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

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

Form C-141

Revised August 8, 2011

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

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

	Release Notification and Corrective Action												
					OPE	RATOR			nitial Repo	ort 🛛 Final Report			
Name of Co	mpany: B	P			(	Contact: Steve Moskal							
Address: 20	0 Energy	Court, Farmi	ngton, N	M 87401	-	Telephone No.: 505-326-9497							
Facility Nar	ne: Floran	ce Gas Com	J 016A		]	Facility Typ	e: Natural gas w	vell					
Surface Ow	ner: Feder	al		Mineral O	wner: I	Federal			API No	. 3004521790			
				LOCA	TION	OF REI	LEASE						
Unit Letter	Section	Township	Range	Feet from the	North/S	South Line	Feet from the		West Line	County: San Juan			
P	06	30N	09W	825	South		1,030	East					
		Latitu	ide36.5	33551°		Longitude	<u>-107.81667°</u>						
				NAT	TURE	OF RELE	CASE						
Type of Relea	ase: Produc	ed water, oil a	ınd condei				Release: unknow	n	Volume F	Recovered: none			
Source of Re	lease: Form	ner drilling res	erve pit, c	ompressor, BGT		Date and H unknown	Iour of Occurrence	e:	Date and 2016	Hour of Discovery: March 30,			
Was Immedia	ate Notice (	Given?				If YES, To	Whom?		2010	DOVE DV COD DIII			
,, as 1111110 or		_	Yes	No 🛛 Not Re	quired	11 125, 10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			RCVD BY OCD DIII			
By Whom? S	Steve Mosk	al				Date and H	lour:			AUG 14, 2017			
Was a Water						If YES, Volume Impacting the Watercourse.							
			Yes 🗵	No									
If a Watercou	irse was Im	pacted, Descri	ibe Fully. <sup>3</sup>	•									
believed to ha	ave been as	sociated with	former ear		nmediate	vicinity of t				n. The identified impacts are ressor operated by BP. BP has			
										tional off site soils were			
										roxide solution was applied to			
										was successfully treated via ing. BP requests no further			
action.	g. Attachet	i is a complem	ensive rep	ort or activities ar	iu iabora	nory data 101	excavation and si	ineduce	ı son sampı	ing. Bi requests no further			
T1 1	4 . 4 . 6			1 1	1		1 1 . 1.1		>77.400	D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
are required to acceptance of a and remediate	report and/o C-141 repo contamination	r file certain rele rt by the NMOC on that pose a the	ease notific CD marked reat to grou	ations and perform o as "Final Report" do nd water, surface wa	corrective ses not rel ater, huma	st of my knowledge and understand that pursuant to NMOCD rules and regulations all operate ctive actions for releases which may endanger public health or the environment. The ot relieve the operator of liability should their operations have failed to adequately investigate human health or the environment. In addition, NMOCD acceptance of a C-141 report does not consider the content of the environment.							
reneve the oper	iator or respo	distority for con	inpirance w	ith any other federal	, state, or	iocai iaws and		CEDV	ATION	DIVISION			
Signature:	Mary VI	Mu)					OIL CON.	<u> </u>	ATION	DIVISION			
						Approved by Environmental Specialist:							
Printed Name	. Sieve Mic	oskai											
Title: Field E	nvironmen	tal Coordinato	r		1	Approval Dat	e: 2/28/18		Expiration 1	ion Date:			
E-mail Addre	ess: steven.ı	moskal@bp.co	om		(	Conditions of	Approval:			Attached 🛛			

\* Attach Additional Sheets If Necessary

Date: August 9, 2017

Phone: 505-326-9497 3RP-9

#nCS1629854256

### State of New Mexico Energy, Minerals and Natural Resources Department

**Susana Martinez** 

Governor

Ken McQueen Cabinet Secretary Heather Riley, Division Director Oil Conservation Division



Matthias Sayer Deputy Cabinet Secretary

New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.5.11

February 28, 2018

Re: Florance Gas Com J16A – Conditions of Approval

Dear Mr. Moskal,

The New Mexico Oil Conservation Division (OCD) received BP America Production Company (BP) C-141 for the Florance Gas Com J #16A on August, 14, 2017 after review the OCD has approved the C-141 with the following conditions of approval.

- 1. The OCD grants BP request for no further action for soil impacts in zone 27.
- 2. The OCD grants BP request for no further action for soil impacts in zone 54S.

It should be noted that the location of this site is still under active investigation and environmental remediation by a second operator and should their investigation provide additional information additional remediation or delineation may be required by BP.

The acceptance of this C-141 report by the OCD marked as "Final Report: does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment.

If you have any questions please feel free to contact me at your leisure.

NMOCO Approved by Signature

<u>February 28, 2018</u>

Date

### Remedial Excavation of Hydrocarbon Impacted Bedrock

Florance GC J 16A (P) Sec 6 – T30N – R9W API: 30-045-21790 San Juan County, New Mexico

Prepared for: BP America Production Co. Farmington, New Mexico

Prepared by:
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, New Mexico 87413
(505)632-1199

# REMEDIAL EXCAVATION OF HYDROCARBON IMPACTED BEDROCK

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# REMEDIAL EXCAVATION OF HYDROCARBON IMPACTED BEDROCK

#### INTRODUCTION

Blagg Engineering Inc. (BEI) has been retained by BP America Production Co. (BP) to monitor, sample and document environmental remediation of hydrocarbon impacts at the Florance GC J 16A, a natural gas well located in rural San Juan County, New Mexico at (P) Sec. 6 – T30N – R9W (Figure 1). The historical origin of the hydrocarbon release at the site is not known but prior investigations identified two source areas operated by BP on the north end of the well pad, both near 95 barrel below grade tanks (BGT's) as shown on Figure 1. An additional source of impacts had previously been identified on the south end of the location in the area of a 45 barrel BGT operated by a third party, Williams Pipeline. This source area is not operated by BP and a partial remediation of this impact was conducted by the owner in November through December of 2016, by excavation. BP began initial remedial excavations on October 25, 2016. This work was temporarily suspended on November 10, 2016 due to work area restrictions with the third party conducting their own remediation on the same well pad. BP resumed remedial excavations on January 4, 2017 and completed the work on April 11, 2017. Final site backfilling, contouring and sampling was concluded on May 1, 2017.

Five groundwater monitor wells (MW-1 through MW-5) previously installed by BP in May and June, 2015 were at the site prior to beginning the remediation. This drilling identified the site lithology as comprised of dense sandstone beginning within the first several feet below ground surface (bgs) and extending to a depth of approximately 35 feet bgs, where a dense blue shalestone is present. A thin perched water table is found to be confined on this shalestone. Sampling of the pre-existing monitoring wells determined that hydrocarbon impacts to groundwater were present in the vicinity of the 45 barrel BGT on the southern end of the well pad, but not in the area of the BP surface soil impacts on the northern end of the well pad. In summary, monitor wells MW-1 and MW-4 located immediately down-gradient of BP operated surface equipment were tested to be non-detect for all hydrocarbons. The monitor wells immediately up-gradient of the third party 45 barrel BGT (MW-2 and MW-5) demonstrated hydrocarbon impacts exceeding NMOCD standards, and the monitor well adjacent to the 45 barrel BGT (MW-3) was found to have 2.38 feet of floating hydrocarbon liquids (apparent condensate).

To further delineate subsurface impacts BP contracted the installation of five additional groundwater monitor wells and one soil boring while remedial excavation was proceeding. This drilling was conducted between January 10 - 13, 2017 and included the installation of monitor wells MW-6 through MW-10 and soil boring BH-A (Figure 1). The findings of this drilling are documented in the BEI report "Drilling Investigation", dated March 31, 2017. In summary, the investigation confirmed a clear separation of soil impacts between the BP operated source areas on the north side of the well pad and the third party impacts on the south side. Additionally, monitor well water sampling confirmed that site groundwater impacts were unlikely to have been contributed by prior BP operations.

#### **REMEDIATION ACTIVITIES**

Site remediation consisted of 3 separate activities: (1) excavation of impacted sandstone in all directions until site closure standards had been achieved, (2) on-site treatment of impacted media to remove hydrocarbon impacts to below site closure standards, followed by placing the treated soil back into cleaned up areas of the remedial excavation, and (3) post remedial sampling of temporary use areas outside of impact zones to confirm residual hydrocarbon impacts were not present in concentrations exceeding site closure standards. The procedures to carry out these activities are discussed below.

The closure standard for the site as determined by the New Mexico Oil Conservation Division (NMOCD) and the U.S. Bureau of Land Management (BLM) was based on the potential risk to ground and surface water from hydrocarbon impacts. At this site the closure standard was established as follows:

Total Petroleum Hydrocarbons (TPH) = 100 mg/Kg (parts per million)
Benzene = 10 mg/Kg
Benzene, Toluene, Ethyl-Benzene and Total Xylenes (BTEX) combined = 50 mg/Kg
Total Chlorides = 600 mg/Kg

#### Excavation of Impacted Media to Achieve Site Remediation

Removal of impacted bedrock sandstone was conducted using a Caterpillar D8 dozer with a single ripping tooth and support with up to three excavators. Final remediation began on January 5, 2017 at the area of the BP operated 95 barrel BGT on the northeast side of the location. After the northeast and east limits of impacts had been removed and sampling confirmed closure of those areas, the excavation was advanced in a westward direction. Excavated impacted media was stacked and stored on the well pad for subsequent treatment via shredding and chemical treatment (discussed below). Excavation continued in all directions until composite samples submitted for laboratory analytical testing confirmed that sidewalls and base areas were within site closure standards. The final excavating and sampling was concluded on April 11, 2017. The excavated area was approximately 300' (east to west) x 180' (north to south) with maximum depths of approximately 35' bgs (Figures 2 and 3).

Closure sampling was progressive as the excavation advanced. Sampling areas were marked out on the excavation walls and base for collection of 5-point composites from each area. Due to the dense bedrock nature of the media this sampling was performed using an excavator trackhoe to dig into and break up the rock for composite collection. All closure sampling was witnessed by either or both the NMOCD and BLM. Representative composite portions of sample were placed into a gallon sized Ziploc® baggie for field headspace analysis of organic vapors with a calibrated IonScience Tiger model photo-ionization detector (PID) containing a 11.2 eV lamp. Split samples were placed into a 4-ounce laboratory supplied jar with Teflon® lid, labeled and placed on ice in an ice chest for further laboratory testing. The jarred samples were hand delivered to a representative of Hall Environmental Analytical Laboratories for analysis via U.S. EPA Method 8021B (volatile organics limited to benzene, toluene, ethyl benzene and total xylenes), U.S. EPA

Method 8015 (gasoline range (GRO), diesel range (DRO) and motor oil range (MRO) organics), and chlorides via U.S. EPA Method 300. A chain-of-custody followed the samples.

In the event that a closure area failed on laboratory testing, that area was further advanced with the excavation equipment and re-sampled. A summary of laboratory analytical results is included in <a href="Table 1: Summary Excavation Closure Analytical Data">Table 1: Summary Excavation Closure Analytical Data</a>. The comments section in Table 1 indicate those sample areas that failed on initial testing and the subsequent actions taken to reach closure. Laboratory test reports are attached in Appendix B.

At the completion of remedial excavations a there were a total of 65 separate composite sampling areas. With the exception of 2 sampling areas, each area tested below the site closure standard. The first failed area, Zone 27 (sidewall, interval -10' to -30' bgs) was sampled on February 22, 2017 and failed on total TPH at 440 mg/Kg. Partial backfilling of this area was necessary to advance the excavation towards the west. The un-backfilled portion of Zone 27 was sampled in Zone 65 (sidewall, interval -3' to -22' bgs) on April 11, 2017 and this portion tested at non-detect for TPH. Based on the surrounding sampling zones of Zone 27 (ie, Zones 25R, 26, 28 and 65) testing below the site closure standard, and with soil samples collected from adjacent monitor wells MW-4, MW-8 and MW-9 all testing at non-detect for TPH is all intervals below 19' bsg, the residual impacts in Zone 27 between the interval of -22' to -30' bgs are not indicated to be contributing to site groundwater impacts. Additionally, down-gradient monitor wells MW-4 and MW-9 both have tested non-detect for hydrocarbon constituents in groundwater.

The second sampling zone that did not meet site closure standards was Zone 54 (Shallow. -4' to -8' bgs). Zone 54 (-4' to -16' bgs) was first sampled on March 30, 2017 and failed on total TPH at 363 mg/Kg. This zone was re-sampled as Zone 54 (Deep, -8' to -16' bgs) and Zone 54 (Shallow, -4' to -8' bgs) on April 11, 2017. The Zone 54 (Deep) composite tested TPH at non-detect, and Zone 54 (Shallow) tested at 2,168 mg/Kg. A test trench was advanced across this shallow section and extended towards the southeast (shown on Figure 2). Grab soil samples collected at 7 feet below grade across this trench all tested TPH at values exceeding site closure standards. The original source of these shallow impacts could not be determined. BP elected to cease remedial excavations towards the southeast in this area due to the immediate proximity of third party impact sources known to exist in this vicinity. The remaining impacts in Zone 54 (Shallow) are not indicated to be contributing to site groundwater impacts.

An additional, un-scheduled site impact mitigation was conducted on April 4, 2017. A heavy overnight precipitation deposited approximately 8-inches of wet, heavy snow. As this snow melted it drained across sidewalls on the southwest extent of the open excavation and pooled at the base of the excavation. There was concern that this drainage could carry hydrocarbon impacts from the shallow impacted sidewalls to the base of the excavation. Approximately 850 gallons of concentrated hydrogen peroxide were sprayed on the open excavation base to remediate potential impacts from this drainage.

#### Remediation of Excavated Impacted Media via Soil Shredding

BP contracted remediation of excavated impacted sandstone to a private enterprise, Unlimited Construction, for on-site treatment. A proprietary process (termed 'soil shredding') was used to crush the sandstone and then chemically treat the fine grained media with hydrogen peroxide to remove hydrocarbons. Following soil shredding, the treated material was sampled to confirm that site closure standards had been achieved and then placed back into clean portions of the remedial excavation. This process progressed at the same approximate rate as the excavation advanced.

Treated soil was placed into labeled stockpiles prior to closure sampling. This sampling was performed using an excavator trackhoe to dig into each pile and collect composite samples for initial field analysis and subsequent laboratory testing. Sample handling, regulatory witnessing, preservation, chain-of-custody and laboratory test procedures were the same as previously described.

At the onset of the soil shredding process certain piles failed on first testing. This can be a common occurrence with the initial shredding process until the proper chemical balance for remediation is determined. These piles were re-treated and subsequently tested below site standards. Later in the shredding process some piles failed on first testing but subsequent testing on the failed piles yielded passing test results. This too can be common as the chemical process is not instantaneous, but progressive over time. A summary of treated soil laboratory test data is presented in <u>Table 2</u>, <u>Summary Treated Soil Pile Analytical Data</u>. Laboratory test reports are attached in Appendix C.

#### Temporary Use Area Closure

The original well pad area was insufficient in size for storage of both excavated impacted material and storage of treated shredded soil. It was necessary to obtain temporary use areas (TUA's) off the well pad for this storage (Figure 4). These areas were located on the east and west sides of the well pad. Following BLM guidelines, a cultural survey was conducted in these areas prior to use to insure no cultural risk was present. The areas were then used to temporarily store treated, shredded soil only.

Following completion of the remedial excavation and backfilling with shredded soils, the TUA's were sampled to insure no residual hydrocarbon impacts exceeding site closure standards were present. This sampling was performed on May 1, 2017 by hand sampling composites from each use area (Figure 4). Sample handling, regulatory witnessing, preservation, chain-of-custody and laboratory test procedures were the same as previously described. All areas tested below site closure standards. A summary of TUA test data is presented in <u>Table 3</u>, <u>Temporary Use Area Vadose Zone Analytical Data</u>. Laboratory test reports are attached in Appendix D.

#### CONCLUSIONS AND RECOMMENDATIONS

- 1) Hydrocarbon impacted soil and bedrock at the Florance GC J 16A, of an historical nature, in release areas from BP operations has been successfully excavated and treated. Excavation sampling and analytical testing has confirmed that 63 of 65 separate sampling zones within the remedial excavation test below site closure standards. The two zones with residual hydrocarbon impacts exceeding site closure standards (Zone 27 (-22' to -30' bgs) and Zone 54 (-4' to -8' bgs) are not indicated to contribute a risk to surface or groundwater. No additional site remediation of BP impacts is indicated. Regulatory closure of remedial activities is recommended.
- All soils treated on-site via the proprietary 'soil shredding' process and backfilled into the remedial excavation have demonstrated via analytical testing to be within site closure standards. These treated soils are not indicated to contribute a risk to surface or groundwater. No additional treatment is recommended.
- 3) Off-pad temporary use areas have been sampled and analytical testing has indicated that the residual ground surface meets site closure standards. No additional confirmation sampling is recommended.

#### CLOSURE AND LIMITATIONS

This report has been prepared for the exclusive use of BP America Production Company as it pertains to hydrocarbon impact remediation at the Florance GC J 16A in San Juan County, New Mexico. The data presented herein is based on visual observations, subsurface soil conditions encountered at sampling locations and on information reported by analytical laboratory testing of soils. This report does not reflect variations which may exist between sampling locations.

I certify that the work performed by Blagg Engineering, Inc. as described in this report was directed by my supervision, and that I am personally familiar with the remedial actions and the contents of this report.

Submitted by:

Blagg Engineering, Inc.

Jeffrey C. Blagg, PE

NMPE 11607

# Tables

## TABLE 1 Florance GC J 16A

### Summary Excavation Closure Analytical Data Page 1 of 2

Sample ID	Date	BTEX (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	TPH MRO (mg/Kg)	TPH Total (mg/Kg)	Comments
Zone 1 (-5' to -15')	1/11/2017	ND	5	200	54	259	Excavated, re-sampled as Zone 7
Zone 2 (-5' to -15')	1/11/2017	ND	42	250	1,500	1,792	Excavated, re-sampled as Zone 8
Zone 3 (-5' to -15')	1/11/2017	ND	42	990	450	1,482	Excavated, re-sampled as Zone 9
Zone 4 (-5' to -15')	1/11/2017	ND	ND	66	ND	66	
Zone 5 (-5' to -15')	1/11/2017	ND	ND	9.8	ND	9.8	
Zone 6 (-5' to -15')	1/11/2017	ND	ND	29	ND	9.8	
Zone 7 (-7' to -17')	1/13/2017	ND	ND	ND	ND	ND	
Zone 8 (-7' to -17')	1/13/2017	ND	ND	ND	ND	ND	
Zone 9 (-7' to -17')	1/13/2017	ND	ND	10	ND	10	
Zone 10 (Base @ -20')	1/20/2017	ND	ND	ND	ND	ND	
Zone 11 (Base @ -20')	1/20/2017	ND	ND	ND	ND	ND	
Zone 12 (-12' to -20')	1/20/2017	ND	ND	ND	ND	ND	
Zone 13 (-12' to -20')	1/20/2017	ND	ND	ND	ND	ND	
Zone 14 (-12' to -20')	1/20/2017	ND	ND	ND	ND	ND	
Zone 15 (-12' to -20')	1/20/2017	ND	ND	ND	ND	ND	
Zone 16 (Base @ -22')	1/20/2017	ND	ND	ND	ND	ND	
Zone 17 (Base @ -22')	1/20/2017	ND	ND	ND	ND	ND	
Zone 18 (-14' to -24')	2/16/2017	ND	ND	44	ND	44	
Zone 19 (-14' to -24')	2/16/2017	ND	66	530	110	706	Excavated, Re-Sampled as Zone 29
Zone 20 (Base @ -24')	2/16/2017	ND	ND	62	ND	62	
Zone 21 (Base @ -24')	2/16/2017	3.4	200	630	120	950	Excavated, Re-Sampled as Zones 24 & 25
Zone 22 (-10' to -30')	2/22/2017	ND	6	120	130	256	Excavated, Re-Sampled as Zone 22R2
Zone 22R2 (-10' to -32')	2/27/2017	ND	ND	ND	ND	ND	
Zone 23 (Base @ -32')	2/22/2017	ND	ND	26	ND	26	
Zone 24 (Base @ -32')	2/22/2017	ND	ND	22	ND	22	
Zone 25 (Base @ -32')	2/22/2017	0.97	61	380	86	527	Excavated, Re-Sampled as Zone 25R
Zone 25R (Base @ -35')	2/27/2017	0.40	4	52	ND	56	
Zone 26 (Base @ -32')	2/22/2017	ND	ND	13	ND	13	
Zone 27 (-10' to -30')	2/22/2017	ND	43	320	77	440	Partially Re-Sampled in Zone 65
Zone 28 (-10' to -30')	2/22/2017	ND	ND	23	ND	23	
Zone 29 (-15' to -30')	2/22/2017	ND	ND	16	ND	16	
Zone 30 (Base @ -35')	2/27/2017	ND	ND	ND	ND	ND	
Zone 31 (Base @ -35')	2/27/2017	ND	ND	ND	ND	ND	
Zone 32 (Base @ -35')	2/27/2017	ND	ND	ND	ND	ND	
Zone 33 (Base @ -35')	2/27/2017	ND	ND	ND	ND	ND	
Zone 34 (-10' to -32')	2/27/2017	ND	ND	ND	ND	ND	
Zone 35 (-6' to -32')	3/7/2017	ND	ND	ND	ND	ND	
Zone 36 (-20' to -32')	3/7/2017	ND	ND	ND	ND	ND	
Zone 37 (-18' to -30')	3/10/2017	ND	ND	ND	ND	ND	
Zone 38 (-18' to -30')	3/10/2017	ND	ND	28	ND	28	
NMOCD Closure Standard		50				100	

ND = not detected.

Benzene and Chloride = ND on all samples.

Depths are approximate from original wellpad grade.

Table 1 Summary Excavation Closure Analytical Data Page 2 of 2

Sample ID	Date	BTEX (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	TPH MRO (mg/Kg)	TPH Total (mg/Kg)	Comments
Zone 39 (-6' to -20')	3/13/2017	ND	ND	ND	ND	ND	
Zone 40 (-6' to -20')	3/13/2017	ND	ND	ND	ND	ND	
Zone 41 (-6' to -20')	3/13/2017	ND	ND	ND	ND	ND	
TH101 @ 31'	3/13/2017	ND	ND	ND	ND	ND	
TH101(North, -12' to -25')	3/13/2017	ND	ND	ND	ND	ND	
TH101(West, -12' to -25')	3/13/2017	ND	ND	ND	ND	ND	
TH101 (Base @ -25')	3/13/2017	ND	ND	ND	ND	ND	
Zone 42 (-6' to -14')	3/15/2017	ND	ND	ND	ND	ND	
Zone 43 (-6' to -14')	3/15/2017	ND	ND	ND	ND	ND	
Zone 44 (-6' to -14')	3/15/2017	ND	ND	11	ND	11	
Zone 45 (Base @ -35')	3/17/2017	ND	ND	ND	ND	ND	
Zone 46 (-20' to -33')	3/17/2017	ND	ND	ND	ND	ND	
Zone 47 (-20' to -33')	3/21/2017	ND	ND	42	ND	42	
Zone 48 (-6' to -14')	3/21/2017	ND	ND	ND	ND	ND	
Zone 49 (Base @ -18')	3/30/2017	ND	ND	ND	ND	ND	
Zone 50 (Base @ -17')	3/30/2017	ND	ND	ND	ND	ND	
Zone 51 (-10' to -17')	3/30/2017	ND	ND	ND	ND	ND	
Zone 52 (Base @ -18')	3/30/2017	ND	ND	ND	ND	ND	
Zone 53 (Base @ -17')	3/30/2017	ND	ND	ND	ND	ND	
Zone 54 (-4' to -16')	3/30/2017	ND	8.1	280	75	363	Re-Sampled as Zones 54 Deep & Shallow
Zone 54 (Deep)(-8' to -16')	4/11/2017	ND	ND	ND	ND	ND	
Zone 54 (Shallow)(-4' to-8')	4/11/2017	8.1	500	1400	260	2,168	
Zone 55 (-18' to -30')	3/30/2017	ND	ND	ND	ND	ND	
Zone 56 (-5' to -18')	3/30/2017	ND	ND	ND	ND	ND	
Zone 57 (-5' to -18')	3/30/2017	1.0	120	680	130	930	Excavated, re-sampled as Zones 57 Deep & Shallow
Zone 57 (Deep) (-10' to-18')	4/11/2017	ND	ND	ND	ND	ND	
Zone 57 (Shallow)(-5' to10')	4/11/2017	ND	ND	ND	ND	ND	
Zone 58 (Base @ -35')	4/4/2017	ND	ND	ND	ND	ND	
Zone 59 (Base @ -35')	4/4/2017	ND	ND	14	ND	14	
Zone 60 (-18' to -33')	4/4/2017	ND	ND	ND	ND	ND	
Zone 61 (-18' to -33')	4/4/2017	ND	ND	ND	ND	ND	
Zone 62 (-18' to -33')	4/4/2017	ND	ND	ND	ND	ND	
Zone 63 (-18' to -33')	4/4/2017	ND	ND	ND	ND	ND	
Zone 64 (-3' to -20')	4/11/2017	ND	9.6	14	ND	23.6	
Zone 65 (-3' to -22')	4/11/2017	ND	ND	ND	ND	ND	
Trench – Point 1 (-7')	4/11/2017	3.66	140	1,100	170	1,410	
Trench – Point 2 (-7')	4/11/2017	ND	26	280	59	365	
Trench – Point 3 (-7')	4/11/2017	ND	ND	310	77	387	
Trench – Point 4 (-7')	4/11/2017	0.86	56	420	95	571	
NMOCD Closure Standard		50				100	

ND = not detected.

Benzene and Chloride = ND on all samples.

Depths are approximate from original wellpad grade.

# TABLE 2 Florance GC J 16A

(P) Sec 6 – T30N – R9W San Juan County, New Mexico API: 30-045-21790

## Summary Treated Soil Pile Analytical Data

				Field		TPH	TPH	TPH	TPH	
Pile ID	Volume	Date	Date	OVM	BTEX	GRO	DRO	MRO	Total	Chloride
	(CY)	Created	Sampled	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
TSP-1	100	1/6/2017	1/13/2017	53	0.12	32	31	ND	64	ND
TSP-2	100	1/6/2017	1/13/2017	71	0.11	41	40	ND	81	ND
TSP-3	100	1/6/2017	1/13/2017	52	0.17	40	32	ND	72	ND
TSP-4	100	1/9/2017	1/13/2017	129	0.11	36	31	ND	67	ND
TSP-5	100	1/9/2017	1/13/2017	55	0.12	38	14	ND	52	ND
TSP-6	100	1/9/2017	1/13/2017	68	0.11	27	25	61	113	ND
TSP-7	100	1/9/2017	1/13/2017	230	0.26	44	250	130	424	ND
TSP-8	100	1/9/2017	1/13/2017	153	0.20	45	230	130	405	ND
TSP-9	100	1/10/2017	1/13/2017	247	0.43	61	400	190	651	ND
TSP-10	100	1/10/2017	1/13/2017	240	0.34	61	400	200	661	ND
TSP-11	100	1/12/2017	1/20/2017	23.0	ND	74	360	240	674	ND
TSP-12	100	1/12/2017	1/20/2017	19.7	ND	71	320	290	681	ND
TSP-13	100	1/12/2017	1/20/2017	24.3	ND	84	380	250	714	ND
TSP-14	100	1/12/2017	1/20/2017	16.5	ND	73	360	180	613	ND
TSP-15	100	1/12/2017	1/20/2017	35.2	ND	73	330	170	573	ND
TSP-16	100	1/12/2017	1/20/2017	39.2	ND	76	370	200	646	ND
TSP-17	100	1/12/2017	1/20/2017	36.5	ND	71	370	200	641	ND
TSP-18	100	1/12/2017	1/20/2017	36.2	ND	82	390	210	682	ND
TSP-19	100	1/12/2017	1/20/2017	35.2	ND	80	350	250	680	ND
TSP-20	100	1/12/2017	1/20/2017	46.2	ND	87	500	260	847	ND
TSP-21	100	1/12/2017	1/20/2017	35.0	ND	79	420	290	789	ND
TSP-22	100	1/12/2017	1/20/2017	30.8	ND	73	390	330	793	ND
TSP-23	700	1/11/2017	1/24/2017	22.4	ND	38	100	360	493	ND
TSP-24	100	1/13/2017	1/24/2017	25.7	ND	26	300	190	516	ND
TSP-25	100	1/13/2017	1/24/2017	12.8	ND	20	250	150	420	ND
TSP-26	100	1/13/2017	1/24/2017	23.8	ND	22	260	180	462	ND
TSP-27	100	1/13/2017	1/24/2017	14.9	ND	22	200	250	472	ND
TSP-28	100	1/13/2017	1/24/2017	16.4	ND	25	140	140	305	ND
TSP-29	100	1/16/2017	1/24/2017	10.7	ND	21	200	180	401	ND
TSP-30	100	1/16/2017	1/24/2017	10.5	ND	24	170	120	314	ND
TSP-31	100	1/16/2017	1/24/2017	21.2	ND	24	220	150	394	ND
TSP-32	100	1/16/2017	1/24/2017	16.1	ND	23	230	160	413	ND
TSP-33	100	1/16/2017	1/24/2017	20.2	ND	26	150	120	296	ND
TSP-34	100	1/16/2017	1/24/2017	19.1	ND	24	210	140	374	ND
TSP-35	100	1/16/2017	1/24/2017	24.9	ND	29	270	200	499	ND
TSP-36	100	1/16/2017	1/24/2017	20.2	ND	21	180	180	381	ND
TSP-37	100	1/16/2017	1/24/2017	25.7	ND	31	310	290	631	ND
TSP-38	100	1/16/2017	1/24/2017	20.6	ND	21	180	130	331	ND
TSP-39	500	1/17/2017	1/24/2017	15.0	ND	14	230	160	404	ND
TSP-40	500	1/17/2017	1/24/2017	19.3	ND	ND	210	85	295	ND
			<u> </u>	Field		TPH	TPH	TPH	TPH	

	Volume	Date	Date	OVM	BTEX	GRO	DRO	MRO	Total	Chloride
Pile ID	(CY)	Created	Sampled	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
TSP-41	500	1/17/2017	1/24/2017	20.7	ND	23	310	220	553	ND
TSP-42	500	1/19/2017	1/24/2017	11.9	ND	ND	110	58	168	ND
TSP-43	500	1/19/2017	1/24/2017	12.9	ND	ND	120	53	173	ND
151-45	300	1/19/2017	1/24/2017	12.9	ND	ND	120	33	173	ND
Re-	sample	of	previously	tested	piles:					
TSP-16/17	200	1/19/2017	1/30/2017	42		35	400	190	625	
TSP-26/27	200	1/19/2017	1/30/2017	39		33	360	170	563	
TSP-31/32	200	1/19/2017	1/30/2017	52		33	360	190	583	
Sampling	of	Re-treated	Piles:	(#39 -	#43)					
TSP-RT-	100	1/30/2017	2/3/2017	1.6	NA	13	31	ND	44	NA
100-01										
TSP-RT-	100	1/30/2017	2/3/2017	2.1	NA	15	39	ND	54	NA
100-02										
TSP-RT- 100-03	100	1/30/2017	2/3/2017	2.4	NA	16	100	ND	116	NA
TSP-RT-	100	1/30/2017	2/3/2017	2.0	NA	15	14	ND	29	NA
100-04	100	1/30/2017	2/3/2017		1111	15	11	TVD	2)	1 17 1
TSP-RT- 100-05	100	1/30/2017	2/3/2017	3.1	NA	14	30	ND	44	NA
TSP-RT-	100	1/30/2017	2/3/2017	2.7	NA	30	31	ND	61	NA
100-06					·			·		·
TSP-RT-	100	1/30/2017	2/3/2017	2.9	NA	24	47	ND	71	NA
100-07 TSP-RT-	100	1/30/2017	2/3/2017	3.3	NA	28	36	ND	64	NA
15P-R1- 100-08	100	1/30/2017	2/3/2017	3.3	NA	28	30	ND	04	NA
TSP-RT-	100	1/30/2017	2/3/2017	3.3	NA	31	38	ND	69	NA
100-09	100		2/2/2017							
TSP-RT- 100-10	100	1/30/2017	2/3/2017	2.8	NA	16	50	ND	66	NA
TSP-RT-	500	2/1/2017	2/3/2017	2.7	NA	3.7	27	ND	30.7	NA
500-01	300									
TSP-RT- 500-02	500	2/1/2017	2/3/2017	5.6	NA	4.5	49	ND	53.5	NA
TSP-RT-	500	2/1/2017	2/3/2017	3.5	NA	3.3	28	ND	31.3	NA
500-03	300	2/1/2017	2/3/2017	3.3	11/21	3.3	20	TVD	31.3	1471
TSP-RT-	500	2/1/2017	2/3/2017	3.5	NA	4.2	32	ND	36.2	NA
500-04										
Sampling	of	Do twooted	Piles:	(#7 -	#38)					
TSP-RT-	500	Re-treated 2/3/2017	2/7/2017	5.1	#38) NA	14	28	ND	42	NA
500-05	300	4/3/401/	2/1/2U1/	J.1	11/1	1+	20	עא	74	11/71
TSP-RT-	500	2/4/2017	2/7/2017	4.2	NA	13	20	ND	33	NA
500-06										
TSP-RT-	500	2/4/2017	2/7/2017	7.4	NA	16	23	ND	39	NA
500-07	F00	2/6/2017	0/7/0017	0.1	NT A	10	0.1	NID	22	NT A
TSP-RT- 500-08	500	2/6/2017	2/7/2017	8.1	NA	12	21	ND	33	NA
TSP-RT-	500	2/6/2017	2/7/2017	16.3	NA	21	24	ND	45	NA
500-09		2, 3, 2011	2,7,2017	10.5	1111	21	21	1,12	15	1111
TSP-RT-	500	2/7/2017	2/7/2017	36.9	NA	28	53	ND	81	NA
500-10										
				Field		TPH	TPH	TPH	TPH	

