9:58:05 AM			
Surr: BFB	225	49.4-163	S	%Rec	1	8/2/2016 9:58:05 AM			
EPA METHOD 8021B: VOLATILES						Analyst: NSB			
Benzene	ND	0.022		mg/Kg	1	8/2/2016 9:58:05 AM			
Toluene	ND	0.044		mg/Kg	1	8/2/2016 9:58:05 AM			
Ethylbenzene	ND	0.044		mg/Kg	1	8/2/2016 9:58:05 AM			
Xylenes, Total	0.27	0.088		mg/Kg	1	8/2/2016 9:58:05 AM			
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	8/2/2016 9:58:05 AM			

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/3/2016

CLIENT: BP America Client Sample ID: TSP-100

 Project:
 GCU 216
 Collection Date: 8/1/2016 9:10:00 AM

 Lab ID:
 1608068-003
 Matrix: MEOH (SOIL)
 Received Date: 8/2/2016 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: KJH									
Diesel Range Organics (DRO)	55	9.8	mg/Kg	1	8/2/2016 11:21:17 AM				
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/2/2016 11:21:17 AM				
Surr: DNOP	96.8	70-130	%Rec	1	8/2/2016 11:21:17 AM				
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB				
Gasoline Range Organics (GRO)	ND	21	mg/Kg	5	8/2/2016 10:21:30 AM				
Surr: BFB	118	49.4-163	%Rec	5	8/2/2016 10:21:30 AM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.11	mg/Kg	5	8/2/2016 10:21:30 AM				
Toluene	ND	0.21	mg/Kg	5	8/2/2016 10:21:30 AM				
Ethylbenzene	ND	0.21	mg/Kg	5	8/2/2016 10:21:30 AM				
Xylenes, Total	ND	0.43	mg/Kg	5	8/2/2016 10:21:30 AM				
Surr: 4-Bromofluorobenzene	97.4	80-120	%Rec	5	8/2/2016 10:21:30 AM				

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 8/3/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-101

 Project:
 GCU 216
 Collection Date: 8/1/2016 9:15:00 AM

 Lab ID:
 1608068-004
 Matrix: MEOH (SOIL)
 Received Date: 8/2/2016 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: K									
Diesel Range Organics (DRO)	36	9.4	mg/Kg	1	8/2/2016 11:43:01 AM				
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/2/2016 11:43:01 AM				
Surr: DNOP	97.6	70-130	%Rec	1	8/2/2016 11:43:01 AM				
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB				
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	8/2/2016 10:45:06 AM				
Surr: BFB	109	49.4-163	%Rec	1	8/2/2016 10:45:06 AM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.021	mg/Kg	1	8/2/2016 10:45:06 AM				
Toluene	ND	0.042	mg/Kg	1	8/2/2016 10:45:06 AM				
Ethylbenzene	ND	0.042	mg/Kg	1	8/2/2016 10:45:06 AM				
Xylenes, Total	ND	0.085	mg/Kg	1	8/2/2016 10:45:06 AM				
Surr: 4-Bromofluorobenzene	92.9	80-120	%Rec	1	8/2/2016 10:45:06 AM				

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/3/2016

CLIENT: BP America Client Sample ID: TSP-102

 Project:
 GCU 216
 Collection Date: 8/1/2016 9:20:00 AM

 Lab ID:
 1608068-005
 Matrix: MEOH (SOIL)
 Received Date: 8/2/2016 7:00:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	s			Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	85	9.9	mg/Kg	1	8/2/2016 12:04:41 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/2/2016 12:04:41 PM
Surr: DNOP	98.7	70-130	%Rec	1	8/2/2016 12:04:41 PM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	48	4.1	mg/Kg	1	8/2/2016 11:08:41 AM
Surr: BFB	355	49.4-163	S %Rec	1	8/2/2016 11:08:41 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.021	mg/Kg	1	8/2/2016 11:08:41 AM
Toluene	ND	0.041	mg/Kg	1	8/2/2016 11:08:41 AM
Ethylbenzene	ND	0.041	mg/Kg	1	8/2/2016 11:08:41 AM
Xylenes, Total	0.46	0.082	mg/Kg	1	8/2/2016 11:08:41 AM
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	8/2/2016 11:08:41 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/3/2016

CLIENT: BP America Client Sample ID: TSP-103

 Project:
 GCU 216
 Collection Date: 8/1/2016 9:25:00 AM

 Lab ID:
 1608068-006
 Matrix: MEOH (SOIL)
 Received Date: 8/2/2016 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: KJ									
Diesel Range Organics (DRO)	67	9.8	mg/Kg	1	8/2/2016 12:26:26 PM				
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/2/2016 12:26:26 PM				
Surr: DNOP	96.9	70-130	%Rec	1	8/2/2016 12:26:26 PM				
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB				
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	8/2/2016 11:32:17 AM				
Surr: BFB	113	49.4-163	%Rec	1	8/2/2016 11:32:17 AM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.020	mg/Kg	1	8/2/2016 11:32:17 AM				
Toluene	ND	0.040	mg/Kg	1	8/2/2016 11:32:17 AM				
Ethylbenzene	ND	0.040	mg/Kg	1	8/2/2016 11:32:17 AM				
Xylenes, Total	ND	0.080	mg/Kg	1	8/2/2016 11:32:17 AM				
Surr: 4-Bromofluorobenzene	94.5	80-120	%Rec	1	8/2/2016 11:32:17 AM				

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 8/3/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-104

 Project:
 GCU 216
 Collection Date: 8/1/2016 9:30:00 AM

 Lab ID:
 1608068-007
 Matrix: MEOH (SOIL)
 Received Date: 8/2/2016 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: KJH									
Diesel Range Organics (DRO)	120	10	mg/Kg	1	8/2/2016 12:48:06 PM				
Motor Oil Range Organics (MRO)	63	50	mg/Kg	1	8/2/2016 12:48:06 PM				
Surr: DNOP	97.1	70-130	%Rec	1	8/2/2016 12:48:06 PM				
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst: NSB				
Gasoline Range Organics (GRO)	7.9	3.7	mg/Kg	1	8/2/2016 11:55:48 AM				
Surr: BFB	156	49.4-163	%Rec	1	8/2/2016 11:55:48 AM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.019	mg/Kg	1	8/2/2016 11:55:48 AM				
Toluene	ND	0.037	mg/Kg	1	8/2/2016 11:55:48 AM				
Ethylbenzene	ND	0.037	mg/Kg	1	8/2/2016 11:55:48 AM				
Xylenes, Total	ND	0.074	mg/Kg	1	8/2/2016 11:55:48 AM				
Surr: 4-Bromofluorobenzene	96.1	80-120	%Rec	1	8/2/2016 11:55:48 AM				

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/3/2016

CLIENT: BP America Client Sample ID: TSP-105

 Project:
 GCU 216
 Collection Date: 8/1/2016 9:35:00 AM

 Lab ID:
 1608068-008
 Matrix: MEOH (SOIL)
 Received Date: 8/2/2016 7:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed					
EPA METHOD 8015M/D: DIESEL RANG	EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: KJH										
Diesel Range Organics (DRO)	120	9.7		mg/Kg	1	8/2/2016 1:09:49 PM					
Motor Oil Range Organics (MRO)	62	49		mg/Kg	1	8/2/2016 1:09:49 PM					
Surr: DNOP	98.7	70-130		%Rec	1	8/2/2016 1:09:49 PM					
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst: NSB					
Gasoline Range Organics (GRO)	55	4.4		mg/Kg	1	8/2/2016 10:27:56 AM					
Surr: BFB	296	49.4-163	S	%Rec	1	8/2/2016 10:27:56 AM					
EPA METHOD 8021B: VOLATILES						Analyst: NSB					
Benzene	ND	0.022		mg/Kg	1	8/2/2016 10:27:56 AM					
Toluene	ND	0.044		mg/Kg	1	8/2/2016 10:27:56 AM					
Ethylbenzene	0.16	0.044		mg/Kg	1	8/2/2016 10:27:56 AM					
Xylenes, Total	0.97	0.087		mg/Kg	1	8/2/2016 10:27:56 AM					
Surr: 4-Bromofluorobenzene	124	80-120	S	%Rec	1	8/2/2016 10:27:56 AM					

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 8 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/3/2016

CLIENT: BP America Client Sample ID: TSP-106

 Project:
 GCU 216
 Collection Date: 8/1/2016 9:40:00 AM

 Lab ID:
 1608068-009
 Matrix: MEOH (SOIL)
 Received Date: 8/2/2016 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	160	9.6	mg/Kg	1	8/2/2016 1:31:31 PM
Motor Oil Range Organics (MRO)	78	48	mg/Kg	1	8/2/2016 1:31:31 PM
Surr: DNOP	98.9	70-130	%Rec	1	8/2/2016 1:31:31 PM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	8.5	4.1	mg/Kg	1	8/2/2016 10:52:21 AM
Surr: BFB	139	49.4-163	%Rec	1	8/2/2016 10:52:21 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	8/2/2016 10:52:21 AM
Toluene	ND	0.041	mg/Kg	1	8/2/2016 10:52:21 AM
Ethylbenzene	ND	0.041	mg/Kg	1	8/2/2016 10:52:21 AM
Xylenes, Total	ND	0.082	mg/Kg	1	8/2/2016 10:52:21 AM
Surr: 4-Bromofluorobenzene	112	80-120	%Rec	1	8/2/2016 10:52:21 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 9 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

BP America

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1608068

03-Aug-16

Project: G	CU 216						
Sample ID LCS-2673	8 SampType:	LCS	Test	Code: EPA Method	8015M/D: Diesel Rang	e Organics	
Client ID: LCSS	Batch ID:	26738	R	tunNo: <b>36150</b>			
Prep Date: 8/2/2016	Analysis Date:	8/2/2016	S	seqNo: <b>1119608</b>	Units: mg/Kg		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC LowLimit	HighLimit %RPD	RPDLimit	Qual
Diesel Range Organics (DR		10 50.00	0	74.6 62.6	124		
Surr: DNOP	4.7	5.000		94.4 70	130		
Sample ID MB-26738	SampType:	MBLK	Test	Code: EPA Method	8015M/D: Diesel Rang	e Organics	
Client ID: PBS	Batch ID:	26738	R	tunNo: <b>36150</b>			
Prep Date: 8/2/2016	Analysis Date:	8/2/2016	S	seqNo: <b>1119609</b>	Units: mg/Kg		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC LowLimit	HighLimit %RPD	RPDLimit	Qual
Diesel Range Organics (DR		10					
Motor Oil Range Organics ( Surr: DNOP	MRO) ND 9.1	50 10.00		91.3 70	130		
Sample ID 1608068-					8015M/D: Diesel Rang	e Organics	
Client ID: TSP-95R	Batch ID:			tunNo: <b>36151</b>	Linitar		
Prep Date: 8/2/2016	,			SeqNo: <b>1120054</b>	Units: mg/Kg		
Analyte	Result PQ 0) 100 9	L SPK value 45.75	SPK Ref Val 57.89	%REC LowLimit 96.3 33.9	HighLimit %RPD 141	RPDLimit	Qual
Diesel Range Organics (DR Surr: DNOP	(a) 100 9 4.4	4.575	57.69	95.3 70	130		
Comple ID 4600069	204 AMED CompTime	MCD	Tool	Codo: EDA Mothed	201EM/D. Discal Bons	o Organias	
Sample ID 1608068-	O01AMSD SampType:  Batch ID:			tunNo: <b>36151</b>	8015M/D: Diesel Rang	e Organics	
Prep Date: 8/2/2016				SeqNo: 1120055	Units: mg/Kg		
,				•		DDD1: "	0 1
Analyte Diesel Range Organics (DR	Result PQ 0) 99 9	L SPK value 0.5 47.62	SPK Ref Val 57.89	%REC LowLimit 86.9 33.9	HighLimit %RPD 141 2.67	RPDLimit 20	Qual
Surr: DNOP	4.6	4.762	07.00	97.6 70	130 0	0	
Sample ID LCS-2672	2 SampType:	LCS	Test	Code: EPA Method	8015M/D: Diesel Rang	e Organics	
Client ID: LCSS	Batch ID:			tunNo: <b>36150</b>	<b>3</b>	<b>.</b>	
Prep Date: 8/1/2016			S	seqNo: <b>1120062</b>	Units: %Rec		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC LowLimit	HighLimit %RPD	RPDLimit	Qual
Surr: DNOP	5.0	5.000		100 70	130		
Sample ID MB-26722	2 SampType:	MBLK	Test	Code: EPA Method	8015M/D: Diesel Rang	e Organics	
Client ID: PBS	Batch ID:			tunNo: <b>36150</b>			
Prep Date: 8/1/2016				seqNo: <b>1120065</b>	Units: %Rec		
Analyte	Result PQ		SPK Ref Val	,	HighLimit %RPD	RPDLimit	Qual
/ inaryto	Nesuit FQ	_ Of it value	OI IVINEI VAI	/UNLO LUWLIIIIII	ragnemin /011FD	IXI DEIIIII	Quai

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range

J Analyte detected below quantitation limits

Page 10 of 13

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1608068** 

03-Aug-16

Client: BP America
Project: GCU 216

Sample ID MB-26722 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 26722 RunNo: 36150

Prep Date: 8/1/2016 Analysis Date: 8/2/2016 SeqNo: 1120065 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 9.1 10.00 91.2 70 130

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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BP America

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

1100

1000

WO#:

1608068

03-Aug-16

Project: GCU 21	6								
Sample ID MB-26719	SampType: <b>ME</b>	BLK	Test	Code: EF	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch ID: 26	719	R	unNo: 30	6163				
Prep Date: 8/1/2016	Analysis Date: 8/	2/2016	S	eqNo: 1	120116	Units: mg/k	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5.0								
Surr: BFB	920	1000		92.0	49.4	163			
Sample ID LCS-26719 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range									
Client ID: LCSS	Batch ID: 26	719	R	unNo: 36	6163				
Prep Date: 8/1/2016	Analysis Date: 8/	2/2016	S	eqNo: 1	120117	Units: mg/k	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24 5.0	25.00	0	95.9	80	120			
Surr: BFB	920	1000		91.8	49.4	163			
Sample ID MB-26718	SampType: ME	BLK	Test	Code: EF	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch ID: 26	718	R	unNo: 36	6162				
Prep Date: 8/1/2016	Analysis Date: 8/	2/2016	S	eqNo: 1	120148	Units: mg/k	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5.0								
Surr: BFB	960	1000		95.9	49.4	163			
Sample ID LCS-26718	SampType: LC	s	Test	Code: EF	PA Method	8015D: Gaso	oline Rang	e	
Client ID: LCSS	Batch ID: 26	718	R	unNo: 30	6162				
Prep Date: 8/1/2016	Analysis Date: 8/	2/2016	S	eqNo: 1	120149	Units: mg/k	ζg		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26 5.0	25.00	0	104	80	120			

#### Qualifiers:

Surr: BFB

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range

106

49.4

163

- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

ation range

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BP America

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1608068** 

03-Aug-16

Project: GCU 2	16									
Sample ID MB-26719	SampT	уре: МЕ	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	n ID: <b>26</b>	719	F	RunNo: <b>36163</b>					
Prep Date: 8/1/2016	Analysis D	oate: 8/	2/2016	5	SeqNo: 1	120136	Units: mg/K	.g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		119	80	120			
Sample ID LCS-26719	SampT	ype: LC	s	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	n ID: 26	719	F	RunNo: 3	6163				
Prep Date: 8/1/2016	Analysis D	oate: 8/	2/2016	5	SeqNo: 1	120137	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.1	75.3	123			
Toluene	0.95	0.050	1.000	0	94.8	80	124			
Ethylbenzene	0.97	0.050	1.000	0	97.3	82.8	121			
Xylenes, Total	2.8	0.10	3.000	0	94.1	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			
Sample ID MB-26718	SampT	уре: МЕ	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	n ID: <b>26</b>	718	F	RunNo: <b>36162</b>					
Prep Date: 8/1/2016	Analysis D	oate: 8/	2/2016	5	SeqNo: 1	120176	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		90.2	80	120			
Sample ID LCS-26718	SampT	ype: LC	s	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	n ID: <b>26</b>	718	F	RunNo: 3	6162				
Prep Date: 8/1/2016	Analysis D	oate: 8/	2/2016	5	SeqNo: 1	120177	Units: mg/K	g		
Analyte	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.4	75.3	123			
Toluene	0.96	0.050	1.000	0	95.7	80	124			