	Vol.	Date	Date	OVM	BTEX	GRO	DRO	MRO	Total	Chloride
Pile ID	(CY)	Created	Sampled	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
TSP-RT-	300	2/7/2017	2/9/2017	15.1	NA	23	23	ND	46	NA
300-11	<b>7</b> 00	2 /0 /2 0 1 5	2/0/2015	22.0			20	275		***
TSP-RT-	500	2/8/2017	2/9/2017	23.9	NA	22	30	ND	52	NA
500-12	500	2/9/2017	2/0/2017	0.0	NT A	21	26	NID	4.7	NT A
TSP-RT-	500	2/8/2017	2/9/2017	8.8	NA	21	26	ND	47	NA
500-13										
C1:	- £	N	Piles:							
Sampling	of 100	New 2/8/2017	2/9/2017	9.2	ND	12	25	ND	20	ND
TSP-44	100		2/9/2017	18.7	ND ND	13	25	ND	38	ND ND
TSP-45 TSP-46	100	2/8/2017 2/8/2017	2/9/2017	7.4	ND ND	16 11	22 18	ND ND	38 29	ND ND
TSP-46	100	2/8/2017	2/9/2017	14.9	ND ND	40	31	ND ND	71	ND ND
TSP-47	100	2/8/2017	2/9/2017	9.4	ND ND	39	29	ND ND	68	ND ND
TSP-49	100	2/9/2017	2/9/2017	3.3	ND ND	12	35	ND ND	47	ND ND
TSP-50	100	2/9/2017	2/9/2017	16.1	ND ND	15	54	ND ND	69	ND ND
TSP-51	100	2/9/2017	2/9/2017	12.9	ND ND	16	34	ND ND	50	ND ND
TSP-52	100	2/9/2017	2/9/2017	12.6	ND ND	14	28	ND ND	42	ND ND
TSP-53	100	2/9/2017	2/9/2017	27.7	ND ND	15	26	ND ND	42	ND ND
TSP-54	500	2/9/2017	2/16/2017	2.8	ND ND	ND	17	ND ND	17	ND ND
TSP-55	500	2/13/2017	2/16/2017	3.5	ND ND	ND	9.2	ND ND	9.2	ND ND
TSP-56	500	2/13/2017	2/16/2017	2.8	ND	ND	15	ND	15	ND
TSP-57	500	2/14/2017	2/16/2017	3.5	ND	ND	ND	ND	ND	ND
TSP-58	500	2/15/2017	2/16/2017	4.1	ND	ND	12	ND	12	ND
TSP-59	500	2/15/2017	2/16/2017	8.3	ND	4.8	50	ND	54.8	ND
TSP-60	500	2/15/2017	2/16/2017	21.0	ND	8.0	64	ND	72	ND
TSP-61	500	2/16/2017	2/16/2017	26.0	ND	9.8	63	ND	72.8	ND
TSP-62	500	2/16/2017	2/22/2017	6.9	ND	ND	67	ND	67	ND
TSP-63	500	2/17/2017	2/22/2017	11.4	ND	ND	100	ND	100	ND
TSP-64	500	2/17/2017	2/22/2017	10.0	ND	ND	70	ND	70	ND
TSP-65	500	2/21/2017	2/22/2017	9.5	ND	ND	10	ND	10	ND
TSP-66	500	2/21/2017	2/22/2017	12.9	ND	ND	30	ND	30	ND
TSP-67	500	2/21/2017	2/22/2017	10.4	ND	ND	39	ND	39	ND
TSP-68	500	2/21/2017	2/22/2017	10.8	ND	ND	45	ND	45	ND
TSP-69	500	2/21/2017	2/22/2017	8.4	ND	ND	34	ND	34	ND
TSP-70	500	2/22/2017	2/22/2017	5.5	ND	ND	67	75	142	ND
TSP-70R	Same	2/22/2017	2/24/2017	2.7	ND	ND	42	ND	42	ND
TSP-71	500	2/22/2017	2/23/2017	4.0	ND	ND	57	ND	57 ~ ~ ~	ND
TSP-72	500	2/22/2017	2/23/2017	5.2	ND	ND	55	ND	55	ND
TSP-73	500	2/22/2017	2/23/2017	3.1	ND	ND	47	ND	47	ND
TSP-74	500	2/23/2017	2/23/2017	5.5	ND	ND ND	60	ND	60	ND
TSP-75	500 500	2/23/2017	2/23/2017	6.9	ND ND	ND	57 51	ND ND	57	ND ND
TSP-76 TSP-77	500	2/23/2017 2/23/2017	2/23/2017 2/23/2017	13.3 14.4	ND ND	ND ND	62	ND ND	51 62	ND ND
TSP-77	500	2/23/2017	2/23/2017	9.0	ND ND	ND ND	50	ND ND	50	ND ND
TSP-78	500	2/23/2017	2/23/2017	13.3	ND ND	ND ND	83	ND ND	83	ND ND
TSP-80	500	2/23/2017	2/23/2017	2.4	ND ND	ND ND	39	ND ND	39	ND ND
TSP-81	500	2/24/2017	2/24/2017	6.4	ND ND	ND ND	78	ND ND	78	ND ND
TSP-82	500	2/24/2017	2/24/2017	5.2	ND ND	ND ND	60	ND ND	60	ND ND
TSP-83	500	2/24/2017	2/24/2017	5.3	ND ND	ND ND	55	ND ND	55	ND ND
TSP-84	500	2/24/2017	2/24/2017	9.8	ND	8.6	74	ND	82.6	ND
TSP-85	500	2/24/2017	2/24/2017	11.4	ND	7.5	54	ND	61.5	ND
TSP-86	500	2/24/2017	2/24/2017	8.2	ND	7.5	42	ND	49.5	ND
TSP-87	500	2/25/2017	2/27/2017	1.9	ND	ND	24	ND	24	ND
TSP-88	500	2/25/2017	2/27/2017	2.1	ND	ND	28	ND	28	ND
TSP-89	500	2/25/2017	2/27/2017	4.3	ND	ND	23	ND	23	ND
TSP-90	500	2/25/2017	2/27/2017	8.8	ND	4.2	30	ND	34.2	ND
				Field		TPH	TPH	TPH	TPH	

	Vol.	Date	Date	OVM	BTEX	GRO	DRO	MRO	Total	Chloride
Pile ID	(CY)	Created	Sampled	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
TSP-91	500	2/27/2017	2/27/2017	8.2	ND	3.9	32	ND	35.9	ND
TSP-92	500	2/27/2017	3/7/2017	1.2	ND	ND	31	ND	31	ND
TSP-93	500	2/27/2017	3/7/2017	5.2	ND	ND	42	ND	42	ND
TSP-94	500	3/6/2017	3/7/2017	3.7	ND	ND	20	ND	20	ND
TSP-95	500	3/6/2017	3/7/2017	5.1	ND	3.5	34	ND	37.5	ND
TSP-96	500	3/6/2017	3/7/2017	4.9	ND	ND	22	ND	22	ND
TSP-97	500	3/6/2017	3/7/2017	4.2	ND	ND	26	ND	26	ND
TSP-98	500	3/6/2017	3/7/2017	4.6	ND	ND	23	ND	23	ND
TSP-99	500	3/7/2017	3/7/2017	6.1	ND	ND	33	ND	33	ND
TSP-100	500	3/7/2017	3/7/2017	6.2	ND	ND	36	ND	36	ND
TSP-101	500	3/7/2017	3/7/2017	5.6	ND	4.3	14	ND	18.3	ND
TSP-102	500	3/7/2017	3/7/2017	8.8	ND	ND	41	ND	41	ND
TSP-103	500	3/7/2017	3/7/2017	8.5	ND	4.9	19	ND	23.9	ND
TSP-104	500	3/7/2017	3/7/2017	12.7	ND	3.5	26	ND	29.5	ND
TSP-105	500	3/7/2017	3/8/2017	4.5	ND	16	19	ND	35	ND
TSP-106	500	3/8/2017	3/8/2017	8.0	ND	7.8	27	ND	34.8	ND
TSP-107	500	3/8/2017	3/8/2017	14.5	ND	9.7	22	ND	31.7	ND
TSP-108	500	3/8/2017	3/8/2017	13.6	ND	9.9	44	ND	53.9	ND
TSP-109	500	3/8/2017	3/8/2017	16.0	ND	7.3	20	ND	27.3	ND
TSP-110	500	3/8/2017	3/9/2017	14.9	ND ND	ND 4.1	22	ND	22	ND ND
TSP-111	500	3/10/2017	3/10/2017	10.2	ND	4.1	43	ND	47.1	ND
TSP-112 TSP-113	500 500	3/10/2017	3/10/2017 3/10/2017	11.7 12.3	ND ND	ND ND	29	ND ND	44 29	ND ND
TSP-113	500	3/10/2017 3/10/2017	3/10/2017	12.5	ND ND	4.8	45	ND ND	49.8	ND ND
TSP-115	500	3/10/2017	3/10/2017	17.1	ND ND	ND	160	61	221	ND ND
TSP-115R	SAME	3/10/2017	3/15/2017	31.1	ND ND	ND ND	97	ND	97	ND
TSP-116	500	3/10/2017	3/13/2017	9.4	ND ND	ND	29	ND ND	29	ND
TSP-117	500	3/10/2017	3/13/2017	11.0	ND	ND	51	ND	51	ND
TSP-118	500	3/10/2017	3/13/2017	12.3	ND	ND	120	49	169	ND
TSP-118R	SAME	3/10/2017	3/15/2017	32.4	ND	ND	63	ND	63	ND
TSP-119	500	3/11/2017	3/13/2017	11.6	ND	ND	68	ND	68	ND
TSP-120	500	3/11/2017	3/13/2017	11.4	ND	ND	22	ND	22	ND
TSP-121	500	3/11/2017	3/13/2017	5.0	ND	ND	49	ND	49	ND
TSP-122	500	3/11/2017	3/13/2017	4.9	ND	ND	33	ND	33	ND
TSP-123	500	3/11/2017	3/13/2017	5.5	ND	ND	66	ND	66	ND
TSP-124	500	3/11/2017	3/13/2017	6.4	ND	ND	32	ND	32	ND
TSP-125	500	3/11/2017	3/13/2017	13.8	ND	ND	78	ND	78	ND
TSP-126	500	3/13/2017	3/13/2017	17.8	ND	ND	32	ND	32	ND
TSP-127	500	3/13/2017	3/13/2017	14.3	ND	ND	55	ND	55	ND
TSP-128	1,000	3/13/2017	3/15/2017	20.0	ND	ND	66	ND	66	ND
TSP-129	1,000	3/13/2017	3/15/2017	18.2	ND	ND	63	ND	63	ND
TSP-130	1,000	3/14/2017	3/15/2017	18.4	ND	ND	91	ND	91	ND
TSP-131	1,000	3/14/2017	3/15/2017	29.0	ND	ND	120	ND	120	ND
TSP-131R-E	500	3/14/2017	3/17/2017	19.5	ND	ND	44	ND	44	ND
TSP-131R-W	500	3/14/2017	3/17/2017	33.0	ND	ND	65	ND	65	ND
TSP-132	1,000	3/14/2017	3/15/2017	68	ND ND	ND ND	100	ND ND	100	ND ND
TSP-133	1,000	3/14-15/2017	3/15/2017	56.6	ND ND	ND ND	120	ND ND	120	ND ND
TSP-133R-E TSP-133R-W	500 500	3/14/2017 3/15/2017	3/17/2017 3/17/2017	28.0 34.4	ND ND	ND ND	24 68	ND ND	24 68	ND ND
TSP-133R-W	1,000	3/15/2017	3/17/2017	32.4	ND ND	ND ND	85	ND ND	85	ND ND
TSP-134 TSP-135	1,000	3/13/2017	3/13/2017	43.6	ND ND	8.7	87	ND ND	95.7	ND ND
TSP-136	1,000	3/20/2017	3/21/2017	34.2	ND ND	9.6	98	ND ND	107.6	ND ND
TSP-136R-N	500	3/20/2017	3/22/2017	17.1	ND ND	ND	73	ND ND	73	ND ND
TSP-136R-S	500	3/20/2017	3/22/2017	26.5	ND	ND	120	55	175	ND
TSP-136R2-S	500	3/20/2017	3/27/2017	17.8	ND	ND	88	ND	88	ND
TSP-137	1,000	3/20/2017	3/21/2017	44.0	ND	6.7	44	ND	50.7	ND
				-						
				Field		TPH	TPH	TPH	TPH	

	Vol.	Date	Date	OVM	BTEX	GRO	DRO	MRO	Total	Chloride
Pile ID	(CY)	Created	Sampled	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
TSP-138	1,000	3/21/2017	3/22/2017	19.1	ND	ND	29	ND	29	ND
TSP-139	1,000	3/21/2017	3/22/2017	27.2	ND	ND	86	ND	86	ND
TSP-140	1,000	3/21/2017	3/22/2017	29.0	ND	ND	62	ND	62	ND
TSP-141	1,000	3/21/2017	3/22/2017	12.0	ND	ND	35	ND	35	ND
TSP-142	1,000	3/21/2017	3/22/2017	20.6	ND	ND	92	67	159	ND
TSP-142R-S	500	3/21/2017	3/27/2017	14.2	ND	ND	69	ND	69	ND
TSP-142R-N	500	3/21/2017	3/27/2017	18.6	ND	ND	60	ND	60	ND
TSP-143	1,000	3/22/2017	3/23/2017	9.6	ND	4.2	78	48	130.2	ND
TSP-143R-N	500	3/22/2017	3/27/2017	10.2	ND	ND	73	ND	73	ND
TSP-143R-S	500	3/22/2017	3/27/2017	12.0	ND	ND	47	ND	47	ND
TSP-144	1,000	3/22/2017	3/23/2017	14.3	ND	5.5	87	ND	92.5	ND
TSP-145	1,000	3/22/2017	3/23/2017	12.6	ND	6.6	73	56	135.6	ND
TSP-145R-N	500	3/22/2017	3/27/2017	7.0	ND	ND	48	ND	48	ND
TSP-145R-S	500	3/22/2017	3/27/2017	9.7	ND	ND	63	ND	63	ND
TSP-146	1,000	3/22/2017	3/23/2017	8.8	ND ND	ND	39	63	102	ND
TSP-146R-N	500	3/22/2017	3/27/2017	4.9	ND ND	ND	62	ND	62	ND
TSP-146R-S	500	3/22/2017	3/27/2017	3.3	ND ND	ND	52	ND ND	52	ND
TSP-147	1,000	3/22/2017	3/27/2017	6.3	ND ND	ND	49	ND ND	49	ND
TSP-147	1,000	3/22/2017	3/27/2017	11.1	ND ND	ND	49	ND ND	49	ND
TSP-149	1,000	3/23/2017	3/27/2017	7.0	ND ND	ND	49	ND ND	49	ND
TSP-150	1,000	3/23/2017	3/27/2017	12.9	ND	ND ND	84	ND ND	84	ND
TSP-151	1,000	3/23/2017	3/27/2017	11.6	ND	7.8	70	ND ND	77.8	ND
TSP-152	1,000	3/23/2017	3/27/2017	13.6	ND	ND	52	ND ND	52	ND
TSP-153	1,000	3/29/2017	3/30/2017	7.2	ND	4.3	62	ND ND	66.3	ND
TSP-154	1,000	3/29/2017	3/30/2017	8.5	ND	ND	27	ND ND	27	ND
TSP-155	1,000	3/29/2017	3/30/2017	11.9	ND	7.4	61	ND ND	68.4	ND
TSP-156	1,000	3/29/2017	4/3/2017	28.6	ND	ND	53	ND ND	53	ND
TSP-157	1,000	3/30/2017	4/3/2017	21.8	ND	ND ND	48	ND ND	48	ND
TSP-158	1,000	3/30/2017	4/3/2017	40.8	ND	ND	43	ND	43	ND
TSP-159	1,000	3/30/2017	4/3/2017	50.9	ND	ND	64	ND	64	ND
TSP-160	1,000	3/30/2017	4/3/2017	57.8	ND	ND	67	ND	67	ND
TSP-161	1,000	4/3/2017	4/4/2017	2.3	ND	ND	16	ND	16	ND
TSP-162	1,000	4/3/2017	4/4/2017	2.0	ND	ND	13	ND	13	ND
TSP-163	1,000	4/3/2017	4/4/2017	1.1	ND	ND	17	ND	17	ND
TSP-164	1,000	4/3/2017	4/4/2017	7.4	ND	ND	32	ND	32	ND
TSP-165	1,000	4/5/2017	4/6/2017	5.0	ND	ND	28	ND	28	ND
TSP-166	1,000	4/5/2017	4/6/2017	10.5	ND	ND	30	ND	30	ND
TSP-167	1,000	4/5/2017	4/6/2017	4.1	ND	ND	34	ND	34	ND
TSP-168	1,000	4/5/2017	4/6/2017	14.8	ND	ND	26	ND	26	ND
TSP-169	1,000	4/5/2017	4/6/2017	4.4	ND	ND	35	ND	35	ND
TSP-170	1,000	4/6/2017	4/7/2017	6.6	ND	ND	31	ND	31	ND
TSP-171	1,000	4/6/2017	4/7/2017	7.8	ND	ND	32	ND	32	ND
TSP-172	1,000	4/6/2017	4/7/2017	10.4	ND	ND	41	ND	41	ND
TSP-173	1,000	4/6/2017	4/7/2017	8.4	ND	ND	46	ND	46	ND
TSP-174	1,000	4/6/2017	4/7/2017	12.3	ND	5.5	41	ND	46.5	ND
TSP-175	1,000	4/7/2017	4/7/2017	15.2	ND	ND	46	ND	46	ND
TSP-176	1,000	4/7/2017	4/7/2017	10.2	ND	ND	38	ND	38	ND
TSP-177	1,000	4/7/2017	4/7/2017	11.4	ND	ND	27	ND	27	ND
TSP-178	1,000	4/11/2017	4/20/2017	0.3	ND	ND	17	ND	17	ND
TSP-179	500	4/11/2017	4/20/2017	1.3	ND	ND	23	ND	23	ND
TSP-180	1,000	4/20/2017	4/21/2017	0.7	ND	ND	30	ND	30	ND
TSP-181	1,000	4/20/2017	4/21/2017	1.7	ND	ND	29	ND	29	ND
TSP-182	1,000	4/20/2017	4/21/2017	1.8	ND	ND	ND	ND	ND	ND
TSP-183	1,000	4/21/2017	4/24/2017	1.6	ND	ND	19	ND	19	ND
TSP-184	1,000	4/21/2017	4/24/2017	2.2	ND	ND	18	ND	18	ND
TSP-185	1,000	4/24/2017	4/25/2017	1.7	ND	ND	32	ND	32	ND
TSP-186	1,000	4/24/2017	4/25/2017	3.0	ND	ND	34	ND	34	ND
	,			Field		TPH	TPH	TPH	TPH	
<u> </u>	I	<u>.                                    </u>	t		1					

Pile	Vol.	Date	Date	OVM	BTEX	GRO	DRO	MRO	Total	Chloride
ID	(CY)	Created	Sampled	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
TSP-187	1,000	4/24/2017	Sampled 4/25/2017	2.5	ND	ND	27	ND	27	ND
TSP-188	1,000	4/25/2017	4/25/2017	1.8	ND	ND	23	ND	23	ND
151-100	1,000	4/23/2017	4/23/2017	1.0	ND	ND	23	ND	23	ND
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NA = Not Analyz		1 14	'. ND N	I.D.	1		l		<u> </u>	<u>j</u>

NA = Not Analyzed, previously passed testing. ND = Not Detected

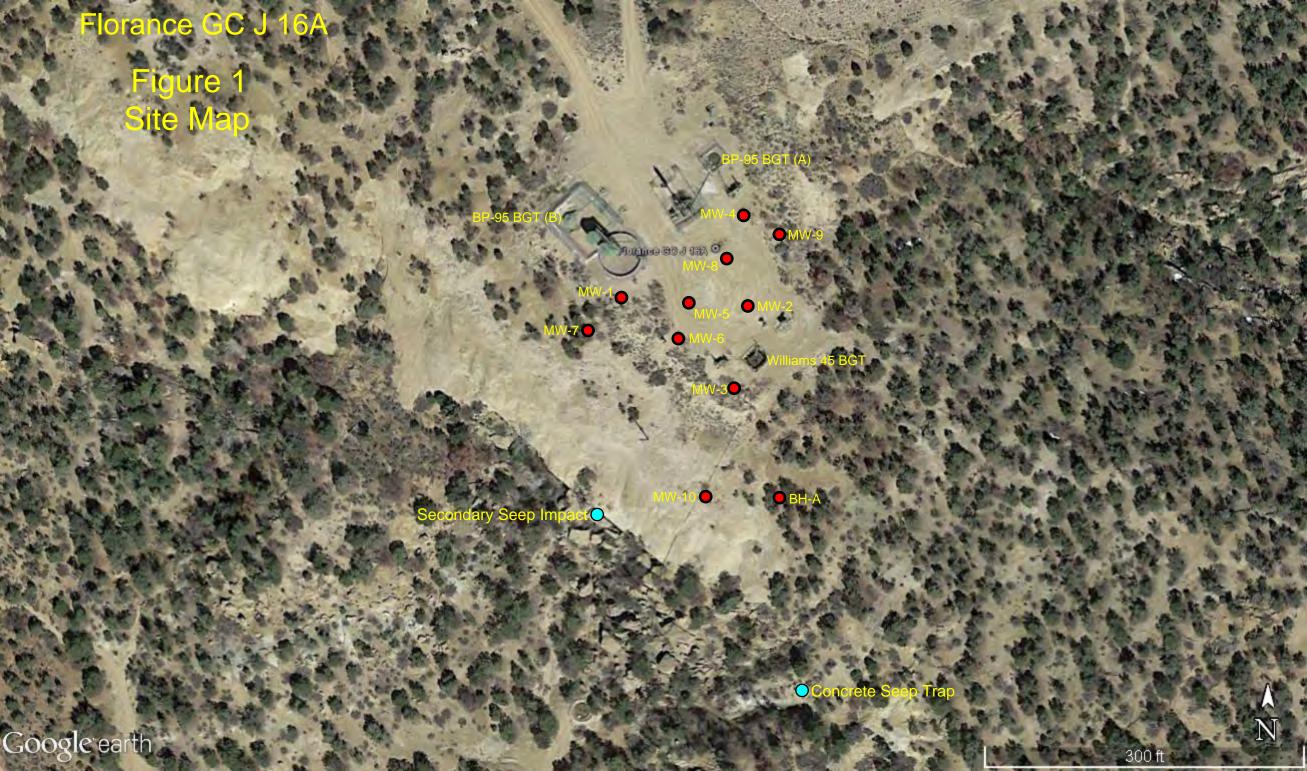
## TABLE 3 Florance GC J 16A

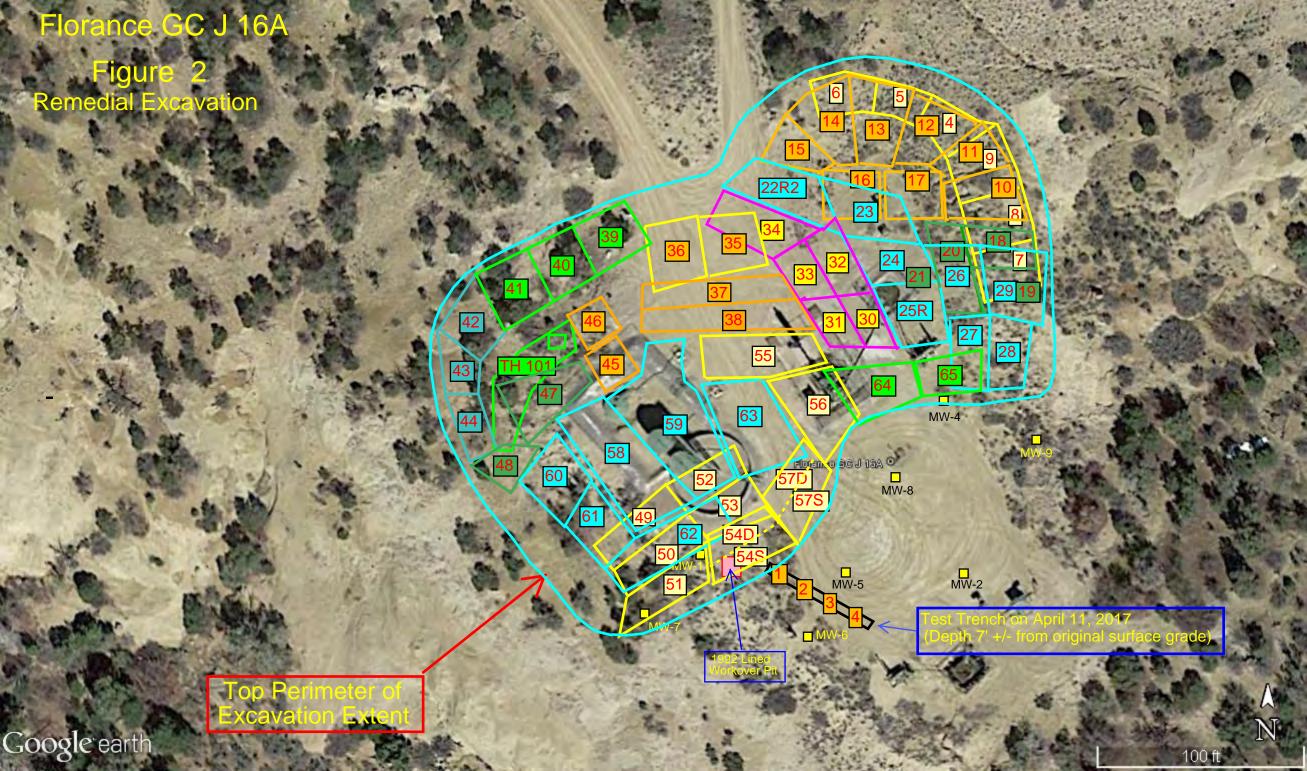
### Summary Temporary Use Area Closure Analytical Data

Sample ID	Date	BTEX (mg/Kg)	Benzene (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	TPH MRO (mg/Kg)	TPH Total (mg/Kg)	Chloride
TUA – VZ 1	5/1/2017	ND	ND	ND	30	ND	30	ND
TUA – VZ 2	5/1/2017	ND	ND	ND	39	50	89	ND
TUA – VZ 3	5/1/2017	ND	ND	ND	62	ND	62	ND
TUA – VZ 4	5/1/2017	ND	ND	ND	39	ND	39	ND
TUA – VZ 5	5/1/2017	ND	ND	ND	36	ND	36	ND
TUA – VZ 6	5/1/2017	ND	ND	ND	39	ND	39	ND
TUA – VZ 7	5/1/2017	ND	ND	ND	57	ND	57	ND
NMOCD Closure Standard		50	10				100	600

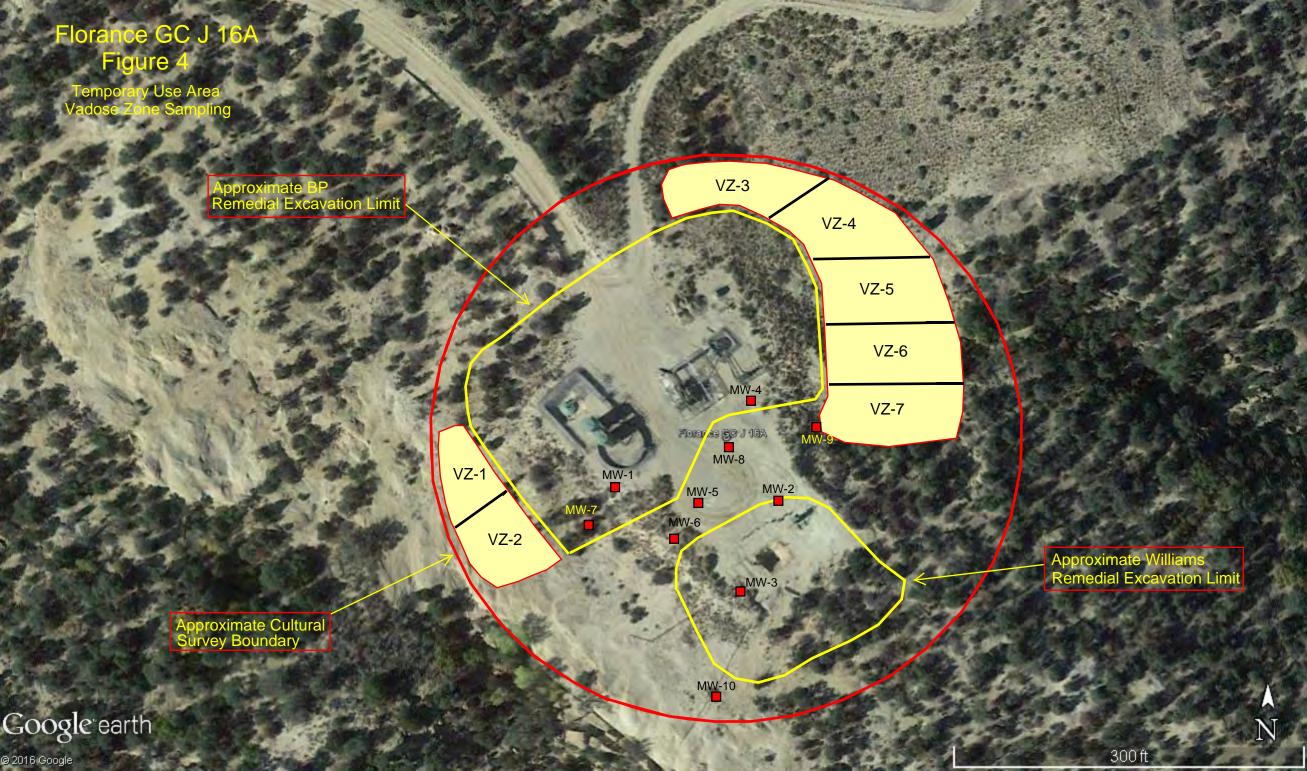
ND = Not Detected

# **FIGURES**









# Appendix B

# Excavation Closure Laboratory Analytical Data Reports



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

January 13, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1701446

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 6 sample(s) on 1/12/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

### Date Reported: 1/13/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: 1 - Shallow Wall

 Project:
 Florance GC J 16A
 Collection Date: 1/11/2017 10:50:00 AM

 Lab ID:
 1701446-001
 Matrix: MEOH (SOIL)
 Received Date: 1/12/2017 7:00:00 AM

Analyses	Result	PQL (	Qual U	J <b>nits</b>	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: LGT
Chloride	ND	30		mg/Kg	20	1/12/2017 11:17:13 AM	29661
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	s				Analyst	:: ТОМ
Diesel Range Organics (DRO)	200	9.6		mg/Kg	1	1/12/2017 10:26:04 AM	29658
Motor Oil Range Organics (MRO)	54	48		mg/Kg	1	1/12/2017 10:26:04 AM	29658
Surr: DNOP	97.2	70-130		%Rec	1	1/12/2017 10:26:04 AM	29658
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst	:: NSB
Gasoline Range Organics (GRO)	5.0	3.8		mg/Kg	1	1/12/2017 9:54:28 AM	G39980
Surr: BFB	149	68.3-144	S	%Rec	1	1/12/2017 9:54:28 AM	G39980
EPA METHOD 8021B: VOLATILES						Analyst	:: NSB
Benzene	ND	0.019		mg/Kg	1	1/12/2017 9:54:28 AM	29643
Toluene	ND	0.038		mg/Kg	1	1/12/2017 9:54:28 AM	29643
Ethylbenzene	ND	0.038		mg/Kg	1	1/12/2017 9:54:28 AM	29643
Xylenes, Total	ND	0.076		mg/Kg	1	1/12/2017 9:54:28 AM	29643
Surr: 4-Bromofluorobenzene	98.2	80-120		%Rec	1	1/12/2017 9:54:28 AM	29643