#### Qualifiers:

Ethylbenzene

Xylenes, Total

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

H Holding times for preparation or analysis exceeded

1.0

2.9

0.96

0.050

0.10

1.000

3.000

1.000

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

82.8

83.9

80

121

122

120

E Value above quantitation range

99.9

97.6

95.9

J Analyte detected below quantitation limits

Page 13 of 13

P Sample pH Not In Range

0

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



#### 4901 Hawkins NE Albuquerque, NM 87109 : 505-345-3975 FAX: 505-345-4107

Sample Log-In Check List

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Client Name: BP AMERICA-Farm	nington Work Order Number	r: 1608068		RoptNo:	1
Received by/date:	08 02 16				
Logged By: Lindsay Mangin	8/2/2016 7:00:00 AM	· · · · · · · · · · · · · · · · · · ·	Junky Hope		
Completed By: Lindsay Mangin	8/2/2016 7:46:18 AM		Stanbirther		
Reviewed By:	08/02/16		Const III		
Chain of Custody	0010-110				
Custody seals intact on sample be	ottlee?	Yes 🗌	No 🗆	Not Present <b>✓</b>	
Is Chain of Custody complete?	otiles :	Yes 🗹	No □	Not Present	
3. How was the sample delivered?		Courier			
Login					
<u>Log In</u>					
4. Was an attempt made to cool the	samples?	Yes 🗹	No 🗌	NA 🗌	
5. Were all samples received at a te	mperature of >0° C to 6.0°C	Yes 🗸	No 🗀	NA 🗆	
6. Sample(s) in proper container(s)?	,	Yes 🗸	No 🗆		
7. Sufficient sample volume for indic	ated test(s)?	Yes 🗹	No 🗌		
8. Are samples (except VOA and ON	•	Yes 🗹	No 🗌		
9. Was preservative added to bottles	s?	Yes	No 🗸	NA 🗆	
10.VOA vials have zero headspace?		Yes 🗌	No 🗆	No VOA Vials 🗹	
11. Were any sample containers rece	eived hroken?	Yes	No ☑	140 VOA VIAIS 🖭	
11, troto any dampie domanio rede	avod broken:	163 —	110 🖭	# of preserved bottles checked	
12. Does paperwork match bottle labe		Yes 🗹	No 🗆	for pH:	
(Note discrepancies on chain of c		V []	No 🗆	(<2 o Adjusted?	r >12 unless noted)
<ul><li>13. Are matrices correctly identified or</li><li>14. Is it clear what analyses were requ</li></ul>		Yes ☑ Yes ☑	No 🗆	_	
15. Were all holding times able to be i		Yes 🗹	No 🗆	Checked by:	
(If no, notify customer for authorize				<u> </u>	<del></del>
Special Handling (if applicable	<u>'e)</u>				
16. Was client notified of all discrepar	ncies with this order?	Yes	No 🗆	NA 🗹	_
Person Notified:	Date				
By Whom:	Via:	eMail	Phone Fax	In Person	
Regarding:				-	
Client Instructions:		- And			
17. Additional remarks:					_
18. Cooler Information					
Cooler No Temp °C Cond		Seal Date	Signed By		
1 3.4 Good	Yes				

#### Air Bubbles (Y or N) **ANALYSIS LABORATORY** HALL ENVIRONMENTAL If necessary samples submitted to Hall Environmental may be subcontracted to other abcredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report. 4901 Hawkins NE - Albuquerque, NM 87109 Fax 505-345-4107 (AOV-ima2) 07S8 www.hallenvironmental.com **Analysis Request** (AOV) **B**09S8 8081 Pesticides / 8082 PCB's Anions (F,CI,NO3,NO2,PO4,SO4) 3CRA 8 Metals Tel. 505-345-3975 (SMIS 07S8 10 01E8) a'HA9 EDB (Method 504.1) (1.814 bodieM) H97 PH 8015B (GROMDRO Remarks: BTEX + MTBE + TPH (Gas only) (1208) *2*,8MT COLU 21/20/80 Time HEAL No <u>2</u> 3 3 3 3 LTE- DEMMY BUSHS mail or Fax#: A steven Mosky @ bo.com Project Manager: Neskal oN,⊡ Rush 2 Burus Preservative Type Sample Teryperature: オス Turn-Around Time: Project Name: □ Standard (Moth Type and # Container Received by: <u>か</u> Sampler: Project #: On Ice: ☐ Level 4 (Full Validation) Sample Request ID 724-878-17-27 abuns @ Henricoin Chain-of-Custody Record 75P-106 75P - 104 TSP - 103 TSP-100 TSP-95R TSP-102 TSP -10) TSP- 105 TSP-99 iquished by: John Colonial Colonia iquished □ Other none #: 505-326-4497 Matrix SOF SS 78 ailing Address: 04 HD A/QC Package: 1707 <u>8</u> Sic 09.5c 0925 355 Time 595 2915 0360 LEDD (Type) ceditation Standard NELAP 3 2 lient: Date



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

August 09, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401 TEL: (505) 326-9457

FAX

RE: GCU #216 OrderNo.: 1608400

#### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 10 sample(s) on 8/6/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

## Date Reported: 8/9/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-104R

 Project:
 GCU #216
 Collection Date: 8/5/2016 9:00:00 AM

 Lab ID:
 1608400-001
 Matrix: MEOH (SOIL)
 Received Date: 8/6/2016 7:45:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	Analys	t: JME			
Diesel Range Organics (DRO)	39	9.8	mg/Kg	1 8/8/2016 10:01:22 AM	26824
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1 8/8/2016 10:01:22 AM	26824
Surr: DNOP	109	70-130	%Rec	1 8/8/2016 10:01:22 AM	26824
EPA METHOD 8015D: GASOLINE RAN	GE			Analys	: NSB
Gasoline Range Organics (GRO)	33	3.7	mg/Kg	1 8/8/2016 11:32:25 AM	26818
Surr: BFB	331	49.4-163	S %Rec	1 8/8/2016 11:32:25 AM	26818
EPA METHOD 8021B: VOLATILES				Analys	t: NSB
Benzene	ND	0.018	mg/Kg	1 8/8/2016 11:32:25 AM	26818
Toluene	ND	0.037	mg/Kg	1 8/8/2016 11:32:25 AM	26818
Ethylbenzene	ND	0.037	mg/Kg	1 8/8/2016 11:32:25 AM	26818
Xylenes, Total	0.25	0.073	mg/Kg	1 8/8/2016 11:32:25 AM	26818
Surr: 4-Bromofluorobenzene	116	80-120	%Rec	1 8/8/2016 11:32:25 AM	26818

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 1 of 13 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

# Date Reported: 8/9/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-105R

 Project:
 GCU #216
 Collection Date: 8/5/2016 9:05:00 AM

 Lab ID:
 1608400-002
 Matrix: MEOH (SOIL)
 Received Date: 8/6/2016 7:45:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed Batcl
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	S		Analyst: <b>JME</b>
Diesel Range Organics (DRO)	90	9.3	mg/Kg	g 1 8/8/2016 10:23:08 AM 2682 <sup>4</sup>
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	g 1 8/8/2016 10:23:08 AM 26824
Surr: DNOP	104	70-130	%Rec	1 8/8/2016 10:23:08 AM 26824
EPA METHOD 8015D: GASOLINE RAN	IGE			Analyst: NSB
Gasoline Range Organics (GRO)	36	4.3	mg/Kg	g 1 8/8/2016 11:56:08 AM 26818
Surr: BFB	316	49.4-163	S %Rec	1 8/8/2016 11:56:08 AM 26818
EPA METHOD 8021B: VOLATILES				Analyst: NSB
Benzene	ND	0.021	mg/Kg	g 1 8/8/2016 11:56:08 AM 26818
Toluene	ND	0.043	mg/Kg	g 1 8/8/2016 11:56:08 AM 26818
Ethylbenzene	ND	0.043	mg/Kg	g 1 8/8/2016 11:56:08 AM 26818
Xylenes, Total	0.21	0.086	mg/Kg	g 1 8/8/2016 11:56:08 AM 26818
Surr: 4-Bromofluorobenzene	118	80-120	%Rec	1 8/8/2016 11:56:08 AM 26818

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

## Date Reported: 8/9/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-106R

 Project:
 GCU #216
 Collection Date: 8/5/2016 9:10:00 AM

 Lab ID:
 1608400-003
 Matrix: MEOH (SOIL)
 Received Date: 8/6/2016 7:45:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S				Analys	: JME
Diesel Range Organics (DRO)	100	9.2		mg/Kg	1	8/8/2016 10:44:53 AM	26824
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/8/2016 10:44:53 AM	26824
Surr: DNOP	109	70-130		%Rec	1	8/8/2016 10:44:53 AM	26824
EPA METHOD 8015D: GASOLINE RAN	GE					Analys	t: NSB
Gasoline Range Organics (GRO)	68	4.2		mg/Kg	1	8/8/2016 12:19:41 PM	26818
Surr: BFB	471	49.4-163	S	%Rec	1	8/8/2016 12:19:41 PM	26818
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.021		mg/Kg	1	8/8/2016 12:19:41 PM	26818
Toluene	ND	0.042		mg/Kg	1	8/8/2016 12:19:41 PM	26818
Ethylbenzene	ND	0.042		mg/Kg	1	8/8/2016 12:19:41 PM	26818
Xylenes, Total	0.47	0.084		mg/Kg	1	8/8/2016 12:19:41 PM	26818
Surr: 4-Bromofluorobenzene	125	80-120	S	%Rec	1	8/8/2016 12:19:41 PM	26818

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 3 of 13 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

### Date Reported: **8/9/2016**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-107

 Project:
 GCU #216
 Collection Date: 8/5/2016 9:15:00 AM

 Lab ID:
 1608400-004
 Matrix: MEOH (SOIL)
 Received Date: 8/6/2016 7:45:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	Analyst	JME			
Diesel Range Organics (DRO)	82	9.8	mg/Kg	1 8/8/2016 11:07:00 AM	26824
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1 8/8/2016 11:07:00 AM	26824
Surr: DNOP	105	70-130	%Rec	1 8/8/2016 11:07:00 AM	26824
EPA METHOD 8015D: GASOLINE RAN	IGE			Analyst	: NSB
Gasoline Range Organics (GRO)	18	4.8	mg/Kg	1 8/8/2016 12:43:14 PM	26818
Surr: BFB	221	49.4-163	S %Rec	1 8/8/2016 12:43:14 PM	26818
EPA METHOD 8021B: VOLATILES				Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1 8/8/2016 12:43:14 PM	26818
Toluene	ND	0.048	mg/Kg	1 8/8/2016 12:43:14 PM	26818
Ethylbenzene	ND	0.048	mg/Kg	1 8/8/2016 12:43:14 PM	26818
Xylenes, Total	0.098	0.097	mg/Kg	1 8/8/2016 12:43:14 PM	26818
Surr: 4-Bromofluorobenzene	112	80-120	%Rec	1 8/8/2016 12:43:14 PM	26818

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

## Date Reported: 8/9/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-108

 Project:
 GCU #216
 Collection Date: 8/5/2016 9:20:00 AM

 Lab ID:
 1608400-005
 Matrix: MEOH (SOIL)
 Received Date: 8/6/2016 7:45:00 AM

Analyses	Result	PQL (	Qual Uni	ts D	F Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG		Analyst	: JME			
Diesel Range Organics (DRO)	66	9.9	mg/	′Kg 1	8/8/2016 11:27:50 AM	26824
Motor Oil Range Organics (MRO)	ND	50	mg/	′Kg 1	8/8/2016 11:27:50 AM	26824
Surr: DNOP	92.3	70-130	%R	ec 1	8/8/2016 11:27:50 AM	26824
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	17	4.0	mg/	′Kg 1	8/8/2016 1:06:51 PM	26818
Surr: BFB	223	49.4-163	S %R	ec 1	8/8/2016 1:06:51 PM	26818
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.020	mg/	′Kg 1	8/8/2016 1:06:51 PM	26818
Toluene	ND	0.040	mg/	′Kg 1	8/8/2016 1:06:51 PM	26818
Ethylbenzene	ND	0.040	mg/	Kg 1	8/8/2016 1:06:51 PM	26818
Xylenes, Total	ND	0.081	mg/	′Kg 1	8/8/2016 1:06:51 PM	26818
Surr: 4-Bromofluorobenzene	109	80-120	%R	ec 1	8/8/2016 1:06:51 PM	26818

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 5 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Date Reported: 8/9/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: B-E05@39'

 Project:
 GCU #216
 Collection Date: 8/5/2016 10:00:00 AM

 Lab ID:
 1608400-006
 Matrix: MEOH (SOIL)
 Received Date: 8/6/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: JME
Diesel Range Organics (DRO)	27	9.7	mg/Kg	1	8/8/2016 11:49:39 AM	26824
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/8/2016 11:49:39 AM	26824
Surr: DNOP	90.9	70-130	%Rec	1	8/8/2016 11:49:39 AM	26824
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	8/8/2016 10:45:32 AM	26818
Surr: BFB	127	49.4-163	%Rec	5	8/8/2016 10:45:32 AM	26818
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.096	mg/Kg	5	8/8/2016 10:45:32 AM	26818
Toluene	ND	0.19	mg/Kg	5	8/8/2016 10:45:32 AM	26818
Ethylbenzene	ND	0.19	mg/Kg	5	8/8/2016 10:45:32 AM	26818
Xylenes, Total	ND	0.39	mg/Kg	5	8/8/2016 10:45:32 AM	26818
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	5	8/8/2016 10:45:32 AM	26818

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 6 of 13 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

Date Reported: 8/9/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: B-C05@39'

 Project:
 GCU #216
 Collection Date: 8/5/2016 10:05:00 AM

 Lab ID:
 1608400-007
 Matrix: MEOH (SOIL)
 Received Date: 8/6/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analyst	: JME
Diesel Range Organics (DRO)	74	9.3	mg/Kg	1	8/8/2016 12:11:17 PM	26824
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/8/2016 12:11:17 PM	26824
Surr: DNOP	93.2	70-130	%Rec	1	8/8/2016 12:11:17 PM	26824
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	36	20	mg/Kg	5	8/8/2016 11:08:58 AM	26818
Surr: BFB	157	49.4-163	%Rec	5	8/8/2016 11:08:58 AM	26818
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.098	mg/Kg	5	8/8/2016 11:08:58 AM	26818
Toluene	ND	0.20	mg/Kg	5	8/8/2016 11:08:58 AM	26818
Ethylbenzene	ND	0.20	mg/Kg	5	8/8/2016 11:08:58 AM	26818
Xylenes, Total	ND	0.39	mg/Kg	5	8/8/2016 11:08:58 AM	26818
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	5	8/8/2016 11:08:58 AM	26818

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 7 of 13 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

### Date Reported: **8/9/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: E-04@39'

 Project:
 GCU #216
 Collection Date: 8/5/2016 10:10:00 AM

 Lab ID:
 1608400-008
 Matrix: MEOH (SOIL)
 Received Date: 8/6/2016 7:45:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analyst	: JME
Diesel Range Organics (DRO)	32	9.7	mg/Kg	1	8/8/2016 11:28:59 AM	26824
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/8/2016 11:28:59 AM	26824
Surr: DNOP	108	70-130	%Rec	1	8/8/2016 11:28:59 AM	26824
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	7.5	4.0	mg/Kg	1	8/8/2016 1:30:26 PM	26818
Surr: BFB	164	49.4-163	S %Rec	1	8/8/2016 1:30:26 PM	26818
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.020	mg/Kg	1	8/8/2016 1:30:26 PM	26818
Toluene	ND	0.040	mg/Kg	1	8/8/2016 1:30:26 PM	26818
Ethylbenzene	ND	0.040	mg/Kg	1	8/8/2016 1:30:26 PM	26818
Xylenes, Total	0.11	0.079	mg/Kg	1	8/8/2016 1:30:26 PM	26818
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	8/8/2016 1:30:26 PM	26818

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 8 of 13 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

Sample container temperature is out of limit as specified

## Date Reported: 8/9/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: E-05@39'

 Project:
 GCU #216
 Collection Date: 8/5/2016 10:15:00 AM

 Lab ID:
 1608400-009
 Matrix: MEOH (SOIL)
 Received Date: 8/6/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analysi	: JME
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	8/8/2016 11:50:54 AM	26824
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/8/2016 11:50:54 AM	26824
Surr: DNOP	105	70-130	%Rec	1	8/8/2016 11:50:54 AM	26824
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	8/8/2016 1:54:00 PM	26818
Surr: BFB	110	49.4-163	%Rec	1	8/8/2016 1:54:00 PM	26818
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.020	mg/Kg	1	8/8/2016 1:54:00 PM	26818
Toluene	ND	0.039	mg/Kg	1	8/8/2016 1:54:00 PM	26818
Ethylbenzene	ND	0.039	mg/Kg	1	8/8/2016 1:54:00 PM	26818
Xylenes, Total	ND	0.078	mg/Kg	1	8/8/2016 1:54:00 PM	26818
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/8/2016 1:54:00 PM	26818

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 9 of 13 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit

% Recovery outside of range due to dilution or matrix

## Date Reported: 8/9/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: E-06@39'

 Project:
 GCU #216
 Collection Date: 8/5/2016 10:20:00 AM

 Lab ID:
 1608400-010
 Matrix: MEOH (SOIL)
 Received Date: 8/6/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	S			Analyst	: JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	8/8/2016 12:12:41 PM	26824
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/8/2016 12:12:41 PM	26824
Surr: DNOP	106	70-130	%Rec	1	8/8/2016 12:12:41 PM	26824
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	8/8/2016 2:17:31 PM	26818
Surr: BFB	110	49.4-163	%Rec	1	8/8/2016 2:17:31 PM	26818
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.020	mg/Kg	1	8/8/2016 2:17:31 PM	26818
Toluene	ND	0.039	mg/Kg	1	8/8/2016 2:17:31 PM	26818
Ethylbenzene	ND	0.039	mg/Kg	1	8/8/2016 2:17:31 PM	26818
Xylenes, Total	ND	0.079	mg/Kg	1	8/8/2016 2:17:31 PM	26818
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/8/2016 2:17:31 PM	26818

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 10 of 13 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1608400** 

09-Aug-16

Client: BP America
Project: GCU #216

Sample ID MB-26824 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: **PBS** Batch ID: 26824 RunNo: 36290 Prep Date: 8/8/2016 Analysis Date: 8/8/2016 SeqNo: 1124202 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 8.7 10.00 86.6 70 130

Sample ID LCS-26824 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 26824 RunNo: 36290 Prep Date: 8/8/2016 Analysis Date: 8/8/2016 SeqNo: 1124203 Units: mg/Kg Analyte SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 40 10 80.6 62.6 50.00 124 Surr: DNOP 4.1 5.000 81.9 70 130

#### Qualifiers:

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

7 maryte detected in the associated interior Blan

Page 11 of 13

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1608400

09-Aug-16

**Client: BP** America **Project:** GCU #216

Surr: BFB

Sample ID MB-26818 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 26818 RunNo: 36301

Prep Date: 8/5/2016 Analysis Date: 8/8/2016 SeqNo: 1124720 Units: 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 1100 1000 105 49.4 163

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-26818 SampType: LCS

Client ID: LCSS Batch ID: 26818 RunNo: 36301

1200

Prep Date: 8/5/2016 Analysis Date: 8/8/2016 SeqNo: 1124721 Units: mg/Kg

1000

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 27 5.0 25.00 108 80 120

119

49.4

163

#### Qualifiers:

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

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### Hall Environmental Analysis Laboratory, Inc.

3.2

1.1

0.10

WO#:

1608400

09-Aug-16

**Client: BP** America **Project:** GCU #216

Sample ID MB-26818 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

**PBS** Client ID: Batch ID: 26818 RunNo: 36301

8/5/2016 Prep Date: Analysis Date: 8/8/2016 SeqNo: 1124736 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Benzene ND 0.025 ND 0.050 Toluene ND 0.050 Ethylbenzene Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene 1.0 1.000 99.5 80 120

3.000

1.000

Sample ID LCS-26818	Samp1	ype: <b>LC</b>	S	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batcl	h ID: <b>26</b>	818	R	RunNo: 3	6301				
Prep Date: 8/5/2016	Analysis D	Date: 8/	8/2016	S	SeqNo: 1	124737	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.2	75.3	123			
Toluene	1.0	0.050	1.000	0	102	80	124			
	1.0	0.000		-						

106

108

83.9

80

122

120

#### Qualifiers:

Xylenes, Total

Surr: 4-Bromofluorobenzene

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

Е Value above quantitation range

J Analyte detected below quantitation limits

P

Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 13 of 13



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

### Sample Log-In Check List

RcptNo: 1 Work Order Number: 1608400 **BP AMERICA-Farmington** Client Name: Received by/date: 8/6/2016 7:45:00 AM Logged By: Lindsay Mangin 8/6/2016 12:16:12 PM **Lindsay Mangin** Completed By: AT 08/08/16 Reviewed By: Chain of Custody No 🗀 Not Present Yes 🗌 1. Custody seals intact on sample bottles? No 🗌 Not Present Yes 2. Is Chain of Custody complete? Courier 3. How was the sample delivered? Log In No 🗌 NA 🗌 Yes 4. Was an attempt made to cool the samples? No 🗌 NA 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗔 Yes Sample(s) in proper container(s)? No L Yes 7. Sufficient sample volume for indicated test(s)? No 🗌 8. Are samples (except VOA and ONG) properly preserved? Yes NA 🗌 No 🍻 Yes 9. Was preservative added to bottles? No VOA Vials No 🗀 Yes 10.VOA vials have zero headspace? No 🕸 Yes 11 Were any sample containers received broken? # of preserved bottles checked No 🗌 for pH: 12. Does paperwork match bottle labels? Yes (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗀 13. Are matrices correctly identified on Chain of Custody? No 🗀 14. Is it clear what analyses were requested? Checked by: No 🗀 Yes 🐼 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) NA 🐼 Yes No 🗌 16. Was client notified of all discrepancies with this order? Date: Person Notified: By Whom: In Person Via: ☐ eMail Phone Fax Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Seal Intact | Seal No Seal Date Signed By Cooler No Temp °C Condition 2.0 Good Yes

CHUTDONMENTA	ANALYSIS LABORATORY	www.hallenvironmental.com	Albuquerque, NM 87109	Fax 505-345-4107	Analysis Request				(\	səp (ON'	ACRA 8 Met Aniona (F,Cl, 8081 Pesticio 8260B (VOA 8270 (Semi-													
	ANAL	www.hal	4901 Hawkins NE -	Tel. 505-345-3975	Y .	Q		WIS	(1.8 (1.4	09 F	TPH 8015B ( EDB (Methoo bodys (8310										<b>A</b>			
			490	<u></u>							aTM +(X3T8	×									<b>~</b>		Remarks:	·
same	sh day TAT		# 216				oska)	Burns	SW SW		We HEAL NP	787	7007	- P33	120	JE -	100	t02	XXX	500-	Q1Q-	1	Date Time	Date Time
id Time:	rd KRush	di	(ACC #			nager:	S. 18	LTE-Banny 1	1.5 m		Preservative # Type	NΥ									<del>&gt;</del>		KALLIDA	
Turn-Around Time:	□ Standard	Project Name:	<u>J</u>	Project #:	<b>.</b>	Project Manage	BP.	LTE	Sampler:	Sample Temberature	Container Type and #	402	,								*>		Received by:	Received by:
Chain-of-Custody Record	48				10ne #: 701-570-4727/505-326-9497	Steven . Moskal @ bp. com	olburns @ Itemv. com	☐ Level 4 (Full Validation)			Sample Request ID	TSP-104R	TSP-105R	TSP-106 R	TSP-107	TSP-108	B-E 65 @ 39'	B-C05@39	E-04@39	E - 05 @ 34'	6-06 039"		3	uished by:
-of-Cus	Laner				4-078-	steven.		]	□ Other	80 F		\$\$	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								<b>&gt;</b>		Relinquished by	Relinqu
Chain	BP.		ailing Address:		10£ #:	nail or Fax#:	√/QC Package:	Standard	screditation NELAP	· EDD (Type)	Time	0000 3	0905	040	35	0420	1000	1005	1016	5101	02.01		Time: 6 1515	Time:
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

August 16, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU #216 OrderNo.: 1608806

#### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 13 sample(s) on 8/13/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-112

 Project:
 GCU #216
 Collection Date: 8/12/2016 9:15:00 AM

 Lab ID:
 1608806-001
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst: TOM
Diesel Range Organics (DRO)	140	10	mg/Kg	1	8/15/2016 10:05:13 AM
Motor Oil Range Organics (MRO)	62	50	mg/Kg	1	8/15/2016 10:05:13 AM
Surr: DNOP	95.2	70-130	%Rec	1	8/15/2016 10:05:13 AM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: RAA
Benzene	ND	0.10	mg/Kg	5	8/13/2016 6:41:12 PM
Toluene	ND	0.10	mg/Kg	5	8/13/2016 6:41:12 PM
Ethylbenzene	ND	0.10	mg/Kg	5	8/13/2016 6:41:12 PM
Xylenes, Total	ND	0.20	mg/Kg	5	8/13/2016 6:41:12 PM
Surr: 1,2-Dichloroethane-d4	96.6	70-130	%Rec	5	8/13/2016 6:41:12 PM
Surr: 4-Bromofluorobenzene	82.9	70-130	%Rec	5	8/13/2016 6:41:12 PM
Surr: Dibromofluoromethane	95.8	70-130	%Rec	5	8/13/2016 6:41:12 PM
Surr: Toluene-d8	99.8	70-130	%Rec	5	8/13/2016 6:41:12 PM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	20	mg/Kg	5	8/13/2016 6:41:12 PM
Surr: BFB	98.4	70-130	%Rec	5	8/13/2016 6:41:12 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-113

 Project:
 GCU #216
 Collection Date: 8/12/2016 9:20:00 AM

 Lab ID:
 1608806-002
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	130	9.9	mg/Kg	1	8/15/2016 10:26:51 AM
Motor Oil Range Organics (MRO)	64	50	mg/Kg	1	8/15/2016 10:26:51 AM
Surr: DNOP	91.6	70-130	%Rec	1	8/15/2016 10:26:51 AM
EPA METHOD 8260B: VOLATILES \$	SHORT LIST				Analyst: RAA
Benzene	ND	0.097	mg/Kg	5	8/13/2016 7:09:56 PM
Toluene	ND	0.097	mg/Kg	5	8/13/2016 7:09:56 PM
Ethylbenzene	ND	0.097	mg/Kg	5	8/13/2016 7:09:56 PM
Xylenes, Total	ND	0.19	mg/Kg	5	8/13/2016 7:09:56 PM
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	5	8/13/2016 7:09:56 PM
Surr: 4-Bromofluorobenzene	90.7	70-130	%Rec	5	8/13/2016 7:09:56 PM
Surr: Dibromofluoromethane	101	70-130	%Rec	5	8/13/2016 7:09:56 PM
Surr: Toluene-d8	98.6	70-130	%Rec	5	8/13/2016 7:09:56 PM
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	8/13/2016 7:09:56 PM
Surr: BFB	100	70-130	%Rec	5	8/13/2016 7:09:56 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-114

 Project:
 GCU #216
 Collection Date: 8/12/2016 9:25:00 AM

 Lab ID:
 1608806-003
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3			Analyst: TOM
Diesel Range Organics (DRO)	160	9.4	mg/Kg	1	8/15/2016 10:48:31 AM
Motor Oil Range Organics (MRO)	67	47	mg/Kg	1	8/15/2016 10:48:31 AM
Surr: DNOP	94.0	70-130	%Rec	1	8/15/2016 10:48:31 AM
EPA METHOD 8260B: VOLATILES SHOP	RT LIST				Analyst: RAA
Benzene	ND	0.11	mg/Kg	5	8/14/2016 2:27:13 PM
Toluene	ND	0.11	mg/Kg	5	8/14/2016 2:27:13 PM
Ethylbenzene	ND	0.11	mg/Kg	5	8/14/2016 2:27:13 PM
Xylenes, Total	ND	0.22	mg/Kg	5	8/14/2016 2:27:13 PM
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	5	8/14/2016 2:27:13 PM
Surr: 4-Bromofluorobenzene	88.3	70-130	%Rec	5	8/14/2016 2:27:13 PM
Surr: Dibromofluoromethane	98.2	70-130	%Rec	5	8/14/2016 2:27:13 PM
Surr: Toluene-d8	98.2	70-130	%Rec	5	8/14/2016 2:27:13 PM
EPA METHOD 8015D MOD: GASOLINE I	RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	55	22	mg/Kg	5	8/14/2016 2:27:13 PM
Surr: BFB	100	70-130	%Rec	5	8/14/2016 2:27:13 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-115

 Project:
 GCU #216
 Collection Date: 8/12/2016 9:30:00 AM

 Lab ID:
 1608806-004
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3			Analyst: TOM
Diesel Range Organics (DRO)	150	10	mg/Kg	1	8/15/2016 9:29:58 AM
Motor Oil Range Organics (MRO)	51	50	mg/Kg	1	8/15/2016 9:29:58 AM
Surr: DNOP	86.5	70-130	%Rec	1	8/15/2016 9:29:58 AM
EPA METHOD 8260B: VOLATILES SHOP	RT LIST				Analyst: RAA
Benzene	ND	0.099	mg/Kg	5	8/14/2016 2:56:00 PM
Toluene	ND	0.099	mg/Kg	5	8/14/2016 2:56:00 PM
Ethylbenzene	ND	0.099	mg/Kg	5	8/14/2016 2:56:00 PM
Xylenes, Total	0.87	0.20	mg/Kg	5	8/14/2016 2:56:00 PM
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	5	8/14/2016 2:56:00 PM
Surr: 4-Bromofluorobenzene	80.6	70-130	%Rec	5	8/14/2016 2:56:00 PM
Surr: Dibromofluoromethane	99.0	70-130	%Rec	5	8/14/2016 2:56:00 PM
Surr: Toluene-d8	98.6	70-130	%Rec	5	8/14/2016 2:56:00 PM
EPA METHOD 8015D MOD: GASOLINE I	RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	75	20	mg/Kg	5	8/14/2016 2:56:00 PM
Surr: BFB	99.8	70-130	%Rec	5	8/14/2016 2:56:00 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-116

 Project:
 GCU #216
 Collection Date: 8/12/2016 9:35:00 AM

 Lab ID:
 1608806-005
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analyst: TOM
Diesel Range Organics (DRO)	140	9.8	mg/Kg	1	8/15/2016 9:51:49 AM
Motor Oil Range Organics (MRO)	52	49	mg/Kg	1	8/15/2016 9:51:49 AM
Surr: DNOP	89.3	70-130	%Rec	1	8/15/2016 9:51:49 AM
EPA METHOD 8260B: VOLATILES SHO	RT LIST				Analyst: RAA
Benzene	ND	0.10	mg/Kg	5	8/13/2016 8:36:15 PM
Toluene	ND	0.10	mg/Kg	5	8/13/2016 8:36:15 PM
Ethylbenzene	ND	0.10	mg/Kg	5	8/13/2016 8:36:15 PM
Xylenes, Total	0.26	0.21	mg/Kg	5	8/13/2016 8:36:15 PM
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	5	8/13/2016 8:36:15 PM
Surr: 4-Bromofluorobenzene	82.8	70-130	%Rec	5	8/13/2016 8:36:15 PM
Surr: Dibromofluoromethane	96.3	70-130	%Rec	5	8/13/2016 8:36:15 PM
Surr: Toluene-d8	99.3	70-130	%Rec	5	8/13/2016 8:36:15 PM
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	56	21	mg/Kg	5	8/13/2016 8:36:15 PM
Surr: BFB	102	70-130	%Rec	5	8/13/2016 8:36:15 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-117

 Project:
 GCU #216
 Collection Date: 8/12/2016 9:40:00 AM

 Lab ID:
 1608806-006
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	130	9.7	mg/Kg	1	8/15/2016 10:13:48 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/15/2016 10:13:48 AM
Surr: DNOP	89.5	70-130	%Rec	1	8/15/2016 10:13:48 AM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: RAA
Benzene	ND	0.11	mg/Kg	5	8/13/2016 9:04:55 PM
Toluene	ND	0.11	mg/Kg	5	8/13/2016 9:04:55 PM
Ethylbenzene	ND	0.11	mg/Kg	5	8/13/2016 9:04:55 PM
Xylenes, Total	ND	0.22	mg/Kg	5	8/13/2016 9:04:55 PM
Surr: 1,2-Dichloroethane-d4	99.7	70-130	%Rec	5	8/13/2016 9:04:55 PM
Surr: 4-Bromofluorobenzene	82.7	70-130	%Rec	5	8/13/2016 9:04:55 PM
Surr: Dibromofluoromethane	97.1	70-130	%Rec	5	8/13/2016 9:04:55 PM
Surr: Toluene-d8	100	70-130	%Rec	5	8/13/2016 9:04:55 PM
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	28	22	mg/Kg	5	8/13/2016 9:04:55 PM
Surr: BFB	101	70-130	%Rec	5	8/13/2016 9:04:55 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-118

 Project:
 GCU #216
 Collection Date: 8/12/2016 9:45:00 AM

 Lab ID:
 1608806-007
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAM		Analyst: <b>TOM</b>			
Diesel Range Organics (DRO)	160	9.8	mg/Kg	1	8/15/2016 10:35:37 AM
Motor Oil Range Organics (MRO)	60	49	mg/Kg	1	8/15/2016 10:35:37 AM
Surr: DNOP	88.3	70-130	%Rec	1	8/15/2016 10:35:37 AM
EPA METHOD 8260B: VOLATILES SI	HORT LIST				Analyst: RAA
Benzene	ND	0.040	mg/Kg	2	8/13/2016 10:02:34 PM
Toluene	ND	0.040	mg/Kg	2	8/13/2016 10:02:34 PM
Ethylbenzene	ND	0.040	mg/Kg	2	8/13/2016 10:02:34 PM
Xylenes, Total	ND	0.080	mg/Kg	2	8/13/2016 10:02:34 PM
Surr: 1,2-Dichloroethane-d4	99.6	70-130	%Rec	2	8/13/2016 10:02:34 PM
Surr: 4-Bromofluorobenzene	79.2	70-130	%Rec	2	8/13/2016 10:02:34 PM
Surr: Dibromofluoromethane	98.7	70-130	%Rec	2	8/13/2016 10:02:34 PM
Surr: Toluene-d8	98.0	70-130	%Rec	2	8/13/2016 10:02:34 PM
EPA METHOD 8015D MOD: GASOLIN	IE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	21	8.0	mg/Kg	2	8/13/2016 10:02:34 PM
Surr: BFB	102	70-130	%Rec	2	8/13/2016 10:02:34 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-119

 Project:
 GCU #216
 Collection Date: 8/12/2016 9:50:00 AM

 Lab ID:
 1608806-008
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE		Analyst: TOM			
Diesel Range Organics (DRO)	98	10	mg/Kg	1	8/15/2016 10:57:28 AM
Motor Oil Range Organics (MRO)	51	50	mg/Kg	1	8/15/2016 10:57:28 AM
Surr: DNOP	92.5	70-130	%Rec	1	8/15/2016 10:57:28 AM
EPA METHOD 8260B: VOLATILES SHOP	RT LIST				Analyst: RAA
Benzene	ND	0.10	mg/Kg	5	8/13/2016 10:31:18 PM
Toluene	ND	0.10	mg/Kg	5	8/13/2016 10:31:18 PM
Ethylbenzene	ND	0.10	mg/Kg	5	8/13/2016 10:31:18 PM
Xylenes, Total	0.29	0.21	mg/Kg	5	8/13/2016 10:31:18 PM
Surr: 1,2-Dichloroethane-d4	95.5	70-130	%Rec	5	8/13/2016 10:31:18 PM
Surr: 4-Bromofluorobenzene	90.4	70-130	%Rec	5	8/13/2016 10:31:18 PM
Surr: Dibromofluoromethane	92.7	70-130	%Rec	5	8/13/2016 10:31:18 PM
Surr: Toluene-d8	100	70-130	%Rec	5	8/13/2016 10:31:18 PM
EPA METHOD 8015D MOD: GASOLINE F	RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	26	21	mg/Kg	5	8/13/2016 10:31:18 PM
Surr: BFB	102	70-130	%Rec	5	8/13/2016 10:31:18 PM