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 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: 1/13/2017

**CLIENT:** Blagg Engineering Client Sample ID: 2 - Shallow Wall

 Project:
 Florance GC J 16A
 Collection Date: 1/11/2017 10:54:00 AM

 Lab ID:
 1701446-002
 Matrix: MEOH (SOIL)
 Received Date: 1/12/2017 7:00:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: LGT
Chloride	ND	30	mg/Kg	20	1/12/2017 11:29:38 AM	29661
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	:: TOM
Diesel Range Organics (DRO)	1500	20	mg/Kg	2	1/12/2017 12:57:08 PM	29658
Motor Oil Range Organics (MRO)	250	99	mg/Kg	2	1/12/2017 12:57:08 PM	1 29658
Surr: DNOP	112	70-130	%Rec	2	1/12/2017 12:57:08 PM	29658
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	42	18	mg/Kg	5	1/12/2017 12:16:05 PM	G39980
Surr: BFB	203	68.3-144	S %Rec	5	1/12/2017 12:16:05 PM	G39980
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.090	mg/Kg	5	1/12/2017 12:16:05 PM	1 29643
Toluene	ND	0.18	mg/Kg	5	1/12/2017 12:16:05 PM	29643
Ethylbenzene	ND	0.18	mg/Kg	5	1/12/2017 12:16:05 PM	29643
Xylenes, Total	ND	0.36	mg/Kg	5	1/12/2017 12:16:05 PM	29643
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	5	1/12/2017 12:16:05 PM	29643

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 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: 1/13/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 3 - Shallow Wall

Project: Florance GC J 16A Collection Date: 1/11/2017 10:58:00 AM

**Lab ID:** 1701446-003 **Matrix:** MEOH (SOIL) **Received Date:** 1/12/2017 7:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analysi	: LGT
Chloride	ND	30		mg/Kg	20	1/12/2017 11:42:02 AM	29661
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	s				Analyst	:: ТОМ
Diesel Range Organics (DRO)	990	49		mg/Kg	5	1/12/2017 1:18:39 PM	29658
Motor Oil Range Organics (MRO)	450	240		mg/Kg	5	1/12/2017 1:18:39 PM	29658
Surr: DNOP	107	70-130		%Rec	5	1/12/2017 1:18:39 PM	29658
EPA METHOD 8015D: GASOLINE RANG	E					Analyst	:: NSB
Gasoline Range Organics (GRO)	42	18		mg/Kg	5	1/12/2017 10:41:34 AM	G39980
Surr: BFB	186	68.3-144	S	%Rec	5	1/12/2017 10:41:34 AM	G39980
EPA METHOD 8021B: VOLATILES						Analyst	:: NSB
Benzene	ND	0.092		mg/Kg	5	1/12/2017 10:41:34 AM	29643
Toluene	ND	0.18		mg/Kg	5	1/12/2017 10:41:34 AM	29643
Ethylbenzene	ND	0.18		mg/Kg	5	1/12/2017 10:41:34 AM	29643
Xylenes, Total	ND	0.37		mg/Kg	5	1/12/2017 10:41:34 AM	29643
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	5	1/12/2017 10:41:34 AM	29643

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
	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: 1/13/2017

**CLIENT:** Blagg Engineering Client Sample ID: 4 - Shallow Wall

Project: Florance GC J 16A Collection Date: 1/11/2017 11:02:00 AM

**Lab ID:** 1701446-004 **Matrix:** MEOH (SOIL) **Received Date:** 1/12/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst:	LGT
Chloride	ND	30	mg/Kg	20	1/12/2017 11:54:27 AM	29661
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst:	TOM
Diesel Range Organics (DRO)	66	9.2	mg/Kg	1	1/12/2017 11:52:36 AM	29658
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	1/12/2017 11:52:36 AM	29658
Surr: DNOP	97.2	70-130	%Rec	1	1/12/2017 11:52:36 AM	29658
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	1/12/2017 11:05:10 AM	G39980
Surr: BFB	93.9	68.3-144	%Rec	1	1/12/2017 11:05:10 AM	G39980
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.019	mg/Kg	1	1/12/2017 11:05:10 AM	29643
Toluene	ND	0.038	mg/Kg	1	1/12/2017 11:05:10 AM	29643
Ethylbenzene	ND	0.038	mg/Kg	1	1/12/2017 11:05:10 AM	29643
Xylenes, Total	ND	0.077	mg/Kg	1	1/12/2017 11:05:10 AM	29643
Surr: 4-Bromofluorobenzene	96.7	80-120	%Rec	1	1/12/2017 11:05:10 AM	29643

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: 1/13/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 5 - Shallow Wall

 Project:
 Florance GC J 16A
 Collection Date: 1/11/2017 11:06:00 AM

 Lab ID:
 1701446-005
 Matrix: MEOH (SOIL)
 Received Date: 1/12/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	1/12/2017 12:06:52 PM	29661
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	9.8	9.7	mg/Kg	1	1/12/2017 12:14:04 PM	29658
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/12/2017 12:14:04 PM	29658
Surr: DNOP	96.6	70-130	%Rec	1	1/12/2017 12:14:04 PM	29658
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	1/12/2017 11:28:48 AM	G39980
Surr: BFB	86.4	68.3-144	%Rec	1	1/12/2017 11:28:48 AM	G39980
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.018	mg/Kg	1	1/12/2017 11:28:48 AM	29643
Toluene	ND	0.037	mg/Kg	1	1/12/2017 11:28:48 AM	29643
Ethylbenzene	ND	0.037	mg/Kg	1	1/12/2017 11:28:48 AM	29643
Xylenes, Total	ND	0.073	mg/Kg	1	1/12/2017 11:28:48 AM	29643
Surr: 4-Bromofluorobenzene	93.9	80-120	%Rec	1	1/12/2017 11:28:48 AM	29643

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

### Date Reported: 1/13/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 6 - Shallow Wall

 Project:
 Florance GC J 16A
 Collection Date: 1/11/2017 11:09:00 AM

 Lab ID:
 1701446-006
 Matrix: MEOH (SOIL)
 Received Date: 1/12/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	1/12/2017 12:19:16 PM	1 29661
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	29	9.7	mg/Kg	1	1/12/2017 12:35:41 PN	1 29658
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/12/2017 12:35:41 PN	1 29658
Surr: DNOP	96.0	70-130	%Rec	1	1/12/2017 12:35:41 PN	1 29658
EPA METHOD 8015D: GASOLINE RAM	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	1/12/2017 11:52:26 AM	4 G39980
Surr: BFB	88.5	68.3-144	%Rec	5	1/12/2017 11:52:26 AN	/ G39980
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.094	mg/Kg	5	1/12/2017 11:52:26 AM	1 29643
Toluene	ND	0.19	mg/Kg	5	1/12/2017 11:52:26 AM	1 29643
Ethylbenzene	ND	0.19	mg/Kg	5	1/12/2017 11:52:26 AN	1 29643
Xylenes, Total	ND	0.38	mg/Kg	5	1/12/2017 11:52:26 AN	1 29643
Surr: 4-Bromofluorobenzene	95.8	80-120	%Rec	5	1/12/2017 11:52:26 AN	1 29643

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
	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#: **1701446** 

13-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29661 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **29661** RunNo: **39991** 

Prep Date: 1/12/2017 Analysis Date: 1/12/2017 SeqNo: 1253152 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29661 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29661 RunNo: 39991

Prep Date: 1/12/2017 Analysis Date: 1/12/2017 SeqNo: 1253153 Units: mg/Kg

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

Chloride 15 1.5 15.00 0 97.3 90 110

#### 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 10

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1701446** 

13-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29658 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 29658 RunNo: 39973

Prep Date: 1/12/2017 Analysis Date: 1/12/2017 SeqNo: 1252701 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 9.1 10.00 91.1 70 130

Sample ID LCS-29658 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 29658 RunNo: 39973

Prep Date: 1/12/2017 Analysis Date: 1/12/2017 SeqNo: 1252763 Units: mg/Kg

Analyte SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 93.2 47 50.00 63.8 116

Diesel Range Organics (DRO) 47 10 50.00 0 93.2 63.8 116
Surr: DNOP 4.5 5.000 89.2 70 130

Sample ID 1701446-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: 1 - Shallow Wall Batch ID: 29658 RunNo: 39973

Prep Date: 1/12/2017 Analysis Date: 1/12/2017 SeqNo: 1252899 Units: mg/Kg

4.931

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 240 9.9 49.31 201.7 79.1 51.6 130

99.9

70

130

Sample ID 1701446-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: 1 - Shallow Wall Batch ID: 29658 RunNo: 39973

4.9

Prep Date: 1/12/2017 Analysis Date: 1/12/2017 SeqNo: 1252911 Units: mg/Kg

LowLimit SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual Diesel Range Organics (DRO) 260 10 50.40 201.7 109 51.6 130 6.39 20 Surr: DNOP 5.0 5.040 100 70 130 0 0

#### Qualifiers:

Surr: DNOP

\* 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 10

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1701446** 

13-Jan-17

	gineering GC J 16A									
Sample ID RB	SampTy	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch	ID: G3	9980	F	RunNo: 39	9980				
Prep Date:	Analysis Da	ate: 1/	12/2017	9	SeqNo: 12	253015	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 880	5.0	1000		87.5	68.3	144			
Sample ID 2.5UG GRO LCS	SampTy	ype: <b>LC</b>	s	Tes	tCode: <b>EF</b>	PA Method	8015D: Gaso	line Rang	е	
Client ID: LCSS	Batch	ID: G3	9980	F	RunNo: 39	9980				
Prep Date:	Analysis Da	ate: 1/	12/2017	5	SeqNo: 12	253017	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	106	74.6	123			
Surr: BFB	970		1000		96.9	68.3	144			
Sample ID 1701446-001AMS	SampTy	уре: <b>М</b> \$	6	Tes	tCode: <b>EF</b>	PA Method	8015D: Gaso	line Rang	e	
Client ID: 1 - Shallow Wall	Batch	ID: G3	9980	F	RunNo: 39	9980				
Prep Date:	Analysis Da	ate: 1/	12/2017	5	SeqNo: 12	253020	Units: mg/K	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	3.8	19.01	4.981	127	61.3	150			
Surr: BFB	1300		760.5		173	68.3	144			S
Sample ID 1701446-001AMSI	<b>D</b> SampTy	ype: <b>M</b> \$	SD	Tes	tCode: <b>EF</b>	PA Method	8015D: Gaso	line Rang	е	
Client ID: 1 - Shallow Wall	Batch	ID: <b>G</b> 3	19980	5	RunNo: 39	9980				
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•						
Prep Date:	Analysis Da	ate: 1/			SeqNo: 12	253021	Units: mg/K	(g		
Prep Date: Analyte	Analysis Da	ate: 1/	12/2017		SeqNo: 12	253021 LowLimit	Units: mg/K	<b>(g</b> %RPD	RPDLimit	Qual
	-		12/2017	5	SeqNo: 12			_	RPDLimit 20	Qual
Analyte	Result	PQL	<b>12/2017</b> SPK value	SPK Ref Val	SeqNo: 12	LowLimit	HighLimit	%RPD		Qual S
Analyte Gasoline Range Organics (GRO)	Result 29	PQL 3.8	SPK value 19.01 760.5	SPK Ref Val 4.981	%REC 126 177	LowLimit 61.3 68.3	HighLimit 150	%RPD 0.367 0	20	
Analyte Gasoline Range Organics (GRO) Surr: BFB	Result 29 1300 SampTy	PQL 3.8	SPK value 19.01 760.5	SPK Ref Val 4.981 Tes	%REC 126 177	LowLimit 61.3 68.3 PA Method	HighLimit 150 144	%RPD 0.367 0	20	
Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID MB-29643	Result 29 1300 SampTy	PQL 3.8 ype: <b>MI</b> ID: <b>29</b>	SPK value 19.01 760.5 BLK 643	SPK Ref Val 4.981 Tes	SeqNo: 12 %REC 126 177 tCode: EF	61.3 68.3 PA Method	HighLimit 150 144	%RPD 0.367 0	20	
Analyte Gasoline Range Organics (GRO) Surr: BFB  Sample ID MB-29643 Client ID: PBS	Result 29 1300 SampTy Batch	PQL 3.8 ype: <b>MI</b> ID: <b>29</b>	SPK value 19.01 760.5 BLK 643	SPK Ref Val 4.981 Tes	%REC 126 177 tCode: EF RunNo: 39	61.3 68.3 PA Method	HighLimit 150 144 <b>8015D: Gasc</b>	%RPD 0.367 0	20	
Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID MB-29643 Client ID: PBS Prep Date: 1/11/2017	Result 29 1300  SampTy Batch Analysis Da	PQL 3.8 ype: ME ID: 29 ate: 1/	SPK value 19.01 760.5 BLK 643	SPK Ref Val 4.981 Tes	%REC 126 177 tCode: EF RunNo: 39	61.3 68.3 PA Method 9980 253022	HighLimit 150 144  8015D: Gasc Units: %Rec	%RPD 0.367 0 oline Rang	20 0	S
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Analyte Gasoline Range Organics (GRO) Surr: BFB  Sample ID MB-29643 Client ID: PBS Prep Date: 1/11/2017 Analyte Surr: BFB	Result 29 1300  SampTy Batch Analysis Da Result 860  SampTy	PQL 3.8 ype: <b>MI</b> ID: <b>29</b> ate: <b>1</b> /	SPK value 19.01 760.5 BLK 643 12/2017 SPK value 1000	SPK Ref Val 4.981  Tes  SPK Ref Val  Tes	REC 126 177 126 177 126 177 126 177 126 177 126 177 126 177 126 177 177 177 177 177 177 177 177 177 17	LowLimit 61.3 68.3 PA Method 9980 253022 LowLimit 68.3 PA Method	HighLimit 150 144  8015D: Gasc Units: %Rec HighLimit 144	%RPD 0.367 0  oline Rang  c %RPD	20 0 <b>e</b> RPDLimit	S
Analyte Gasoline Range Organics (GRO) Surr: BFB  Sample ID MB-29643 Client ID: PBS Prep Date: 1/11/2017 Analyte Surr: BFB  Sample ID LCS-29643	Result 29 1300  SampTy Batch Analysis Da Result 860  SampTy	PQL 3.8  ype: ME ID: 29 ate: 1/ PQL  ype: LC ID: 29	SPK value 19.01 760.5  BLK 643 12/2017 SPK value 1000 SS 643	SPK Ref Val 4.981  Tes  SPK Ref Val  Tes	%REC 126 177 tCode: EF %REC 85.7 tCode: EF	LowLimit 61.3 68.3 PA Method 9980 253022 LowLimit 68.3 PA Method 9980	HighLimit 150 144  8015D: Gasc Units: %Rec HighLimit 144	%RPD 0.367 0  Indine Range  %RPD	20 0 <b>e</b> RPDLimit	S
Analyte Gasoline Range Organics (GRO) Surr: BFB  Sample ID MB-29643 Client ID: PBS Prep Date: 1/11/2017 Analyte Surr: BFB  Sample ID LCS-29643 Client ID: LCSS	Result 29 1300  SampTy Batch Analysis Da Result 860  SampTy Batch	PQL 3.8  ype: ME ID: 29 ate: 1/ PQL  ype: LC ID: 29	SPK value 19.01 760.5  BLK 643 12/2017  SPK value 1000  SS 643 12/2017	SPK Ref Val 4.981  Tes  SPK Ref Val  Tes	8eqNo: 12  8REC 126 177  tCode: EF RunNo: 39 8eqNo: 12  8EC 85.7  tCode: EF RunNo: 39 8eqNo: 12	LowLimit 61.3 68.3 PA Method 9980 253022 LowLimit 68.3 PA Method 9980	HighLimit 150 144  8015D: Gasc Units: %Rec HighLimit 144  8015D: Gasc	%RPD 0.367 0  Indine Range  %RPD	20 0 <b>e</b> RPDLimit	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 9 of 10

### Hall Environmental Analysis Laboratory, Inc.

0.93

WO#: **1701446** 

13-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Surr: 4-Bromofluorobenzene

Sample ID MB-29643 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 29643 RunNo: 39980 Prep Date: 1/11/2017 Analysis Date: 1/12/2017 SeqNo: 1253047 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

92.8

80

120

1.000

Sample ID LCS-29643	SampType: LCS  Batch ID: 29643			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS				R	RunNo: 3	9980				
Prep Date: 1/11/2017	Analysis Date: 1/12/2017			SeqNo: <b>1253048</b>			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	112	75.2	115			
Toluene	1.0	0.050	1.000	0	104	80.7	112			
Ethylbenzene	0.99	0.050	1.000	0	98.9	78.9	117			
Xylenes, Total	2.9	0.10	3.000	0	98.3	79.2	115			
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

in the associated Method Blank

Page 10 of 10



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109

Sample Log-In Check List

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

lient Name: BLAGG	Work Order Number:	1701446	÷	RoptNo: 1	· ·
eceived by/date:	1/12/17				
Audu langean	1/12/2017 7:00:00 AM		ON PACE		
1 man TUNSSOT	いしにして				
ompione a	Oiliz17				
eviewed By:		<u> </u>			
hain of Custody		Yes 🗍	No 🗆	Not Present 🗹	
1. Custody seals intact on sample bottles?		Yes ☑ Yes ☑	No 🗆	Not Present	
2. Is Chain of Custody complete?					
<ol><li>How was the sample delivered?</li></ol>		<u>Courier</u>			
Log In		V-2 •	No 🗆	na 🗆	
4. Was an attempt made to cool the sample:	s?	Yes 🗹			
5. Were all samples received at a temperatu		Yes 🗹	No 🗆	NA $\square$	
		Yes 🗹	No 🗆		
6. Sample(s) in proper container(s)?			$ abla$		
7. Sufficient sample volume for indicated tea	st(s)?	Yes 🗹	No 🗆		
Are samples (except VOA and ONG) pro	perly preserved?	Yes 🗹	No 🗀	NA 🗆	
Was preservative added to bottles?		Yes 🗌	No 🗹	NA L	
9. Was preservative dates		Yes 🗌	No 🗆	No VOA Vials 🗹	
10.VOA vials have zero headspace?		Yes □ Yes □	No ☑ [		
11. Were any sample containers received b	roken?	Yes —	1,5 _	# of preserved bottles checked	
		Yes 🗹	No 🗆	for nH'	>12 unless noted
12. Does paperwork match bottle labels?	١	,,,,		(<2 or Adjusted?	> 12 unless notes,
(Note discrepancies on chain of custody 13. Are matrices correctly identified on Chai	n of Custody?	Yes 🔽	No 📙 '	, (a) a o c o a ·	
13. Are matrices correctly labellated at 14. Is it clear what analyses were requested	1?	Yes 🗹	No 📙	Checked by:	
14. Is it clear what arrayses were required to be met?		Yes 🗹	No 🗆		
(If no, notify customer for authorization.	)				
Special Handling (if applicable)		. 🗂	No 🗆	NA 🗹	
16. Was client notified of all discrepancies	with this order?	Yes 🗆	NO L		7
Person Notified:	Dat	e	_	Ell Britain	
By Whom:	Via	: eMail	Phone Fax	☐ In Person	
Regarding:			· · · · · · · · · · · · · · · · · · ·	The second secon	
Client Instructions:					_
17. Additional remarks:					
18. Cooler Information	, , , , , , , , , , , , , , , , , , , ,	L Carl Data	Signed By	1	
Cooler No Temp °C Condition	n   Seal Intact   Seal No	Seal Date	Jignou Dy	-	

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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

January 17, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1701591

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/14/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1701591**Date Reported: **1/17/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: 7-Extended East Shallow Well

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 1:24:00 PM

 Lab ID:
 1701591-001
 Matrix: MEOH (SOIL)
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/16/2017 10:47:53 AM	29704
EPA METHOD 8015M/D: DIESEL RANGE	E ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	1/16/2017 10:28:14 AM	29698
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/16/2017 10:28:14 AM	29698
Surr: DNOP	109	70-130	%Rec	1	1/16/2017 10:28:14 AM	29698
EPA METHOD 8015D: GASOLINE RANG	iΕ				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	1/16/2017 10:55:05 AM	G40040
Surr: BFB	113	68.3-144	%Rec	1	1/16/2017 10:55:05 AM	G40040
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.018	mg/Kg	1	1/16/2017 10:55:05 AM	B40040
Toluene	ND	0.036	mg/Kg	1	1/16/2017 10:55:05 AM	B40040
Ethylbenzene	ND	0.036	mg/Kg	1	1/16/2017 10:55:05 AM	B40040
Xylenes, Total	ND	0.073	mg/Kg	1	1/16/2017 10:55:05 AM	B40040
Surr: 4-Bromofluorobenzene	96.3	80-120	%Rec	1	1/16/2017 10:55:05 AM	B40040

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

# Lab Order **1701591**Date Reported: **1/17/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: 8-Extended East Shallow Wall

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 1:28:00 PM

 Lab ID:
 1701591-002
 Matrix: MEOH (SOIL)
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL Qu	al Units	DF 1	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	1/16/2017 11:00:17 AM	A 29704
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	1/16/2017 10:55:43 AM	A 29698
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	1/16/2017 10:55:43 AM	A 29698
Surr: DNOP	109	70-130	%Rec	1	1/16/2017 10:55:43 AM	A 29698
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	1/16/2017 11:18:39 AM	И G40040
Surr: BFB	94.2	68.3-144	%Rec	1	1/16/2017 11:18:39 AM	/I G40040
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.018	mg/Kg	1	1/16/2017 11:18:39 AM	И B40040
Toluene	ND	0.036	mg/Kg	1	1/16/2017 11:18:39 AM	Л B40040
Ethylbenzene	ND	0.036	mg/Kg	1	1/16/2017 11:18:39 AM	Л B40040
Xylenes, Total	ND	0.072	mg/Kg	1	1/16/2017 11:18:39 AM	Л B40040
Surr: 4-Bromofluorobenzene	93.9	80-120	%Rec	1	1/16/2017 11:18:39 AM	И B40040

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 7
	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

# Lab Order **1701591**Date Reported: **1/17/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: 9-Extended East Shallow Wall

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 1:34:00 PM

 Lab ID:
 1701591-003
 Matrix: MEOH (SOIL)
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL Qu	PQL Qual Units		Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	1/16/2017 11:12:42 A	M 29704
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANIC	S			Analy	st: TOM
Diesel Range Organics (DRO)	10	9.5	mg/Kg	1	1/16/2017 11:23:20 A	M 29698
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	1/16/2017 11:23:20 A	M 29698
Surr: DNOP	109	70-130	%Rec	1	1/16/2017 11:23:20 A	M 29698
EPA METHOD 8015D: GASOLINE RA	NGE				Analy	st: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	1/16/2017 11:42:14 A	M G40040
Surr: BFB	89.8	68.3-144	%Rec	1	1/16/2017 11:42:14 A	M G40040
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.019	mg/Kg	1	1/16/2017 11:42:14 A	M B40040
Toluene	ND	0.037	mg/Kg	1	1/16/2017 11:42:14 A	M B40040
Ethylbenzene	ND	0.037	mg/Kg	1	1/16/2017 11:42:14 A	M B40040
Xylenes, Total	ND	0.074	mg/Kg	1	1/16/2017 11:42:14 A	M B40040
Surr: 4-Bromofluorobenzene	94.5	80-120	%Rec	1	1/16/2017 11:42:14 A	M B40040

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 7
	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#: **1701591** 

17-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29704 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 29704 RunNo: 40057

Prep Date: 1/16/2017 Analysis Date: 1/16/2017 SeqNo: 1255351 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29704 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29704 RunNo: 40057

Prep Date: 1/16/2017 Analysis Date: 1/16/2017 SeqNo: 1255352 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.3 90 110

#### 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#: **1701591** 

17-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID LCS-29698	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch	1D: <b>29</b>	698	F	RunNo: 40028					
Prep Date: 1/16/2017	Analysis D	ate: 1/	16/2017	5	SeqNo: 1	254640	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.3	63.8	116			
Surr: DNOP	4.6		5.000		91.2	70	130			
				TestCode: EPA Method 8015M/D: Diesel Range Organics						
Sample ID MB-29698	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Sample ID MB-29698 Client ID: PBS	•	ype: <b>ME</b> n ID: <b>29</b> 0			tCode: <b>E</b> l RunNo: <b>4</b>		8015M/D: Di	esel Rang	e Organics	
	•	n ID: <b>29</b> 0	698	F		0028	8015M/D: Di		e Organics	
Client ID: PBS	Batch	n ID: <b>29</b> 0	698 16/2017	F	RunNo: 4	0028			e Organics  RPDLimit	Qual
Client ID: <b>PBS</b> Prep Date: <b>1/16/2017</b>	Batch Analysis D	n ID: <b>29</b> 0 Pate: <b>1/</b>	698 16/2017	F	RunNo: 4 SeqNo: 1	0028 254641	Units: mg/h	(g	•	Qual
Client ID: PBS Prep Date: 1/16/2017 Analyte	Batch Analysis D Result	n ID: <b>29</b> 0 Pate: <b>1/</b> PQL	698 16/2017	F	RunNo: 4 SeqNo: 1	0028 254641	Units: mg/h	(g	•	Qual

Sample ID MB-29674	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 29674	RunNo: 40030						
Prep Date: 1/13/2017	Analysis Date: 1/16/2017	SeqNo: <b>1254788</b>	Units: %Rec					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual					
Surr: DNOP	10 10.00	105 70	130					

Sample ID LCS-29674	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 29674	RunNo: 40030
Prep Date: 1/13/2017	Analysis Date: 1/16/2017	SeqNo: <b>1254824</b> Units: <b>%Rec</b>
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DMOD	5.5 5.000	109 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

D. Camala all Nat la Danas

Page 5 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#: **1701591** 

17-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: G40040 RunNo: 40040

Prep Date: Analysis Date: 1/16/2017 SeqNo: 1254956 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 86.4 68.3 144

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

Client ID: LCSS Batch ID: G40040 RunNo: 40040

Prep Date: Analysis Date: 1/16/2017 SeqNo: 1254957 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
 99.8
 74.6
 123

 Surr: BFB
 1000
 1000
 99.8
 68.3
 144

Sample ID 1701591-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: 7-Extended East Sh Batch ID: G40040 RunNo: 40040

Prep Date: Analysis Date: 1/16/2017 SeqNo: 1254958 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 19 18.20 1.557 97.2 61.3 150

Surr: BFB 700 727.8 95.6 68.3 144

Sample ID 1701591-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: 7-Extended East Sh Batch ID: G40040 RunNo: 40040

Prep Date: Analysis Date: 1/16/2017 SeqNo: 1254959 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 19 3.6 18.20 1.557 98.4 61.3 150 1.09 20 Surr: BFB 690 727.8 94.7 68.3 144 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 6 of 7

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1701591

17-Jan-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

**PBS** Client ID: Batch ID: **B40040** RunNo: 40040

Prep Date: Analysis Date: 1/16/2017 SeqNo: 1254972 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

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: **B40040** RunNo: 40040

Prep Date: Analysis Date: 1/16/2017 SeqNo: 1254973 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1.1 0.025 1.000 0 109 75.2 115 Benzene Toluene 0.97 0.050 1.000 0 96.9 80.7 112 Ethylbenzene 0.94 0.050 0 94.3 78.9 1.000 117 93.9 Xylenes, Total 2.8 0.10 3.000 0 79.2 115 Surr: 4-Bromofluorobenzene 1.0 1.000 103 80 120

Sample ID 1701591-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles

Batch ID: **B40040** RunNo: 40040 Client ID: 8-Extended East Sh

Prep Date:	Analysis [	Date: 1/	16/2017	S	SeqNo: 1	254974	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.018	0.7153	0	109	61.5	138			
Toluene	0.71	0.036	0.7153	0	99.3	71.4	127			
Ethylbenzene	0.67	0.036	0.7153	0	93.7	70.9	132			
Xylenes, Total	2.0	0.072	2.146	0	93.0	76.2	123			
Surr: 4-Bromofluorobenzene	0.73		0.7153		101	80	120			

Sample ID 1701591-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles

Batch ID: **B40040** RunNo: 40040 8-Extended East Sh

Ollont ID. O-Exteriaca East	• • • • • • • • • • • • • • • • • • • •	(dili 10. <del>-</del> 1									
Prep Date:	Analysis Date: 1/16/2017			S	SeqNo: 1254975 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.75	0.018	0.7153	0	105	61.5	138	3.61	20		
Toluene	0.69	0.036	0.7153	0	96.9	71.4	127	2.41	20		
Ethylbenzene	0.66	0.036	0.7153	0	92.5	70.9	132	1.29	20		
Xylenes, Total	2.0	0.072	2.146	0	93.0	76.2	123	0.0903	20		
Surr: 4-Bromofluorobenzene	0.72		0.7153		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

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: **BLAGG** Work Order Number: 1701591 RcptNo: 1 Received by/date: Logged By: Lindsay<sup>\</sup>Mangin 1/14/2017 9:00:00 AM Completed By: Lindsay Mangin 1/14/2017 10:15:00 AM 1/16/17 Reviewed By: Chain of Custody No [...] 1. Custody seals intact on sample bottles? Yes 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 🛄 NA 🗔 5. Were all samples received at a temperature of >0° C to 6.0°C NA [] Yes 🗸 No 6. Sample(s) in proper container(s)? No \_ 7. Sufficient sample volume for indicated test(s)? Yes 🗸 8. Are samples (except VOA and ONG) properly preserved? Yes 9. Was preservative added to bottles? Yes NA 🗀 10.VOA vials have zero headspace? Yes No L No VOA Vials 11. Were any sample containers received broken? No 🗸 # of preserved bottles checked 12. Does paperwork match bottle labels? No 🗌 for pH: (Note discrepancies on chain of custody) (<2 or >12 unless noted) Adjusted? 13. Are matrices correctly identified on Chain of Custody? Yes 🗸 No 🗀 14. Is it clear what analyses were requested? 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 L No 🗔 NA 🗸 Person Notified: Date: By Whom: eMail Phone Fax In Person Via: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No | Temp °C Condition | Seal Intact | Seal No | Seal Date Signed By Good Yes

HALL ENVIRONMENTAL	LABORATORY	l.com	, NM 87109	505-345-4107	est			(		ΟΛ-	8250 (Semi- ChucupE	×	×	×					Ž.		d on the analytical report.
I ENVID	ANALYSIS L		E - Albuquerque, NM 87109	10	Analysis		)S <sup>(†</sup> O	J, <sub>s</sub> O	N' <sup>E</sup> C	tals I,NC	PH's (8310 RCRA 8 Me CF,C Sonions (F,C								STEVE MOSKA VHIXONEVRM		lata will be clearly notate
	ANA	www.	4901 Hawkins NE	Tel. 505-345-3975		(0)		(	1.81 1.40	s po	TPH 8015B	×	<b>×</b>	<b>x</b>					 Sur By		ny sub-contracted d
			490	Tel		(Հի	10 se£	) На	<u></u> 1⊥ +	BE ·	BTEX + MT	×	<b>×</b>	بد		 		 	Remarks:		ossibility. Au
CANAL STATES	SHA VE		( S		AREA	-			□ No		HEAL No.   170   50   1	-001	-005	-003					Date Time.	01/4/17 090	ed laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report
Time:	K Rush		E OC F		KEMEDIATION AREA	ger:	1 Detas	. Kulle	15	erature:	Preservative Type	7007	7	'n					John John John John John John John John	X	l <del>ॆ</del> ╮
Turn-Around Time:	☐ Standard	Project Name:	FLORAGE	1	N S S	Project Manager:	K	Sampler:		뺼	Container Type and #	12807	u	×					Received by:	Received by:	ontracted to other ac
Chain-of-Custody Record	TRICA.	Bud Engineering			- 320-1193		New		□ Other		Matrix Sample Request ID	SOUL 1-Extended Frot Statues Well	4 B-Extended Entstayon while	11 G-Extended Ext Shyuas Wall					Relinquished by:	Relinduis Mediby:	If necessary, samples submitted to Hall Environmental may be subcontracted to other accre
Chain-c	lient: BP AMERICA	BAS	ailing Address:		hone #: 505	1 . "	A/QC Package:	ccreditation	NELAP	EDD (Type)	Date Time	1324 s	u 1328	H221						Time:  8 4	If necessary, s



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

January 24, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1701926

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 9 sample(s) on 1/21/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 1/24/2017