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

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 8 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-120

 Project:
 GCU #216
 Collection Date: 8/12/2016 9:55:00 AM

 Lab ID:
 1608806-009
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA		Analyst: <b>TOM</b>			
Diesel Range Organics (DRO)	99	9.5	mg/Kg	1	8/15/2016 11:19:12 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/15/2016 11:19:12 AM
Surr: DNOP	85.6	70-130	%Rec	1	8/15/2016 11:19:12 AM
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst: RAA
Benzene	ND	0.022	mg/Kg	1	8/13/2016 10:59:59 PM
Toluene	ND	0.043	mg/Kg	1	8/13/2016 10:59:59 PM
Ethylbenzene	ND	0.043	mg/Kg	1	8/13/2016 10:59:59 PM
Xylenes, Total	0.12	0.087	mg/Kg	1	8/13/2016 10:59:59 PM
Surr: 1,2-Dichloroethane-d4	106	70-130	%Rec	1	8/13/2016 10:59:59 PM
Surr: 4-Bromofluorobenzene	78.9	70-130	%Rec	1	8/13/2016 10:59:59 PM
Surr: Dibromofluoromethane	102	70-130	%Rec	1	8/13/2016 10:59:59 PM
Surr: Toluene-d8	101	70-130	%Rec	1	8/13/2016 10:59:59 PM
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	19	4.3	mg/Kg	1	8/13/2016 10:59:59 PM
Surr: BFB	102	70-130	%Rec	1	8/13/2016 10:59:59 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 9 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-121

 Project:
 GCU #216
 Collection Date: 8/12/2016 10:00:00 AM

 Lab ID:
 1608806-010
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE		Analyst: TOM			
Diesel Range Organics (DRO)	95	10	mg/Kg	1	8/15/2016 11:21:40 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/15/2016 11:21:40 AM
Surr: DNOP	89.4	70-130	%Rec	1	8/15/2016 11:21:40 AM
EPA METHOD 8260B: VOLATILES SHOP	RT LIST				Analyst: RAA
Benzene	ND	0.020	mg/Kg	1	8/13/2016 11:28:43 PM
Toluene	ND	0.039	mg/Kg	1	8/13/2016 11:28:43 PM
Ethylbenzene	ND	0.039	mg/Kg	1	8/13/2016 11:28:43 PM
Xylenes, Total	ND	0.079	mg/Kg	1	8/13/2016 11:28:43 PM
Surr: 1,2-Dichloroethane-d4	109	70-130	%Rec	1	8/13/2016 11:28:43 PM
Surr: 4-Bromofluorobenzene	80.7	70-130	%Rec	1	8/13/2016 11:28:43 PM
Surr: Dibromofluoromethane	104	70-130	%Rec	1	8/13/2016 11:28:43 PM
Surr: Toluene-d8	95.0	70-130	%Rec	1	8/13/2016 11:28:43 PM
EPA METHOD 8015D MOD: GASOLINE F	RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	12	3.9	mg/Kg	1	8/13/2016 11:28:43 PM
Surr: BFB	103	70-130	%Rec	1	8/13/2016 11:28:43 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 10 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-122

 Project:
 GCU #216
 Collection Date: 8/12/2016 10:05:00 AM

 Lab ID:
 1608806-011
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA		Analyst: <b>TOM</b>			
Diesel Range Organics (DRO)	130	9.6	mg/Kg	1	8/15/2016 10:54:10 AM
Motor Oil Range Organics (MRO)	70	48	mg/Kg	1	8/15/2016 10:54:10 AM
Surr: DNOP	92.0	70-130	%Rec	1	8/15/2016 10:54:10 AM
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst: RAA
Benzene	ND	0.019	mg/Kg	1	8/13/2016 11:57:31 PM
Toluene	ND	0.037	mg/Kg	1	8/13/2016 11:57:31 PM
Ethylbenzene	ND	0.037	mg/Kg	1	8/13/2016 11:57:31 PM
Xylenes, Total	ND	0.074	mg/Kg	1	8/13/2016 11:57:31 PM
Surr: 1,2-Dichloroethane-d4	98.6	70-130	%Rec	1	8/13/2016 11:57:31 PM
Surr: 4-Bromofluorobenzene	86.7	70-130	%Rec	1	8/13/2016 11:57:31 PM
Surr: Dibromofluoromethane	99.0	70-130	%Rec	1	8/13/2016 11:57:31 PM
Surr: Toluene-d8	98.8	70-130	%Rec	1	8/13/2016 11:57:31 PM
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	8/13/2016 11:57:31 PM
Surr: BFB	108	70-130	%Rec	1	8/13/2016 11:57:31 PM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 11 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-111RT

 Project:
 GCU #216
 Collection Date: 8/12/2016 10:10:00 AM

 Lab ID:
 1608806-012
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE		Analyst: TOM			
Diesel Range Organics (DRO)	130	10	mg/Kg	1	8/15/2016 10:26:43 AM
Motor Oil Range Organics (MRO)	69	50	mg/Kg	1	8/15/2016 10:26:43 AM
Surr: DNOP	91.4	70-130	%Rec	1	8/15/2016 10:26:43 AM
EPA METHOD 8260B: VOLATILES SHOP	RT LIST				Analyst: RAA
Benzene	ND	0.023	mg/Kg	1	8/14/2016 12:26:21 AM
Toluene	ND	0.046	mg/Kg	1	8/14/2016 12:26:21 AM
Ethylbenzene	ND	0.046	mg/Kg	1	8/14/2016 12:26:21 AM
Xylenes, Total	ND	0.092	mg/Kg	1	8/14/2016 12:26:21 AM
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	8/14/2016 12:26:21 AM
Surr: 4-Bromofluorobenzene	77.8	70-130	%Rec	1	8/14/2016 12:26:21 AM
Surr: Dibromofluoromethane	104	70-130	%Rec	1	8/14/2016 12:26:21 AM
Surr: Toluene-d8	96.7	70-130	%Rec	1	8/14/2016 12:26:21 AM
EPA METHOD 8015D MOD: GASOLINE F	RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	11	4.6	mg/Kg	1	8/14/2016 12:26:21 AM
Surr: BFB	101	70-130	%Rec	1	8/14/2016 12:26:21 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 12 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2016

CLIENT: BP America Client Sample ID: TSP-106RT

 Project:
 GCU #216
 Collection Date: 8/12/2016 10:15:00 AM

 Lab ID:
 1608806-013
 Matrix: MEOH (SOIL)
 Received Date: 8/13/2016 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAI		Analyst: <b>TOM</b>			
Diesel Range Organics (DRO)	130	9.7	mg/Kg	1	8/15/2016 9:58:58 AM
Motor Oil Range Organics (MRO)	67	49	mg/Kg	1	8/15/2016 9:58:58 AM
Surr: DNOP	92.1	70-130	%Rec	1	8/15/2016 9:58:58 AM
EPA METHOD 8260B: VOLATILES SI	HORT LIST				Analyst: RAA
Benzene	ND	0.021	mg/Kg	1	8/14/2016 12:55:03 AM
Toluene	ND	0.043	mg/Kg	1	8/14/2016 12:55:03 AM
Ethylbenzene	ND	0.043	mg/Kg	1	8/14/2016 12:55:03 AM
Xylenes, Total	0.33	0.086	mg/Kg	1	8/14/2016 12:55:03 AM
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	1	8/14/2016 12:55:03 AM
Surr: 4-Bromofluorobenzene	73.4	70-130	%Rec	1	8/14/2016 12:55:03 AM
Surr: Dibromofluoromethane	102	70-130	%Rec	1	8/14/2016 12:55:03 AM
Surr: Toluene-d8	97.7	70-130	%Rec	1	8/14/2016 12:55:03 AM
EPA METHOD 8015D MOD: GASOLIN	NE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	72	4.3	mg/Kg	1	8/14/2016 12:55:03 AM
Surr: BFB	115	70-130	%Rec	1	8/14/2016 12:55:03 AM

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 13 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

**BP** America

**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1608806

16-Aug-16

Project:	GCU #21	6									
Sample ID 1	1608806-001AMS	SampTy	pe: <b>M</b> \$	6	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: 1	ΓSP-112	Batch	ID: <b>26</b>	973	F	RunNo: 3	6497				
Prep Date:	8/15/2016	Analysis Da	ate: 8/	15/2016	Ş	SeqNo: 1	130202	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Or	ganics (DRO)	160	9.8	48.97	139.2	50.2	33.9	141			
Surr: DNOP		4.5		4.897		92.6	70	130			
Sample ID 1	1608806-001AMSE	SampTy	pe: <b>M</b> \$	SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: 1	ΓSP-112	Batch	ID: <b>26</b>	973	F	RunNo: 3	6497				
Prep Date:	8/15/2016	Analysis Da	ate: 8/	15/2016	5	SeqNo: 1	130203	Units: mg/h	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Or	ganics (DRO)	170	9.4	46.86	139.2	69.6	33.9	141	4.79	20	
Surr: DNOP		4.2		4.686		88.7	70	130	0	0	
Sample ID L	_CS-26973	SampTy	pe: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: L	_CSS	Batch	ID: <b>26</b>	973	F	RunNo: 3	6497				
Prep Date:	8/15/2016	Analysis Da	ate: 8/	15/2016	5	SeqNo: 1	130206	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Or	ganics (DRO)	42	10	50.00	0	83.1	62.6	124			
Surr: DNOP		4.2		5.000		83.4	70	130			
Sample ID N	MB-26973	SampTy	pe: ME	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: F	PBS	Batch	ID: <b>26</b>	973	F	RunNo: 3	6497				
Prep Date:	8/15/2016	Analysis Da	ate: 8/	15/2016	5	SeqNo: 1	130207	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Or	=	ND	10								
Motor Oil Range	Organics (MRO)	ND	50	10.00		00.0	70	400			
Surr: DNOP		9.0		10.00		89.9	70	130			
Sample ID L	_CS-26952	SampTy	pe: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: L	_CSS	Batch	ID: <b>26</b>	952	F	RunNo: 3	6499				
Prep Date:	8/12/2016	Analysis Da	ate: 8/	16/2016	Ş	SeqNo: 1	131127	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.7		5.000		94.7	70	130			
Sample ID N	MB-26952	SampTy	pe: <b>M</b>	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: F		Batch	ID: <b>26</b>	952		RunNo: 3			J	-	
Prep Date:		Analysis Da				SeqNo: 1		Units: %Re	С		
		-				-					

#### Qualifiers:

Analyte

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

Result

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

HighLimit

%RPD

Value above quantitation range

J Analyte detected below quantitation limits

Page 14 of 18

Qual

**RPDLimit** 

P Sample pH Not In Range

SPK value SPK Ref Val %REC LowLimit

RLReporting Detection Limit

Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1608806** 

16-Aug-16

Client: BP America
Project: GCU #216

Sample ID MB-26952 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 26952 RunNo: 36499

Prep Date: 8/12/2016 Analysis Date: 8/16/2016 SeqNo: 1131128 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 8.5 10.00 85.3 70 130

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 15 of 18

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1608806** 

16-Aug-16

Client:	BP America
Project:	GCU #216

Sample ID 100ng Ics	Samp1	Гуре: <b>LC</b>	s	TestCode: EPA Method 8260B: Volatiles Short List									
Client ID: LCSS	RunNo: <b>36480</b>												
Prep Date:	13/2016	5	SeqNo: 1	129725	Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	0.96	0.025	1.000	0	96.3	70	130						
Toluene	1.0	0.050	1.000	0	99.9	70	130						
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		97.7	70	130						
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.3	70	130						
Surr: Dibromofluoromethane	0.46		0.5000		91.1	70	130						
Surr: Toluene-d8	0.48		0.5000		95.5	70	130						
Sample ID 1608806-012a ms SampType: MS TestCode: FPA Method 8260R: Volatiles Short List													

Sample ID 1608806-012a ms	SampT	уре: М	3	TestCode: EPA Method 8260B: Volatiles Short List									
Client ID: TSP-111RT	Batcl	n ID: <b>R3</b>	6480	F	RunNo: 3								
Prep Date:	Analysis D	oate: 8/	14/2016	S	SeqNo: 1	129738	Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	0.85	0.023	0.9158	0	93.1	49.2	155						
Toluene	0.86	0.046	0.9158	0	93.6	52	154						
Surr: 1,2-Dichloroethane-d4	0.47		0.4579		102	70	130						
Surr: 4-Bromofluorobenzene	0.37		0.4579		80.0	70	130						
Surr: Dibromofluoromethane	0.46		0.4579		101	70	130						
Surr: Toluene-d8	0.43		0.4579		94.8	70	130						

Sample ID 1608806-012a m	sd SampT	уре: М\$	SD	Tes						
Client ID: TSP-111RT	Batch	n ID: <b>R3</b>	6480	F	RunNo: 3	6480				
Prep Date:	Analysis D	oate: 8/	14/2016	5	SeqNo: 1	129739	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.023	0.9158	0	90.2	49.2	155	3.15	20	
Toluene	0.84	0.046	0.9158	0	91.6	52	154	2.20	20	
Surr: 1,2-Dichloroethane-d4	0.45		0.4579		98.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.36		0.4579		79.4	70	130	0	0	
Surr: Dibromofluoromethane	0.46		0.4579		99.5	70	130	0	0	
Surr: Toluene-d8	0.42		0 4579		92.8	70	130	0	0	

Sample ID rb	SampT	ype: ME	BLK	TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: PBS	Batch	1D: <b>R3</b>	6480	F	RunNo: 3	6480					
Prep Date:	Analysis D	ate: 8/	13/2016	8	SeqNo: 1	129741	Units: mg/K	ίg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.025									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 16 of 18

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1608806** 

16-Aug-16

Client: BP America
Project: GCU #216

Sample ID rb SampType: MBLK TestCode: EPA Method 8260B: Volatiles Short List PBS Client ID: Batch ID: R36480 RunNo: 36480 SeqNo: 1129741 Prep Date: Analysis Date: 8/13/2016 Units: mg/Kg Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: 1,2-Dichloroethane-d4 0.49 0.5000 97.4 70 130 0.44 0.5000 88.6 70 130 Surr: 4-Bromofluorobenzene 96.3 Surr: Dibromofluoromethane 0.48 0.5000 70 130 0.5000 100 Surr: Toluene-d8 0.50 70 130

#### Qualifiers:

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

Page 17 of 18

# Hall Environmental Analysis Laboratory, Inc.

480

500.0

WO#:

1608806

16-Aug-16

Client:	BP America
Project:	GCU #216

Project:	GCU #21										
Sample ID	1608806-013a ms	SampTy	/pe: <b>M</b> \$	3	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	TSP-106RT	Batch	ID: G3	6480	F	RunNo: 3	6480				
Prep Date:		Analysis Da	ate: <b>8/</b>	14/2016	5	SeqNo: 1	129707	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	100	4.3	21.41	72.16	134	52.3	132			S
Surr: BFB		430		428.1		100	70	130			
Sample ID	1608806-013a msd	I SampTy	/pe: <b>M</b> \$	SD	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	TSP-106RT	Batch	ID: G3	6480	F	RunNo: 3	6480				
Prep Date:		Analysis Da	ate: 8/	14/2016	5	SeqNo: 1	129708	Units: mg/h	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	100	4.3	21.41	72.16	145	52.3	132	2.31	20	S
Surr: BFB		440		428.1		103	70	130	0	0	
Sample ID	2.5ug lcs	SampTy	pe: LC	s	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	LCSS	Batch	ID: G3	6480	F	RunNo: 3	6480				
Prep Date:		Analysis Da	ate: <b>8/</b>	13/2016	5	SeqNo: 1	129709	Units: mg/k	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	22	5.0	25.00	0	89.6	62.9	123			
Surr: BFB		490		500.0		98.7	70	130			
Sample ID	rb	SampTy	/pe: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	PBS	Batch	ID: G3	6480	F	RunNo: 3	6480				
Prep Date:		Analysis Da	ate: <b>8/</b>	13/2016	S	SeqNo: 1	129710	Units: mg/k	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0								

#### Qualifiers:

Surr: BFB

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range

96.8

130

- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory 4901 Hawkins NE

Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

## Sample Log-In Check List

RcptNo: 1 Work Order Number: 1608806 Client Name: **BP AMERICA-Farmington** Received by/date: 8/13/2016 7:15:00 AM Logged By: Lindsay Mangin 8/13/2016 7/49:27 AM Completed By: Lindsay Mangin Reviewed By: Chain of Custody Yes Not Present 1. Custody seals intact on sample bottles? Yes 🕏 No 🗌 Not Present .... 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No 🗌 NA 🗔 4. Was an attempt made to cool the samples? NA 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C Yes No ... Sample(s) in proper container(s)? Yes No 7. Sufficient sample volume for indicated test(s)? No 🗌 8. Are samples (except VOA and ONG) properly preserved? NA 🔲 No 🍻 9. Was preservative added to bottles? No VOA Vials 🗹 No 🗌 Yes 🗌 10.VOA vials have zero headspace? Yes □ No 🐱 11. Were any sample containers received broken? # of preserved bottles checked No 🗀 for pH: 12. Does paperwork match bottle labels? Yes (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 13. Are matrices correctly identified on Chain of Custody? No 🔲 14. Is it clear what analyses were requested? Yes No 🗀 Checked by: 15. Were all holding times able to be met? Yes (If no, notify customer for authorization.) Special Handling (if applicable) Yes No 🗌 NA 🐼 16. Was client notified of all discrepancies with this order? Person Notified: Date: By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Temp °C | Condition Seal Intact | Seal No Seal Date Cooler No Signed By Good 1.2 Yes

	ANALYSIS LABORATORY	mo	4901 Hawkins NE - Albuquerque, NM 87109	-4107	1				1)		′ΟΛ	r-imə2) (Semi-	3														I the analytical renort
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<b>.</b>	_					(	120	8) s	.Mg:	L +	3E	HM + KETB	X	_	-	-				-			7		Rem		idissoa
Turn-Around Time: SayMe	XRush		GC以 #216	Project #:	<b>T</b>	Project Manager:	2	LTE-Danny Burns	1. B. Burns	On lce:	Sample Temperature: / / 7	Container Preservative Type Type	Hos NA -CD	700-	201	12		022	tol-	XX	50-	010-	7	<b>&gt;</b>	Received by: Date Time	Received by Date Time	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
Chain-of-Custody Record	Lower 48				Phone #: 701 540 - 4727 /505 326 9497	steven, moskal@bp.com	dburns@Itenv.com	☐ Level 4 (Full Validation)		U Other	PDF	Matrix Sample Request ID	SS TSP-112.	TSP-113.	HII-dS1	758-115	128-116	TSP-117	111-851	611 - 151	158-120	15P-121	V TSP-122	7	Relination by:	elinguished by:	ss submitted to Hall Environmental may be subc
l-of			.;		570	<del>*</del> *	l		l (	╛┃	سن			_													sample
hain	BP		Addres		まま	· Fax#:	Package	dard	tation	} 	(Type)	Time	0915	0260	5760	0260	09 35	०भ सह	0945	0360	0955	1000	5001		Time: <b>H2</b> 30	Time: 2/69	necessary,
S	Client:		Mailing Address:		Phone #	email or Fax#:	QA/QC Package:	又 Standard	Accreditation	NELAP	X EDD (Type)	Date	5/12/16	_									>		Pate:	Sate:	<u>_</u>

NTAL		Air Bubbles (Y or N)										report													
HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com	- Albuquerque, NM 87109 Fax 505-345-4107 Analysis Request	(AOV) 80628 (AOV-ime <i>S</i> ) 0728				 · \						istand on the analylica													
SIS	- Albuquerque, NN Fax 505-345- Analysis Request	Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) 8081 Pesticides / 8082 PCB's				\						ou viscalo e													
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AZ A	4901 Hawkins NE 7	EDB (Method 504.1)	ļ		_			+			+	-   <del>1</del>	<b>I ∢</b>	awkir 5-34(	TPH (Method 418.1)						$\top$				-   Hoose
	MT TH	<b>ОЯИ (БВД) (БВД)</b> ВЗ 108 НЯТ	1	X																					
	5 ⊢ 1 ⊢	BTEX + MTBE + TPH (Gas only)						4				Remarks													
		8TEX + MT8E + TM8's (8021)	<u>)                                    </u>	X	H				-	-	-														
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Turn-Around Time:  ☐ Standard  Project Name:	Project #:	Project Manager:  Rampler: Sample Temperature: Container Type and # Type	LOZ NA	7								Received by: Received ky:													
Client: BP Lower 48		email or Fax#: Steven - MoSkal @bp.tom  OA/OC Package: Aburns @ttenv. turn  Standard	3/12/16 1010 SS TSP-111RT	3/2/16 10/5 SS TSP 106 RT								Date: Time: Relinquished by:    Part   Part   Part   Part   Part													



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

July 13, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU #216 OrderNo.: 1607484

#### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 7 sample(s) on 7/12/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 7/13/2016

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT: BP America Client Sample ID:** TSP-59

**Project:** GCU #216 **Collection Date:** 7/11/2016 9:05:00 AM Lab ID: 1607484-001 Matrix: SOIL Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analy	st: TOM
Diesel Range Organics (DRO)	44	10	mg/Kg	1	7/12/2016 10:43:28 A	M 26339
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/12/2016 10:43:28 A	M 26339
Surr: DNOP	87.9	70-130	%Rec	1	7/12/2016 10:43:28 A	M 26339
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	7/12/2016 10:46:49 A	M 26325
Surr: BFB	102	80-120	%Rec	1	7/12/2016 10:46:49 A	M 26325
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.022	mg/Kg	1	7/12/2016 10:46:49 A	M 26325
Toluene	ND	0.044	mg/Kg	1	7/12/2016 10:46:49 A	M 26325
Ethylbenzene	ND	0.044	mg/Kg	1	7/12/2016 10:46:49 A	M 26325
Xylenes, Total	ND	0.088	mg/Kg	1	7/12/2016 10:46:49 A	M 26325
Surr: 4-Bromofluorobenzene	91.2	80-120	%Rec	1	7/12/2016 10:46:49 A	M 26325

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

#### Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 10 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

**Qualifiers:** 

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

CLIENT: BP America Client Sample ID: TSP-60

 Project:
 GCU #216
 Collection Date: 7/11/2016 9:10:00 AM

 Lab ID:
 1607484-002
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analy	zed Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	61	10	mg/Kg	1 7/12/2016 11	1:05:03 AM 26339
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1 7/12/2016 11	1:05:03 AM 26339
Surr: DNOP	91.4	70-130	%Rec	1 7/12/2016 11	1:05:03 AM 26339
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1 7/12/2016 11	1:10:22 AM 26325
Surr: BFB	116	80-120	%Rec	1 7/12/2016 1	1:10:22 AM 26325
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1 7/12/2016 11	1:10:22 AM 26325
Toluene	ND	0.038	mg/Kg	1 7/12/2016 11	1:10:22 AM 26325
Ethylbenzene	ND	0.038	mg/Kg	1 7/12/2016 1	1:10:22 AM 26325
Xylenes, Total	ND	0.075	mg/Kg	1 7/12/2016 11	1:10:22 AM 26325
Surr: 4-Bromofluorobenzene	93.2	80-120	%Rec	1 7/12/2016 11	1:10:22 AM 26325

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

## **Qualifiers:** \* Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

CLIENT: BP America Client Sample ID: TSP-61

 Project:
 GCU #216
 Collection Date: 7/11/2016 9:15:00 AM

 Lab ID:
 1607484-003
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	50	9.8	mg/Kg	1	7/12/2016 11:26:38 AM	1 26339
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/12/2016 11:26:38 AM	1 26339
Surr: DNOP	93.4	70-130	%Rec	1	7/12/2016 11:26:38 AM	1 26339
EPA METHOD 8015D: GASOLINE RAM	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	11	4.3	mg/Kg	1	7/12/2016 11:33:53 AM	1 26325
Surr: BFB	142	80-120	S %Rec	1	7/12/2016 11:33:53 AM	1 26325
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.022	mg/Kg	1	7/12/2016 11:33:53 AM	1 26325
Toluene	ND	0.043	mg/Kg	1	7/12/2016 11:33:53 AM	1 26325
Ethylbenzene	ND	0.043	mg/Kg	1	7/12/2016 11:33:53 AM	1 26325
Xylenes, Total	ND	0.087	mg/Kg	1	7/12/2016 11:33:53 AM	1 26325
Surr: 4-Bromofluorobenzene	97.5	80-120	%Rec	1	7/12/2016 11:33:53 AM	1 26325

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

### **Qualifiers:** \* Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

CLIENT: BP America Client Sample ID: TSP-62

 Project:
 GCU #216
 Collection Date: 7/11/2016 9:30:00 AM

 Lab ID:
 1607484-004
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	5			Analys	t: TOM
Diesel Range Organics (DRO)	63	9.9	mg/Kg	1	7/12/2016 11:48:36 AM	Л 26339
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/12/2016 11:48:36 AM	A 26339
Surr: DNOP	90.8	70-130	%Rec	1	7/12/2016 11:48:36 AM	A 26339
EPA METHOD 8015D: GASOLINE RAM	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	7/12/2016 11:57:21 AM	Л 26325
Surr: BFB	105	80-120	%Rec	1	7/12/2016 11:57:21 AM	A 26325
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.021	mg/Kg	1	7/12/2016 11:57:21 AM	И 26325
Toluene	ND	0.041	mg/Kg	1	7/12/2016 11:57:21 AM	A 26325
Ethylbenzene	ND	0.041	mg/Kg	1	7/12/2016 11:57:21 AM	A 26325
Xylenes, Total	ND	0.082	mg/Kg	1	7/12/2016 11:57:21 AM	A 26325
Surr: 4-Bromofluorobenzene	93.0	80-120	%Rec	1	7/12/2016 11:57:21 AM	A 26325

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 10
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

CLIENT: BP America Client Sample ID: TSP-63

 Project:
 GCU #216
 Collection Date: 7/11/2016 9:35:00 AM

 Lab ID:
 1607484-005
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3		Ar	nalyst: <b>TOM</b>
Diesel Range Organics (DRO)	52	9.9	mg/Kg	1 7/12/2016 12:10:0	9 PM 26339
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1 7/12/2016 12:10:0	9 PM 26339
Surr: DNOP	92.7	70-130	%Rec	1 7/12/2016 12:10:0	9 PM 26339
EPA METHOD 8015D: GASOLINE RAM	IGE			Ar	nalyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1 7/12/2016 12:20:5	50 PM 26325
Surr: BFB	101	80-120	%Rec	1 7/12/2016 12:20:5	50 PM 26325
EPA METHOD 8021B: VOLATILES				Ar	nalyst: <b>NSB</b>
Benzene	ND	0.019	mg/Kg	1 7/12/2016 12:20:5	50 PM 26325
Toluene	ND	0.037	mg/Kg	1 7/12/2016 12:20:5	50 PM 26325
Ethylbenzene	ND	0.037	mg/Kg	1 7/12/2016 12:20:5	50 PM 26325
Xylenes, Total	ND	0.075	mg/Kg	1 7/12/2016 12:20:5	50 PM 26325
Surr: 4-Bromofluorobenzene	91.3	80-120	%Rec	1 7/12/2016 12:20:5	50 PM 26325

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

#### 

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

**CLIENT: BP America** Client Sample ID: TSP-64

**Project:** GCU #216 **Collection Date:** 7/11/2016 9:40:00 AM Lab ID: 1607484-006 Matrix: SOIL Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Q	Qual Units	DF Da	te Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	1			Analyst:	ТОМ
Diesel Range Organics (DRO)	48	10	mg/Kg	1 7/1	2/2016 12:32:16 PM	26339
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1 7/1	2/2016 12:32:16 PM	26339
Surr: DNOP	92.8	70-130	%Rec	1 7/1	2/2016 12:32:16 PM	26339
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	9.6	3.8	mg/Kg	1 7/1	2/2016 12:44:20 PM	26325
Surr: BFB	138	80-120	S %Rec	1 7/1	2/2016 12:44:20 PM	26325
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.019	mg/Kg	1 7/1	2/2016 12:44:20 PM	26325
Toluene	ND	0.038	mg/Kg	1 7/1	2/2016 12:44:20 PM	26325
Ethylbenzene	ND	0.038	mg/Kg	1 7/1	2/2016 12:44:20 PM	26325
Xylenes, Total	0.16	0.076	mg/Kg	1 7/1	2/2016 12:44:20 PM	26325
Surr: 4-Bromofluorobenzene	97.5	80-120	%Rec	1 7/1	2/2016 12:44:20 PM	26325

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Н Holding times for preparation or analysis exceeded J

Analyte detected below quantitation limits Page 6 of 10

ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit

% Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/13/2016

CLIENT: BP America Client Sample ID: TSP-65

 Project:
 GCU #216
 Collection Date: 7/11/2016 9:45:00 AM

 Lab ID:
 1607484-007
 Matrix: SOIL
 Received Date: 7/12/2016 7:50:00 AM

Analyses	Result	PQL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	42	9.7	mg/Kg	1	7/12/2016 12:53:56 PM	26339
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/12/2016 12:53:56 PM	26339
Surr: DNOP	91.4	70-130	%Rec	1	7/12/2016 12:53:56 PM	26339
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	4.1	3.7	mg/Kg	1	7/12/2016 1:07:49 PM	26325
Surr: BFB	127	80-120	S %Rec	1	7/12/2016 1:07:49 PM	26325
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	7/12/2016 1:07:49 PM	26325
Toluene	ND	0.037	mg/Kg	1	7/12/2016 1:07:49 PM	26325
Ethylbenzene	ND	0.037	mg/Kg	1	7/12/2016 1:07:49 PM	26325
Xylenes, Total	ND	0.075	mg/Kg	1	7/12/2016 1:07:49 PM	26325
Surr: 4-Bromofluorobenzene	96.7	80-120	%Rec	1	7/12/2016 1:07:49 PM	26325

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

### **Qualifiers:** \* Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

BP America

**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1607484** 

13-Jul-16

Project:	GCU #21	6									
Sample ID	LCS-26339	SampTy	pe: LC	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: <b>26</b>	339	F	RunNo: 3	5609				
Prep Date:	7/12/2016	Analysis Da	ate: 7/	12/2016	5	SeqNo: 1	102200	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	42	10	50.00	0	83.6	62.6	124			
Surr: DNOP		4.0		5.000		79.6	70	130			
Sample ID	MB-26339	SampTy	/pe: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: <b>26</b>	339	F	RunNo: 3	5609				
Prep Date:	7/12/2016	Analysis Da	ate: 7/	12/2016	9	SeqNo: 1	102201	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	ND	10								
Motor Oil Range	Organics (MRO)	ND	50								
Surr: DNOP		8.8		10.00		88.1	70	130			
Sample ID	1607484-001AMS	SampTy	/pe: <b>M</b> \$	 S	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	TSP-59	Batch	ID: <b>26</b>	339	F	RunNo: 3	5609				
Prep Date:	7/12/2016	Analysis Da	ate: <b>7/</b>	12/2016	5	SeqNo: 1	102271	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	110	10	49.90	44.07	123	33.9	141			
Surr: DNOP		4.4		4.990		88.2	70	130			
Sample ID	1607484-001AMSE	<b>S</b> ampTy	/pe: <b>M</b> \$	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	TSP-59	Batch	ID: <b>26</b>	339	F	RunNo: 3	5609				
Prep Date:	7/12/2016	Analysis Da	ate: 7/	12/2016	5	SeqNo: 1	102272	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	88	10	50.40	44.07	88.2	33.9	141	17.7	20	

#### Qualifiers:

Surr: DNOP

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

4.5

5.040

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

D. Canada all Nat la Danas

90.0

70

130

Page 8 of 10

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1607484

13-Jul-16

**Client: BP** America **Project:** GCU #216

Surr: BFB

Sample ID MB-26325 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 26325 RunNo: 35619

Prep Date: 7/11/2016 Analysis Date: 7/12/2016 SeqNo: 1102390 Units: 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 950 1000 94.7 80 120

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-26325 SampType: LCS

Client ID: LCSS Batch ID: 26325 RunNo: 35619

1000

Prep Date: 7/11/2016 Analysis Date: 7/12/2016 SeqNo: 1102391 Units: mg/Kg

1000

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 26 5.0 25.00 103 80 120

105

80

120

#### Qualifiers:

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

Page 9 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1607484

13-Jul-16

**Client: BP** America **Project:** GCU #216

Sample ID MB-26325 SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBS Client ID: Batch ID: 26325 RunNo: 35619 Prep Date: 7/11/2016 Analysis Date: 7/12/2016 SeqNo: 1102416 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 ND 0.050 ND 0.050

Toluene Ethylbenzene ND Xylenes, Total 0.10

Surr: 4-Bromofluorobenzene 0.91 1.000 91.2 80 120

Sample ID LCS-26325	Samp <sup>-</sup>	Type: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batc	h ID: <b>26</b>	325	F	RunNo: <b>35619</b>							
Prep Date: 7/11/2016	Analysis [	Date: 7/	12/2016	S	SeqNo: 1	102417	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.97	0.025	1.000	0	96.6	75.3	123					
Toluene	0.95	0.050	1.000	0	95.5	80	124					
Ethylbenzene	0.99	0.050	1.000	0	99.3	82.8	121					
Xylenes, Total	3.0	0.10	3.000	0	99.1	83.9	122					
Surr: 4-Bromofluorobenzene	0.97		1.000		97.0	80	120					

#### Qualifiers:

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

Page 10 of 10



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: BP AMERICA-Farmington	Work Order Number:	160748	4		RcptNe	p: 1
Received by/date: AT 01//21/6						
Logged By: Anne Thorne 7/	12/2016 7:50:00 AM		anne	Am	_	
Completed By: Anne Thorne 7/	12/2016		Dan.	Shum Shum		
Reviewed By:	11/12/16		Carra ,	<i>)</i> ,,		
Chain of Custody						
1. Custody seals intact on sample bottles?		Yes [	No		Not Present	
2. Is Chain of Custody complete?		Yes 🛚	<b>∠</b> No		Not Present	
3. How was the sample delivered?		Courier	:			
<u>Log In</u>						
4. Was an attempt made to cool the samples?		Yes 🛚	<b>∠</b> No	· 🗆	NA 🗆	]
5. Were all samples received at a temperature of	>0° C to 6.0°C	Yes <b>✓</b>	. 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 p	reserved?	Yes 🛂	. No			
9. Was preservative added to bottles?		Yes [	] No	✓	NA 🗆	
10.VOA vials have zero headspace?		Yes [	] No		No VOA Vials <b>✓</b>	
11. Were any sample containers received broken?		Yes [	□ No	<b>Y</b>		
			_	_	# of preserved bottles checked	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🛂	No No		for pH: (<2	or >12 unless noted)
13. Are matrices correctly identified on Chain of Cu	stody?	Yes 🔽	No		Adjusted?	
14. Is it clear what analyses were requested?	•	Yes 🗹	. No			
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:	Date					
By Whom:	Via:	] eMail	☐ Phone ☐	Fax	In Person	
Regarding:	and the state of t					
Client Instructions:		W120-11. 12. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	The state of the s	ment variously and	and the term of the second of	
17. Additional remarks:	<u>-</u>	_		** *		J
18. Cooler Information  Cooler No. Temp °C Condition Seal  1 1.0 Good Yes	Intact   Seal No   Se	eal Date	Signed I	Ву		