CLIENT:Blagg EngineeringClient Sample ID: 10-Base 5-pt @ 20'Project:Florance GC J 16ACollection Date: 1/20/2017 12:56:00 PMLab ID:1701926-001Matrix: MEOH (SOIL)Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/23/2017 9:58:25 AM	29827
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	1/21/2017 3:26:01 PM	C40186
Surr: BFB	95.5	70-130	%Rec	1	1/21/2017 3:26:01 PM	C40186
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	1/23/2017 10:34:51 AM	29817
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	1/23/2017 10:34:51 AM	29817
Surr: DNOP	102	70-130	%Rec	1	1/23/2017 10:34:51 AM	29817
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst	: DJF
Benzene	ND	0.019	mg/Kg	1	1/21/2017 3:26:01 PM	A40186
Toluene	ND	0.038	mg/Kg	1	1/21/2017 3:26:01 PM	A40186
Ethylbenzene	ND	0.038	mg/Kg	1	1/21/2017 3:26:01 PM	A40186
Xylenes, Total	ND	0.075	mg/Kg	1	1/21/2017 3:26:01 PM	A40186
Surr: 1,2-Dichloroethane-d4	96.9	70-130	%Rec	1	1/21/2017 3:26:01 PM	A40186
Surr: 4-Bromofluorobenzene	96.6	70-130	%Rec	1	1/21/2017 3:26:01 PM	A40186
Surr: Dibromofluoromethane	96.1	70-130	%Rec	1	1/21/2017 3:26:01 PM	A40186
Surr: Toluene-d8	103	70-130	%Rec	1	1/21/2017 3:26:01 PM	A40186

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 1 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	<ul> <li>R PD outside accepted recovery limits</li> <li>S Recovery outside of range due to dilution or matrix</li> </ul>		RL	Reporting Detection Limit
			W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 1/24/2017

CLIENT: Blagg Engineering
Client Sample ID: 11-Base 5-pt @ 20'
Project: Florance GC J 16A
Collection Date: 1/20/2017 12:59:00 PM
Lab ID: 1701926-002
Matrix: MEOH (SOIL)
Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	1/23/2017 10:10:50 AM	29827
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	1/21/2017 3:55:14 PM	C40186
Surr: BFB	96.1	70-130	%Rec	1	1/21/2017 3:55:14 PM	C40186
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	}			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	1/23/2017 10:56:25 AM	29817
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	1/23/2017 10:56:25 AM	29817
Surr: DNOP	102	70-130	%Rec	1	1/23/2017 10:56:25 AM	29817
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	DJF
Benzene	ND	0.018	mg/Kg	1	1/21/2017 3:55:14 PM	A40186
Toluene	ND	0.035	mg/Kg	1	1/21/2017 3:55:14 PM	A40186
Ethylbenzene	ND	0.035	mg/Kg	1	1/21/2017 3:55:14 PM	A40186
Xylenes, Total	ND	0.070	mg/Kg	1	1/21/2017 3:55:14 PM	A40186
Surr: 1,2-Dichloroethane-d4	95.6	70-130	%Rec	1	1/21/2017 3:55:14 PM	A40186
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	1/21/2017 3:55:14 PM	A40186
Surr: Dibromofluoromethane	94.5	70-130	%Rec	1	1/21/2017 3:55:14 PM	A40186
Surr: Toluene-d8	103	70-130	%Rec	1	1/21/2017 3:55:14 PM	A40186

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: 1/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: 12-Sidewall 5-pt

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 1:04:00 PM

 Lab ID:
 1701926-003
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/23/2017 10:23:14 AM	29827
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	1/21/2017 4:24:25 PM	C40186
Surr: BFB	94.7	70-130	%Rec	1	1/21/2017 4:24:25 PM	C40186
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS	;			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	1/23/2017 11:17:53 AM	29817
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	1/23/2017 11:17:53 AM	29817
Surr: DNOP	102	70-130	%Rec	1	1/23/2017 11:17:53 AM	29817
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: DJF
Benzene	ND	0.019	mg/Kg	1	1/21/2017 4:24:25 PM	A40186
Toluene	ND	0.038	mg/Kg	1	1/21/2017 4:24:25 PM	A40186
Ethylbenzene	ND	0.038	mg/Kg	1	1/21/2017 4:24:25 PM	A40186
Xylenes, Total	ND	0.076	mg/Kg	1	1/21/2017 4:24:25 PM	A40186
Surr: 1,2-Dichloroethane-d4	93.5	70-130	%Rec	1	1/21/2017 4:24:25 PM	A40186
Surr: 4-Bromofluorobenzene	99.8	70-130	%Rec	1	1/21/2017 4:24:25 PM	A40186
Surr: Dibromofluoromethane	93.7	70-130	%Rec	1	1/21/2017 4:24:25 PM	A40186
Surr: Toluene-d8	102	70-130	%Rec	1	1/21/2017 4:24:25 PM	A40186

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: 1/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: 13-Sidewall 5-pt

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 1:08:00 PM

 Lab ID:
 1701926-004
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/23/2017 10:35:39 AM	29827
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	:: DJF
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	1/21/2017 4:53:34 PM	C40186
Surr: BFB	93.9	70-130	%Rec	1	1/21/2017 4:53:34 PM	C40186
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS	3			Analyst	:: ТОМ
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	1/23/2017 11:39:41 AM	1 29817
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/23/2017 11:39:41 AM	29817
Surr: DNOP	103	70-130	%Rec	1	1/23/2017 11:39:41 AM	29817
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	:: DJF
Benzene	ND	0.018	mg/Kg	1	1/21/2017 4:53:34 PM	A40186
Toluene	ND	0.037	mg/Kg	1	1/21/2017 4:53:34 PM	A40186
Ethylbenzene	ND	0.037	mg/Kg	1	1/21/2017 4:53:34 PM	A40186
Xylenes, Total	ND	0.074	mg/Kg	1	1/21/2017 4:53:34 PM	A40186
Surr: 1,2-Dichloroethane-d4	90.4	70-130	%Rec	1	1/21/2017 4:53:34 PM	A40186
Surr: 4-Bromofluorobenzene	96.8	70-130	%Rec	1	1/21/2017 4:53:34 PM	A40186
Surr: Dibromofluoromethane	90.5	70-130	%Rec	1	1/21/2017 4:53:34 PM	A40186
Surr: Toluene-d8	103	70-130	%Rec	1	1/21/2017 4:53:34 PM	A40186

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: 1/24/2017

CLIENT: Blagg Engineering Client Sample ID: 14-Sidewall 5-pt

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 1:13:00 PM

 Lab ID:
 1701926-005
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/23/2017 10:48:04 AM	29827
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	1/21/2017 5:22:38 PM	C40186
Surr: BFB	101	70-130	%Rec	1	1/21/2017 5:22:38 PM	C40186
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	1/23/2017 12:01:08 PM	29817
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/23/2017 12:01:08 PM	29817
Surr: DNOP	101	70-130	%Rec	1	1/23/2017 12:01:08 PM	29817
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	: DJF
Benzene	ND	0.017	mg/Kg	1	1/21/2017 5:22:38 PM	A40186
Toluene	ND	0.035	mg/Kg	1	1/21/2017 5:22:38 PM	A40186
Ethylbenzene	ND	0.035	mg/Kg	1	1/21/2017 5:22:38 PM	A40186
Xylenes, Total	ND	0.069	mg/Kg	1	1/21/2017 5:22:38 PM	A40186
Surr: 1,2-Dichloroethane-d4	88.8	70-130	%Rec	1	1/21/2017 5:22:38 PM	A40186
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	1/21/2017 5:22:38 PM	A40186
Surr: Dibromofluoromethane	90.3	70-130	%Rec	1	1/21/2017 5:22:38 PM	A40186
Surr: Toluene-d8	106	70-130	%Rec	1	1/21/2017 5:22:38 PM	A40186

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
  - % Recovery outside of range due to dilution or matrix
- 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: 1/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: 15-Sidewall 5-pt

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 1:18:00 PM

 Lab ID:
 1701926-006
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/23/2017 11:00:28 AM	29827
EPA METHOD 8015D MOD: GASOL	NE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	1/21/2017 5:51:38 PM	C40186
Surr: BFB	93.8	70-130	%Rec	1	1/21/2017 5:51:38 PM	C40186
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analyst	: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	1/23/2017 12:22:54 PM	29817
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	1/23/2017 12:22:54 PM	29817
Surr: DNOP	104	70-130	%Rec	1	1/23/2017 12:22:54 PM	29817
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst	: DJF
Benzene	ND	0.018	mg/Kg	1	1/21/2017 5:51:38 PM	A40186
Toluene	ND	0.036	mg/Kg	1	1/21/2017 5:51:38 PM	A40186
Ethylbenzene	ND	0.036	mg/Kg	1	1/21/2017 5:51:38 PM	A40186
Xylenes, Total	ND	0.073	mg/Kg	1	1/21/2017 5:51:38 PM	A40186
Surr: 1,2-Dichloroethane-d4	90.2	70-130	%Rec	1	1/21/2017 5:51:38 PM	A40186
Surr: 4-Bromofluorobenzene	96.4	70-130	%Rec	1	1/21/2017 5:51:38 PM	A40186
Surr: Dibromofluoromethane	90.4	70-130	%Rec	1	1/21/2017 5:51:38 PM	A40186
Surr: Toluene-d8	105	70-130	%Rec	1	1/21/2017 5:51:38 PM	A40186

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 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: 1/24/2017

CLIENT:Blagg EngineeringClient Sample ID: 16-Base 5-pt @ 22'Project:Florance GC J 16ACollection Date: 1/20/2017 1:29:00 PMLab ID:1701926-007Matrix: MEOH (SOIL)Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/23/2017 11:12:53 AM	29827
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	1/21/2017 6:20:35 PM	C40186
Surr: BFB	98.2	70-130	%Rec	1	1/21/2017 6:20:35 PM	C40186
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS	;			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	1/23/2017 12:44:33 PM	29817
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/23/2017 12:44:33 PM	29817
Surr: DNOP	103	70-130	%Rec	1	1/23/2017 12:44:33 PM	29817
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: DJF
Benzene	ND	0.017	mg/Kg	1	1/21/2017 6:20:35 PM	A40186
Toluene	ND	0.035	mg/Kg	1	1/21/2017 6:20:35 PM	A40186
Ethylbenzene	ND	0.035	mg/Kg	1	1/21/2017 6:20:35 PM	A40186
Xylenes, Total	ND	0.069	mg/Kg	1	1/21/2017 6:20:35 PM	A40186
Surr: 1,2-Dichloroethane-d4	89.8	70-130	%Rec	1	1/21/2017 6:20:35 PM	A40186
Surr: 4-Bromofluorobenzene	98.8	70-130	%Rec	1	1/21/2017 6:20:35 PM	A40186
Surr: Dibromofluoromethane	93.3	70-130	%Rec	1	1/21/2017 6:20:35 PM	A40186
Surr: Toluene-d8	106	70-130	%Rec	1	1/21/2017 6:20:35 PM	A40186

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 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
	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: 1/24/2017

CLIENT: Blagg Engineering

Client Sample ID: 17-Base 5-pt @ 22'

Project: Florance GC J 16A

Collection Date: 1/20/2017 1:33:00 PM

**Lab ID:** 1701926-008 **Matrix:** MEOH (SOIL) **Received Date:** 1/21/2017 9:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/23/2017 11:50:06 AM	29827
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	1/21/2017 6:49:31 PM	C40186
Surr: BFB	96.0	70-130	%Rec	1	1/21/2017 6:49:31 PM	C40186
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS	}			Analyst	: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	1/23/2017 1:06:17 PM	29817
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	1/23/2017 1:06:17 PM	29817
Surr: DNOP	103	70-130	%Rec	1	1/23/2017 1:06:17 PM	29817
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: DJF
Benzene	ND	0.019	mg/Kg	1	1/21/2017 6:49:31 PM	A40186
Toluene	ND	0.038	mg/Kg	1	1/21/2017 6:49:31 PM	A40186
Ethylbenzene	ND	0.038	mg/Kg	1	1/21/2017 6:49:31 PM	A40186
Xylenes, Total	ND	0.076	mg/Kg	1	1/21/2017 6:49:31 PM	A40186
Surr: 1,2-Dichloroethane-d4	87.0	70-130	%Rec	1	1/21/2017 6:49:31 PM	A40186
Surr: 4-Bromofluorobenzene	97.1	70-130	%Rec	1	1/21/2017 6:49:31 PM	A40186
Surr: Dibromofluoromethane	89.1	70-130	%Rec	1	1/21/2017 6:49:31 PM	A40186
Surr: Toluene-d8	102	70-130	%Rec	1	1/21/2017 6:49:31 PM	A40186

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: 1/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: A-Sidewall 5-pt

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 1:22:00 PM

 Lab ID:
 1701926-009
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: LGT
Chloride	ND	30	mg/Kg	20	1/23/2017 12:02:31 PM	1 29827
EPA METHOD 8015D MOD: GASOLII	NE RANGE				Analyst	:: DJF
Gasoline Range Organics (GRO)	670	20	mg/Kg	5	1/21/2017 7:18:27 PM	C40186
Surr: BFB	116	70-130	%Rec	5	1/21/2017 7:18:27 PM	C40186
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS	}			Analyst	:: TOM
Diesel Range Organics (DRO)	610	9.6	mg/Kg	1	1/23/2017 1:27:46 PM	29817
Motor Oil Range Organics (MRO)	110	48	mg/Kg	1	1/23/2017 1:27:46 PM	29817
Surr: DNOP	109	70-130	%Rec	1	1/23/2017 1:27:46 PM	29817
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	:: DJF
Benzene	ND	0.10	mg/Kg	5	1/21/2017 7:18:27 PM	A40186
Toluene	ND	0.20	mg/Kg	5	1/21/2017 7:18:27 PM	A40186
Ethylbenzene	0.98	0.20	mg/Kg	5	1/21/2017 7:18:27 PM	A40186
Xylenes, Total	11	0.40	mg/Kg	5	1/21/2017 7:18:27 PM	A40186
Surr: 1,2-Dichloroethane-d4	94.5	70-130	%Rec	5	1/21/2017 7:18:27 PM	A40186
Surr: 4-Bromofluorobenzene	118	70-130	%Rec	5	1/21/2017 7:18:27 PM	A40186
Surr: Dibromofluoromethane	90.1	70-130	%Rec	5	1/21/2017 7:18:27 PM	A40186
Surr: Toluene-d8	101	70-130	%Rec	5	1/21/2017 7:18:27 PM	A40186

BEI Note: This sample informational only for BP to determine magnitude of known impacts. Subsequently excavated.

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

W Sample container temperature is out of limit as specified

% Recovery outside of range due to dilution or matrix

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1701926** 

24-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29827 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 29827 RunNo: 40232

Prep Date: 1/23/2017 Analysis Date: 1/23/2017 SeqNo: 1261425 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29827 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29827 RunNo: 40232

Prep Date: 1/23/2017 Analysis Date: 1/23/2017 SeqNo: 1261426 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 90.6 90 110

#### 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

Reporting Detection Limit

J Analyte detected below quantitation limits

D. C. J. HALLED

P Sample pH Not In Range

RL

W Sample container temperature is out of limit as specified

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# Hall Environmental Analysis Laboratory, Inc.

WO#: 1701926

24-Jan-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID LCS-29817	SampT	SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics											
Client ID: LCSS	Batch	h ID: <b>29</b>	817	F	RunNo: 4	0199	0199						
Prep Date: 1/21/2017	Analysis D	)ate: <b>1/</b>	23/2017	S	SeqNo: 1	260281	Units: mg/k	(g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRO)	49	10	50.00	0	98.5	63.8	116						
Surr: DNOP	5.0		5.000		99.5	70	130						
Sample ID MB-29817 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics													
Client ID: PBS	Batch	h ID: <b>29</b>	817	F	RunNo: 4	o: <b>40199</b>							
Prep Date: 1/21/2017	Analysis D	)ate: 1/	23/2017	S	SeqNo: 1	260282	Units: mg/k	(g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRO)	ND	10											
Diesel Range Organics (DRO)  Motor Oil Range Organics (MRO)	ND ND	10 50											
0 0 1 7		_	10.00		101	70	130						

Sample ID LCS-29802	SampT	ype: <b>LC</b>	s	Tes	TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: LCSS Batch ID: 29802 RunNo: 40200														
Prep Date: 1/20/2017	Prep Date: 1/20/2017 Analysis Date: 1/23/2017				SeqNo: 1	261137	;							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Surr: DNOP	4.9		5.000	_	97.2	70	130							

Sample ID MB-29802	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 29802	RunNo: 40200						
Prep Date: 1/20/2017	Analysis Date: 1/23/2017	SeqNo: <b>1261138</b> Units: <b>%Rec</b>						
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.
- 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
- 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

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1701926** 

24-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID rb SampType: MBLK TestCode: EPA Method 8260B: Volatiles Short List **PBS** Client ID: Batch ID: A40186 RunNo: 40186 Prep Date: Analysis Date: 1/21/2017 SeqNo: 1259842 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 0.46 0.5000 92.0 70 130 Surr: 4-Bromofluorobenzene 0.51 0.5000 102 70 130 Surr: Dibromofluoromethane 0.48 0.5000 95.6 70 130 Surr: Toluene-d8 0.52 0.5000 104 70 130

Sample ID 100ng Ics	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: LCSS	Batch	n ID: A4	0186	F								
Prep Date:	Analysis D	ate: 1/	21/2017	S	SeqNo: 1	259843	(g	g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.93	0.025	1.000	0	93.2	70	130					
Toluene	1.0	0.050	1.000	0	102	70	130					
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.9	70	130					
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130					
Surr: Dibromofluoromethane	0.47		0.5000		93.5	70	130					
Surr: Toluene-d8	0.51		0.5000		103	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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### Hall Environmental Analysis Laboratory, Inc.

WO#: 1701926

24-Jan-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

Client ID: **PBS** Batch ID: C40186 RunNo: 40186

Prep Date: Analysis Date: 1/21/2017 SeqNo: 1259894 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 500 500.0 100 70 130

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

Client ID: LCSS RunNo: 40186 Batch ID: C40186

Prep Date: Analysis Date: 1/21/2017 SeqNo: 1259895 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 26 5.0 25.00 104 62.9 123 500 500.0 99.0 70

130

#### 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 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: **BLAGG** Work Order Number: 1701926 RcptNo: 1 Received by/date: Logged By: 1/21/2017 9:15:00 AM Lindsay Mangin Completed By: **Lindsay Mangin** 1/21/2017 9:31:30 AM Reviewed By: DF 1/21/2017 Chain of Custody No . Not Present ✓ Yes 1. Custody seals intact on sample bottles? Yes 🗸 No ... Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier <u>Log In</u> No 🗀 4. Was an attempt made to cool the samples? Yes 🗸 NA 🗔 5. Were all samples received at a temperature of >0° C to 6.0°C NA 🗌 Yes 🗸 No 🗀 6. Sample(s) in proper container(s)? Yes 🔽 No 🗔 7. Sufficient sample volume for indicated test(s)? Yes 🗸 No 🗌 8. Are samples (except VOA and ONG) properly preserved? ~ No 🗸 NA 🗌 9. Was preservative added to bottles? Yes 10.VOA vials have zero headspace? No 🗌 No VOA Vials 🗹 Yes L Yes No 🗹 11. Were any sample containers received broken? # of preserved bottles checked 12. Does paperwork match bottle labels? No 🗀 for pH: Yes 🗸 (Note discrepancies on chain of custody) (<2 or >12 unless noted) Adjusted? No 🗌 13. Are matrices correctly identified on Chain of Custody? Yes 🗸 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 16. Was client notified of all discrepancies with this order? NA 🗹 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

<b>_</b>	. ₹								(N	or	人) :	Pir Bubbles															
HALL ENVIRONMENTAL	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107		(°O	(SI	OA:	(); (); (); (); ();	118 504 504 504 78	. (G . bo . bo . bo . bo . bo . bo . bo . bo	TPH 8015B TPH (Methor PPH's (831 RCRA 8 Methor (F,CA) Anions (F,CA) 8081 Pestic	×	× ×	×	×	×	×	×	×	×				6 24 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	VID : VAIXBUENEM	This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
			4	•								BTEX + 1 <del>MB</del> BTEX + 1MT	~	×	×	×	×	×	×	*	`*				Remarks:		possibilit
AS S	K Rush	i	I lba	i .	TION AREA							ative HEAL No.	1 (2) -	700-	- (PX	100	500-	730-	400-	-CX	-1891	,			Date Time	DI 2/17 COL	٦
ime:	X		Z		KEMEDIATION	er:	250		- Besta	//Yes	erature:	Preservative Type	Ceri	*	<b></b>	æ	Z	ន	2	ł,	=				L. Land	X	credited taboratories.
Turn-Around Time:	□ Standard	Project Name:	FLORANCE		N N N	Project Manager:	J. B.		Sampler: I	On Ice:	Sample Temperature:	Container Type and #	48x1	z	3	11	<b>*</b>	3	7	h	ħ				Received by:	Received by:	contracted to other ac
Chain-of-Custody Record	BP America	BASE ENGWEERING INC			505-320-493			☐ Level 4 (Full Validation)		□ Other		Matrix Sample Request ID	501L 10-BASES-OF @ 20'	<i></i>	K 12- Streinm 5-0t	4 13-SINEWAL S-18	14-SIMMUS-10	" IS-SIDEWAL S-DE	" 16-8-85-958, 22"		h				Relinquished by:	Relinquished by:	
Chain-	lient: BP A	C. N. S.	lailing Address:	:	hone #:	0	A/QC Package:	Standard	ccreditation	INELAP	EDD (Type)	Date Time	221 Clas	-	4021	13.08	1313	1318		1333	1327	-	:	-	Jate: Time:	John Igai	If necessary.



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

February 21, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1702782

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 4 sample(s) on 2/17/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order 1702782

Date Reported: 2/21/2017

Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: 18-East Wall (14'-24')

**Project:** Florance GC J 16A Collection Date: 2/16/2017 3:08:00 PM

Lab ID: 1702782-001 Matrix: MEOH (SOIL) Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	2/17/2017 10:52:13 AM	30276
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	2/17/2017 10:57:53 AM	G40826
Surr: BFB	92.6	70-130	%Rec	5	2/17/2017 10:57:53 AM	G40826
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	: MAB
Diesel Range Organics (DRO)	44	9.1	mg/Kg	1	2/17/2017 10:50:00 AM	30267
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/17/2017 10:50:00 AM	30267
Surr: DNOP	91.5	70-130	%Rec	1	2/17/2017 10:50:00 AM	30267
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst	: DJF
Benzene	ND	0.095	mg/Kg	5	2/17/2017 10:57:53 AM	30160
Toluene	ND	0.19	mg/Kg	5	2/17/2017 10:57:53 AM	30160
Ethylbenzene	ND	0.19	mg/Kg	5	2/17/2017 10:57:53 AM	30160
Xylenes, Total	ND	0.38	mg/Kg	5	2/17/2017 10:57:53 AM	30160
Surr: 1,2-Dichloroethane-d4	112	70-130	%Rec	5	2/17/2017 10:57:53 AM	30160
Surr: 4-Bromofluorobenzene	89.5	70-130	%Rec	5	2/17/2017 10:57:53 AM	30160
Surr: Dibromofluoromethane	108	70-130	%Rec	5	2/17/2017 10:57:53 AM	30160
Surr: Toluene-d8	95.5	70-130	%Rec	5	2/17/2017 10:57:53 AM	30160

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 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

#### Lab Order **1702782**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/21/2017

CLIENT: Blagg Engineering

Client Sample ID: 19-East Wall (14'-24')

Project: Florance GC J 16A

Collection Date: 2/16/2017 3:11:00 PM

**Lab ID:** 1702782-002 **Matrix:** MEOH (SOIL) **Received Date:** 2/17/2017 6:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	2/17/2017 11:04:37 AM	30276
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	66	22	mg/Kg	5	2/17/2017 11:26:47 AM	G40826
Surr: BFB	98.2	70-130	%Rec	5	2/17/2017 11:26:47 AM	G40826
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analyst	MAB
Diesel Range Organics (DRO)	530	9.9	mg/Kg	1	2/17/2017 11:17:34 AM	30267
Motor Oil Range Organics (MRO)	110	50	mg/Kg	1	2/17/2017 11:17:34 AM	30267
Surr: DNOP	96.2	70-130	%Rec	1	2/17/2017 11:17:34 AM	30267
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: DJF
Benzene	ND	0.11	mg/Kg	5	2/17/2017 11:26:47 AM	30160
Toluene	ND	0.22	mg/Kg	5	2/17/2017 11:26:47 AM	30160
Ethylbenzene	ND	0.22	mg/Kg	5	2/17/2017 11:26:47 AM	30160
Xylenes, Total	ND	0.44	mg/Kg	5	2/17/2017 11:26:47 AM	30160
Surr: 1,2-Dichloroethane-d4	110	70-130	%Rec	5	2/17/2017 11:26:47 AM	30160
Surr: 4-Bromofluorobenzene	93.2	70-130	%Rec	5	2/17/2017 11:26:47 AM	30160
Surr: Dibromofluoromethane	109	70-130	%Rec	5	2/17/2017 11:26:47 AM	30160
Surr: Toluene-d8	93.8	70-130	%Rec	5	2/17/2017 11:26:47 AM	30160

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 2 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

#### Lab Order 1702782

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/21/2017

CLIENT: Blagg Engineering

Client Sample ID: 20-East Base @ 24'

Project: Florance GC J 16A

Collection Date: 2/16/2017 3:14:00 PM

Lab ID: 1702782-003

Matrix: MEOH (SOIL)

Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	2/17/2017 11:17:02 AM	30276
EPA METHOD 8015D MOD: GASOLIN	E RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	2/17/2017 11:55:17 AM	G40826
Surr: BFB	98.1	70-130	%Rec	5	2/17/2017 11:55:17 AM	G40826
EPA METHOD 8015M/D: DIESEL RAN	3			Analyst	MAB	
Diesel Range Organics (DRO)	62	9.5	mg/Kg	1	2/17/2017 11:45:07 AM	30267
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/17/2017 11:45:07 AM	30267
Surr: DNOP	94.1	70-130	%Rec	1	2/17/2017 11:45:07 AM	30267
EPA METHOD 8260B: VOLATILES SH	ORT LIST				Analyst	DJF
Benzene	ND	0.091	mg/Kg	5	2/17/2017 11:55:17 AM	30160
Toluene	ND	0.18	mg/Kg	5	2/17/2017 11:55:17 AM	30160
Ethylbenzene	ND	0.18	mg/Kg	5	2/17/2017 11:55:17 AM	30160
Xylenes, Total	ND	0.36	mg/Kg	5	2/17/2017 11:55:17 AM	30160
Surr: 1,2-Dichloroethane-d4	112	70-130	%Rec	5	2/17/2017 11:55:17 AM	30160
Surr: 4-Bromofluorobenzene	91.6	70-130	%Rec	5	2/17/2017 11:55:17 AM	30160
Surr: Dibromofluoromethane	113	70-130	%Rec	5	2/17/2017 11:55:17 AM	30160
Surr: Toluene-d8	97.9	70-130	%Rec	5	2/17/2017 11:55:17 AM	30160

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

#### Lab Order 1702782

Date Reported: 2/21/2017

Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Florance GC J 16A

**Project:** 

Client Sample ID: 21-East Base @ 24'

**Collection Date:** 2/16/2017 3:17:00 PM

**Lab ID:** 1702782-004 **Matrix:** MEOH (SOIL) **Received Date:** 2/17/2017 6:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	2/17/2017 11:29:27 AM	30276
EPA METHOD 8015D MOD: GASOLII	NE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	200	20	mg/Kg	5	2/17/2017 12:24:18 PM	G40826
Surr: BFB	107	70-130	%Rec	5	2/17/2017 12:24:18 PM	G40826
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS	3			Analyst	: MAB
Diesel Range Organics (DRO)	630	9.9	mg/Kg	1	2/17/2017 12:12:42 PM	30267
Motor Oil Range Organics (MRO)	120	49	mg/Kg	1	2/17/2017 12:12:42 PM	30267
Surr: DNOP	97.9	70-130	%Rec	1	2/17/2017 12:12:42 PM	30267
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	: DJF
Benzene	ND	0.098	mg/Kg	5	2/17/2017 12:24:18 PM	30160
Toluene	ND	0.20	mg/Kg	5	2/17/2017 12:24:18 PM	30160
Ethylbenzene	ND	0.20	mg/Kg	5	2/17/2017 12:24:18 PM	30160
Xylenes, Total	3.4	0.39	mg/Kg	5	2/17/2017 12:24:18 PM	30160
Surr: 1,2-Dichloroethane-d4	112	70-130	%Rec	5	2/17/2017 12:24:18 PM	30160
Surr: 4-Bromofluorobenzene	99.5	70-130	%Rec	5	2/17/2017 12:24:18 PM	30160
Surr: Dibromofluoromethane	111	70-130	%Rec	5	2/17/2017 12:24:18 PM	30160
Surr: Toluene-d8	95.6	70-130	%Rec	5	2/17/2017 12:24:18 PM	30160

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

#### Qualifiers: \* V

- \* 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 8
- 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#: **1702782** 

21-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30276 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30276 RunNo: 40822

Prep Date: 2/17/2017 Analysis Date: 2/17/2017 SeqNo: 1279310 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30276 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30276 RunNo: 40822

Prep Date: 2/17/2017 Analysis Date: 2/17/2017 SeqNo: 1279311 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.4 90 110

#### 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#: **1702782** 

21-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID LCS-30267 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 30267 RunNo: 40813

Prep Date: 2/17/2017 Analysis Date: 2/17/2017 SeqNo: 1278706 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 54 50.00 0 108 63.8 116 Surr: DNOP 5.000 107 5.3 70 130

Sample ID MB-30267 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS Batch ID: 30267 RunNo: 40813

Prep Date: 2/17/2017 Analysis Date: 2/17/2017 SeqNo: 1278707 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 9.4 10.00 94.4 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#: **1702782** 

21-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID mb-30160	SampType: MBLK  Batch ID: 30160  Analysis Date: 2/17/2017			TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: PBS				RunNo: 40826						
Prep Date: 2/10/2017				5	SeqNo: 1	279108	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	0.53		0.5000		106	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.5	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.49		0.5000		97.0	70	130			

Sample ID Ics-30160	TestCode: EPA Method 8260B: Volatiles Short List									
Client ID: LCSS	Batcl	h ID: 30	160	RunNo: 40826						
Prep Date: 2/10/2017	Analysis Date: 2/17/2017			S	SeqNo: 1	279109	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	111	70	130			
Toluene	1.0	0.050	1.000	0	99.9	70	130			
Surr: 1,2-Dichloroethane-d4	0.54		0.5000		108	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.0	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		109	70	130			
Surr: Toluene-d8	0.47		0.5000		94.7	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 7 of 8

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1702782** 

21-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: G40826 RunNo: 40826

Prep Date: Analysis Date: 2/17/2017 SeqNo: 1279111 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 460 500.0 92.0 70 130

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

Client ID: LCSS Batch ID: G40826 RunNo: 40826

Prep Date: Analysis Date: 2/17/2017 SeqNo: 1279112 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
 99.4
 70
 130

 Surr: BFB
 470
 500.0
 94.8
 70
 130

Sample ID 1702782-001ams SampType: MS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: 18-East Wall (14'-24' Batch ID: G40826 RunNo: 40826

Prep Date: Analysis Date: 2/17/2017 SeqNo: 1279113 Units: mg/Kg

1892

PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual Gasoline Range Organics (GRO) 92 19 94.62 97.3 63.2 128

95.9

70

130

Sample ID 1702782-001amsd SampType: MSD TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: 18-East Wall (14'-24' Batch ID: G40826 RunNo: 40826

1800

Prep Date: Analysis Date: 2/17/2017 SeqNo: 1279114 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 89 19 94.62 94.2 63.2 128 3.22 20 Surr: BFB 1800 1892 96.3 70 130 0 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

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 Albuguerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: **BLAGG** Work Order Number: 1702782 RcptNo: 1 Received by/date: Logged By: Ashley Gallegos 2/17/2017 6:00:00 AM Ashley Gallegos Completed By: 2/17/2017 6:23:51 AM AT 02/17/1 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 Log In 4. Was an attempt made to cool the samples? Yes 🗸 No 🛄 NA [ ] 5. Were all samples received at a temperature of >0° C to 6.0°C No 🔲 Yes 🗸 NA 🗌 6. 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? 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? No 🗔 Adjusted? Yes 🗸 14. Is it clear what analyses were requested? Yes 🗸 No 🗀 15. Were all holding times able to be met? Checked by: Yes 🔽 No 🗌 (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 Good

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İ		www.hallenvironmental.com	ΣN	Fax 505-345-4107	sst							OV) 80828 im98) 0728												F.	on the
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ASAP	AME CAT		IBA					•				HEAL No. 1702-189	100-	-002	-003	h00-							Date Time	Date Time $02/7/1$	is serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
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Time:	K Rush	<u> </u>   	66		EXCAVATION	ger:	BUMOS		- BUALD	<b>W</b> (CS	remperature:	Preservative Type	COUR	1	Ą	উ							7	n) Gas	credited aboratories.
Turn-Around Time:	☐ Standard	Project Name:	FLORANCE	Project #:	NE E	Project Manager:	<b>b</b>		Sampler: J	OH CE.	Sample remi	Container Type and #	103×1	11	11	/1						-	Received by:	Received by:	ontracted to other so
Chain-of-Custody Record		BLAST ENGLARED AND			83		:	☐ Level 4 (Full Validation)				Sample Request ID	18-EAST WALL (14-24)	19- EAST WALL(14'-24')	20-EAST BOR (0, 24'	21-EAST BOSE 24'	).						los	) Jella	if necessary, samples, submitted to Hall Environmental may be subcontrapted to other pocredited.
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-of-Cu	BP AMERICA	r Engl	::		Phone #: (505) 320- 1183	,			□ Other			Matrix	Soil	11	11	~							Relinquished by	Retinguished by	samples subm
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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