Chain-of-Custody Record Turn-A lient: \$\insert{C} \insert{C} \cdot \text{Lower}  \text{R} \\ \text{Died} \\ \text{Project} \\ \text{hole #: } \insert{Sos-326-9497} \end{Aptilong Project} \\ \text{Project} \\ \text{mail or Fax#: } \insert{Stevten. moskel @bp.com} \\ \text{Project} \\ \text{Mon Project}	round Time: Salme	Rush TAT ANAL		GCL #216 4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975	Analysis Request	(\(\frac{1}{2}\))	HENE MASKED IS)	Danny (Swrms (Signal ) (Si	D & Burns, (1.2)	AO SO SI A SO SO SO SO SO SO SO SO SO SO SO SO SO	bo bo bo \( \rangle \text{\lambda} \)	Preservative HEAL No. Type //ocide	N4 201		X X 802			X X 9%					low	
Carry   Carstody   Carry   C				4901 Hav	Tel. 505-		-		_	<u>a</u> )(	วยร	3)/8	35108 H9T	X	$\searrow$	X	Z	X	X,	X				arks:	
Adress:  School Record Turn-Around Time: Supple State of Color of Color of Rush Taken Taken School of Color of Rush Taken School of Color														$\searrow$	X	X	X	X	X	X	)			Remi	I
Adress:    Second   Turn-Around Time:   Columbia   Colu	Same	sh TAT		F216			•	Masked	Burns	· ·				102	202	892	1002-	2002	9,702	100		:	<b>\</b>	Date Time C7/12/16	Date Time
Address:  Se-Lower 48  Groject Named and Project Named and Project Named and Delect Named Aburns & Item Native Aburns & Item Native Aburns & Item Native Aburns & Item Sample:  Type) & Def Sample Request ID Type Aburns Aburns Aburns Aburns Aburns Sample Request ID Type Aburns Abu	me:	Ru		キュ			er:	Steve	<b>~</b> ]	D Bu	sa).	rature:	reservati Type	۸A	-					>			)_	7,7	
Colorest	Turn-Around Ti	□ Standard	Project Name:	ر ا	Project #:		Project Manage	186-	176		1	Sample Tempe		402	£					>				Received by:	Received by:
Time: Relinquisher	stody Record	wer 48				~~	Moskal	_	□ Level 4 (Full Validation)					TSP-59	TSP-60	TSP-61	Tsp-62	TsP-63	TSP-64	188-65				Mad b	d by:
Time: Time: Tain-California and California and Cali	of-Cus	ا ،				26-949	steven	dieur		(		40	Matrix	SS	- Carrier					>		)		Religevishe	Relinquishe
	ıain-c	358	)	ddress:		505-3		1	ard	ے		Type)	***	2060	8 16	0915	88	0935	0460	24.62				Fime:	Time:



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

July 07, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU #216 OrderNo.: 1607131

#### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 3 sample(s) on 7/6/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

## **Analytical Report**

Lab Order **1607131**Date Reported: **7/7/2016** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-51R

 Project:
 GCU #216
 Collection Date: 7/5/2016 9:00:00 AM

 Lab ID:
 1607131-001
 Matrix: SOIL
 Received Date: 7/6/2016 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	91	9.9	mg/Kg	1	7/6/2016 11:00:24 AM	26242
Motor Oil Range Organics (MRO)	64	49	mg/Kg	1	7/6/2016 11:00:24 AM	26242
Surr: DNOP	97.1	70-130	%Rec	1	7/6/2016 11:00:24 AM	26242
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	7/6/2016 10:19:42 AM	26229
Surr: BFB	101	80-120	%Rec	1	7/6/2016 10:19:42 AM	26229
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	7/6/2016 10:19:42 AM	26229
Toluene	ND	0.037	mg/Kg	1	7/6/2016 10:19:42 AM	26229
Ethylbenzene	ND	0.037	mg/Kg	1	7/6/2016 10:19:42 AM	26229
Xylenes, Total	ND	0.075	mg/Kg	1	7/6/2016 10:19:42 AM	26229
Surr: 4-Bromofluorobenzene	92.2	80-120	%Rec	1	7/6/2016 10:19:42 AM	26229

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

#### Qualifiers:

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

## **Analytical Report**

Lab Order **1607131**Date Reported: **7/7/2016** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: TSP-37,38,39R

 Project:
 GCU #216
 Collection Date: 7/5/2016 9:15:00 AM

 Lab ID:
 1607131-002
 Matrix: SOIL
 Received Date: 7/6/2016 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	}			Analys	st: TOM
Diesel Range Organics (DRO)	72	10	mg/Kg	1	7/6/2016 11:22:01 AM	26242
Motor Oil Range Organics (MRO)	54	50	mg/Kg	1	7/6/2016 11:22:01 AM	26242
Surr: DNOP	96.1	70-130	%Rec	1	7/6/2016 11:22:01 AM	26242
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	7/6/2016 10:43:15 AM	26229
Surr: BFB	119	80-120	%Rec	1	7/6/2016 10:43:15 AM	26229
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.020	mg/Kg	1	7/6/2016 10:43:15 AM	26229
Toluene	ND	0.039	mg/Kg	1	7/6/2016 10:43:15 AM	26229
Ethylbenzene	ND	0.039	mg/Kg	1	7/6/2016 10:43:15 AM	26229
Xylenes, Total	ND	0.079	mg/Kg	1	7/6/2016 10:43:15 AM	26229
Surr: 4-Bromofluorobenzene	96.1	80-120	%Rec	1	7/6/2016 10:43:15 AM	26229

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

#### Qualifiers:

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

## **Analytical Report**

Lab Order 1607131 Date Reported: 7/7/2016

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT: BP America** Client Sample ID: TSP-54

**Project:** GCU #216 Collection Date: 7/5/2016 9:30:00 AM 1607131-003 Matrix: SOIL Received Date: 7/6/2016 7:35:00 AM Lab ID:

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN			Analyst	том		
Diesel Range Organics (DRO)	41	9.7	mg/Kg	1	7/6/2016 11:43:47 AM	26242
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/6/2016 11:43:47 AM	26242
Surr: DNOP	98.7	70-130	%Rec	1	7/6/2016 11:43:47 AM	26242
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	7/6/2016 11:06:45 AM	26229
Surr: BFB	115	80-120	%Rec	1	7/6/2016 11:06:45 AM	26229
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	7/6/2016 11:06:45 AM	26229
Toluene	ND	0.038	mg/Kg	1	7/6/2016 11:06:45 AM	26229
Ethylbenzene	ND	0.038	mg/Kg	1	7/6/2016 11:06:45 AM	26229
Xylenes, Total	ND	0.076	mg/Kg	1	7/6/2016 11:06:45 AM	26229
Surr: 4-Bromofluorobenzene	95.6	80-120	%Rec	1	7/6/2016 11:06:45 AM	26229

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Н Holding times for preparation or analysis exceeded J

Analyte detected below quantitation limits Page 3 of 7

ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit

% Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

BP America

GCU #216

**Client:** 

**Project:** 

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1607131** 

07-Jul-16

Sample ID	LCS-26242	SampTy	ype: <b>LC</b>	cs	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: <b>26</b>	242	F	RunNo: 3	5436				
Prep Date:	7/6/2016	Analysis Da	ate: <b>7</b>	/6/2016	9	SeqNo: 10	096556	Units: mg/h	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
_	Organics (DRO)	42	10	50.00	0	84.1	62.6	124			
Surr: DNOP		4.4		5.000		87.7	70	130			
Sample ID	MB-26242	SampTy	/pe: <b>M</b> I	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	PBS	Batch	ID: 26	242	F	RunNo: 3	5436				
Prep Date:	7/6/2016	Analysis Da	ate: <b>7</b>	/6/2016	9	SeqNo: 10	096557	Units: mg/k	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
•	Organics (DRO)	ND	10								
_	je Organics (MRO)	ND	50	40.00		05.4	70	400			
Surr: DNOP		9.5		10.00		95.4	70	130			
Sample ID	MB-26224	SampTy	ype: <b>M</b> I	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	PBS	Batch	ID: <b>26</b>	224	F	RunNo: 3	5437				
Prep Date:	7/5/2016	Analysis Da	ate: <b>7</b>	/6/2016	Ş	SeqNo: 10	096560	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.5		10.00		94.6	70	130			
Sample ID	LCS-26224	SampTy	ype: <b>LC</b>	cs	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	LCSS	Batch	ID: <b>26</b>	224	F	RunNo: 3	5437				
Prep Date:	7/5/2016	Analysis Da	ate: <b>7</b>	/6/2016	5	SeqNo: 10	096561	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.1		5.000		82.6	70	130			
Sample ID	1607131-001AMS	SampTy	/pe: <b>M</b> \$	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	TSP-51R		ID: <b>26</b>		F	RunNo: 3	5436			•	
Prep Date:	7/6/2016	Analysis Da	ate: <b>7</b>	/6/2016	5	SeqNo: 10	096829	Units: mg/k	<b>(</b> g		
A11		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Anaivte					90.51	66.8	33.9	141		-	
Analyte Diesel Range (	Organics (DRO)	120	9.9	49.55	30.31	00.0	55.5				
	3 , ,	120 4.5	9.9	49.55 4.955		90.5	70	130			
Diesel Range ( Surr: DNOP	3 , ,	4.5		4.955		90.5	70		esel Rang	e Organics	
Diesel Range C Surr: DNOP Sample ID		4.5 SampTy		4.955 SD	Tes	90.5	70 PA Method	130	esel Rang	e Organics	
Diesel Range C Surr: DNOP Sample ID	1607131-001AMSE	4.5 SampTy	/pe: <b>M</b> :	4.955 SD 5242	Tes	90.5 tCode: <b>El</b>	70 PA Method 5436	130	J	e Organics	
Diesel Range C Surr: DNOP Sample ID Client ID:	1607131-001AMSE TSP-51R	4.5 SampTy Batch	/pe: <b>M</b> :	4.955 SD 5242 /6/2016	Tes	90.5 tCode: Ef RunNo: 35 SeqNo: 10	70 PA Method 5436	130 <b>8015M/D: Di</b>	J	e Organics RPDLimit	Qual

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 4 of 7

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607131** 

07-Jul-16

Client: BP America
Project: GCU #216

Sample ID 1607131-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **TSP-51R** Batch ID: **26242** RunNo: **35436** 

Prep Date: **7/6/2016** Analysis Date: **7/6/2016** SeqNo: **1096985** Units: **mg/Kg** 

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 4.6 4.902 92.8 70 130 0 0

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 5 of 7

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1607131** 

07-Jul-16

Client: BP America
Project: GCU #216

Sample ID MB-26229 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 26229 RunNo: 35443

Prep Date: 7/5/2016 Analysis Date: 7/6/2016 SeqNo: 1097615 Units: 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 960 1000 95.5 80 120

Sample ID LCS-26229 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 26229 RunNo: 35443

Prep Date: 7/5/2016 Analysis Date: 7/6/2016 SeqNo: 1097616 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 26 5.0 25.00 105 80 120 1100 1000 108 80 Surr: BFB 120

#### Qualifiers:

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

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## Hall Environmental Analysis Laboratory, Inc.

0.99

WO#: 10

1607131 07-Jul-16

Client: BP America
Project: GCU #216

Surr: 4-Bromofluorobenzene

Sample ID MB-26229 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 26229 RunNo: 35443

Prep Date: **7/5/2016** Analysis Date: **7/6/2016** SeqNo: **1097633** Units: **mg/Kg** 

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Benzene
 ND
 0.025

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

Surr: 4-Bromofluorobenzene 0.93 1.000 92.8 80 120

1.000

Sample ID LCS-26229	SampT	ype: <b>LC</b>	ype: LCS TestCode: EPA Method			PA Method	1 8021B: Volatiles				
Client ID: LCSS	Batch	n ID: <b>26</b>	229	F	RunNo: 3	5443					
Prep Date: 7/5/2016	Analysis D	oate: 7/	6/2016	S	SeqNo: 1	097635	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.98	0.025	1.000	0	97.8	75.3	123				
Toluene	0.97	0.050	1.000	0	96.9	80	124				
Ethylbenzene	0.99	0.050	1.000	0	99.4	82.8	121				
Xylenes, Total	3.0	0.10	3.000	0	99.2	83.9	122				

98.6

80

120

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 7 of 7



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: **BP AMERICA-Farmington** Work Order Number: 1607131 RcptNo: 1 07/04/16 Received by/date: anne Am Logged By: 7/6/2016 7:35:00 AM **Anne Thorne** anne Am Completed By: Anne Thorne 7/6/2016 Reviewed By: Chain of Custody Yes  $\square$ 1. Custody seals intact on sample bottles? No  $\square$ Not Present ✓ No 🗌 2. Is Chain of Custody complete? Yes 🗸 Not Present 3. How was the sample delivered? Courier Log In 4. Was an attempt made to cool the samples? Yes 🗹 No  $\square$ NA  $\square$ 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗀 NA 🗌 Yes 🗸 Yes 🔽 No 🗆 Sample(s) in proper container(s)? 7. Sufficient sample volume for indicated test(s)? No 🗌 Yes 🗸 No 🗌 8. Are samples (except VOA and ONG) properly preserved? Yes 🗸 No 🗹 9. Was preservative added to bottles? Yes 🗌 NA 🗌 10.VOA vials have zero headspace? Yes 🗌 No 🗌 No VOA Vials 🗹 No 🔽 Yes 🗔 11. Were any sample containers received broken? # of preserved bottles checked No 🗆 for pH: 12. Does paperwork match bottle labels? Yes 🗸 (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 13. Are matrices correctly identified on Chain of Custody? Yes 🗸 No  $\square$ 14. Is it clear what analyses were requested? Yes 🗸 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: Date By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact | Seal No Seal Date Signed By 1.0 Good Yes

HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107	TPH (Method 418.1)  EDB (Method 504.1)  PAH's (8310 or 8270 SIMS)  RCRA 8 Metals  Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )  8081 Pesticides \ 8082 PCB's  8260B (VOA)  8270 (Semi-VOA)		sub-contracted data will be clearly notated on the analytical report.
Turn-Around Time: Same  Standard Krush TAT  Project Name:  C.U. #216  Project #:	Project Manager:  2 P-S Few Masted  CTE-Lumy (Survs Sampler:  D. Burns On Ice:  Sample Temperature:  Container Preservative Type and # Type  Type  Project Manager:  Container Preservative  HEAL No.  Type Type	102 None 20/2 X 202 X 202 X 202	Time: Reinquished by:    Lots
	hone #: 505 - 326 - 441+/ +01-5+0-474-  nail or Fax#: steven, moskal@bp.com  AQC Package: Aburns @ I tew. com  Standard	5/4 0906 35 TSP-51 R 0915   TSP-37,38,39 R 0930 V TSP-54	ate: Time: Reineurshed by:    Signature   State   Stat



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

August 22, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401 TEL: (505) 326-9457

FAX

RE: GCU 216 OrderNo.: 1608B44

#### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 9 sample(s) on 8/19/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 8/22/2016

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** BP America

Client Sample ID: TSP-106RT

 Project:
 GCU 216
 Collection Date: 8/18/2016 2:00:00 PM

 Lab ID:
 1608B44-001
 Matrix: MEOH (SOIL)
 Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL		Analyst	: AG			
Gasoline Range Organics (GRO)	25	4.1	mg/Kg	1	8/19/2016 10:34:15 AM	G36634
Surr: BFB	102	70-130	%Rec	1	8/19/2016 10:34:15 AM	G36634
EPA METHOD 8015M/D: DIESEL RA			Analyst	: TOM		
Diesel Range Organics (DRO)	110	9.9	mg/Kg	1	8/19/2016 2:13:13 PM	27071
Motor Oil Range Organics (MRO)	54	49	mg/Kg	1	8/19/2016 2:13:13 PM	27071
Surr: DNOP	92.1	70-130	%Rec	1	8/19/2016 2:13:13 PM	27071
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: AG
Benzene	ND	0.020	mg/Kg	1	8/19/2016 10:34:15 AM	R36634
Toluene	ND	0.041	mg/Kg	1	8/19/2016 10:34:15 AM	R36634
Ethylbenzene	ND	0.041	mg/Kg	1	8/19/2016 10:34:15 AM	R36634
Xylenes, Total	ND	0.082	mg/Kg	1	8/19/2016 10:34:15 AM	R36634
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	8/19/2016 10:34:15 AM	R36634
Surr: 4-Bromofluorobenzene	72.0	70-130	%Rec	1	8/19/2016 10:34:15 AM	R36634
Surr: Dibromofluoromethane	95.6	70-130	%Rec	1	8/19/2016 10:34:15 AM	R36634
Surr: Toluene-d8	95.3	70-130	%Rec	1	8/19/2016 10:34:15 AM	R36634