February 24, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1702998

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 8 sample(s) on 2/23/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1702998**Date Reported: **2/24/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: 22-NW Wall

 Project:
 Florance GC J 16A
 Collection Date: 2/22/2017 2:16:00 PM

 Lab ID:
 1702998-001
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 10:53:20 AM	30373
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	6.0	3.9	mg/Kg	1	2/23/2017 10:55:27 AM	G40948
Surr: BFB	96.8	70-130	%Rec	1	2/23/2017 10:55:27 AM	G40948
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analyst	MAB
Diesel Range Organics (DRO)	120	10	mg/Kg	1	2/23/2017 10:29:19 AM	30360
Motor Oil Range Organics (MRO)	130	50	mg/Kg	1	2/23/2017 10:29:19 AM	30360
Surr: DNOP	91.7	70-130	%Rec	1	2/23/2017 10:29:19 AM	30360
EPA METHOD 8260B: VOLATILES SHO	RT LIST				Analyst	DJF
Benzene	ND	0.019	mg/Kg	1	2/23/2017 10:55:27 AM	30350
Toluene	ND	0.039	mg/Kg	1	2/23/2017 10:55:27 AM	30350
Ethylbenzene	ND	0.039	mg/Kg	1	2/23/2017 10:55:27 AM	30350
Xylenes, Total	ND	0.077	mg/Kg	1	2/23/2017 10:55:27 AM	30350
Surr: 1,2-Dichloroethane-d4	98.4	70-130	%Rec	1	2/23/2017 10:55:27 AM	30350
Surr: 4-Bromofluorobenzene	92.6	70-130	%Rec	1	2/23/2017 10:55:27 AM	30350
Surr: Dibromofluoromethane	102	70-130	%Rec	1	2/23/2017 10:55:27 AM	30350
Surr: Toluene-d8	92.3	70-130	%Rec	1	2/23/2017 10:55:27 AM	30350

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

# Lab Order **1702998**Date Reported: **2/24/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 23-Base @ 32'

 Project:
 Florance GC J 16A
 Collection Date: 2/22/2017 2:24:00 PM

 Lab ID:
 1702998-002
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 11:05:45 AM	30373
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst:	DJF
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	2/23/2017 12:22:24 PM	G40948
Surr: BFB	93.0	70-130	%Rec	1	2/23/2017 12:22:24 PM	G40948
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS	;			Analyst	MAB
Diesel Range Organics (DRO)	26	9.6	mg/Kg	1	2/23/2017 10:56:50 AM	30360
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/23/2017 10:56:50 AM	30360
Surr: DNOP	90.6	70-130	%Rec	1	2/23/2017 10:56:50 AM	30360
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst:	DJF
Benzene	ND	0.019	mg/Kg	1	2/23/2017 12:22:24 PM	30350
Toluene	ND	0.039	mg/Kg	1	2/23/2017 12:22:24 PM	30350
Ethylbenzene	ND	0.039	mg/Kg	1	2/23/2017 12:22:24 PM	30350
Xylenes, Total	ND	0.078	mg/Kg	1	2/23/2017 12:22:24 PM	30350
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	2/23/2017 12:22:24 PM	30350
Surr: 4-Bromofluorobenzene	88.6	70-130	%Rec	1	2/23/2017 12:22:24 PM	30350
Surr: Dibromofluoromethane	104	70-130	%Rec	1	2/23/2017 12:22:24 PM	30350
Surr: Toluene-d8	91.1	70-130	%Rec	1	2/23/2017 12:22:24 PM	30350

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 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Analytical Report Lab Order 1702998

## Date Reported: 2/24/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 24-Base @ 32'

 Project:
 Florance GC J 16A
 Collection Date: 2/22/2017 2:30:00 PM

 Lab ID:
 1702998-003
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 11:18:10 AM	30373
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	2/23/2017 12:51:24 PM	G40948
Surr: BFB	97.0	70-130	%Rec	1	2/23/2017 12:51:24 PM	G40948
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3			Analyst	MAB
Diesel Range Organics (DRO)	22	9.3	mg/Kg	1	2/23/2017 11:24:22 AM	30360
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/23/2017 11:24:22 AM	30360
Surr: DNOP	90.4	70-130	%Rec	1	2/23/2017 11:24:22 AM	30360
EPA METHOD 8260B: VOLATILES SHO	RT LIST				Analyst	DJF
Benzene	ND	0.021	mg/Kg	1	2/23/2017 12:51:24 PM	30350
Toluene	ND	0.042	mg/Kg	1	2/23/2017 12:51:24 PM	30350
Ethylbenzene	ND	0.042	mg/Kg	1	2/23/2017 12:51:24 PM	30350
Xylenes, Total	ND	0.085	mg/Kg	1	2/23/2017 12:51:24 PM	30350
Surr: 1,2-Dichloroethane-d4	109	70-130	%Rec	1	2/23/2017 12:51:24 PM	30350
Surr: 4-Bromofluorobenzene	91.1	70-130	%Rec	1	2/23/2017 12:51:24 PM	30350
Surr: Dibromofluoromethane	107	70-130	%Rec	1	2/23/2017 12:51:24 PM	30350
Surr: Toluene-d8	92.5	70-130	%Rec	1	2/23/2017 12:51:24 PM	30350

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 12
	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

# **Analytical Report**Lab Order **1702998**

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/24/2017

CLIENT: Blagg Engineering Client Sample ID: 25-Base @ 32'

 Project:
 Florance GC J 16A
 Collection Date: 2/22/2017 2:35:00 PM

 Lab ID:
 1702998-004
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 11:30:34 AM	30373
EPA METHOD 8015D MOD: GASOLIN	E RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	61	19	mg/Kg	5	2/23/2017 11:24:29 AM	G40948
Surr: BFB	97.5	70-130	%Rec	5	2/23/2017 11:24:29 AM	G40948
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	}			Analyst	MAB
Diesel Range Organics (DRO)	380	10	mg/Kg	1	2/23/2017 11:51:56 AM	30360
Motor Oil Range Organics (MRO)	86	50	mg/Kg	1	2/23/2017 11:51:56 AM	30360
Surr: DNOP	87.3	70-130	%Rec	1	2/23/2017 11:51:56 AM	30360
EPA METHOD 8260B: VOLATILES SH	ORT LIST				Analyst	DJF
Benzene	ND	0.095	mg/Kg	5	2/23/2017 11:24:29 AM	30350
Toluene	ND	0.19	mg/Kg	5	2/23/2017 11:24:29 AM	30350
Ethylbenzene	ND	0.19	mg/Kg	5	2/23/2017 11:24:29 AM	30350
Xylenes, Total	0.97	0.38	mg/Kg	5	2/23/2017 11:24:29 AM	30350
Surr: 1,2-Dichloroethane-d4	110	70-130	%Rec	5	2/23/2017 11:24:29 AM	30350
Surr: 4-Bromofluorobenzene	89.9	70-130	%Rec	5	2/23/2017 11:24:29 AM	30350
Surr: Dibromofluoromethane	111	70-130	%Rec	5	2/23/2017 11:24:29 AM	30350
Surr: Toluene-d8	92.2	70-130	%Rec	5	2/23/2017 11:24:29 AM	30350

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 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Lab Order 1702998 Date Reported: 2/24/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 26-Base @ 32'

**Project:** Florance GC J 16A **Collection Date:** 2/22/2017 2:39:00 PM 1702998-005 Lab ID: Matrix: MEOH (SOIL) Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 11:42:59 AM	30373
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	2/23/2017 1:20:30 PM	G40948
Surr: BFB	95.2	70-130	%Rec	1	2/23/2017 1:20:30 PM	G40948
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analyst	MAB
Diesel Range Organics (DRO)	13	9.7	mg/Kg	1	2/23/2017 12:19:31 PM	30360
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/23/2017 12:19:31 PM	30360
Surr: DNOP	90.0	70-130	%Rec	1	2/23/2017 12:19:31 PM	30360
EPA METHOD 8260B: VOLATILES \$	SHORT LIST				Analyst	DJF
Benzene	ND	0.018	mg/Kg	1	2/23/2017 1:20:30 PM	30350
Toluene	ND	0.037	mg/Kg	1	2/23/2017 1:20:30 PM	30350
Ethylbenzene	ND	0.037	mg/Kg	1	2/23/2017 1:20:30 PM	30350
Xylenes, Total	ND	0.074	mg/Kg	1	2/23/2017 1:20:30 PM	30350
Surr: 1,2-Dichloroethane-d4	106	70-130	%Rec	1	2/23/2017 1:20:30 PM	30350
Surr: 4-Bromofluorobenzene	88.7	70-130	%Rec	1	2/23/2017 1:20:30 PM	30350
Surr: Dibromofluoromethane	106	70-130	%Rec	1	2/23/2017 1:20:30 PM	30350
Surr: Toluene-d8	91.2	70-130	%Rec	1	2/23/2017 1:20:30 PM	30350

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

- 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
- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 5 of 12 J
- P Sample pH Not In Range
- RLReporting Detection Limit
- Sample container temperature is out of limit as specified

**Qualifiers:** 

# **Analytical Report**Lab Order **1702998**

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/24/2017

CLIENT:Blagg EngineeringClient Sample ID: 27-South Wall #2Project:Florance GC J 16ACollection Date: 2/22/2017 2:48:00 PMLab ID:1702998-006Matrix: MEOH (SOIL)Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 11:55:24 AM	30373
EPA METHOD 8015D MOD: GASOLINE F	RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	43	19	mg/Kg	5	2/23/2017 11:53:28 AM	G40948
Surr: BFB	97.6	70-130	%Rec	5	2/23/2017 11:53:28 AM	G40948
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3			Analyst	MAB
Diesel Range Organics (DRO)	320	9.9	mg/Kg	1	2/23/2017 12:46:58 PM	30360
Motor Oil Range Organics (MRO)	77	49	mg/Kg	1	2/23/2017 12:46:58 PM	30360
Surr: DNOP	91.2	70-130	%Rec	1	2/23/2017 12:46:58 PM	30360
EPA METHOD 8260B: VOLATILES SHOR	RT LIST				Analyst	DJF
Benzene	ND	0.096	mg/Kg	5	2/23/2017 11:53:28 AM	30350
Toluene	ND	0.19	mg/Kg	5	2/23/2017 11:53:28 AM	30350
Ethylbenzene	ND	0.19	mg/Kg	5	2/23/2017 11:53:28 AM	30350
Xylenes, Total	ND	0.38	mg/Kg	5	2/23/2017 11:53:28 AM	30350
Surr: 1,2-Dichloroethane-d4	108	70-130	%Rec	5	2/23/2017 11:53:28 AM	30350
Surr: 4-Bromofluorobenzene	90.0	70-130	%Rec	5	2/23/2017 11:53:28 AM	30350
Surr: Dibromofluoromethane	106	70-130	%Rec	5	2/23/2017 11:53:28 AM	30350
Surr: Toluene-d8	90.5	70-130	%Rec	5	2/23/2017 11:53:28 AM	30350

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 12
	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

# Lab Order **1702998**Date Reported: **2/24/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 28-South Wall #1

Project: Florance GC J 16A

Collection Date: 2/22/2017 2:53:00 PM

**Lab ID:** 1702998-007 **Matrix:** MEOH (SOIL) **Received Date:** 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 12:07:49 PM	30373
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	2/23/2017 1:49:32 PM	G40948
Surr: BFB	97.0	70-130	%Rec	1	2/23/2017 1:49:32 PM	G40948
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analyst	: MAB
Diesel Range Organics (DRO)	23	9.8	mg/Kg	1	2/23/2017 1:14:32 PM	30360
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/23/2017 1:14:32 PM	30360
Surr: DNOP	89.8	70-130	%Rec	1	2/23/2017 1:14:32 PM	30360
EPA METHOD 8260B: VOLATILES \$	SHORT LIST				Analyst	: DJF
Benzene	ND	0.020	mg/Kg	1	2/23/2017 1:49:32 PM	30350
Toluene	ND	0.039	mg/Kg	1	2/23/2017 1:49:32 PM	30350
Ethylbenzene	ND	0.039	mg/Kg	1	2/23/2017 1:49:32 PM	30350
Xylenes, Total	ND	0.078	mg/Kg	1	2/23/2017 1:49:32 PM	30350
Surr: 1,2-Dichloroethane-d4	106	70-130	%Rec	1	2/23/2017 1:49:32 PM	30350
Surr: 4-Bromofluorobenzene	91.0	70-130	%Rec	1	2/23/2017 1:49:32 PM	30350
Surr: Dibromofluoromethane	105	70-130	%Rec	1	2/23/2017 1:49:32 PM	30350
Surr: Toluene-d8	95.2	70-130	%Rec	1	2/23/2017 1:49:32 PM	30350

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 12
	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 **1702998**

# Date Reported: 2/24/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT:Blagg EngineeringClient Sample ID: 29-East Wall-SouthProject:Florance GC J 16ACollection Date: 2/22/2017 2:56:00 PMLab ID:1702998-008Matrix: MEOH (SOIL)Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 12:20:14 PM	30373
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	2/23/2017 2:18:24 PM	G40948
Surr: BFB	98.2	70-130	%Rec	1	2/23/2017 2:18:24 PM	G40948
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	: MAB
Diesel Range Organics (DRO)	16	9.2	mg/Kg	1	2/23/2017 1:42:07 PM	30360
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/23/2017 1:42:07 PM	30360
Surr: DNOP	89.8	70-130	%Rec	1	2/23/2017 1:42:07 PM	30360
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	: DJF
Benzene	ND	0.019	mg/Kg	1	2/23/2017 2:18:24 PM	30350
Toluene	ND	0.038	mg/Kg	1	2/23/2017 2:18:24 PM	30350
Ethylbenzene	ND	0.038	mg/Kg	1	2/23/2017 2:18:24 PM	30350
Xylenes, Total	ND	0.075	mg/Kg	1	2/23/2017 2:18:24 PM	30350
Surr: 1,2-Dichloroethane-d4	108	70-130	%Rec	1	2/23/2017 2:18:24 PM	30350
Surr: 4-Bromofluorobenzene	93.2	70-130	%Rec	1	2/23/2017 2:18:24 PM	30350
Surr: Dibromofluoromethane	108	70-130	%Rec	1	2/23/2017 2:18:24 PM	30350
Surr: Toluene-d8	94.0	70-130	%Rec	1	2/23/2017 2:18:24 PM	30350

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 12
	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#: **1702998** 

24-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30373 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30373 RunNo: 40946

Prep Date: 2/23/2017 Analysis Date: 2/23/2017 SeqNo: 1282951 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30373 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30373 RunNo: 40946

Prep Date: 2/23/2017 Analysis Date: 2/23/2017 SeqNo: 1282952 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 96.1 90 110

#### 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 12

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

Blagg Engineering

WO#: 1702998

24-Feb-17

Project: Floran	ce GC J 16A									
Sample ID LCS-30360	SampTyp	e: <b>LC</b>	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch II	D: <b>30</b>	360	F	tunNo: 4	0934				
Prep Date: 2/23/2017	Analysis Date	e: <b>2/</b>	23/2017	S	SeqNo: 1	282102	Units: mg/k	<b>(</b> g		
Analyte	Result I	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	63.8	116			
Surr: DNOP	4.7		5.000		93.1	70	130			
Sample ID MB-30360	SampTyp	e: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	<del></del>

Client ID: PBS	Batch ID: 30360			R	tunNo: 4	0934				
Prep Date: 2/23/2017	Analysis Date: 2/23/2017			S	282103	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	9.2		10.00		91.8	70	130			

Sample ID 1702998-001AMS	SampT	ype: <b>M</b> \$	3	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: 22-NW Wall	Batch	n ID: 30	360	R	RunNo: 4	0934					
Prep Date: 2/23/2017	Analysis D	ate: 2/	23/2017	S	SeqNo: 1	282930	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	160	9.4	46.86	123.2	80.7	51.6	130				
Surr: DNOP	4.9		4.686		106	70	130				

Sample ID 1702998-001AMS	<b>D</b> SampTy	SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: 22-NW Wall	Batch	ID: <b>30</b>	360	R	RunNo: 4	0934				
Prep Date: 2/23/2017	Analysis Da	ate: <b>2/</b>	23/2017	SeqNo: <b>1282931</b> Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	190	9.9	49.50	123.2	127	51.6	130	14.3	20	
Surr: DNOP	5.3		4.950		107	70	130	0	0	

#### 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 10 of 12

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1702998

24-Feb-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID mb-30350	SampT	уре: МЕ	BLK	Tes									
Client ID: PBS	Batch	n ID: <b>30</b>	350	F	RunNo: 4	0948							
Prep Date: 2/22/2017	Analysis D	Analysis Date: 2/23/2017			SeqNo: <b>1283074</b> Ur				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	0.54		0.5000		108	70	130						
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.5	70	130						
Surr: Dibromofluoromethane	0.53		0.5000		107	70	130						
Surr: Toluene-d8	0.49		0.5000		98.0	70	130						

Sample ID Ics-30350	SampT	ype: <b>LC</b>	s	Tes							
Client ID: LCSS	Batch	h ID: 30	350	F	RunNo: 40948						
Prep Date: 2/22/2017	Analysis D	Date: <b>2/</b>	23/2017	S	SeqNo: 1283076 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.2	0.025	1.000	0	118	70	130				
Toluene	1.0	0.050	1.000	0	99.5	70	130				
Surr: 1,2-Dichloroethane-d4	0.56		0.5000		112	70	130				
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.3	70	130				
Surr: Dibromofluoromethane	0.54		0.5000		109	70	130				
Surr: Toluene-d8	0.47		0.5000		94.3	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

% 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 11 of 12

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1702998** 

24-Feb-17

Client:	Blagg Engineering
Project:	Florance GC J 16A

Sample ID rb	Samp1	уре: МЕ	BLK	TestCode: EPA Method 8015D Mod: Gasoline Range							
Client ID: PBS	Batcl	n ID: <b>G</b> 4	10948	R	RunNo: 4	0948					
Prep Date:	Analysis D	oate: 2/	23/2017	SeqNo: 1283134 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	460		500.0		92.3	70	130				
Sample ID 2.5ug gro lcs	SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range										

Sample ID 2.3ug gro ics		restode. Era metrioù 60130 mou. Gasonne kange								
Client ID: LCSS	0948	F	RunNo: 4							
Prep Date:	Analysis D	oate: <b>2/</b>	23/2017	8	SeqNo: 1	283135	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.0	70	130			
Surr: BFB	480		500.0		96.5	70	130			

Sample ID 1702998-001ams	Samp1	уре: М	3	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: 22-NW Wall	R	RunNo: 40948										
Prep Date:	Analysis Date: 2/23/2017			SeqNo: <b>1283136</b>			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)	25	3.9	19.29	5.980	99.4	63.2	128					
Surr: BFB	380		385.8		97.3	70	130					

Sample ID 1702998-001ams	d Samply	ype: <b>M</b> \$	SD	I es	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: 22-NW Wall	Batch	ID: <b>G</b> 4	10948	R	RunNo: 4	0948				
Prep Date:	Analysis Da	ate: 2/	23/2017	S	SeqNo: 1	283137	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	3.9	19.29	5.980	97.1	63.2	128	1.76	20	
Surr: BFB	380		385.8		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

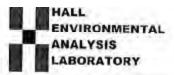
J Analyte detected below quantitation limits

Page 12 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 Euboratory 2001 Hawkins NE Albuquerque, NM 87109

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

## Sample Log-In Check List

BLAGG Client Name: Work Order Number: 1702998 RoptNo: 1 Received by/date: Logged By Andy Jansson 2/23/2017 8:00:00 AM Completed By. Ashley Gallegos 2/23/2017 8:23:07 AM Reviewed By: Chain of Custody 1. Custody seals intact on sample pottles? No Not Present 789 2. Is Chain of Custody complete? No Yes Not Present How was the sample delivered? Courier Log In 4. Was an attempt made to cool the samples? No NA Yes V Were all samples received at a temperature of >0° C to 6.0°C No Yes V NA Sample(s) in proper container(s)? Ves V No ... 7. Sufficient sample volume for indicated test(s)? Yes No 8. Are samples (except VOA and ONG) properly preserved? Yes No 9. Was preservative added to bottles? Yes No V NA . 10. VOA vials have zero headspace? No VOA Vials V Yes No 11. Were any sample containers received broken? Yes No V # of preserved bottles checked 12. Does paperwork melch bottle labels? for pH Ves No. (Note discrepancies on chain of custody) (<2 or >12 unless noted) 13. Are matrices correctly identified on Chain of Customy? Adjusted? No Yes V 14. Is it clear what analyses were requested? No 15. Were all holding times able to be met? Checked by: Yes A No (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 Cooler No Temp C Condition Seal Intact Seel No Seal Date Signed By 1.0 Good

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Mailing Address:	School	BLAGE ENGIR	BLAGGE ENGINEERING INC	Project Name:	14	168	ш		www.hallenvironmental.com	www.hallenvironmental.com	namuc	tal.co	E	5	Ž.
				Project #:			49	01 Hav	4901 Hawkins NE -	- Albu	Albuquerque, NM 87109	ie, N	M 871	60	
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email or Fax#:	Fax#			Project Manager:	ger		_	(0)		2,3	00		H	F	
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II EDD (Type)	Type			On ice: IV Yes	WYes	No I			Þ09 1	SIE			_	3/	,,,,
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO. 1702948	BTEX + MTB	) 83108 H9T bortieM) H9T	EDB (Method Ot£8) s'HA9	RCRA 8 Met	Anions (F,Cl, 8081 Pesilolo	(AOV) 808S8	7-imes) 07S8	CHEOKI	/ir Bubbles (
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	1430		24-Base @ 32			1907									
	1435		25-Base @ 32			1007									
	1439		100			1 00 F			Ē						F
	1448		27-50 Aller 11 #2			900-									
	1453		28-50 An Wall #1			100-									
	145p	-	29- Fox wall-Sorth			800-						TIME			
						74.1									
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1	854	J. W.	11854 Wax Water Order	Served by.	M	02/23/17 08co				ť		\$	1		



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

March 01, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1702B88

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 7 sample(s) on 2/28/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1702B88**Date Reported: **3/1/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 22R2-NW Sidewall

Project: Florance GC J 16A

Collection Date: 2/27/2017 2:12:00 PM

**Lab ID:** 1702B88-001 **Matrix:** MEOH (SOIL) **Received Date:** 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	2/28/2017 10:50:18 AM	30447
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst:	TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	2/28/2017 11:01:10 AM	30431
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/28/2017 11:01:10 AM	30431
Surr: DNOP	101	70-130	%Rec	1	2/28/2017 11:01:10 AM	30431
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	2/28/2017 10:40:22 AM	G41049
Surr: BFB	86.8	54-150	%Rec	1	2/28/2017 10:40:22 AM	G41049
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.018	mg/Kg	1	2/28/2017 10:40:22 AM	B41049
Toluene	ND	0.036	mg/Kg	1	2/28/2017 10:40:22 AM	B41049
Ethylbenzene	ND	0.036	mg/Kg	1	2/28/2017 10:40:22 AM	B41049
Xylenes, Total	ND	0.073	mg/Kg	1	2/28/2017 10:40:22 AM	B41049
Surr: 4-Bromofluorobenzene	93.0	80-120	%Rec	1	2/28/2017 10:40:22 AM	B41049

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 12
	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

# Lab Order **1702B88**Date Reported: **3/1/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 25R-Base @ 35'

 Project:
 Florance GC J 16A
 Collection Date: 2/27/2017 1:45:00 PM

 Lab ID:
 1702B88-002
 Matrix: MEOH (SOIL)
 Received Date: 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Analyst:	MRA
Chloride	ND	30	mg/Kg	20 2/28/2017 11:02:43 AM	30447
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS			Analyst:	ТОМ
Diesel Range Organics (DRO)	52	10	mg/Kg	1 2/28/2017 12:44:47 PM	30431
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1 2/28/2017 12:44:47 PM	30431
Surr: DNOP	107	70-130	%Rec	1 2/28/2017 12:44:47 PM	30431
EPA METHOD 8015D: GASOLINE RAN	GE			Analyst:	NSB
Gasoline Range Organics (GRO)	4.0	3.9	mg/Kg	1 2/28/2017 11:06:42 AM	G41049
Surr: BFB	119	54-150	%Rec	1 2/28/2017 11:06:42 AM	G41049
EPA METHOD 8021B: VOLATILES				Analyst:	NSB
Benzene	ND	0.019	mg/Kg	1 2/28/2017 11:06:42 AM	B41049
Toluene	ND	0.039	mg/Kg	1 2/28/2017 11:06:42 AM	B41049
Ethylbenzene	ND	0.039	mg/Kg	1 2/28/2017 11:06:42 AM	B41049
Xylenes, Total	0.40	0.078	mg/Kg	1 2/28/2017 11:06:42 AM	B41049
Surr: 4-Bromofluorobenzene	91.7	80-120	%Rec	1 2/28/2017 11:06:42 AM	B41049

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 12
	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

# Lab Order **1702B88**Date Reported: **3/1/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 30-Base @ 35'

 Project:
 Florance GC J 16A
 Collection Date: 2/27/2017 1:54:00 PM

 Lab ID:
 1702B88-003
 Matrix: MEOH (SOIL)
 Received Date: 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	: MRA
Chloride	ND	30	mg/Kg	20	2/28/2017 11:15:07 AM	30447
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst	:: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	2/28/2017 12:39:09 PM	30431
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/28/2017 12:39:09 PM	30431
Surr: DNOP	105	70-130	%Rec	1	2/28/2017 12:39:09 PM	30431
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	2/28/2017 11:33:11 AM	G41049
Surr: BFB	89.9	54-150	%Rec	1	2/28/2017 11:33:11 AM	G41049
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	2/28/2017 11:33:11 AM	B41049
Toluene	ND	0.037	mg/Kg	1	2/28/2017 11:33:11 AM	B41049
Ethylbenzene	ND	0.037	mg/Kg	1	2/28/2017 11:33:11 AM	B41049
Xylenes, Total	ND	0.075	mg/Kg	1	2/28/2017 11:33:11 AM	B41049
Surr: 4-Bromofluorobenzene	95.4	80-120	%Rec	1	2/28/2017 11:33:11 AM	B41049

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 12
	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

# Lab Order **1702B88**Date Reported: **3/1/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 31-Base @ 35'

 Project:
 Florance GC J 16A
 Collection Date: 2/27/2017 1:56:00 PM

 Lab ID:
 1702B88-004
 Matrix: MEOH (SOIL)
 Received Date: 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	2/28/2017 11:27:31 AN	1 30447
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	2/28/2017 11:16:26 AM	1 30431
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/28/2017 11:16:26 AM	1 30431
Surr: DNOP	99.2	70-130	%Rec	1	2/28/2017 11:16:26 AM	1 30431
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	2/28/2017 11:59:27 AN	1 G41049
Surr: BFB	81.8	54-150	%Rec	1	2/28/2017 11:59:27 AN	1 G41049
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	2/28/2017 11:59:27 AN	1 B41049
Toluene	ND	0.038	mg/Kg	1	2/28/2017 11:59:27 AM	1 B41049
Ethylbenzene	ND	0.038	mg/Kg	1	2/28/2017 11:59:27 AN	1 B41049
Xylenes, Total	ND	0.075	mg/Kg	1	2/28/2017 11:59:27 AN	1 B41049
Surr: 4-Bromofluorobenzene	81.7	80-120	%Rec	1	2/28/2017 11:59:27 AM	1 B41049

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

# Qualifiers: \* Value exceeds Maximum Contaminant Level. B 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 12 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

# Lab Order **1702B88**Date Reported: **3/1/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 32-Base @ 35'

 Project:
 Florance GC J 16A
 Collection Date: 2/27/2017 1:59:00 PM

 Lab ID:
 1702B88-005
 Matrix: MEOH (SOIL)
 Received Date: 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	2/28/2017 11:39:56 AM	30447
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	2/28/2017 11:38:12 AM	30431
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/28/2017 11:38:12 AM	30431
Surr: DNOP	98.9	70-130	%Rec	1	2/28/2017 11:38:12 AM	30431
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	2/28/2017 12:25:48 PM	G41049
Surr: BFB	77.0	54-150	%Rec	1	2/28/2017 12:25:48 PM	G41049
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.021	mg/Kg	1	2/28/2017 12:25:48 PM	B41049
Toluene	ND	0.043	mg/Kg	1	2/28/2017 12:25:48 PM	B41049
Ethylbenzene	ND	0.043	mg/Kg	1	2/28/2017 12:25:48 PM	B41049
Xylenes, Total	ND	0.085	mg/Kg	1	2/28/2017 12:25:48 PM	B41049
Surr: 4-Bromofluorobenzene	81.8	80-120	%Rec	1	2/28/2017 12:25:48 PM	B41049

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

# Lab Order **1702B88**Date Reported: **3/1/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 33-Base @ 35'

 Project:
 Florance GC J 16A
 Collection Date: 2/27/2017 2:02:00 PM

 Lab ID:
 1702B88-006
 Matrix: MEOH (SOIL)
 Received Date: 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	2/28/2017 11:52:21 AM	30447
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	2/28/2017 11:59:43 AM	30431
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/28/2017 11:59:43 AM	30431
Surr: DNOP	99.2	70-130	%Rec	1	2/28/2017 11:59:43 AM	30431
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	2/28/2017 12:52:04 PM	G41049
Surr: BFB	80.3	54-150	%Rec	1	2/28/2017 12:52:04 PM	G41049
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.020	mg/Kg	1	2/28/2017 12:52:04 PM	B41049
Toluene	ND	0.041	mg/Kg	1	2/28/2017 12:52:04 PM	B41049
Ethylbenzene	ND	0.041	mg/Kg	1	2/28/2017 12:52:04 PM	B41049
Xylenes, Total	ND	0.081	mg/Kg	1	2/28/2017 12:52:04 PM	B41049
Surr: 4-Bromofluorobenzene	87.6	80-120	%Rec	1	2/28/2017 12:52:04 PM	B41049

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 12
	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

#### Lab Order 1702B88 Date Reported: 3/1/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 34-West Sidewall

**Project:** Florance GC J 16A **Collection Date:** 2/27/2017 2:25:00 PM 1702B88-007 Lab ID: Matrix: MEOH (SOIL) **Received Date:** 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	2/28/2017 12:04:45 PM	1 30447
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	2/28/2017 12:21:27 PN	1 30431
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/28/2017 12:21:27 PM	1 30431
Surr: DNOP	100	70-130	%Rec	1	2/28/2017 12:21:27 PN	1 30431
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	2/28/2017 1:18:18 PM	G41049
Surr: BFB	80.6	54-150	%Rec	1	2/28/2017 1:18:18 PM	G41049
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	2/28/2017 1:18:18 PM	B41049
Toluene	ND	0.037	mg/Kg	1	2/28/2017 1:18:18 PM	B41049
Ethylbenzene	ND	0.037	mg/Kg	1	2/28/2017 1:18:18 PM	B41049
Xylenes, Total	ND	0.075	mg/Kg	1	2/28/2017 1:18:18 PM	B41049
Surr: 4-Bromofluorobenzene	86.0	80-120	%Rec	1	2/28/2017 1:18:18 PM	B41049

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 7 of 12 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.

WO#: **1702B88** 

01-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30447 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30447 RunNo: 41047

Prep Date: 2/28/2017 Analysis Date: 2/28/2017 SeqNo: 1286758 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30447 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30447 RunNo: 41047

Prep Date: 2/28/2017 Analysis Date: 2/28/2017 SeqNo: 1286759 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 93.0 90 110

#### 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 12

**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

Result

45

4.4

10

**Blagg Engineering** 

WO#: 1702B88

01-Mar-17

Project: Florance	e GC J 16A	
Sample ID MB-30431	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 30431	RunNo: 41032
Prep Date: 2/28/2017	Analysis Date: 2/28/2017	SeqNo: 1285370 Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)	ND 10 ND 50	
Surr: DNOP	9.7 10.00	96.8 70 130
Sample ID LCS-30399	SampType: <b>LCS</b>	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 30399	RunNo: 41033
Prep Date: 2/27/2017	Analysis Date: 2/28/2017	SeqNo: 1285372 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.7 5.000	93.9 70 130
Sample ID MB-30399	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 30399	RunNo: 41033
Prep Date: 2/27/2017	Analysis Date: 2/28/2017	SeqNo: <b>1285373</b> Units: <b>%Rec</b>
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	11 10.00	108 70 130
Sample ID LCS-30431	SampType: <b>LCS</b>	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 30431	RunNo: <b>41032</b>
Prep Date: 2/28/2017	Analysis Date: 2/28/2017	SeqNo: <b>1285512</b> Units: <b>mg/Kg</b>

SPK value SPK Ref Val

50.00

5.000

#### Qualifiers:

Analyte

Surr: DNOP

Diesel Range Organics (DRO)

- 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

%REC

90.6

88.5

0

LowLimit

63.8

70

- J
- Analyte detected below quantitation limits
- Page 9 of 12

%RPD

HighLimit

116

130

**RPDLimit** 

Qual

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

## Hall Environmental Analysis Laboratory, Inc.

1000

1000

WO#: **1702B88** 

01-Mar-17

Client: Blagg I	Engineering								
Project: Florance	ee GC J 16A								
Sample ID RB	SampType: MBL	K	Test	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch ID: G410	049	R	tunNo: 4	1049				
Prep Date:	Analysis Date: 2/28	3/2017	S	SeqNo: 1	286082	Units: mg/K	.g		
Analyte	Result PQL S	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 960	1000		95.8	54	150			
Sample ID 2.5UG GRO LC:	SampType: LCS		Test	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch ID: G410	049	R	tunNo: 4	1049				
Prep Date:	Analysis Date: 2/28	3/2017	S	seqNo: 1	286083	Units: mg/K	g		
Analyte	Result PQL S	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29 5.0	25.00	0	114	76.4	125			
Surr: BFB	1200	1000		116	54	150			
Sample ID MB-30408	SampType: MBL	K	Test	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch ID: 3040	8	R	tunNo: 4	1049				
Prep Date: 2/27/2017	Analysis Date: 2/28	3/2017	S	seqNo: 1	286086	Units: %Red	;		
Analyte	Result PQL S	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	890	1000		89.4	54	150			
Sample ID LCS-30408	SampType: LCS		Test	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch ID: 3040	8	R	tunNo: 4	1049				
Prep Date: 2/27/2017	Analysis Date: 2/28	3/2017	S	SeqNo: 1	286087	Units: %Red	;		
Analyte	Result PQL S	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

#### 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

101

- 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#: **1702B88** 

01-Mar-17

Chent:	Diagg Engineering						
Project:	Florance GC J 16A						
Sample ID RB	SampType: MBLK						

Dlaga Engineering

Client ID: **PBS** Batch ID: **B41049** RunNo: **41049** 

Analysis Date: 2/28/2017 Prep Date: SeqNo: 1286104 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 1.000 105 66.6 132

TestCode: EPA Method 8021B: Volatiles

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: **B41049** RunNo: 41049 SeqNo: 1286105 Prep Date: Analysis Date: 2/28/2017 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** LowLimit Qual 0.025 1.000 O 98.3 75.2 115 Benzene 0.98 Toluene 1.0 0.050 1.000 0 101 80.7 112 Ethylbenzene 0.050 0 103 78.9 1.0 1.000 117 Xylenes, Total 3.2 0.10 3.000 0 107 79.2 115 Surr: 4-Bromofluorobenzene 1.1 1.000 106 66.6 132

Sample ID 1702B88-001AMS SampType: MS TestCode: EPA Method 8021B: Volatiles 22R2-NW Sidewall Client ID: Batch ID: **B41049** RunNo: 41049 Analysis Date: 2/28/2017 SeqNo: 1286106 Prep Date: Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.71 0.018 0.7289 97.7 61.5 138 Λ Toluene 0.72 0.036 0.7289 0 99.5 71.4 127 0.73 0.036 0.7289 0 99.9 70.9 132 Ethylbenzene Xylenes, Total 2.3 0.073 2.187 0 103 76.2 123

0.7289

Sample ID 1702B88-001AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Client ID: 22R2-NW Sidewall Batch ID: **B41049** RunNo: 41049 Prep Date: Analysis Date: 2/28/2017 SeqNo: 1286107 Units: mg/Kg SPK value SPK Ref Val %REC **RPDLimit** Analyte Result **PQL** LowLimit HighLimit %RPD Qual 0.78 0.018 0.7289 0 107 61.5 138 9.09 20 Benzene Toluene 0.79 0.036 0.7289 0 109 71.4 127 9.07 20 Ethylbenzene 0.79 0.036 0.7289 0 109 70.9 132 8.31 20 Xylenes, Total 2.4 0.073 2.187 0 111 76.2 123 7.23 20 Surr: 4-Bromofluorobenzene 0.66 0.7289 90.7 66.6 132 0 0

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

H Holding times for preparation or analysis exceeded

0.70

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

96.5

66.6

132

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#: 1702B88

01-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30408 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 30408 RunNo: 41049

Prep Date: 2/27/2017 Analysis Date: 2/28/2017 SeqNo: 1286108 Units: %Rec

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

Surr: 4-Bromofluorobenzene 0.99 1.000 99.0 66.6 132

Sample ID LCS-30408 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 30408 RunNo: 41049

Prep Date: 2/27/2017 Analysis Date: 2/28/2017 SeqNo: 1286109 Units: %Rec

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

Surr: 4-Bromofluorobenzene 0.90 1.000 90.1 66.6 132

#### 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 12 of 12

P Sample pH Not In Range

RL Reporting Detection Limit

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:	BLAGG	A	Work C	order Numbe	er: <b>1702E</b>	88			RcptNo	: 1
Received by/dat	te:		02/28/	7						
Logged By:	Lindsay Ma	ıngin	2/28/2017	77:30:00 Al	М		June 1	1400		
Completed By:	√ Lindsay Ma	ngin	2/28/2017	7 8:05:16 A	М		Ambiet	16		
Reviewed By:	U		67.17	8/17			$V^{\vee}$	U		
Chain of Cus			- C/ C	<i>[</i>						
1. Custody sea		mple bottles?			Yes		No		Not Present 🗹	
2. Is Chain of C	Custody compl	ete?			Yes	<b>✓</b>	No		Not Present	
3. How was the	e sample deliv	ered?			Couri	er				
Log In										
4. Was an atte	empt made to	cool the sample	es?		Yes	<b>✓</b>	No		na 🗆	
5. Were all sar	mples received	at a temperati	ure of >0° C	to 6.0°C	Yes	<b>Y</b>	No		na 🗆	
6. Sample(s) ii	n proper conta	iner(s)?			Yes	<b>✓</b>	No			
7. Sufficient sa	ımple volume f	or indicated tes	st(s)?		Yes	<b>Y</b>	No			
8. Are samples	(except VOA	and ONG) prop	erly preserve	ed?	Yes	✓	No			
9. Was preserv	vative added to	bottles?			Yes		No	✓	NA 🗆	
10.VOA vials ha	ave zero head:	space?			Yes		No		No VOA Vials	
11. Were any sa	ample containe	ers received bro	oken?		Yes		No	<b>Y</b>	# - 6	
40								$_{-}$	# of preserved bottles checked	
12.Does paperv (Note discre		ttle labels? ain of custody)			Yes	✓	No	Ч	for pH: (<2	or >12 unless noted)
13 Are matrices	•		of Custody?		Yes	<b>✓</b>	No		Adjusted?	
14. Is it clear wh	at analyses w	ere requested?			Yes	✓'	No			
15. Were all hold	-				Yes	<b>V</b>	No		Checked by:	
(If no, notify	customer for a	iuthorization.)								
Special Hand	lling (if app	licable)								
16. Was client n	otified of all di	screpancies wit	th this order?		Yes		No		NA 🗹	
Persor	n Notified:			Date:						
By Wh	iom:	VPVCB428000000000000000000000000000000000000	Million Million and Committee	Via:	eMa	i) []	Phone 🗍	Fax	☐ In Person	
Regard	ding:	nun 1880 (1880 (1851 ) SCAROLO (1861 )	MERCENT AND							
Client	Instructions:				(1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0		Militar and an annual of a finish factors			
17. Additional re	emarks:									
18. Cooler Info	rmation									
Cooler N	o Temp °C	Condition	Seal Intact	Seal No	Seal Da	te	Signed E	Ву	•	
1	1.9	Good	⁄es							

ENVIRONMENTAL	ANALYSIS LABORATORY	mental.com	Albuquerque, NM 87109	505-345-4107	Analysis Request			Z808 /	<b>3€</b> /O∧ (v)	8081 Pestion (VOA 8260B (VOA 82500 (Semi-	×									CONTACT: STEVE MOSKAL KONEVRM LI-0016D-E:FIRMCGCT 160		rrly notated on the analytical report.
HALLEN	ANALYS]	www.hallenvironmental.com	4901 Hawkins NE - Albuq	10	Analysi	(0)	(SWI	70 / OR (1.8 (1.44) 8 0728	(GK q 41 or tals	B3108 HqT TPH (Metho DEB (Metho OH39 (8310 OH39 (8310 OH39 (8310 OH39 (B400)	×									Remarks: Bill BP VID: VHIXONEVRM WBS ELENENT: L1-001(		'. Any sub-contracted data will be cle
ASAP	rd XRush SAME JAK	■:	6C J 16A	ļ	ExCAVATION					Preservative HEAL No. X X + + Type TTO R88 BTEX X	ļ	1 20- 1	-073	-@H	- mx	200	1 1			Date Time Remark	02/28/A 0730	If necessary, samples submitted to Hall Environmental may be subcontracted to other accedited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
Chain-of-Custody Record Tum-Around Time:	□ Standard	<u>ā.                                    </u>	FLORANCE	Project #:	- 1183 NE	Project Ma	Level 4 (Full Validation)	Sampler:	2 - C	Sample Request ID Type and #	22R2-NW SIDEWALL 402x1		30-BKE @35'	31- BASE @ 35',	32-BAE @ 35'	33-BKE @ 36	34- WEST SIDEWALL			by:  Slagin  Received by:  Note that the state of the sta	Mother Wester	tted to Hall Environmental may be subcontracted to othe
Chain-of-Cus	Client: BP AMERICA	BAG, ENGINEERING INC	Mailing Address:		Phone #: (505) 320- 1183	email or Fax#:	QA/QC Package:  X Standard	ا ا Other	□ EDD (Type)	Date Time Matrix	2/21/1 1412 SOIL 2	1345	1354	1356	1359		1425   3		_	Poste: Time: Relinquished by 1643 AM 17 1643 AM 17 Date: Time: Relinquished by	_	If necessary, samplés submit



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

March 09, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703348

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/8/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1703348**Date Reported: **3/9/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: 35-West Wall

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 2:38:00 PM

 Lab ID:
 1703348-001
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: LGT
Chloride	ND	30	mg/Kg	20	3/8/2017 10:24:25 AM	30589
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	:: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	3/8/2017 8:58:01 AM	30576
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/8/2017 8:58:01 AM	30576
Surr: DNOP	100	70-130	%Rec	1	3/8/2017 8:58:01 AM	30576
EPA METHOD 8015D: GASOLINE RANG	GE .				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	3/8/2017 9:57:16 AM	G41229
Surr: BFB	85.4	54-150	%Rec	1	3/8/2017 9:57:16 AM	G41229
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.020	mg/Kg	1	3/8/2017 9:57:16 AM	B41229
Toluene	ND	0.041	mg/Kg	1	3/8/2017 9:57:16 AM	B41229
Ethylbenzene	ND	0.041	mg/Kg	1	3/8/2017 9:57:16 AM	B41229
Xylenes, Total	ND	0.081	mg/Kg	1	3/8/2017 9:57:16 AM	B41229
Surr: 4-Bromofluorobenzene	116	66.6-132	%Rec	1	3/8/2017 9:57:16 AM	B41229

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

# Lab Order **1703348**Date Reported: **3/9/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: 36-West Wall

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 2:44:00 PM

 Lab ID:
 1703348-002
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses Result **PQL Qual Units DF** Date Analyzed Batch **EPA METHOD 300.0: ANIONS** Analyst: LGT Chloride ND 30 mg/Kg 3/8/2017 10:36:50 AM 30589 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) ND mg/Kg 3/8/2017 9:22:17 AM 30576 9.9 Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 3/8/2017 9:22:17 AM 30576 Surr: DNOP 103 70-130 %Rec 3/8/2017 9:22:17 AM 30576 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 3.6 mg/Kg 1 3/8/2017 10:20:39 AM G41229 Surr: BFB 82.9 %Rec 3/8/2017 10:20:39 AM G41229 54-150 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.018 mg/Kg 1 3/8/2017 10:20:39 AM B41229 Toluene ND 0.036 mg/Kg 3/8/2017 10:20:39 AM B41229 1 Ethylbenzene ND 0.036 mg/Kg 1 3/8/2017 10:20:39 AM B41229 Xylenes, Total ND 0.071 mg/Kg 3/8/2017 10:20:39 AM B41229 Surr: 4-Bromofluorobenzene 112 66.6-132 %Rec 3/8/2017 10:20:39 AM B41229

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 2 of 6
	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#: **1703348** 

09-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30589 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30589 RunNo: 41226

Prep Date: 3/8/2017 Analysis Date: 3/8/2017 SeqNo: 1292439 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30589 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30589 RunNo: 41226

Prep Date: 3/8/2017 Analysis Date: 3/8/2017 SeqNo: 1292440 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.8 90 110

Sample ID MB-30589 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30589 RunNo: 41227

Prep Date: 3/8/2017 Analysis Date: 3/8/2017 SeqNo: 1292528 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30589 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30589 RunNo: 41227

Prep Date: 3/8/2017 Analysis Date: 3/8/2017 SeqNo: 1292529 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.8 90 110

#### Qualifiers:

S

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

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 6

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1703348

09-Mar-17

Client: Project:	Blagg En Florance	gineering GC J 16A									
Sample ID	LCS-30576	SampTyp	pe: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch I	D: <b>30</b>	576	F	RunNo: 4	1217				
Prep Date:	3/8/2017	Analysis Dat	te: <b>3/</b>	8/2017	5	SeqNo: 1	291504	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)	46	10	50.00	0	92.0	63.8	116			
Surr: DNOP		4.7		5.000		94.0	70	130			
Sample ID	MB-30576	SampTyp	pe: ME	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch I	D: <b>30</b>	576	F	RunNo: 4	1217				
Prep Date:	3/8/2017	Analysis Dat	te: <b>3/</b>	8/2017	Ş	SeqNo: 1	291505	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)	ND	10								
Motor Oil Rang	je Organics (MRO)	ND	50								
Surr: DNOP		10		10.00		104	70	130			
Sample ID	1703348-001AMS	SampTyp	ре: М	3	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	35-West Wall	Batch I	D: <b>30</b>	576	F	RunNo: 4	1219				
Prep Date:	3/8/2017	Analysis Dat	te: <b>3/</b>	8/2017	5	SeqNo: 1	291740	Units: mg/h	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (	Organics (DRO)	46	9.5	47.66	2.038	91.9	51.6	130			
Surr: DNOP		4.7		4.766		97.6	70	130			
Sample ID	1703348-001AMS	<b>D</b> SampTyp	pe: <b>M</b> \$	SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	35-West Wall	Batch I	D: <b>30</b>	576	F	RunNo: 4	1219				
Prep Date:	3/8/2017	Analysis Dat	te: <b>3/</b>	8/2017	5	SeqNo: 1	291743	Units: mg/h	<b>K</b> g		
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

4.6

4.638

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

99.7

70

130

0

0

J Analyte detected below quantitation limits

Page 4 of 6

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

780

Result

21

770

SampType: MSD

Analysis Date: 3/8/2017

Batch ID: **G41229** 

**PQL** 

4.1

812.3

20.31

812.3

SPK value SPK Ref Val %REC

**Blagg Engineering** 

WO#: 1703348

09-Mar-17

Project: Florance	GC J 16A									
Sample ID RB	SampTy	/pe: <b>ME</b>	BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch	ID: <b>G4</b>	11229	F	RunNo: 4	1229				
Prep Date:	Analysis Da	ate: <b>3/</b>	8/2017	5	SeqNo: 1	292216	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 860	5.0	1000		85.5	54	150			
Sample ID 2.5UG GRO LCS	SampTy	/pe: <b>LC</b>	s	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	ID: <b>G4</b>	11229	F	RunNo: 4	1229				
Prep Date:	Analysis Da	ate: <b>3/</b>	8/2017	\$	SeqNo: 1	292217	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	94.1	76.4	125			
Surr: BFB	940		1000		93.5	54	150			
Sample ID 1703348-001AMS	SampTy	/pe: <b>M</b> \$	<u> </u>	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	е	
Client ID: 35-West Wall	Batch	ID: <b>G4</b>	11229	F	RunNo: 4	1229				
Prep Date:	Analysis Da	ate: <b>3/</b>	8/2017	5	SeqNo: 1	292218	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.1	20.31	0	91.2	61.3	150	•		

96.5

RunNo: 41229

104

95.3

SeqNo: 1292219

54

LowLimit

61.3

54

TestCode: EPA Method 8015D: Gasoline Range

150

Units: mg/Kg

150

150

%RPD

12.8

**RPDLimit** 

20

0

Qual

HighLimit

Onal	lifiare

Surr: BFB

Client ID:

Prep Date:

Surr: BFB

Analyte

Sample ID 1703348-001AMSD

Gasoline Range Organics (GRO)

35-West Wall

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

Page 5 of 6

P Sample pH Not In Range

Reporting Detection Limit RL

Sample container temperature is out of limit as specified

**Client:** 

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

# Hall Environmental Analysis Laboratory, Inc.

0.050

0.10

1.000

3.000

1.000

1.1

3.2

1.2

**Blagg Engineering** 

WO#: 1703348

09-Mar-17

Project: Floran	ce GC J 16A									
Sample ID RB	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batch	n ID: <b>B4</b>	1229	F	RunNo: 4	1229				
Prep Date:	Analysis D	oate: 3/	8/2017	9	SeqNo: 1	292222	Units: mg/k	<b>(</b> 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	1.1		1.000		112	66.6	132			
Sample ID 100NG BTEX L	.CS SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batch	n ID: <b>B4</b>	1229	F	RunNo: 4	1229				
Prep Date:	Analysis D	oate: 3/	8/2017	9	SeqNo: 1	292223	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	102	75.2	115			
Toluene	1.1	0.050	1.000	0	105	80.7	112			

Sample ID 1703348-002AMS	SampT	уре: М	3	Tes	tCode: El	PA Method	8021B: Vola	iles		
Client ID: 36-West Wall	Batch	n ID: <b>B4</b>	1229	R	RunNo: 4	1229				
Prep Date:	Analysis D	ate: 3/	8/2017	S	SeqNo: 1	292224	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.018	0.7112	0	119	61.5	138			
Toluene	0.86	0.036	0.7112	0	121	71.4	127			
Ethylbenzene	0.83	0.036	0.7112	0	117	70.9	132			
Xylenes, Total	2.5	0.071	2.134	0	118	76.2	123			
Surr: 4-Bromofluorobenzene	0.87		0.7112		122	66.6	132			

0

0

107

108

118

78.9

79.2

66.6

117

115

132

Sample ID 1703348-002AMS	<b>D</b> SampT	ype: MS	SD	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: 36-West Wall	Batch	n ID: <b>B4</b>	1229	F	RunNo: 4	1229				
Prep Date:	Analysis D	ate: 3/	8/2017	8	SeqNo: 1	292225	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.018	0.7112	0	116	61.5	138	2.76	20	
Toluene	0.82	0.036	0.7112	0	115	71.4	127	4.64	20	
Ethylbenzene	0.80	0.036	0.7112	0	112	70.9	132	4.35	20	
Xylenes, Total	2.4	0.071	2.134	0	113	76.2	123	4.30	20	
Surr: 4-Bromofluorobenzene	0.85		0.7112		120	66.6	132	0	0	

#### 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

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 6 of 6



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:	BLAGG	Work Order Numb	per: 1703348		RcptNo: 1	.,
Received by/dat	e:	03/08/17				
Logged By:	Lindsay Mangin	3/8/2017 7:35:00 AI	νI	Junely Hope		
Completed By:	Lindsay Mangin	3/8/2017 7:43:08 Al		And Allens		i
Reviewed By:		ost cato		000		
Chain of Cus	tody	03:00/12				
1. Custody sea	als intact on sample bo	ottles?	Yes	No 🗌	Not Present 🗹	
2. Is Chain of C	Custody complete?		Yes 🗸	No 🗌	Not Present	
3. How was the	e sample delivered?		Courier			
Log In						
4. Was an atte	empt made to cool the	samples?	Yes 🗹	No 🗌	NA $\square$	
5. Were all san	mples received at a ter	mperature of >0° C to 6.0°C	Yes 🔽	No 🗌	na 🗆	
6. Sample(s) ir	n proper container(s)?		Yes 🗸	No 🗌		
7. Sufficient sa	mple volume for indica	ated test(s)?	Yes 🗸	No 🗀		
8. Are samples	(except VOA and ON	G) properly preserved?	Yes 🗸	No 🗌		
9. Was preserv	vative added to bottles	?	Yes	No 🔽	NA 🗆	
10.VOA vials ha	ave zero headspace?		Yes 🗌	No 🗆	No VOA Vials 🗹	
11. Were any sa	ample containers rece	ived broken?	Yes	No 🗹	# of preserved	
12 Does nanen	vork match bottle labe	le?	Yes 🗸	No 🔲	bottles checked for pH:	
	pancies on chain of cu		162 💌	140		2 unless noted)
13, Are matrices	correctly identified or	Chain of Custody?	Yes 🗹	No 🗆	Adjusted?	
14. Is it clear wh	at analyses were requ	ested?	Yes 🗹	No 🗌		
	ding times able to be r customer for authoriza		Yes 🗸	No 🗆 -	Checked by:	
<u>Special Hand</u>	ling (if applicable	<u>e)</u>				
16. Was client no	otified of all discrepan	cies with this order?	Yes 🗌	No 🗆	NA 🔽	
Person	Notified:	Date		*******		
By Wh	om:	Via:	eMail F	Phone 🔲 Fax	☐ In Person	
Regard						
Client I	Instructions:	<del></del>				
17. Additional re	emarks:					
18. Cooler Info						
Cooler No	<del></del>		Seal Date	Signed By		
<b>'</b> 	1.6 Good	Yes		]		

SLYCE ELIENASERA  g Address:  or Fax#:  S Package:  andard ditation  LAP  O (Type)  O (Type)  I (438 Sold 35-  I (444 W 36-  I (	Client		BP AMANCA		☐ Standard	XRush		JĮ	W	I 4	Z	<u> </u>	Y L	2	ď	ME	HALL ENVIRONMENTAL	AL
Froject #   Factor   Following   Froject   Following   Froject   Following   Froject   Following   Froject   Following   Fol	Mailing	BLAG.	ELLEIN Si		Project Nam	3	Y		4904	, jamkir	ww.h	1 m	ironm		COM	27100	2	2
## (\$65\$) \$26 - 1183  NE Excave to 1  Project Manager  Take  Package:    And   Project Manager   Proje					Project #				- 4.	05.34	307		in he	08.90	5.64	201		
Project Manager   Project Ma	Phone			1	WZ	Excavat	Tool					Analy	sis R	edne	ts.			Ü
Container   Time   Matrix   Sample   Request   Dontainer   Preservative   Cook   Sample   Container   Preservative   Cook   Co	email	or Fax#:			Project Mans	ager		_	_		H		_		H		H	F
Itation	X Star	Package: idard	61	☐ Level 4 (Full Validation)	R	BAS		_			(SW)	/max	OS'*Oc	bce,≈				
Time Matrix Sample Request ID Container Preservative HEALNO HEALNO Type and # Type (Method 504) Type (Meth	Accrec	litation	C	3	Sampler:	Y BA	a			()			NO <sup>5</sup> 'I	2808			_	
Time Matrix Sample Request ID Container Preservative HEAL Not HEAL		4	1 0	in the second	On Ice:	N Yes	ON C	_		81	_	_	'EC	/ 5	(A		-	_
Time Matrix Sample Request ID Type and # Type   TYPS 24 S BT ET FT H B B B B B B B B B B B B B B B B B B	□ ED	(Type)			Sample Tem	perature: 1	و			þ þc		_	N'I	_			-	
H38   Soil   35-   West   Way   4 02 ×   CECK   -CCK   X   X     1444   W   36-   West   Way   4 02 ×   CECK   -CCK   X   X     1444   W   36-   West   Way   Wa	Date			Sample Request ID	Container Type and #	Preservative Type	Z Z			TPH (Metho		Carrier Williams	O, 4) snoinA	C. S. C. L. S. L.				
1444   W	Hory	-	_		403×	Cook	100-	×	×							2.00		
Time: Relinquished by:  Time: Time: Relinquished by:	18	_	и	36- WEST WAY	200	Cast	211-	×	×					-		×		
Time: Reinquished by:    1   1   2   4   5   5   1   5     Time: Reinquished by:							}							+	-		+	
Time: Reinquished by:    Light														+			H	
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2	Date:		Remanish	ed by:	Second party of the second		-	3 3		E ME	5	77	90	3	65	1. KN	30	P = 0



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

March 14, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703591

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/11/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order **1703591**

**Received Date:** 3/11/2017 8:00:00 AM

Date Reported: 3/14/2017

## Hall Environmental Analysis Laboratory, Inc.

Lab ID:

1703591-001

CLIENT:Blagg EngineeringClient Sample ID: 37-West Base/WallProject:Florance GC J 16ACollection Date: 3/10/2017 1:02:00 PM

Matrix: MEOH (SOIL)

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/13/2017 11:24:46 AM	1 30664
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	3/13/2017 11:40:44 AM	1 30650
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	3/13/2017 11:40:44 AM	1 30650
Surr: DNOP	104	70-130	%Rec	1	3/13/2017 11:40:44 AM	1 30650
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	3/13/2017 11:48:17 AM	1 30631
Surr: BFB	79.5	54-150	%Rec	1	3/13/2017 11:48:17 AM	1 30631
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	3/13/2017 11:48:17 AM	1 30631
Toluene	ND	0.039	mg/Kg	1	3/13/2017 11:48:17 AM	1 30631
Ethylbenzene	ND	0.039	mg/Kg	1	3/13/2017 11:48:17 AM	1 30631
Xylenes, Total	ND	0.077	mg/Kg	1	3/13/2017 11:48:17 AM	1 30631
Surr: 4-Bromofluorobenzene	86.5	66.6-132	%Rec	1	3/13/2017 11:48:17 AM	1 30631

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 6
	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

#### Lab Order **1703591**

Date Reported: 3/14/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT:Blagg EngineeringClient Sample ID: 38-West Base/WallProject:Florance GC J 16ACollection Date: 3/10/2017 1:07:00 PM

**Lab ID:** 1703591-002 **Matrix:** MEOH (SOIL) **Received Date:** 3/11/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/13/2017 11:37:10 AM	30664
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	: ТОМ
Diesel Range Organics (DRO)	28	9.7	mg/Kg	1	3/13/2017 12:02:21 PM	30650
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/13/2017 12:02:21 PM	30650
Surr: DNOP	103	70-130	%Rec	1	3/13/2017 12:02:21 PM	30650
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	3/13/2017 12:14:27 PM	30631
Surr: BFB	86.9	54-150	%Rec	1	3/13/2017 12:14:27 PM	30631
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	3/13/2017 12:14:27 PM	30631
Toluene	ND	0.038	mg/Kg	1	3/13/2017 12:14:27 PM	30631
Ethylbenzene	ND	0.038	mg/Kg	1	3/13/2017 12:14:27 PM	30631
Xylenes, Total	ND	0.077	mg/Kg	1	3/13/2017 12:14:27 PM	30631
Surr: 4-Bromofluorobenzene	77.8	66.6-132	%Rec	1	3/13/2017 12:14:27 PM	30631

*	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 6
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	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	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

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703591** 

14-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30664 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30664 RunNo: 41329

Prep Date: 3/13/2017 Analysis Date: 3/13/2017 SeqNo: 1296016 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30664 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30664 RunNo: 41329

Prep Date: 3/13/2017 Analysis Date: 3/13/2017 SeqNo: 1296017 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 91.7 90 110

#### 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 6

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: 1703591

14-Mar-17

Project:	Florance	e GC J 16A									
Sample ID LCS	-30650	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCS	ss	Batch	ID: 306	650	F	RunNo: 4	1323				
Prep Date: 3/1	3/2017	Analysis D	ate: 3/	13/2017	5	SeqNo: 1	294853	Units: mg/h	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organi	cs (DRO)	47	10	50.00	0	93.8	63.8	116			
Surr: DNOP		4.8		5.000		95.8	70	130			
Sample ID MB-	30650	SampT	ype: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	3	Batch	ID: 306	650	F	RunNo: 4	1323				

Client ID. PBS	Dater	11D. 30	650	Γ	turino. 4	1323				
Prep Date: 3/13/2017	Analysis D	oate: 3/	13/2017	9	SeqNo: 1	294854	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	10		10.00		101	70	130			
Sample ID I CS 20627	Comp	Type: LC		Too	tCodo: <b>E</b>	DA Mathad	904EM/D: Di	acal Dana	o Ormanias	

Sample ID LCS-30637	SampType: LCS	Test	Code: EPA Method	8015M/D: Dies	el Range	Organics	
Client ID: LCSS	Batch ID: 3063	37 R	unNo: <b>41324</b>				
Prep Date: 3/10/2017	Analysis Date: 3/1:	3/2017 Se	eqNo: <b>1295865</b>	Units: %Rec			
Analyte	Result PQL	SPK value SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3	5.000	86.1 70	130		•	

Sample ID MB-30637	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 30637	RunNo: 41324
Prep Date: 3/10/2017	Analysis Date: 3/13/2017	SeqNo: <b>1295866</b> Units: <b>%Rec</b>
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.