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/22/2016

CLIENT: BP America Client Sample ID: TSP-111RT

 Project:
 GCU 216
 Collection Date: 8/18/2016 2:05:00 PM

 Lab ID:
 1608B44-002
 Matrix: MEOH (SOIL)
 Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	32	3.9	mg/Kg	1	8/19/2016 11:02:59 AM	G36634
Surr: BFB	105	70-130	%Rec	1	8/19/2016 11:02:59 AM	G36634
EPA METHOD 8015M/D: DIESEL RA			Analyst	: TOM		
Diesel Range Organics (DRO)	89	9.6	mg/Kg	1	8/19/2016 2:56:40 PM	27071
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/19/2016 2:56:40 PM	27071
Surr: DNOP	92.0	70-130	%Rec	1	8/19/2016 2:56:40 PM	27071
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst	: AG
Benzene	ND	0.020	mg/Kg	1	8/19/2016 11:02:59 AM	R36634
Toluene	ND	0.039	mg/Kg	1	8/19/2016 11:02:59 AM	R36634
Ethylbenzene	ND	0.039	mg/Kg	1	8/19/2016 11:02:59 AM	R36634
Xylenes, Total	ND	0.078	mg/Kg	1	8/19/2016 11:02:59 AM	R36634
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	8/19/2016 11:02:59 AM	R36634
Surr: 4-Bromofluorobenzene	73.8	70-130	%Rec	1	8/19/2016 11:02:59 AM	R36634
Surr: Dibromofluoromethane	96.3	70-130	%Rec	1	8/19/2016 11:02:59 AM	R36634
Surr: Toluene-d8	96.2	70-130	%Rec	1	8/19/2016 11:02:59 AM	R36634

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/22/2016

CLIENT: BP America Client Sample ID: TSP-112R

 Project:
 GCU 216
 Collection Date: 8/18/2016 2:10:00 PM

 Lab ID:
 1608B44-003
 Matrix: MEOH (SOIL)
 Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLIN			Analyst:	AG		
Gasoline Range Organics (GRO)	69	4.5	mg/Kg	1	8/19/2016 11:31:45 AM	G36634
Surr: BFB	115	70-130	%Rec	1	8/19/2016 11:31:45 AM	G36634
EPA METHOD 8015M/D: DIESEL RAN			Analyst	ТОМ		
Diesel Range Organics (DRO)	94	9.8	mg/Kg	1	8/19/2016 3:18:29 PM	27071
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/19/2016 3:18:29 PM	27071
Surr: DNOP	95.2	70-130	%Rec	1	8/19/2016 3:18:29 PM	27071
EPA METHOD 8260B: VOLATILES SH	ORT LIST				Analyst:	AG
Benzene	ND	0.023	mg/Kg	1	8/19/2016 11:31:45 AM	R36634
Toluene	ND	0.045	mg/Kg	1	8/19/2016 11:31:45 AM	R36634
Ethylbenzene	ND	0.045	mg/Kg	1	8/19/2016 11:31:45 AM	R36634
Xylenes, Total	ND	0.091	mg/Kg	1	8/19/2016 11:31:45 AM	R36634
Surr: 1,2-Dichloroethane-d4	109	70-130	%Rec	1	8/19/2016 11:31:45 AM	R36634
Surr: 4-Bromofluorobenzene	71.8	70-130	%Rec	1	8/19/2016 11:31:45 AM	R36634
Surr: Dibromofluoromethane	103	70-130	%Rec	1	8/19/2016 11:31:45 AM	R36634
Surr: Toluene-d8	98.7	70-130	%Rec	1	8/19/2016 11:31:45 AM	R36634

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

W Sample container temperature is out of limit as specified

% Recovery outside of range due to dilution or matrix

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/22/2016

CLIENT: BP America Client Sample ID: TSP-113R

 Project:
 GCU 216
 Collection Date: 8/18/2016 2:15:00 PM

 Lab ID:
 1608B44-004
 Matrix: MEOH (SOIL)
 Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	80	4.1	mg/Kg	1	8/19/2016 12:00:31 PM	G36634
Surr: BFB	106	70-130	%Rec	1	8/19/2016 12:00:31 PM	G36634
EPA METHOD 8015M/D: DIESEL RA			Analyst	: TOM		
Diesel Range Organics (DRO)	110	10	mg/Kg	1	8/19/2016 3:40:05 PM	27071
Motor Oil Range Organics (MRO)	51	50	mg/Kg	1	8/19/2016 3:40:05 PM	27071
Surr: DNOP	93.5	70-130	%Rec	1	8/19/2016 3:40:05 PM	27071
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst	: AG
Benzene	ND	0.020	mg/Kg	1	8/19/2016 12:00:31 PM	R36634
Toluene	ND	0.041	mg/Kg	1	8/19/2016 12:00:31 PM	R36634
Ethylbenzene	0.070	0.041	mg/Kg	1	8/19/2016 12:00:31 PM	R36634
Xylenes, Total	0.93	0.082	mg/Kg	1	8/19/2016 12:00:31 PM	R36634
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	8/19/2016 12:00:31 PM	R36634
Surr: 4-Bromofluorobenzene	74.1	70-130	%Rec	1	8/19/2016 12:00:31 PM	R36634
Surr: Dibromofluoromethane	98.1	70-130	%Rec	1	8/19/2016 12:00:31 PM	R36634
Surr: Toluene-d8	98.3	70-130	%Rec	1	8/19/2016 12:00:31 PM	R36634

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/22/2016

CLIENT: BP America Client Sample ID: TSP-114R

 Project:
 GCU 216
 Collection Date: 8/18/2016 2:20:00 PM

 Lab ID:
 1608B44-005
 Matrix: MEOH (SOIL)
 Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLIN	E RANGE				Analysi	: AG
Gasoline Range Organics (GRO)	12	3.7	mg/Kg	1	8/19/2016 12:29:22 PM	1 G36634
Surr: BFB	98.7	70-130	%Rec	1	8/19/2016 12:29:22 PM	G36634
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	8			Analyst	:: TOM
Diesel Range Organics (DRO)	45	9.6	mg/Kg	1	8/19/2016 10:08:02 AM	1 27071
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/19/2016 10:08:02 AM	1 27071
Surr: DNOP	85.4	70-130	%Rec	1	8/19/2016 10:08:02 AM	1 27071
EPA METHOD 8260B: VOLATILES SH	ORT LIST				Analyst	: AG
Benzene	ND	0.019	mg/Kg	1	8/19/2016 12:29:22 PM	R36634
Toluene	ND	0.037	mg/Kg	1	8/19/2016 12:29:22 PM	1 R36634
Ethylbenzene	ND	0.037	mg/Kg	1	8/19/2016 12:29:22 PM	R36634
Xylenes, Total	ND	0.074	mg/Kg	1	8/19/2016 12:29:22 PM	R36634
Surr: 1,2-Dichloroethane-d4	98.1	70-130	%Rec	1	8/19/2016 12:29:22 PM	R36634
Surr: 4-Bromofluorobenzene	76.5	70-130	%Rec	1	8/19/2016 12:29:22 PM	R36634
Surr: Dibromofluoromethane	98.4	70-130	%Rec	1	8/19/2016 12:29:22 PM	R36634
Surr: Toluene-d8	96.0	70-130	%Rec	1	8/19/2016 12:29:22 PM	R36634

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 5 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/22/2016

CLIENT: BP America Client Sample ID: TSP-115R

 Project:
 GCU 216
 Collection Date: 8/18/2016 2:25:00 PM

 Lab ID:
 1608B44-006
 Matrix: MEOH (SOIL)
 Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	54	4.4	mg/Kg	1	8/19/2016 12:58:08 PM	G36634
Surr: BFB	104	70-130	%Rec	1	8/19/2016 12:58:08 PM	G36634
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	8			Analyst	: TOM
Diesel Range Organics (DRO)	46	9.8	mg/Kg	1	8/19/2016 10:29:55 AM	27071
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/19/2016 10:29:55 AM	27071
Surr: DNOP	83.9	70-130	%Rec	1	8/19/2016 10:29:55 AM	27071
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	: AG
Benzene	ND	0.022	mg/Kg	1	8/19/2016 12:58:08 PM	R36634
Toluene	ND	0.044	mg/Kg	1	8/19/2016 12:58:08 PM	R36634
Ethylbenzene	ND	0.044	mg/Kg	1	8/19/2016 12:58:08 PM	R36634
Xylenes, Total	0.29	0.088	mg/Kg	1	8/19/2016 12:58:08 PM	R36634
Surr: 1,2-Dichloroethane-d4	110	70-130	%Rec	1	8/19/2016 12:58:08 PM	R36634
Surr: 4-Bromofluorobenzene	75.1	70-130	%Rec	1	8/19/2016 12:58:08 PM	R36634
Surr: Dibromofluoromethane	103	70-130	%Rec	1	8/19/2016 12:58:08 PM	R36634
Surr: Toluene-d8	93.4	70-130	%Rec	1	8/19/2016 12:58:08 PM	R36634

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 6 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/22/2016

CLIENT: BP America Client Sample ID: TSP-116R

 Project:
 GCU 216
 Collection Date: 8/18/2016 2:30:00 PM

 Lab ID:
 1608B44-007
 Matrix: MEOH (SOIL)
 Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLIN	IE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	27	4.8	mg/Kg	1	8/19/2016 1:26:54 PM	G36634
Surr: BFB	102	70-130	%Rec	1	8/19/2016 1:26:54 PM	G36634
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS	8			Analyst	: TOM
Diesel Range Organics (DRO)	48	10	mg/Kg	1	8/19/2016 10:51:42 AM	27071
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/19/2016 10:51:42 AM	27071
Surr: DNOP	86.4	70-130	%Rec	1	8/19/2016 10:51:42 AM	27071
EPA METHOD 8260B: VOLATILES SI	HORT LIST				Analyst	: AG
Benzene	ND	0.024	mg/Kg	1	8/19/2016 1:26:54 PM	R36634
Toluene	ND	0.048	mg/Kg	1	8/19/2016 1:26:54 PM	R36634
Ethylbenzene	ND	0.048	mg/Kg	1	8/19/2016 1:26:54 PM	R36634
Xylenes, Total	ND	0.095	mg/Kg	1	8/19/2016 1:26:54 PM	R36634
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	8/19/2016 1:26:54 PM	R36634
Surr: 4-Bromofluorobenzene	73.8	70-130	%Rec	1	8/19/2016 1:26:54 PM	R36634
Surr: Dibromofluoromethane	99.4	70-130	%Rec	1	8/19/2016 1:26:54 PM	R36634
Surr: Toluene-d8	96.6	70-130	%Rec	1	8/19/2016 1:26:54 PM	R36634

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 7 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

W Sample container temperature is out of limit as specified

% Recovery outside of range due to dilution or matrix

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/22/2016

CLIENT: BP America Client Sample ID: TSP-118R

 Project:
 GCU 216
 Collection Date: 8/18/2016 2:35:00 PM

 Lab ID:
 1608B44-008
 Matrix: MEOH (SOIL)
 Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	15	4.7	mg/Kg	1	8/19/2016 1:55:41 PM	G36634
Surr: BFB	103	70-130	%Rec	1	8/19/2016 1:55:41 PM	G36634
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	8			Analyst	:: ТОМ
Diesel Range Organics (DRO)	36	10	mg/Kg	1	8/19/2016 11:13:41 AM	27071
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/19/2016 11:13:41 AM	27071
Surr: DNOP	87.3	70-130	%Rec	1	8/19/2016 11:13:41 AM	27071
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst	: AG
Benzene	ND	0.024	mg/Kg	1	8/19/2016 1:55:41 PM	R36634
Toluene	ND	0.047	mg/Kg	1	8/19/2016 1:55:41 PM	R36634
Ethylbenzene	ND	0.047	mg/Kg	1	8/19/2016 1:55:41 PM	R36634
Xylenes, Total	ND	0.094	mg/Kg	1	8/19/2016 1:55:41 PM	R36634
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	8/19/2016 1:55:41 PM	R36634
Surr: 4-Bromofluorobenzene	77.6	70-130	%Rec	1	8/19/2016 1:55:41 PM	R36634
Surr: Dibromofluoromethane	101	70-130	%Rec	1	8/19/2016 1:55:41 PM	R36634
Surr: Toluene-d8	92.7	70-130	%Rec	1	8/19/2016 1:55:41 PM	R36634

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 8 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/22/2016

CLIENT: BP America Client Sample ID: TSP-122R

 Project:
 GCU 216
 Collection Date: 8/18/2016 2:40:00 PM

 Lab ID:
 1608B44-009
 Matrix: MEOH (SOIL)
 Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	33	4.3	mg/Kg	1	8/19/2016 2:24:30 PM	G36634
Surr: BFB	101	70-130	%Rec	1	8/19/2016 2:24:30 PM	G36634
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	8			Analyst	:: ТОМ
Diesel Range Organics (DRO)	42	9.6	mg/Kg	1	8/19/2016 11:35:34 AM	27071
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/19/2016 11:35:34 AM	27071
Surr: DNOP	87.5	70-130	%Rec	1	8/19/2016 11:35:34 AM	27071
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: AG
Benzene	ND	0.022	mg/Kg	1	8/19/2016 2:24:30 PM	R36634
Toluene	ND	0.043	mg/Kg	1	8/19/2016 2:24:30 PM	R36634
Ethylbenzene	ND	0.043	mg/Kg	1	8/19/2016 2:24:30 PM	R36634
Xylenes, Total	ND	0.087	mg/Kg	1	8/19/2016 2:24:30 PM	R36634
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	1	8/19/2016 2:24:30 PM	R36634
Surr: 4-Bromofluorobenzene	74.9	70-130	%Rec	1	8/19/2016 2:24:30 PM	R36634
Surr: Dibromofluoromethane	98.1	70-130	%Rec	1	8/19/2016 2:24:30 PM	R36634
Surr: Toluene-d8	97.0	70-130	%Rec	1	8/19/2016 2:24:30 PM	R36634

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
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 9 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1608B44** 

22-Aug-16

Client: BP America
Project: GCU 216

Sample ID LCS-27071 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 27071 RunNo: 36619 Prep Date: 8/19/2016 Analysis Date: 8/19/2016 SeqNo: 1134501 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 45 10 O 90.6 62.6 50.00 124 Surr: DNOP 4.1 5.000 81.2 130

Sample ID MB-27071 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 27071 RunNo: 36619 Analysis Date: 8/19/2016 Prep Date: 8/19/2016 SeqNo: 1134502 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 ND 50 Motor Oil Range Organics (MRO) Surr: DNOP 8.6 10.00 85.8 70 130

Sample ID 1608B44-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: TSP-106RT Batch ID: 27071 RunNo: 36621 Prep Date: 8/19/2016 Analysis Date: 8/19/2016 SeqNo: 1134949 Units: mg/Kg Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 150 9.5 47.30 112.2 77.3 33.9 141 Surr: DNOP 4.7 4.730 99.9 70 130

TestCode: EPA Method 8015M/D: Diesel Range Organics Sample ID 1608B44-001AMSD SampType: MSD Client ID: TSP-106RT Batch ID: 27071 RunNo: 36621 Prep Date: 8/19/2016 Analysis Date: 8/19/2016 SeqNo: 1134962 Units: mg/Kg SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual Diesel Range Organics (DRO) 180 10 50.05 112.2 135 33.9 141 19.0 20 Surr: DNOP 5.3 5.005 106 70 130 0 0

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: 22-Aug-16

1608B44

**Client: BP** America **Project:** GCU 216

Sample ID 100ng lcs	Samp1	ype: <b>LC</b>	s	Tes	TestCode: EPA Method 8260B: Volatiles Short List					
Client ID: LCSS	Batcl	n ID: <b>R3</b>	6634	F	RunNo: <b>36634</b>					
Prep Date:	Analysis Date: 8/19/2016			5	SeqNo: <b>1135325</b> Units: <b>mg/</b> l					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.3	70	130			
Toluene	0.97	0.050	1.000	0	97.1	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.1	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.2	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.2	70	130			
Surr: Toluene-d8	0.48		0.5000		96.4	70	130			
Sample ID rb SampType: MBLK				Tes	tCode: E	PA Method	8260B: Vola	tiles Short	List	

Campic ID ID	Camprype. MBER					AWELIOU	OZOOD. VOIALIIES SHOIT LIST				
Client ID: PBS	Batch ID: R36634			R	RunNo: 36634						
Prep Date:	Analysis Date: 8/19/2016		19/2016	S	SeqNo: 1	135327	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.025									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		101	70	130				
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.3	70	130				
Surr: Dibromofluoromethane	0.48		0.5000		95.5	70	130				
Surr: Toluene-d8	0.51		0.5000		101	70	130				

Sample ID 1608b44-001ams	SampT	ype: MS	3	Tes	tCode: El	PA Method	d 8260B: Volatiles Short List					
Client ID: TSP-106RT	Batch	n ID: <b>R3</b>	6634	F	RunNo: 3	6634						
Prep Date:	Analysis D	ate: 8/	19/2016	SeqNo: <b>1135385</b>			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.79	0.020	0.8150	0	97.4	49.2	155		_			
Toluene	0.78	0.041	0.8150	0	95.6	52	154					
Surr: 1,2-Dichloroethane-d4	0.42		0.4075		104	70	130					
Surr: 4-Bromofluorobenzene	0.31		0.4075		76.9	70	130					
Surr: Dibromofluoromethane	0.40		0.4075		97.6	70	130					
Surr: Toluene-d8	0.37		0.4075		91.0	70	130					

Sample ID	1608b44-001amsd	SampT	SampType: MSD TestCode: EPA Method 8260B: Volatiles Short List									
Client ID:	TSP-106RT	Batch	ID: <b>R3</b>	6634	RunNo: 36634							
Prep Date:		Analysis D	ate: 8/	19/2016	SeqNo: 1135386			Units: mg/Kg				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene		0.73	0.020	0.8150	0	89.0	49.2	155	9.00	20		
Toluene		0.74	0.041	0.8150	0	90.3	52	154	5.73	20		