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

Е Value above quantitation range

J Analyte detected below quantitation limits

Page 4 of 6

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1703591** 

14-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30631 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 30631 RunNo: 41331

Prep Date: 3/10/2017 Analysis Date: 3/13/2017 SeqNo: 1295376 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 800 1000 79.9 54 150

Sample ID LCS-30631 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 30631 RunNo: 41331

1000

Prep Date: 3/10/2017 Analysis Date: 3/13/2017 SeqNo: 1295377 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 25.00 105 76.4 125

103

54

150

#### 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

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 6

### Hall Environmental Analysis Laboratory, Inc.

0.92

WO#: **1703591** 

14-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30631 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 30631 RunNo: 41331

Prep Date: 3/10/2017 Analysis Date: 3/13/2017 SeqNo: 1295395 Units: mg/Kg

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

 Betizetie
 ND
 0.023

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

Surr: 4-Bromofluorobenzene

Surr: 4-Bromofluorobenzene 0.89 1.000 88.9 66.6 132

1.000

Sample ID LCS-30631 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 30631 RunNo: 41331 Prep Date: Analysis Date: 3/13/2017 SeqNo: 1295396 3/10/2017 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.97 0.025 1.000 0 96.7 80 120 Benzene Toluene 0.99 0.050 1.000 0 98.9 80 120 Ethylbenzene 0.050 1.000 0 100 80 120 1.0 103 Xylenes, Total 3.1 0.10 3.000 0 80 120

92.5

66.6

132

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 6 of 6



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109

Sample Log-In Check List

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

Client Name:	BLAGG	Work Order	Number: 1703591		RcptNo	: 1
Received by/date	e:	01117	· ····			
Logged By:	Lindsay Mangin	3/11/2017 8:00	D:00 AM	Juney Hayo		
Completed By:	Lindsay Mangin		3:58 AM	And the po		
Reviewed By:	$\alpha$	31817	l	000		
Chain of Cus	tody					
		bottles?	Yes 🗌	No $\square$	Not Present 🗹	
2. Is Chain of C	Custody complete?		Yes 🗸	No 🗌	Not Present	
3. How was the	sample delivered?	>	Courier			
<u>Log In</u>						
4. Was an atte	mpt made to cool t	he samples?	Yes 🗹	No 🗌	na 🗆	
5. Were all sam	nples received at a	temperature of >0° C to 6.0	°C Yes 🗹	No 🗌	NA 🗆	
6. Sample(s) ir	n proper container(s	3)?	Yes 🗸	No 🗌		
7. Sufficient sar	mple volume for inc	dicated test(s)?	Yes 🔽	No 🗌		
8. Are samples	(except VOA and	ONG) properly preserved?	Yes 🗹	No 🗆		
9. Was preserv	ative added to bott	les?	Yes	No 🗹	NA 🗆	
10.VOA vials ha	ave zero headspace	e?	Yes	No 🗆	No VOA Vials 🗹	
11. Were any sa	ample containers re	eceived broken?	Yes	No 🗹	# of preserved	
10 p	and analytic testing in	h-1-0	<b>Y</b>	No []	bottles checked for pH:	
	vork match bottle la pancies on chain of		Yes 🔽	No 📙	·	or >12 unless noted)
13. Are matrices	correctly identified	on Chain of Custody?	Yes 🗹	No 🗆	Adjusted?	
	at analyses were re		Yes 🗹	No 🗌		
	ling times able to b customer for autho		Yes 🗹	No 📙	Checked by:	
Special Handi	ling (if applica	ble)				
		pancies with this order?	Yes	No 🗌	NA 🗹	
	Notified:		Date:			
By Who			•	Phone Fax	In Person	!
Regard	<u></u>		via: Unividit	none rax		
	nstructions:					
17. Additional re						
18. Cooler Info	rmation					
Cooler No		ndition   Seal Intact   Seal	No Seal Date	Signed By		
1	2.9 Goo	d Yes				

Particular   Particular   Project Name:   Pr	,	nam	-o	unain-or-custody Record	ושווים ווווים.		SANG			•		i	1	-	1	1	į	1
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Fleaker     Project Manager     Project Manager	Phone	# (50)			. 1	XCAUATTOA						Analy	sis F	Seque	st			1
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Time   Matrix   Sample Request   D   Container Preservative   HEALNO   Type	Accred	itation				1 1		_					101	280				- (1)
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Time Matrix Sample Request ID Container Preservative HEAL No. 14 7 15 8 14 8 16 16 16 16 16 16 16 16 16 16 16 16 16	O EDC	(Type)			Sample Tem	Serature: 2	2	_				_	JN'I	-		_		N/
1302 501 37-1497 Bas Jan 1 402 x 1 COU X X X X X X X X X X X X X X X X X X X	Date	Time			Container Type and #	Preservative Type	Ē			7-74-74			O,3) snoinA					aolddi 9 10
1307   11   38-1264   314	Sopor	1302			60	COOL	1007-	×	×							×		
Time: Reinquished by:   S31   Machina   Received by:   San   Time   Remarks:   San   Specifical   San    3.1	1307		Rose	71	11.	200-	>	>		-			-	-	>	-		
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Time: Reinquished by,  Received by:  Time: Reinfauished by,  Received by:  Time: Reinfauished by,  Received by:  Time: Reinfauished by.  Date Time Remarks. By, By Content  NID: UHIXON EUR.  NID: UHIXON EUR.  1757 Multiput Malta.  1757 Multiput Mult											H				+			
Time: Relinquished by,  [53]  [153]  [153]  [154]  [155]																		
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10/17 1751 Junating Water Capully 0800		Time: [53]		ed by Stocky	Received by: Nuclina Received by:	July		Кета	500	1	マニー	200	520	i III	1 1	RNS &	35.5	49
	11/0/	1751	June	the Water		1	XX0 FILLIS								3 1			



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

March 16, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703654

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/14/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1703654**Date Reported: **3/16/2017**

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 39-West Wall/North

Project: Florance GC J 16A

Collection Date: 3/13/2017 2:42:00 PM

**Lab ID:** 1703654-001 **Matrix:** MEOH (SOIL) **Received Date:** 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	3/14/2017 11:11:50 A	M 30685
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analys	st: TOM
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	3/14/2017 10:37:38 A	M 30671
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/14/2017 10:37:38 A	M 30671
Surr: DNOP	92.4	70-130	%Rec	1	3/14/2017 10:37:38 A	M 30671
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	3/14/2017 9:01:14 AM	30654
Surr: BFB	81.2	54-150	%Rec	1	3/14/2017 9:01:14 AM	30654
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.017	mg/Kg	1	3/14/2017 9:01:14 AM	30654
Toluene	ND	0.035	mg/Kg	1	3/14/2017 9:01:14 AM	30654
Ethylbenzene	ND	0.035	mg/Kg	1	3/14/2017 9:01:14 AM	30654
Xylenes, Total	ND	0.070	mg/Kg	1	3/14/2017 9:01:14 AM	30654
Surr: 4-Bromofluorobenzene	89.8	66.6-132	%Rec	1	3/14/2017 9:01:14 AM	30654

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 11
	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

#### Lab Order **1703654**

Date Reported: 3/16/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT:Blagg EngineeringClient Sample ID: 40-West Wall/NorthProject:Florance GC J 16ACollection Date: 3/13/2017 2:44:00 PMLab ID:1703654-002Matrix: MEOH (SOIL)Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	3/14/2017 11:24:15 AM	A 30685
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	3/14/2017 11:02:11 AM	A 30671
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/14/2017 11:02:11 AM	A 30671
Surr: DNOP	93.3	70-130	%Rec	1	3/14/2017 11:02:11 AM	<i>I</i> 30671
EPA METHOD 8015D: GASOLINE RANG	E				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	3/14/2017 9:27:35 AM	30654
Surr: BFB	67.2	54-150	%Rec	1	3/14/2017 9:27:35 AM	30654
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.018	mg/Kg	1	3/14/2017 9:27:35 AM	30654
Toluene	ND	0.035	mg/Kg	1	3/14/2017 9:27:35 AM	30654
Ethylbenzene	ND	0.035	mg/Kg	1	3/14/2017 9:27:35 AM	30654
Xylenes, Total	ND	0.070	mg/Kg	1	3/14/2017 9:27:35 AM	30654
Surr: 4-Bromofluorobenzene	73.7	66.6-132	%Rec	1	3/14/2017 9:27:35 AM	30654

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

# Lab Order **1703654**Date Reported: **3/16/2017**

Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Florance GC J 16A

**Project:** 

Client Sample ID: 41-West Wall/North

W Sample container temperature is out of limit as specified

**Collection Date:** 3/13/2017 2:47:00 PM

**Lab ID:** 1703654-003 **Matrix:** MEOH (SOIL) **Received Date:** 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	3/14/2017 11:36:39 AM	A 30685
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	3/14/2017 11:26:43 AN	A 30671
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/14/2017 11:26:43 AN	A 30671
Surr: DNOP	91.7	70-130	%Rec	1	3/14/2017 11:26:43 AN	A 30671
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	3/14/2017 9:53:56 AM	30654
Surr: BFB	65.8	54-150	%Rec	1	3/14/2017 9:53:56 AM	30654
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.018	mg/Kg	1	3/14/2017 9:53:56 AM	30654
Toluene	ND	0.037	mg/Kg	1	3/14/2017 9:53:56 AM	30654
Ethylbenzene	ND	0.037	mg/Kg	1	3/14/2017 9:53:56 AM	30654
Xylenes, Total	ND	0.074	mg/Kg	1	3/14/2017 9:53:56 AM	30654
Surr: 4-Bromofluorobenzene	73.4	66.6-132	%Rec	1	3/14/2017 9:53:56 AM	30654

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 11
	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

# Lab Order **1703654**Date Reported: **3/16/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: TH101-Grab@31'

**Project:** Florance GC J 16A **Collection Date:** 3/13/2017 3:01:00 PM

**Lab ID:** 1703654-004 **Matrix:** MEOH (SOIL) **Received Date:** 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 11:49:04 AM	1 30685
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	3/14/2017 11:51:28 AM	1 30671
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/14/2017 11:51:28 AM	1 30671
Surr: DNOP	90.9	70-130	%Rec	1	3/14/2017 11:51:28 AM	1 30671
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	3/14/2017 10:20:21 AM	1 30654
Surr: BFB	70.4	54-150	%Rec	1	3/14/2017 10:20:21 AM	1 30654
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.018	mg/Kg	1	3/14/2017 10:20:21 AM	1 30654
Toluene	ND	0.036	mg/Kg	1	3/14/2017 10:20:21 AM	1 30654
Ethylbenzene	ND	0.036	mg/Kg	1	3/14/2017 10:20:21 AM	1 30654
Xylenes, Total	ND	0.072	mg/Kg	1	3/14/2017 10:20:21 AM	1 30654
Surr: 4-Bromofluorobenzene	77.6	66.6-132	%Rec	1	3/14/2017 10:20:21 AM	1 30654

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 11
	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 **1703654**

## Date Reported: 3/16/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: TH101-North Wall

Project: Florance GC J 16A

Collection Date: 3/13/2017 2:53:00 PM

**Lab ID:** 1703654-005 **Matrix:** MEOH (SOIL) **Received Date:** 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 12:01:29 PM	30685
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analyst	:: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	3/14/2017 12:16:05 PM	30671
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/14/2017 12:16:05 PM	30671
Surr: DNOP	88.6	70-130	%Rec	1	3/14/2017 12:16:05 PM	30671
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	3/14/2017 10:46:33 AM	30654
Surr: BFB	77.3	54-150	%Rec	1	3/14/2017 10:46:33 AM	30654
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	3/14/2017 10:46:33 AM	30654
Toluene	ND	0.037	mg/Kg	1	3/14/2017 10:46:33 AM	30654
Ethylbenzene	ND	0.037	mg/Kg	1	3/14/2017 10:46:33 AM	30654
Xylenes, Total	ND	0.075	mg/Kg	1	3/14/2017 10:46:33 AM	30654
Surr: 4-Bromofluorobenzene	84.1	66.6-132	%Rec	1	3/14/2017 10:46:33 AM	30654

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 11
	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

# Lab Order **1703654**Date Reported: **3/16/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TH101-West Wall

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 3:09:00 PM

 Lab ID:
 1703654-006
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	3/14/2017 12:13:54 P	M 30685
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analys	st: TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	3/14/2017 12:40:54 P	M 30671
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/14/2017 12:40:54 P	M 30671
Surr: DNOP	91.0	70-130	%Rec	1	3/14/2017 12:40:54 P	M 30671
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	3/14/2017 11:12:45 A	M 30654
Surr: BFB	78.6	54-150	%Rec	1	3/14/2017 11:12:45 A	M 30654
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.018	mg/Kg	1	3/14/2017 11:12:45 A	M 30654
Toluene	ND	0.036	mg/Kg	1	3/14/2017 11:12:45 A	M 30654
Ethylbenzene	ND	0.036	mg/Kg	1	3/14/2017 11:12:45 A	M 30654
Xylenes, Total	ND	0.072	mg/Kg	1	3/14/2017 11:12:45 A	M 30654
Surr: 4-Bromofluorobenzene	86.3	66.6-132	%Rec	1	3/14/2017 11:12:45 A	M 30654

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 11
	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 **1703654**

Date Reported: 3/16/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TH101-Base@25'

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 3:12:00 PM

 Lab ID:
 1703654-007
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 12:26:19 PM	1 30685
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	3/14/2017 1:05:32 PM	30671
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/14/2017 1:05:32 PM	30671
Surr: DNOP	93.6	70-130	%Rec	1	3/14/2017 1:05:32 PM	30671
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	3/14/2017 11:39:01 AN	1 30654
Surr: BFB	76.7	54-150	%Rec	1	3/14/2017 11:39:01 AN	1 30654
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.018	mg/Kg	1	3/14/2017 11:39:01 AN	1 30654
Toluene	ND	0.037	mg/Kg	1	3/14/2017 11:39:01 AM	1 30654
Ethylbenzene	ND	0.037	mg/Kg	1	3/14/2017 11:39:01 AN	1 30654
Xylenes, Total	ND	0.074	mg/Kg	1	3/14/2017 11:39:01 AN	1 30654
Surr: 4-Bromofluorobenzene	83.4	66.6-132	%Rec	1	3/14/2017 11:39:01 AM	1 30654

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 7 of 11
	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#: **1703654** 

16-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30685 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30685 RunNo: 41363

Prep Date: 3/14/2017 Analysis Date: 3/14/2017 SeqNo: 1297164 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30685 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30685 RunNo: 41363

Prep Date: 3/14/2017 Analysis Date: 3/14/2017 SeqNo: 1297165 Units: mg/Kg

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

Chloride 15 1.5 15.00 0 96.7 90 110

#### 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

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

4.1

**Blagg Engineering** 

WO#: 1703654

16-Mar-17

Project:	Florance C	GC J 16A									
Sample ID LC:	S-30671	SampTy	pe: <b>LC</b>	s	Tes	tCode: <b>E</b>	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: LC:	ss	Batch	ID: <b>30</b>	671	F	RunNo: 4	1353				
Prep Date: 3/	14/2017	Analysis Da	te: <b>3/</b>	14/2017	5	SeqNo: 1	295899	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organ	nics (DRO)	45	10	50.00	0	89.1	63.8	116			
Surr: DNOP		4.5		5.000		90.1	70	130			
Sample ID MB	3-30671	SampTy	pe: <b>M</b> E	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: PB	S	Batch	ID: <b>30</b>	671	F	RunNo: 4	1353				
Prep Date: 3/	14/2017	Analysis Da	te: <b>3/</b>	14/2017	5	SeqNo: 1	295900	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organ	nics (DRO)	ND	10								
Motor Oil Range Org	ganics (MRO)	ND	50								
Surr: DNOP		9.5		10.00		95.2	70	130			
Sample ID 170	03654-001AMS	SampTy	ре: М\$	6	Tes	tCode: E	PA Method	8015M/D: Di	esel Range	e Organics	
I					_		4050				
Client ID: 39-	West Wall/North	n Batch	ID: <b>30</b>	671	ŀ	RunNo: 4	1353				
		n Batch Analysis Da				Runno: <b>4</b> SeqNo: <b>1</b>		Units: mg/k	(g		
		-		14/2017				Units: mg/k	<b>(g</b> %RPD	RPDLimit	Qual

Sample ID 1703654-001AMS	<b>D</b> SampT	ype: MS	SD	Test	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: 39-West Wall/Nor	rth Batch	1D: <b>30</b>	671	R	RunNo: 4	1353				
Prep Date: 3/14/2017	Analysis D	ate: 3/	14/2017	S	SeqNo: 1	296392	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.5	47.71	2.709	84.5	51.6	130	3.74	20	
Surr: DNOP	4.3		4.771		89.6	70	130	0	0	

86.8

70

130

4.713

#### 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
- 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
- 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 9 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1703654

16-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30654 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 30654 RunNo: 41364

Prep Date: 3/13/2017 Analysis Date: 3/14/2017 SeqNo: 1296623 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 750 1000 74.8 54 150

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-30654 SampType: LCS

Client ID: LCSS Batch ID: 30654 RunNo: 41364

980

Prep Date: 3/13/2017 Analysis Date: 3/14/2017 SeqNo: 1296624 Units: mg/Kg

1000

LowLimit Analyte Result **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 5.0 25.00 100 76.4 125

98.1

54

150

#### 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

Page 10 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703654** 

16-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30654 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 30654 RunNo: 41364 Prep Date: 3/13/2017 Analysis Date: 3/14/2017 SeqNo: 1296641 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 Surr: 4-Bromofluorobenzene 0.83 1.000 83.0 66.6 132

Sample ID LCS-30654	Samp	Type: <b>LC</b>	s	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batc	h ID: <b>30</b>	654	F	RunNo: 4	1364				
Prep Date: 3/13/2017	Analysis [	Date: <b>3/</b>	14/2017	S	SeqNo: 1	296642	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.1	80	120			
Toluene	0.98	0.050	1.000	0	98.5	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.0	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	0.84		1.000		83.7	66.6	132			

#### Qualifiers:

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

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Page 11 of 11



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: **BLAGG** Work Order Number: 1703654 RcptNo: 1 Received by/date: Logged By: 3/14/2017 7:35:00 AM Lindsay Mangin Completed By: Lindsay Mangin 3/14/2017 7:49:38 AM Reviewed By: 13/14/17 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 No 🗌 NA 🗌 4. Was an attempt made to cool the samples? Yes 🗸 No 🗆 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 🗸 7. Sufficient sample volume for indicated test(s)? Yes 🗸 No Yes 🗸 Nο 8. Are samples (except VOA and ONG) properly preserved? No 🗹 9. Was preservative added to bottles? Yes 🗌 NA . Yes 🗌 10. VOA vials have zero headspace? No 🗔 No VOA Vials Yes No 🗸 11. Were any sample containers received broken? # of preserved bottles checked No 🗌 Yes 🗸 for pH: 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? Yes 🗸 14. Is it clear what analyses were requested? No No 🗌 Checked by: 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 🔽 Person Notified: Date By Whom: Via: ☐ eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Condition | Seal Intact | Seal No | Temp ºC Seal Date Signed By 1.8 Good Yes

1															
Client	Client DP AMERICA	WESTE A		□ Standard	XRush		Л	V	2 4	MALL ENVI	12	1	5 0	ANALYSTS LABORATORY	AL
	BAGS	ENGLA	ENGINEERWY INC.	Project Name.	1			Ш	*	w.halle	nviron	www.hallenvironmental.com	9 00	Y Y	S S
Mailing	Mailing Address:	1000		FLORANCE GC	7	V91	4	901 H	4901 Hawkins NE -		Albugu	Albuquerone NM 87109	MN	87109	
				Project #				Tel. 50	Tel. 505-345-3975		T X	505-345-4107	5.4	07	
Phone #:	(505) #	025 (50	0-1183							An	Analysis	Request	ī		
email	email or Fax#:			Project Manager:	ger:		_	-	H		(10)		H		
QA/QC Packa	CA/OC Package:		evel 4 /Full Validation	J. B.Ke	50		_			(SM	05"00	oCB,2	_		
Accreditation	itation	1		Sampler: J.	Sparts :			4.4.1	_	IS 02	q. <sub>s</sub> Ol	1 Z80	_		
□ NELAP	AP	□ Other	er	On Ice:	Z Yes	ON II				_		8/	7.0		
□ EDC	EDD (Type)			Sample Temperature:	Serature: 1/8						-	_	100		
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX + ME	82108 H9T	TPH (Metho	r£8) z'HA9	RCRA 8 ME O.A) snoinA	oitee9 1808	OV) 808S8 im98) 07S8	כוורס צון	
15/2017	2441	501L	39-WEST WEIGHT	402×1	Car	120-	-	×			-			×	
Н	ከትተ	R	40- West Wallham		1	700-	-	~					-		
71	1447	35	4) - west wall passent			-0.72							-		
И	1501	14	TH 101- MULTINUARY SPAN			100h									
×	H53	1	TH 101-Namy Wall			500-			Н						
//	(509	14	TH 101- West Wall			93.1		ř							
	1512	=	TH 101-845 @ 25'			409	-								
													++		
3/3/17 Date:	13 17   1705	Reinquished by:	Time: Relinquished by Sagy Received by.  Time: Relinquished by:  2040 Mucha (Dalla)	Received by.	1 Jacobs (38/12)	3/13/17 170x VIB VAIXONEVRM  Shid 13/17 170x VIB VAIXONEVRM  Deta Time WBs: L1-0016D-E: FARNCECT IL	Remarks	3	BLL B VID V	SP VHIXONEVRA L1-5016D-	NEVR 016J	i į	GUNAGE FER	CONTACT: STAVE M.	Nasron 16,4



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

March 17, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703853

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/16/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order **1703853**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/17/2017

**CLIENT:** Blagg Engineering Client Sample ID: 42-West Wall

 Project:
 Florance GC J 16A
 Collection Date: 3/15/2017 3:17:00 PM

 Lab ID:
 1703853-001
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	3/16/2017 12:27:58 PM	30730
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst	MAB
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	3/16/2017 9:35:10 AM	30722
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/16/2017 9:35:10 AM	30722
Surr: DNOP	92.3	70-130	%Rec	1	3/16/2017 9:35:10 AM	30722
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	3/16/2017 9:46:01 AM	G41423
Surr: BFB	90.9	54-150	%Rec	1	3/16/2017 9:46:01 AM	G41423
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	3/16/2017 9:46:01 AM	B41423
Toluene	ND	0.037	mg/Kg	1	3/16/2017 9:46:01 AM	B41423
Ethylbenzene	ND	0.037	mg/Kg	1	3/16/2017 9:46:01 AM	B41423
Xylenes, Total	ND	0.074	mg/Kg	1	3/16/2017 9:46:01 AM	B41423
Surr: 4-Bromofluorobenzene	124	66.6-132	%Rec	1	3/16/2017 9:46:01 AM	B41423

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	H Holding times for preparation or analysis exceeded J Analyte detected below quantitat		Analyte detected below quantitation limits Page 1 of 8				
	ND Not Detected at the Reporting Limit			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				

#### Lab Order **1703853**

Date Reported: 3/17/2017

3/16/2017 10:09:28 AM B41423

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Surr: 4-Bromofluorobenzene

Client Sample ID: 43-West Wall

 Project:
 Florance GC J 16A
 Collection Date: 3/15/2017 3:21:00 PM

 Lab ID:
 1703853-002
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses Result **PQL Qual Units DF** Date Analyzed Batch **EPA METHOD 300.0: ANIONS** Analyst: MRA Chloride ND 30 mg/Kg 20 3/16/2017 12:40:23 PM 30730 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: MAB Diesel Range Organics (DRO) ND 9.2 mg/Kg 3/16/2017 10:02:23 AM 30722 Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 3/16/2017 10:02:23 AM 30722 Surr: DNOP 91.8 70-130 %Rec 3/16/2017 10:02:23 AM 30722 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 3.8 mg/Kg 1 3/16/2017 10:09:28 AM G41423 Surr: BFB 88.3 %Rec 3/16/2017 10:09:28 AM G41423 54-150 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.019 mg/Kg 1 3/16/2017 10:09:28 AM B41423 Toluene ND 0.038 mg/Kg 3/16/2017 10:09:28 AM B41423 1 Ethylbenzene ND 0.038 mg/Kg 1 3/16/2017 10:09:28 AM B41423 3/16/2017 10:09:28 AM B41423 Xylenes, Total ND 0.076 mg/Kg

66.6-132

%Rec

122

*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank			
D	Sample Diluted Due to Matrix	E	Value above quantitation range			
		J	Analyte detected below quantitation limits Page 2 of 8			
		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			
	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			

#### Lab Order 1703853

Date Reported: 3/17/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: 44-West Wall

 Project:
 Florance GC J 16A
 Collection Date: 3/15/2017 3:25:00 PM

 Lab ID:
 1703853-003
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/16/2017 12:52:48 PM	30730
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst	: MAB
Diesel Range Organics (DRO)	11	9.7	mg/Kg	1	3/16/2017 10:29:40 AM	30722
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/16/2017 10:29:40 AM	30722
Surr: DNOP	93.9	70-130	%Rec	1	3/16/2017 10:29:40 AM	30722
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	3/16/2017 10:32:54 AM	G41423
Surr: BFB	87.5	54-150	%Rec	1	3/16/2017 10:32:54 AM	G41423
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.018	mg/Kg	1	3/16/2017 10:32:54 AM	B41423
Toluene	ND	0.036	mg/Kg	1	3/16/2017 10:32:54 AM	B41423
Ethylbenzene	ND	0.036	mg/Kg	1	3/16/2017 10:32:54 AM	B41423
Xylenes, Total	ND	0.071	mg/Kg	1	3/16/2017 10:32:54 AM	B41423
Surr: 4-Bromofluorobenzene	120	66.6-132	%Rec	1	3/16/2017 10:32:54 AM	B41423

0 1'6'	*	V1 1 M ' C + ' 1 1	D	A 1 ( 1 ( ( 1 ) 1 ) 1 ( ( ( 1 ) 1 ) 1 ( ( ( (			
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 8			
	ND	Not Detected at the Reporting Limit	P	ue above quantitation range ulyte detected below quantitation limits uple pH Not In Range oorting Detection Limit			
	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#: **1703853** 

17-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30730 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **30730** RunNo: **41429** 

Prep Date: 3/16/2017 Analysis Date: 3/16/2017 SeqNo: 1299397 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30730 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30730 RunNo: 41429

Prep Date: 3/16/2017 Analysis Date: 3/16/2017 SeqNo: 1299398 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.9 90 110

#### 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 8

**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

Blagg Engineering

WO#: 1703853

17-Mar-17

Project:	Florance	GC J 16A									
Sample ID	MB-30722 SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID:	PBS	Batch ID: 30722		F	RunNo: <b>41403</b>						
Prep Date:	3/16/2017	Analysis Date: 3/16/2017		S	SeqNo: <b>1297887</b>		Units: mg/Kg				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
=	Organics (DRO)	ND	10								
Motor Oil Rang Surr: DNOP	e Organics (MRO)	ND 10	50	10.00		104	70	130			
Suil. DIVOP		10		10.00		104	70	130			
Sample ID	LCS-30722	SampTy	pe: LC	s	Tes	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: <b>30</b>	722	F	RunNo: 4	1403				
Prep Date:	3/16/2017	Analysis Date: 3/16/2017			SeqNo: <b>1298115</b>			Units: mg/Kg			
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	Organics (DRO)	48	10	50.00	0	96.9	63.8	116			
Surr: DNOP		4.9		5.000		98.8	70	130			
Sample ID	1703853-001AMS	SampTy	ре: М\$	3	Tes	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	42-West Wall	Batch	ID: <b>30</b>	722	RunNo: 41402						
Prep Date:	3/16/2017	Analysis Da	ite: 3/	16/2017	SeqNo: <b>1298613</b>			Units: mg/Kg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
=	Organics (DRO)	51	9.3	46.60	4.004	102	51.6	130			
Surr: DNOP		4.4		4.660		95.4	70	130			
Sample ID	1703853-001AMSI	<b>D</b> SampTy	ре: М\$	SD	Tes	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	42-West Wall	Batch	ID: <b>30</b>	722	F	RunNo: 4	1402				
Prep Date:	ate: 3/16/2017 Analysis Date: 3/16/2017 SeqNo: 1298658 Units: mg/Kg										
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	Organics (DRO)	51	9.5	47.71	4.004	99.2	51.6	130	0.239	20	
Surr: DNOP		4.4		4.771		92.9	70	130	0	0	
Sample ID	Sample ID LCS-30698 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics										
Client ID:	Client ID: LCSS		Batch ID: 30698			RunNo: 41403					
Prep Date:	3/15/2017	Analysis Da	ite: 3/	16/2017	S	SeqNo: 1	299328	Units: %Re	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.1		5.000		102	70	130			
Sample ID	MB-30698	SampTy	ре: МЕ	BLK	Tes	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: <b>30</b>	698	F	RunNo: 4	1403				
Prep Date:	3/15/2017	Analysis Da	ite: 3/	16/2017	8	SeqNo: 1	299329	Units: %Re	С		
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

Е Value above quantitation range

J Analyte detected below quantitation limits

Page 5 of 8

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#: **1703853** 

17-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30698 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 30698 RunNo: 41403

Prep Date: 3/15/2017 Analysis Date: 3/16/2017 SeqNo: 1299329 Units: %Rec

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

Surr: DNOP 10 10.00 101 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#: **1703853** 

17-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: G41423 RunNo: 41423

Prep Date: Analysis Date: 3/16/2017 SeqNo: 1299267 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 89.0 54 150

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

Client ID: LCSS Batch ID: G41423 RunNo: 41423

Prep Date: Analysis Date: 3/16/2017 SeqNo: 1299268 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 20 5.0 25.00 81.2 76.4 125 930 93.3 Surr: BFB 1000 54 150

#### 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.

3.1

1.3

0.10

WO#: **1703853** 

17-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: B41423 RunNo: 41423

Prep Date: Analysis Date: 3/16/2017 SeqNo: 1299305 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 1.2 1.000 121 66.6 132

3.000

1.000

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: **B41423** RunNo: 41423 Prep Date: Analysis Date: 3/16/2017 SeqNo: 1299306 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.98 0.025 1.000 0 97.9 80 120 Benzene Toluene 0.99 0.050 1.000 0 99.0 80 120 Ethylbenzene 0.050 1.000 0 103 80 120 1.0

0

104

126

80

66.6

120

132

#### Qualifiers:

Xylenes, Total

Surr: 4-Bromofluorobenzene

\* 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 Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name:	BLAGG	1	Work O	rder Number:	1703853		RcptNo:	1
Received by/o	date:		03/11/17	7				
Logged By:	Lindsay Ma	i angin	3/16/2017	7:09:00 AM		July Allego		İ
Completed By	/: Lindsay Ma	angin	3/16/2017	7:35:09 AM		Strady Happy		
Reviewed By:	$\omega$	7	03116	117		000		
Chain of Co	<u>ustody</u>							
1. Custody s	seals intact on sa	imple bottles?			Yes 🗌	No 🗆	Not Present 🗹	
2. Is Chain o	of Custody comp	lete?			Yes 🗸	No 🗆	Not Present	
3. How was	the sample deliv	ered?			<u>Courier</u>			
<u>Log In</u>								
4. Was an a	ittempt made to	cool the samples	s?		Yes 🗸	No 🗆	NA $\square$	
5. Were all s	samples received	d at a temperatur	re of >0°C t	to 6.0°C	Yes 🗹	No 🗆	NA $\square$	
6. Sample(s	s) in proper conta	niner(s)?			Yes 🗹	No 🗆		
7. Sufficient	sample volume	for indicated test	(s)?		Yes 🗹	No 🗆		
8. Are samp	les (except VOA	and ONG) prope	erly preserve	ed?	Yes 🗹	No $\square$		
9. Was pres	ervative added to	bottles?			Yes 🗌	No 🗹	NA $\square$	
10. VOA vials	have zero head	space?			Yes 🗹	No 🗆	No VOA Vials □	
11, Were any	sample contain	ers received brok	ken?		Yes 🗆	No 🗹	# of preserved	
12. Does pap	erwork match bo	ttle labels?			Yes 🔽	No 🗆	bottles checked for pH:	
•	crepancies on ch	•				$\Box$	(<2 o Adjusted?	r >12 unless noted)
	-	ntified on Chain o	of Custody?		Yes ✓	No ∐	Adjusted:	
	what analyses w	•			Yes ✔ Yes ✔	No	Checked by:	
	olding times ablify customer for a				Yes 🗹	140		
Cassial Ha	ndlina (if ann	olioable)						
	ndling (if app				,	$\Box$		
16. Was clien	t notified of all di	screpancies with	this order?		Yes 🗀	No 🗆	NA 🗹	
	son Notified:			Date				
•	Whom:	······································		Via:	eMail	Phone  Fax	_ In Person	
	arding: nt Instructions:			***************************************	***************************************	·····		
17. Additiona		· ——· · · · · · · · · · · · · · · · · ·				<u></u>		
18. Cooler Ir								
Cooler		Condition S	Seal Intact	Seal No S	Seal Date	Signed By		
1	2.6	Good Ye		1		*		

Sample Request ID  42-West Wall  43-West Wall  44-West Wall	DAY HALL ENVIRONMENTAL DAY	CE 6C J 16A	Tel. 505-345-3975	(4)	(8021) (908) (801) (801) (801)	HPT 4 (0, 181) (1, 18) (1, 18) (1, 18) (1, 18) (1, 18)	ERE + SO O O O O O O O O O O O O O O O O O	Container Preservative HEAL No HEAL NO	02×1 COOL - COO   X   X   X	1 1 1 200- 1	1 1 200- 1		Received by:  MLL MCUS 3/1/17 1763  WBS Elevant: L1-0016D-E: FLRNCGCT16A  Received by:  A Date Time WBS Elevant: L1-0016D-E: FLRNCGCT16A
	Stody Record	JEERING INC PR	E CONT	- 1103		Other Sar	Sar		h /	43-West Well	-West		
Time Type) SZ1 SZ1 SZ1 SZ2 SZ2 SZ2 SZ2 SZ2 SZ2 SZ2 SZ2 SZ2 SZ2	Client BP AMERICA	BLAGE Mailing Address:		email or Fax#	OA/OC Package	Accreditation II NELAP	□ EDD (Type)	Date	718/1 1517	1251	1526		Date: Time: 75/7 1703 Date: Time



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

March 21, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703984

### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/18/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# **Analytical Report**Lab Order **1703984**

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/21/2017

CLIENT:Blagg EngineeringClient Sample ID: 45-West Base @-42'Project:Florance GC J 16ACollection Date: 3/17/2017 9:50:00 AMLab ID:1703984-001Matrix: MEOH (SOIL)Received Date: 3/18/2017 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	3/20/2017 12:15:55 PM	30796
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	3/20/2017 11:03:36 AM	30779
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/20/2017 11:03:36 AM	30779
Surr: DNOP	128	70-130	%Rec	1	3/20/2017 11:03:36 AM	30779
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.0	mg/Kg	1	3/20/2017 10:42:28 AM	30752
Surr: BFB	87.1	54-150	%Rec	1	3/20/2017 10:42:28 AM	30752
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.015	mg/Kg	1	3/20/2017 10:42:28 AM	30752
Toluene	ND	0.030	mg/Kg	1	3/20/2017 10:42:28 AM	30752
Ethylbenzene	ND	0.030	mg/Kg	1	3/20/2017 10:42:28 AM	30752
Xylenes, Total	ND	0.061	mg/Kg	1	3/20/2017 10:42:28 AM	30752
Surr: 4-Bromofluorobenzene	94.0	66.6-132	%Rec	1	3/20/2017 10:42:28 AM	30752

(BEI Note, Transit Survey on 3/30/2017: Actual depth @ - 35')

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 1 of 6
	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 **1703984**