### Qualifiers:

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

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1608B44** 

22-Aug-16

Client: BP America
Project: GCU 216

Sample ID 1608b44-001amsd SampType: MSD TestCode: EPA Method 8260B: Volatiles Short List Client ID: TSP-106RT Batch ID: R36634 RunNo: 36634 SeqNo: 1135386 Prep Date: Analysis Date: 8/19/2016 Units: mg/Kg Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: 1,2-Dichloroethane-d4 0.44 0.4075 107 70 130 0 0 0.32 0.4075 78.8 70 0 Surr: 4-Bromofluorobenzene 130 0 Surr: Dibromofluoromethane 0.41 0.4075 100 70 130 0 0 0.4075 Surr: Toluene-d8 0.37 91.9 70 130 0 0

### Qualifiers:

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

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1608B44** 

22-Aug-16

Client: BP America
Project: GCU 216

Sample ID 2.5ug lcs SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: LCSS Batch ID: G36634 RunNo: 36634 Prep Date: Analysis Date: 8/19/2016 SeqNo: 1135359 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) O 87.8 62.9 22 5.0 25.00 123 Surr: BFB 490 500.0 98.9 130

Sample ID rb SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: PBS Batch ID: G36634 RunNo: 36634 Analysis Date: 8/19/2016 Prep Date: SeqNo: 1135360 Units: 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 500 500.0 101 70 130

TestCode: EPA Method 8015D Mod: Gasoline Range Sample ID 1608B44-001AMSD SampType: MSD Client ID: TSP-106RT Batch ID: G36634 RunNo: 36634 Prep Date: Analysis Date: 8/19/2016 SeqNo: 1135361 Units: mg/Kg SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 41 20.38 25.13 76.4 52.3 132 3.64 20 Surr: BFB 420 407.5 104 70 130 0 0

Sample ID 1608B44-001AMS SampType: MS TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: TSP-106RT Batch ID: G36634 RunNo: 36634 Analysis Date: 8/19/2016 Prep Date: SeqNo: 1135362 Units: mg/Kg %REC Analyte Result **PQL** SPK value SPK Ref Val LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 42 4.1 20.38 25.13 83.8 52.3 132 Surr: BFB 410 407.5 102 70 130

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 13 of 13

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

## Sample Log-In Check List

RcptNo: 1 Work Order Number: 1608B44 BP AMERICA-Farmington Client Name: Received by/date: 8/19/2016 7:30:00 AM Ashley Gallegos Logged By: 8/19/2016 8:05:30 AM **Ashley Gallegos** Completed By: 08/19/16 Reviewed By: Chain of Custody Not Present No 🗆 Yes 1. Custody seals intact on sample bottles? Not Present No 🗌 Yes 🗸 2. Is Chain of Custody complete? Courier 3 How was the sample delivered? Log <u>in</u> NA 🗌 No 🗌 Yes 🗹 4. Was an attempt made to cool the samples? No 🗆 NA 🗌 Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No 🗌 Yes 🔽 6. Sample(s) in proper container(s)? No 🗌 Yes 🗹 7. Sufficient sample volume for indicated test(s)? No 🗆 Yes 🗸 8. Are samples (except VOA and ONG) properly preserved? NA 🗌 No 🔽 Yes 🗌 9. Was preservative added to bottles? No VOA Vials 🗹 No 🗌 Yes 10. VOA vials have zero headspace? Yes No 🗹 11. Were any sample containers received broken? # of preserved bottles checked No 🗌 for pH: Yes 🗹 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 Yes 🗹 13. Are matrices correctly identified on Chain of Custody? No 🗌 Yes 🗹 14. Is it clear what analyses were requested? No 🗌 Checked by: Yes 🗹 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) NA 🗹 No 🗌 Yes 🗌 16. Was client notified of all discrepancies with this order? Date Person Notified: eMail Phone Fax Via: By Whom: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Temp °C | Condition | Seal Intact | Seal No | Seal Date Signed By Cooler No 2.1 Good

TAL	Air Bubbles (Y or N)	
IALL ENVIRONMENTAL INALYSIS LABORATORY www.hallenvironmental.com ns NE - Albuquerque, NM 87109 15-3975 Fax 505-345-4107 Analysis Request	8081 Pesticides / 8082 PCB's 8260B (VOA) 8270 (Semi-VOA)	88 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
ENV rSIS environ Albuqu Fax alysis	RCRA 8 Metals Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	점
	PAH's (8310 or 8270 SIMS)	D United data vited
HAAN	TPH (Method 418.1) EDB (Method 504.1)	T
######################################	(SAM/QAQ/QAQ) 82108 H9T	Any suft
49	BIEX + WIBE + TMB's (8021)	Remarks:
Turn-Around Time: Sauwa  □ Standard KRush day  Project Name:  G-CM #216  Project #:	Servative HEAL No. Type	Date Time  Date Time  Date Time  This serves as notice of this
ain-of-Custody Record  BP Lower 4 & Idress:	Kal C be com I ten V. com 4 (Full Validation)	1405   TSP-106 RT   UOE   WA   1410   TSP-112 R   1415   TSP-113 R   1420   TSP-113 R   1430   TSP-114 R   1430   TSP-116 R



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

September 08, 2016

Steve Moskal BP America 200 Energy Court Farmington, NM 87401

TEL: (505) 326-9457

FAX

RE: GCU # 216 OrderNo.: 1608G72

### Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 6 sample(s) on 8/30/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 9/8/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: VZ01

 Project:
 GCU # 216
 Collection Date: 8/29/2016 9:00:00 AM

 Lab ID:
 1608G72-001
 Matrix: SOIL
 Received Date: 8/30/2016 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	9/1/2016 1:58:03 PM	27281
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/1/2016 1:58:03 PM	27281
Surr: DNOP	85.4	70-130	%Rec	1	9/1/2016 1:58:03 PM	27281
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/31/2016 3:14:18 PM	27243
Surr: BFB	84.1	68.3-144	%Rec	1	8/31/2016 3:14:18 PM	27243
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	8/31/2016 3:14:18 PM	27243
Toluene	ND	0.047	mg/Kg	1	8/31/2016 3:14:18 PM	27243
Ethylbenzene	ND	0.047	mg/Kg	1	8/31/2016 3:14:18 PM	27243
Xylenes, Total	ND	0.094	mg/Kg	1	8/31/2016 3:14:18 PM	27243
Surr: 4-Bromofluorobenzene	99.4	80-120	%Rec	1	8/31/2016 3:14:18 PM	27243

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

### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Sample container temperature is out of limit as specified

## Date Reported: 9/8/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: VZ02

 Project:
 GCU # 216
 Collection Date: 8/29/2016 9:05:00 AM

 Lab ID:
 1608G72-002
 Matrix: SOIL
 Received Date: 8/30/2016 8:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S				Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/1/2016 2:20:08 PM	27281
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2016 2:20:08 PM	27281
Surr: DNOP	59.5	70-130	S	%Rec	1	9/1/2016 2:20:08 PM	27281
EPA METHOD 8015D: GASOLINE RAN	GE					Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/31/2016 3:37:49 PM	27243
Surr: BFB	84.6	68.3-144		%Rec	1	8/31/2016 3:37:49 PM	27243
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.023		mg/Kg	1	8/31/2016 3:37:49 PM	27243
Toluene	ND	0.047		mg/Kg	1	8/31/2016 3:37:49 PM	27243
Ethylbenzene	ND	0.047		mg/Kg	1	8/31/2016 3:37:49 PM	27243
Xylenes, Total	ND	0.094		mg/Kg	1	8/31/2016 3:37:49 PM	27243
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	8/31/2016 3:37:49 PM	27243

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 2 of 9 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit

% Recovery outside of range due to dilution or matrix

# Analytical Report

# Lab Order **1608G72**Date Reported: **9/8/2016**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: VZ03

 Project:
 GCU # 216
 Collection Date: 8/29/2016 9:10:00 AM

 Lab ID:
 1608G72-003
 Matrix: SOIL
 Received Date: 8/30/2016 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	9/1/2016 2:42:02 PM	27281
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/1/2016 2:42:02 PM	27281
Surr: DNOP	84.1	70-130	%Rec	1	9/1/2016 2:42:02 PM	27281
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/31/2016 4:01:18 PM	27243
Surr: BFB	86.0	68.3-144	%Rec	1	8/31/2016 4:01:18 PM	27243
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.023	mg/Kg	1	8/31/2016 4:01:18 PM	27243
Toluene	ND	0.046	mg/Kg	1	8/31/2016 4:01:18 PM	27243
Ethylbenzene	ND	0.046	mg/Kg	1	8/31/2016 4:01:18 PM	27243
Xylenes, Total	ND	0.093	mg/Kg	1	8/31/2016 4:01:18 PM	27243
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	8/31/2016 4:01:18 PM	27243

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

#### **Qualifiers:** Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank D Sample Diluted Due to Matrix Е Value above quantitation range Analyte detected below quantitation limits Page 3 of 9 Н Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range R RPD outside accepted recovery limits RL Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

# Date Reported: 9/8/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: VZ04

 Project:
 GCU # 216
 Collection Date: 8/29/2016 9:15:00 AM

 Lab ID:
 1608G72-004
 Matrix: SOIL
 Received Date: 8/30/2016 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	9/1/2016 3:04:07 PM	27281
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/1/2016 3:04:07 PM	27281
Surr: DNOP	82.1	70-130	%Rec	1	9/1/2016 3:04:07 PM	27281
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/31/2016 4:24:44 PM	27243
Surr: BFB	86.0	68.3-144	%Rec	1	8/31/2016 4:24:44 PM	27243
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	8/31/2016 4:24:44 PM	27243
Toluene	ND	0.048	mg/Kg	1	8/31/2016 4:24:44 PM	27243
Ethylbenzene	ND	0.048	mg/Kg	1	8/31/2016 4:24:44 PM	27243
Xylenes, Total	ND	0.096	mg/Kg	1	8/31/2016 4:24:44 PM	27243
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	8/31/2016 4:24:44 PM	27243

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

### Qualifiers: \*

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## **Analytical Report**

Lab Order **1608G72**Date Reported: **9/8/2016** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: VZ05

 Project:
 GCU # 216
 Collection Date: 8/29/2016 9:20:00 AM

 Lab ID:
 1608G72-005
 Matrix: SOIL
 Received Date: 8/30/2016 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	s			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	9/1/2016 3:48:19 PM	27281
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/1/2016 3:48:19 PM	27281
Surr: DNOP	90.8	70-130	%Rec	1	9/1/2016 3:48:19 PM	27281
EPA METHOD 8015D: GASOLINE RANG	SE .				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/31/2016 8:19:16 PM	27243
Surr: BFB	87.0	68.3-144	%Rec	1	8/31/2016 8:19:16 PM	27243
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	8/31/2016 8:19:16 PM	27243
Toluene	ND	0.048	mg/Kg	1	8/31/2016 8:19:16 PM	27243
Ethylbenzene	ND	0.048	mg/Kg	1	8/31/2016 8:19:16 PM	27243
Xylenes, Total	ND	0.096	mg/Kg	1	8/31/2016 8:19:16 PM	27243
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	8/31/2016 8:19:16 PM	27243

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

### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 9/8/2016

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: BP America Client Sample ID: VZ06

 Project:
 GCU # 216
 Collection Date: 8/26/2016 9:25:00 AM

 Lab ID:
 1608G72-006
 Matrix: SOIL
 Received Date: 8/30/2016 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	s			Analys	: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	9/1/2016 4:10:23 PM	27281
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/1/2016 4:10:23 PM	27281
Surr: DNOP	86.4	70-130	%Rec	1	9/1/2016 4:10:23 PM	27281
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/31/2016 8:42:39 PM	27243
Surr: BFB	85.5	68.3-144	%Rec	1	8/31/2016 8:42:39 PM	27243
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	8/31/2016 8:42:39 PM	27243
Toluene	ND	0.047	mg/Kg	1	8/31/2016 8:42:39 PM	27243
Ethylbenzene	ND	0.047	mg/Kg	1	8/31/2016 8:42:39 PM	27243
Xylenes, Total	ND	0.095	mg/Kg	1	8/31/2016 8:42:39 PM	27243
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	8/31/2016 8:42:39 PM	27243

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

### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

BP America

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1608G72

08-Sep-16

Project:	GCU#	216								
Sample ID	LCS-27281	SampType: L	cs	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	LCSS	Batch ID: 2	7281	F	RunNo: 3	6922				
Prep Date:	8/31/2016	Analysis Date: 9	/1/2016	Ş	SeqNo: 1	144520	Units: mg/K	(g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
=	Organics (DRO)	41 10		0	81.4	62.6	124			
Surr: DNOP		3.9	5.000		77.1	70	130			
Sample ID	MB-27281	SampType: N	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	PBS	Batch ID: 2	7281	F	RunNo: 3	6922				
Prep Date:	8/31/2016	Analysis Date: 9	/1/2016	5	SeqNo: 1	144521	Units: mg/K	(g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
=	Organics (DRO)	ND 10								_
Surr: DNOP	e Organics (MRO)	ND 50 8.2	10.00		82.1	70	130			
· ·	LCS-27347	SampType: L					8015M/D: Die	esel Rang	e Organics	
Client ID:		Batch ID: 2			RunNo: 3					
Prep Date:	9/6/2016	Analysis Date: 9	)/7/2016	\$	SeqNo: 1	147694	Units: %Re			
Analyte		Result PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.7	5.000		94.1	70	130			
Sample ID	MB-27347	SampType: N	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	PBS	Batch ID: 2	7347	F	RunNo: 3	7025				
Prep Date:	9/6/2016	Analysis Date: 9	/7/2016	5	SeqNo: 1	147695	Units: %Re	<b>c</b>		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		8.7	10.00		87.2	70	130			
Sample ID	LCS-27351	SampType: L	cs	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	LCSS	Batch ID: 2	7351	F	RunNo: 3	7025				
Prep Date:	9/6/2016	Analysis Date:	/7/2016	9	SeqNo: 1	148382	Units: %Re	<b>c</b>		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.4	5.000		88.3	70	130			
Sample ID	MB-27351	SampType: <b>N</b>	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
-	PBS	Batch ID: 2	7351		RunNo: 3			J	-	
Prep Date:	9/6/2016	Analysis Date:			SeqNo: 1		Units: %Re	<b>c</b>		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		8.3	10.00		82.7	70	130			

### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range

J Analyte detected below quantitation limits

Page 7 of 9

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1608G72

08-Sep-16

**Client: BP** America **Project:** GCU # 216

Sample ID MB-27243 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 27243 RunNo: 36893

Prep Date: 8/30/2016 Analysis Date: 8/31/2016 SeqNo: 1143738 Units: 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 84.6 68.3 144

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-27243 SampType: LCS

Client ID: LCSS Batch ID: 27243 RunNo: 36893

930

Prep Date: 8/30/2016 Analysis Date: 8/31/2016 SeqNo: 1143739 Units: mg/Kg

1000

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 24 5.0 25.00 97.3 80 120

93.0

68.3

144

### Qualifiers:

Surr: BFB

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

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### Hall Environmental Analysis Laboratory, Inc.

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WO#: **1608G72** 

08-Sep-16

Client: BP America
Project: GCU # 216

Surr: 4-Bromofluorobenzene

Sample ID MB-27243 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: 27243 RunNo: 36893 Prep Date: 8/30/2016 Analysis Date: 8/31/2016 SeqNo: 1143786 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 ND 0.050 Toluene ND 0.050 Ethylbenzene Xylenes, Total ND 0.10

101

80

120

1.000

Sample ID LCS-27243 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 27243 RunNo: 36893 Prep Date: Analysis Date: 8/31/2016 SeqNo: 1143787 8/30/2016 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.93 0.025 1.000 0 92.6 75.3 123 Benzene Toluene 0.90 0.050 1.000 0 90.3 80 124 Ethylbenzene 0.92 0.050 1.000 0 92.0 82.8 121 92.6 83.9 Xylenes, Total 2.8 0.10 3.000 0 122 108 Surr: 4-Bromofluorobenzene 1.1 1.000 80 120

### Qualifiers:

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

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

### Sample Log-In Check List

RcptNo: 1 Client Name: **BP AMERICA-Farmington** Work Order Number: 1608G72 Received by/date: 8/30/2016 8:30:00 AM Logged By: Lindsay Mangin Lindsay Mangin 8/30/2016 9:22:26 AM Completed By: Reviewed By: <u>Chain of Cus</u>ťody Not Present Yes No 🗌 1 Custody seals intact on sample bottles? No 🗌 Not Present Yes 🕏 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No 🗆 NA 🗔 4. Was an attempt made to cool the samples? Yes NA 🗌 No 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗔 6. Sample(s) in proper container(s)? Yes No 7. Sufficient sample volume for indicated test(s)? Yes No 8. Are samples (except VOA and ONG) properly preserved? NA 🗀 Yes 🗀 9. Was preservative added to bottles? No  $\square$ No VOA Vials Yes 🗌 10.VOA vials have zero headspace? Yes  $\square$ No 🌌 11. Were any sample containers received broken? # of preserved bottles checked No 🗌 for pH: Yes 🗟 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? Yes 🐼 No 🗆 13. Are matrices correctly identified on Chain of Custody? No 🗌 14. Is it clear what analyses were requested? Checked by: No 🗌 Yes 🐼 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes 🗌 No 🗌 NA 🖈 16. Was client notified of all discrepancies with this order? Person Notified: Date: By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date Signed By 1.8 Good

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