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/21/2017

CLIENT:Blagg EngineeringClient Sample ID: 46-West Wall-NorthProject:Florance GC J 16ACollection Date: 3/17/2017 9:54:00 AMLab ID:1703984-002Matrix: MEOH (SOIL)Received Date: 3/18/2017 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/20/2017 12:28:20 PM	30796
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	S			Analyst	: ТОМ
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	3/20/2017 11:25:51 AM	30779
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/20/2017 11:25:51 AM	30779
Surr: DNOP	106	70-130	%Rec	1	3/20/2017 11:25:51 AM	30779
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.2	mg/Kg	1	3/20/2017 11:08:38 AM	30752
Surr: BFB	81.6	54-150	%Rec	1	3/20/2017 11:08:38 AM	30752
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.016	mg/Kg	1	3/20/2017 11:08:38 AM	30752
Toluene	ND	0.032	mg/Kg	1	3/20/2017 11:08:38 AM	30752
Ethylbenzene	ND	0.032	mg/Kg	1	3/20/2017 11:08:38 AM	30752
Xylenes, Total	ND	0.065	mg/Kg	1	3/20/2017 11:08:38 AM	30752
Surr: 4-Bromofluorobenzene	91.3	66.6-132	%Rec	1	3/20/2017 11:08:38 AM	30752

				-		
Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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 6		
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range		
	R	R RPD outside accepted recovery limits RL Reporting Detection Limit		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#: **1703984** 

21-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30796 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **30796** RunNo: **41508** 

Prep Date: 3/20/2017 Analysis Date: 3/20/2017 SeqNo: 1302226 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30796 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30796 RunNo: 41508

Prep Date: 3/20/2017 Analysis Date: 3/20/2017 SeqNo: 1302227 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 92.0 90 110

#### 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 6

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1703984** 

21-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID LCS-30779 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics LCSS Client ID: Batch ID: 30779 RunNo: 41496 SeqNo: 1301282 Prep Date: 3/20/2017 Analysis Date: 3/20/2017 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

 Diesel Range Organics (DRO)
 48
 10
 50.00
 0
 95.5
 63.8
 116

 Surr: DNOP
 4.9
 5.000
 97.8
 70
 130

Sample ID MB-30779 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 30779 RunNo: 41496

Prep Date: 3/20/2017 Analysis Date: 3/20/2017 SeqNo: 1301283 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 12 10.00 119 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 4 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1703984** 

21-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30752 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 30752 RunNo: 41507

Prep Date: 3/17/2017 Analysis Date: 3/20/2017 SeqNo: 1301576 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 700 1000 69.7 54 150

Sample ID LCS-30752 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 30752 RunNo: 41507

830

Prep Date: 3/17/2017 Analysis Date: 3/20/2017 SeqNo: 1301577 Units: mg/Kg

1000

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 29 5.0 25.00 115 76.4 125

82.6

54

150

#### 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
- 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

Page 5 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1703984** 

21-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30752 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 30752 RunNo: 41507 3/17/2017 Prep Date: Analysis Date: 3/20/2017 SeqNo: 1301599 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 ND 0.050

 Benzene
 ND
 0.025

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

Surr: 4-Bromofluorobenzene 0.76 1.000 76.3 66.6 132

Sample ID LCS-30752	Samp	Гуре: <b>LC</b>	s	Tes	tCode: El	tiles					
Client ID: LCSS	Batc	Batch ID: 30752			RunNo: 4						
Prep Date: 3/17/2017	ate: 3/17/2017 Analysis Date: 3/20/2017				SeqNo: 1	301600	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.98	0.025	1.000	0	97.8	80	120				
Toluene	1.0	0.050	1.000	0	99.9	80	120				
Ethylbenzene	1.0	0.050	1.000	0	100	80	120				
Xylenes, Total	3.1	0.10	3.000	0	103	80	120				
Surr: 4-Bromofluorobenzene	0.85		1.000		85.4	66.6	132				

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 6 of 6



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:	BLAGG		Work C	order Numbe	er: 17 <b>03</b>	984			RoptNo	p: 1
Received by/da	ite:	R	03/18	177						
Logged By:	Lindsay Ma	∵; ingin	3/18/2017	7 8:15:00 A	М		Julyth	, <del>g</del> o		:
Completed By:	Lindsay Ma	ngin	3/18/2017	7 9:24:08 A	М		Amby Alle	, , ,		
Reviewed By:	$\alpha$	1	03/2	0117			000	<i>)</i>		
Chain of Cus	stody									
1. Custody sea	als intact on sa	mple bottles?	•		Yes		No [	☐ No	t Present 🗹	
2. Is Chain of	Custody comple	ete?			Yes	<b>✓</b>	No [	] No	t Present 🗌	
3. How was the	e sample delive	ered?			Cou	<u>ier</u>				
Log In										
4. Was an atte	empt made to c	ool the samp	oles?		Yes	<b>~</b>	No [		NA 🗆	]
5. Were all sa	mples received	at a tempera	iture of >0° C	to 6.0°C	Yes	<b>✓</b>	No [		na 🗆	
6. Sample(s) i	in proper contai	iner(s)?			Yes	✓	No [			
7. Sufficient sa	ample volume f	or indicated t	est(s)?		Yes	<b>V</b>	No [			
8. Are samples	s (except VOA	and ONG) pr	operly preserve	ed?	Yes	<b>✓</b>	No 🗆			
9. Was preser	vative added to	bottles?			Yes		No 🔽		NA 🗆	
10.VOA vials h	ave zero heads	pace?			Yes		No 🗆	No V	OA Vials 🗹	
11. Were any s	ample containe	ers received b	roken?		Yes		No 🛚			· · ·
							_		preserved es checked	
12. Does paper	work match bot epancies on cha		۸		Yes	✓	No L	_ for p		or >12 unless noted)
13. Are matrices	·	•	•		Yes	<b>V</b>	No [	1	Adjusted?	or > 12 dilless floted)
14. Is it clear wh	_		•		Yes	$\overline{\mathbf{V}}$	No [			
15. Were all hol	lding times able	to be met?			Yes	<b>V</b>	No 🗆	]	Checked by:	
(ir no, notity	customer for a	utnorization.)						'		···
Special Hand	lling (if app	licable)								
16, Was client r	notified of all dis	screpancies v	vith this order?		Yes		No [		NA 🗹	
Perso	n Notified:			Date:		•				
By Wh	nom:			Via:	r ☐ eMa	ail 🗀	] Phone [ ] Fa	ax 🔲 In I	Person	
Regar	rding:									
Client	Instructions:									·
17. Additional r	emarks:									
18. Cooler Info			المعاما				1			
Cooler N	lo Temp ℃ 4.1	Condition Good	Seal Intact Yes	Seal No	Seal Da	ate	Signed By			
Ľ	I	1	1- <b>5</b> 0				L			

X Rush	Project Name: FLORANCE GC J 16A	Project #:		Project Manager.	(G98 i	on Sampler I. Budler P = = = = = = = = = = = = = = = = = =	40	Temperature: 4	Time Matrix Sample Request ID Container Preservative HEAL No. X X X X X X X X X X X X X X X X X X X	3/1/2017 0950 Soil 45-WEST BASE 8-42 402 X1 COCL -OC) X X X	2954 " 46-West Water North " " -COZ				Turne. Relinquished by. Received by. A 318 17 08 14 08 14 00.	Time: Reinquished by:     Date Time   W155 ELEMENT!
LL ENVIE	www.hallenvironmental.com	75 Fax 505-345-4107	Analysis Request	PAH's (8310 or 8270 SIMS)  RCRA 8 Metals  Anions (P,CI,NO <sub>2</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )  8081 Pesticides / 3082 PC8's								HIXONEVEN	19100-			
HALL ENVIRONMENTAL	www.hallenvironmental.com	345-4107	uest					OV-	8570 (Semi 8270 (Semi 8260B (VO)	×	×				VHIXONEVEN	O-F. FIRNCA
TAL	S S					()	1 10	(Y)	səlddu <b>8</b> riA						POXCH.	CT16A



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

March 23, 2017

Jeff Blagg Blagg Engineering P. O. Box 87

Bloomfield, NM 87413 TEL: (505) 632-1199 FAX (505) 632-3903

RE: FLORANCE GC J 16A OrderNo.: 1703A92

### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/22/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 1703A92

Received Date: 3/22/2017 7:30:00 AM

### Hall Environmental Analysis Laboratory, Inc.

Lab ID:

1703A92-001

Date Reported: 3/23/2017

**CLIENT:** Blagg Engineering Client Sample ID: 47-West Sidewall

Matrix: SOIL

**Project:** FLORANCE GC J 16A **Collection Date:** 3/21/2017 1:08:00 PM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Analyst:	MRA
Chloride	ND	30	mg/Kg	20 3/22/2017 11:13:57 AM	30843
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	<b>;</b>		Analyst:	TOM
Diesel Range Organics (DRO)	42	9.5	mg/Kg	1 3/22/2017 10:54:35 AM	30836
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1 3/22/2017 10:54:35 AM	30836
Surr: DNOP	104	70-130	%Rec	1 3/22/2017 10:54:35 AM	30836
EPA METHOD 8015D: GASOLINE RAM	NGE			Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1 3/22/2017 10:11:13 AM	G41577
Surr: BFB	125	54-150	%Rec	1 3/22/2017 10:11:13 AM	G41577
EPA METHOD 8021B: VOLATILES				Analyst:	NSB
Benzene	ND	0.017	mg/Kg	1 3/22/2017 10:11:13 AM	B41577
Toluene	ND	0.034	mg/Kg	1 3/22/2017 10:11:13 AM	B41577
Ethylbenzene	ND	0.034	mg/Kg	1 3/22/2017 10:11:13 AM	B41577
Xylenes, Total	ND	0.069	mg/Kg	1 3/22/2017 10:11:13 AM	B41577
Surr: 4-Bromofluorobenzene	110	66.6-132	%Rec	1 3/22/2017 10:11:13 AM	B41577

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 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## Analytical Report Lab Order 1703A92

Date Reported: 3/23/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: 48 West Sidewall

 Project:
 FLORANCE GC J 16A
 Collection Date: 3/21/2017 1:17:00 PM

 Lab ID:
 1703A92-002
 Matrix: SOIL
 Received Date: 3/22/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Analyst:	MRA
Chloride	ND	30	mg/Kg	20 3/22/2017 11:26:22 AM	30843
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3		Analyst:	TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1 3/22/2017 11:16:47 AM	30836
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1 3/22/2017 11:16:47 AM	30836
Surr: DNOP	105	70-130	%Rec	1 3/22/2017 11:16:47 AM	30836
EPA METHOD 8015D: GASOLINE RAM	NGE			Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1 3/22/2017 10:34:41 AM	G41577
Surr: BFB	90.3	54-150	%Rec	1 3/22/2017 10:34:41 AM	G41577
EPA METHOD 8021B: VOLATILES				Analyst:	NSB
Benzene	ND	0.017	mg/Kg	1 3/22/2017 10:34:41 AM	B41577
Toluene	ND	0.034	mg/Kg	1 3/22/2017 10:34:41 AM	B41577
Ethylbenzene	ND	0.034	mg/Kg	1 3/22/2017 10:34:41 AM	B41577
Xylenes, Total	ND	0.068	mg/Kg	1 3/22/2017 10:34:41 AM	B41577
Surr: 4-Bromofluorobenzene	108	66.6-132	%Rec	1 3/22/2017 10:34:41 AM	B41577

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

### **Qualifiers:** \* Value ex

- \* 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.

WO#: 1703A92

23-Mar-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

Sample ID MB-30843 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **30843** RunNo: **41580** 

Prep Date: 3/22/2017 Analysis Date: 3/22/2017 SeqNo: 1304961 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30843 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30843 RunNo: 41580

Prep Date: 3/22/2017 Analysis Date: 3/22/2017 SeqNo: 1304962 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.7 90 110

#### 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 6

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1703A92** 

23-Mar-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

Sample ID LCS-30836 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics LCSS Client ID: Batch ID: 30836 RunNo: 41566 SeqNo: 1303563 Prep Date: 3/22/2017 Analysis Date: 3/22/2017 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 48 50.00 0 96.8 63.8 116 Surr: DNOP 5.000 97.7 4.9 70 130

Sample ID MB-30836 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 30836 RunNo: 41566 Prep Date: 3/22/2017 Analysis Date: 3/22/2017 SeqNo: 1303564 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 10.00 101 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 4 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1703A92

23-Mar-17

**Client:** Blagg Engineering **Project:** FLORANCE GC J 16A

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

Client ID: **PBS** Batch ID: **G41577** RunNo: 41577

Prep Date: Analysis Date: 3/22/2017 SeqNo: 1304575 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 910 1000 90.8 54 150

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

Client ID: LCSS Batch ID: **G41577** RunNo: 41577

960

Prep Date: Analysis Date: 3/22/2017 SeqNo: 1304576 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 96.4 76.4 125

96.4

54

150

#### 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
- 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

Page 5 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1703A92** 

23-Mar-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

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

Client ID: PBS Batch ID: B41577 RunNo: 41577

Prep Date: Analysis Date: 3/22/2017 SeqNo: 1304581 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 1.000 106 66.6 132

Sample ID 100NG BTEX LC	CS Samp	Гуре: <b>LC</b>	s	Tes	tCode: E	tiles				
Client ID: LCSS	Batc	h ID: <b>B4</b>	1577	F	RunNo: 4					
Prep Date:	Analysis [	Date: 3/	22/2017	5	SeqNo: 1	304582	Units: mg/k	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.8	80	120			
Toluene	0.95	0.050	1.000	0	94.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	66.6	132			

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 6 of 6



#### 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:	BLAGG	Work Or	der Number:	1703A	\92		RcptN	lo: 1
Received by/dat	te:/	T 03/22/17	7					
Logged By:	Anne Thorne	3/22/2017	7:30:00 AM			anne Sham	_	
Completed By:	Anne Thorne	3/22/2017	7:51:43 AM			Aone Sh.		
Reviewed By:	as	03/2	2/17			CANA JI CO		
Chain of Cus	tody		•					
1. Custody sea	als intact on sam	ple bottles?		Yes		No 🗆	Not Present <b>⊻</b>	•
2. Is Chain of C	Custody complet	te?		Yes	✓	No 🗌	Not Present	
3. How was the	e sample deliver	ed?		Couri	<u>er</u>			
<u>Log In</u>								
4. Was an atte	empt made to co	ol the samples?		Yes	<b>✓</b>	No 🗌	NA [	
5. Were all sar	mples received a	at a temperature of >0° C to	6.0°C	Yes	<b>✓</b>	No 🗌	NA □	]
6. Sample(s) in	n proper contain	er(s)?		Yes	<b>✓</b>	No 🗌		
7. Sufficient sa	mple volume for	indicated test(s)?		Yes	<b>✓</b>	No 🗌		
8. Are samples	(except VOA a	nd ONG) properly preserved	?	Yes	✓	No 🗆		
9. Was preserv	ative added to b	pottles?		Yes		No 🗹	NA [	]
10. VOA vials ha	ave zero headsp	ace?		Yes		No 🗆	No VOA Vials ☑	· .
11. Were any sa	ample container	s received broken?		Yes		No 🗹		
						_	# of preserved bottles checked	
12. Does paperv	vork match bottl pancies on chai			Yes	✓	No 🗀	for pH:	2 or >12 unless noted)
		fied on Chain of Custody?		Yes	<b>~</b>	No 🗆	Adjusted?	2 or 12 amoss notedy
14. Is it clear wh				Yes		No 🗆		
15. Were all hold				Yes	<b>V</b>	No 🗌	Checked by	:
(If no, notify	customer for au	thorization.)				1		
Special Hand	lling (if appli	cable)						
		repancies with this order?		Yes		No 🗹	NA 🗆	]
Person	Notified:		Date		•			
By Wh	grana.		Via: ∫	ີ eMa	il 🖂	Phone  Fax	In Person	
Regard			L					
Client I	Instructions:			*************				
17. Additional re	emarks:							
18. Cooler Info	rmation							
Cooler No	Temp °C	Condition   Seal Intact   S	Seal No S	eal Da	te	Signed By	J	
1	3.0	Good Yes	Para de la companya d				_	

Client: 20	n-of-C	stody Record	Turn-Around Time.	Time:	SAME			_	Ī	4	Ź	/IR	ō	Σ	HALL ENVIRONMENT	AL	
72	AMERICA	₩.	□ Standard	K Rush				_	Ž	ANALYSIS	SI		AB	0	LABORATORY	NY.	
BLA66		ENGINEERING INC	Project Name:			,		_	www	haller	viron	71	<u> </u>	; )	) 		
Mailing Address:			FLORANCE	SE 60 Y	16A		4901	4901 Hawkins NE	ns N	1	Ibuau	Albuquerane, NM 87109	Σ	8710	<u>თ</u>		
			Project #:			ı	le F	Tel. 505-345-3975	5-39	10	Fax	505-345-4107	454	107	<b>)</b>		
Phone #:	505) 37	320- 1183								Ana	lysis	Analysis Request	est				
email or Fax#:	£.		Project Manager:	ger:							(*(			_			L
QA/QC Package: X Standard	je:	☐ Level 4 (Full Validation)	7. %	BLAGG						(SMI	)S'⁵Od	bCB₁౭					
Accreditation □ NELAP	□ Other	, e	Sampler: J.	J. BLAGE					(1.4	S 072	''ON'	Z808		(			(N
□ EDD (Type)			- W	A Les elature:					09 F								Y or
Date Time	e Matrix	Sample Request ID	Arcまいりた Container Type and # M-公社上す	Preservative Type	HEALNO.	BTEX + MTE	8TM + X3T8 ) 82108 H9T	TPH (Methoc	EDB (Methoc	0168) a'HA역 RCRA 8 Met	,IO,3) snoinA	8081 Pesticio	(AOV) 80828	/-imə2) 0728	CHLORIDE		Air Bubbles (
1/20x7 1308	50 Soll	47-West Sidewell	403×1	COOL	102	×	×							X			'
1317	7 11	48-West Sidewall	11	11	292	γ	X				_		$\vdash$	<u>ス</u>		-	
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Date: Time: 230	Relinquished by	1 Bless simus	Received by:	11/2	Date 2/17	Remarks:	arks: 1	וארר אנים: ענים:	8P V H(X	BP VHIXONEVRM	ž	CONTAGT:	ğ	<u>V</u>	STEVE MOSKAL	Kar	l
Date: Time:	Relifiquished by	hed by:	Received by:	) /	Date Time	- w85		<b>にとに</b> 人にとす。	e.,		00	(9)	i)	T.	L1-0016D-E:FirncgcJ16A	J 16	<u></u>
If necess;	ıry, samples sut	If necessary, samples submitted to Hall Environmental may be subcontracted to other accre	intracted to other act	redited laboratorie	dited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	ilidissod s	ty. Any 8	ub-contr	acted d	ata will )	e clear	y notate	don #	e analy	ical report.		



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

April 03, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703F37

### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 9 sample(s) on 3/31/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1703F37**Date Reported: **4/3/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: AREA 49

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 2:18:00 PM

 Lab ID:
 1703F37-001
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: LGT
Chloride	ND	30	mg/Kg	20	3/31/2017 10:56:40 AM	1 31010
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	3/31/2017 10:22:54 AN	1 31008
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/31/2017 10:22:54 AN	1 31008
Surr: DNOP	116	70-130	%Rec	1	3/31/2017 10:22:54 AN	1 31008
EPA METHOD 8015D: GASOLINE RANG	E				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	3/31/2017 9:03:41 AM	30995
Surr: BFB	73.7	54-150	%Rec	1	3/31/2017 9:03:41 AM	30995
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.018	mg/Kg	1	3/31/2017 9:03:41 AM	30995
Toluene	ND	0.036	mg/Kg	1	3/31/2017 9:03:41 AM	30995
Ethylbenzene	ND	0.036	mg/Kg	1	3/31/2017 9:03:41 AM	30995
Xylenes, Total	ND	0.071	mg/Kg	1	3/31/2017 9:03:41 AM	30995
Surr: 4-Bromofluorobenzene	80.1	66.6-132	%Rec	1	3/31/2017 9:03:41 AM	30995

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

# Lab Order **1703F37**Date Reported: **4/3/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: AREA 50

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 2:21:00 PM

 Lab ID:
 1703F37-002
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: LGT
Chloride	ND	30	mg/Kg	20	3/31/2017 11:09:05 AM	1 31010
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analys	: TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	3/31/2017 10:45:07 AM	1 31008
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/31/2017 10:45:07 AM	1 31008
Surr: DNOP	114	70-130	%Rec	1	3/31/2017 10:45:07 AM	1 31008
EPA METHOD 8015D: GASOLINE RANG	iΕ				Analys	: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	3/31/2017 9:30:03 AM	30995
Surr: BFB	75.5	54-150	%Rec	1	3/31/2017 9:30:03 AM	30995
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.018	mg/Kg	1	3/31/2017 9:30:03 AM	30995
Toluene	ND	0.037	mg/Kg	1	3/31/2017 9:30:03 AM	30995
Ethylbenzene	ND	0.037	mg/Kg	1	3/31/2017 9:30:03 AM	30995
Xylenes, Total	ND	0.074	mg/Kg	1	3/31/2017 9:30:03 AM	30995
Surr: 4-Bromofluorobenzene	84.5	66.6-132	%Rec	1	3/31/2017 9:30:03 AM	30995

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

Lab Order **1703F37**Date Reported: **4/3/2017** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: AREA 52

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 2:29:00 PM

 Lab ID:
 1703F37-003
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	3/31/2017 11:21:29 AN	1 31010
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	3/31/2017 11:07:26 AM	1 31008
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	3/31/2017 11:07:26 AM	1 31008
Surr: DNOP	116	70-130	%Rec	1	3/31/2017 11:07:26 AM	1 31008
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	3/31/2017 9:56:32 AM	30995
Surr: BFB	70.7	54-150	%Rec	1	3/31/2017 9:56:32 AM	30995
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	3/31/2017 9:56:32 AM	30995
Toluene	ND	0.037	mg/Kg	1	3/31/2017 9:56:32 AM	30995
Ethylbenzene	ND	0.037	mg/Kg	1	3/31/2017 9:56:32 AM	30995
Xylenes, Total	ND	0.075	mg/Kg	1	3/31/2017 9:56:32 AM	30995
Surr: 4-Bromofluorobenzene	80.0	66.6-132	%Rec	1	3/31/2017 9:56:32 AM	30995

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

## Lab Order **1703F37**Date Reported: **4/3/2017**

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: AREA 53

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 2:32:00 PM

 Lab ID:
 1703F37-004
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	3/31/2017 11:33:53 AN	1 31010
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	3/31/2017 11:29:38 AM	1 31008
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/31/2017 11:29:38 AM	1 31008
Surr: DNOP	109	70-130	%Rec	1	3/31/2017 11:29:38 AM	1 31008
EPA METHOD 8015D: GASOLINE RANG	<b>GE</b>				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	3/31/2017 10:23:02 AM	1 30995
Surr: BFB	67.8	54-150	%Rec	1	3/31/2017 10:23:02 AN	1 30995
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.018	mg/Kg	1	3/31/2017 10:23:02 AM	1 30995
Toluene	ND	0.037	mg/Kg	1	3/31/2017 10:23:02 AN	1 30995
Ethylbenzene	ND	0.037	mg/Kg	1	3/31/2017 10:23:02 AN	1 30995
Xylenes, Total	ND	0.073	mg/Kg	1	3/31/2017 10:23:02 AN	1 30995
Surr: 4-Bromofluorobenzene	76.3	66.6-132	%Rec	1	3/31/2017 10:23:02 AM	1 30995

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

Lab Order **1703F37**Date Reported: **4/3/2017** 

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: AREA 54

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 2:36:00 PM

 Lab ID:
 1703F37-005
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	st: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	3/31/2017 11:46:17 A	M 31010
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	S				Analys	st: TOM
Diesel Range Organics (DRO)	280	9.5		mg/Kg	1	3/31/2017 11:52:13 A	M 31008
Motor Oil Range Organics (MRO)	75	48		mg/Kg	1	3/31/2017 11:52:13 A	M 31008
Surr: DNOP	109	70-130		%Rec	1	3/31/2017 11:52:13 A	M 31008
EPA METHOD 8015D: GASOLINE RANG	E					Analys	st: NSB
Gasoline Range Organics (GRO)	8.1	7.4		mg/Kg	2	3/31/2017 10:49:26 A	M 30995
Surr: BFB	152	54-150	S	%Rec	2	3/31/2017 10:49:26 A	M 30995
EPA METHOD 8021B: VOLATILES						Analys	st: NSB
Benzene	ND	0.037		mg/Kg	2	3/31/2017 10:49:26 A	M 30995
Toluene	ND	0.074		mg/Kg	2	3/31/2017 10:49:26 A	M 30995
Ethylbenzene	ND	0.074		mg/Kg	2	3/31/2017 10:49:26 A	M 30995
Xylenes, Total	ND	0.15		mg/Kg	2	3/31/2017 10:49:26 A	M 30995
Surr: 4-Bromofluorobenzene	94.9	66.6-132		%Rec	2	3/31/2017 10:49:26 A	M 30995

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

Lab Order **1703F37**Date Reported: **4/3/2017** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: AREA 55

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 2:45:00 PM

 Lab ID:
 1703F37-006
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	3/31/2017 12:23:30 PM	M 31010
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	st: TOM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	3/31/2017 12:14:28 PM	√ 31008
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/31/2017 12:14:28 PM	M 31008
Surr: DNOP	106	70-130	%Rec	1	3/31/2017 12:14:28 PM	√l 31008
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	3/31/2017 11:15:48 AM	√ 30995
Surr: BFB	70.6	54-150	%Rec	1	3/31/2017 11:15:48 Af	√ 30995
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	3/31/2017 11:15:48 AM	√ 30995
Toluene	ND	0.039	mg/Kg	1	3/31/2017 11:15:48 AM	M 30995
Ethylbenzene	ND	0.039	mg/Kg	1	3/31/2017 11:15:48 AM	И 30995
Xylenes, Total	ND	0.077	mg/Kg	1	3/31/2017 11:15:48 AM	M 30995
Surr: 4-Bromofluorobenzene	77.8	66.6-132	%Rec	1	3/31/2017 11:15:48 AM	И 30995

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

Lab Order **1703F37**Date Reported: **4/3/2017** 

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: AREA 56

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 2:56:00 PM

 Lab ID:
 1703F37-007
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	3/31/2017 12:35:55 PM	1 31010
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	3/31/2017 12:36:56 PM	1 31008
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/31/2017 12:36:56 PM	1 31008
Surr: DNOP	109	70-130	%Rec	1	3/31/2017 12:36:56 PM	1 31008
EPA METHOD 8015D: GASOLINE RANG	SE .				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	3/31/2017 11:42:12 AM	1 30995
Surr: BFB	73.2	54-150	%Rec	1	3/31/2017 11:42:12 AM	1 30995
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	3/31/2017 11:42:12 AM	1 30995
Toluene	ND	0.037	mg/Kg	1	3/31/2017 11:42:12 AM	1 30995
Ethylbenzene	ND	0.037	mg/Kg	1	3/31/2017 11:42:12 AM	1 30995
Xylenes, Total	ND	0.074	mg/Kg	1	3/31/2017 11:42:12 AM	1 30995
Surr: 4-Bromofluorobenzene	81.2	66.6-132	%Rec	1	3/31/2017 11:42:12 AM	1 30995

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

# Lab Order **1703F37**Date Reported: **4/3/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: AREA 57

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 3:03:00 PM

 Lab ID:
 1703F37-008
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL (	)ual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	3/31/2017 12:48:19 PM	<i>I</i> 31010
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	;				Analys	t: TOM
Diesel Range Organics (DRO)	680	9.2		mg/Kg	1	3/31/2017 12:59:13 PM	<i>I</i> 31008
Motor Oil Range Organics (MRO)	130	46		mg/Kg	1	3/31/2017 12:59:13 PM	<i>I</i> 31008
Surr: DNOP	113	70-130		%Rec	1	3/31/2017 12:59:13 PM	<i>I</i> 31008
EPA METHOD 8015D: GASOLINE RAN	GE					Analys	t: NSB
Gasoline Range Organics (GRO)	120	18		mg/Kg	5	3/31/2017 12:08:32 PM	Л 30995
Surr: BFB	396	54-150	S	%Rec	5	3/31/2017 12:08:32 PM	Л 30995
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.092		mg/Kg	5	3/31/2017 12:08:32 PM	Л 30995
Toluene	ND	0.18		mg/Kg	5	3/31/2017 12:08:32 PM	Л 30995
Ethylbenzene	ND	0.18		mg/Kg	5	3/31/2017 12:08:32 PM	Л 30995
Xylenes, Total	1.0	0.37		mg/Kg	5	3/31/2017 12:08:32 PM	A 30995
Surr: 4-Bromofluorobenzene	103	66.6-132		%Rec	5	3/31/2017 12:08:32 PM	Л 30995

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

# Lab Order **1703F37**Date Reported: **4/3/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: AREA 51

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 2:26:00 PM

 Lab ID:
 1703F37-009
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/31/2017 1:00:44 PM	31010
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	S			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	3/31/2017 1:21:23 PM	31008
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	3/31/2017 1:21:23 PM	31008
Surr: DNOP	108	70-130	%Rec	1	3/31/2017 1:21:23 PM	31008
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	3/31/2017 12:34:49 PM	30995
Surr: BFB	80.6	54-150	%Rec	1	3/31/2017 12:34:49 PM	30995
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	3/31/2017 12:34:49 PM	30995
Toluene	ND	0.038	mg/Kg	1	3/31/2017 12:34:49 PM	30995
Ethylbenzene	ND	0.038	mg/Kg	1	3/31/2017 12:34:49 PM	30995
Xylenes, Total	ND	0.076	mg/Kg	1	3/31/2017 12:34:49 PM	30995
Surr: 4-Bromofluorobenzene	85.4	66.6-132	%Rec	1	3/31/2017 12:34:49 PM	30995

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#: **1703F37** 

03-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31010 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **31010** RunNo: **41802** 

Prep Date: 3/31/2017 Analysis Date: 3/31/2017 SeqNo: 1313317 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31010 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31010 RunNo: 41802

Prep Date: 3/31/2017 Analysis Date: 3/31/2017 SeqNo: 1313318 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.7 90 110

#### 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

Reporting Detection Limit

J Analyte detected below quantitation limits

D C 1 HN (I D

Page 10 of 13

P Sample pH Not In Range

RL

W Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1703F37** 

03-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID LCS-30969 SampType: LCS

Client ID: LCSS Batch ID: 30969 RunNo: 41755

Prep Date: 3/29/2017 Analysis Date: 3/30/2017 SeqNo: 1311683 Units: %Rec

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

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

%RPD

**RPDLimit** 

Qual

Surr: DNOP 5.2 5.000 104 70 130

 Sample ID
 MB-30969
 SampType:
 MBLK
 TestCode:
 EPA Method 8015M/D:
 Diesel Range Organics

 Client ID:
 PBS
 Batch ID:
 30969
 RunNo:
 41755

 Prep Date:
 3/29/2017
 Analysis Date:
 3/30/2017
 SeqNo:
 1311684
 Units:
 %Rec

 Analyte
 Result
 PQL
 SPK value
 SPK Ref Val
 %REC
 LowLimit
 HighLimit

 Surr: DNOP
 10
 10.00
 101
 70
 130

Sample ID LCS-31008 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 31008 RunNo: 41755 Prep Date: Analysis Date: 3/31/2017 SeqNo: 1312226 Units: mg/Kg 3/31/2017 Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Qual

 Diesel Range Organics (DRO)
 50
 10
 50.00
 0
 99.7
 63.8
 116

 Surr: DNOP
 4.9
 5.000
 98.7
 70
 130

Sample ID MB-31008 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 31008 RunNo: 41755

Prep Date: 3/31/2017 Analysis Date: 3/31/2017 SeqNo: 1312227 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 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 11 of 13

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1703F37

03-Apr-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30995 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 30995 RunNo: 41803

Prep Date: 3/30/2017 Analysis Date: 3/31/2017 SeqNo: 1312759 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 720 1000 72.1 54 150

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-30995 SampType: LCS

Client ID: LCSS Batch ID: 30995 RunNo: 41803

Prep Date: Analysis Date: 3/31/2017 SeqNo: 1312760 3/30/2017 Units: mg/Kg

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

Gasoline Range Organics (GRO) 29 5.0 25.00 115 76.4 125 900 90.4 Surr: BFB 1000 54 150

#### 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
- Sample container temperature is out of limit as specified

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## Hall Environmental Analysis Laboratory, Inc.

WO#: 1703F37

03-Apr-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID MB-30995 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 30995 RunNo: 41803 Prep Date: 3/30/2017 Analysis Date: 3/31/2017 SeqNo: 1312771 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 Surr: 4-Bromofluorobenzene 0.81 1.000 80.9 66.6 132

Sample ID LCS-30995 SampType: LCS				TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 30995			R	RunNo: 4					
Prep Date: 3/30/2017	Analysis Date: 3/31/2017			SeqNo: 1312772			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	104	80	120			
Toluene	1.1	0.050	1.000	0	106	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 4-Bromofluorobenzene	0.80		1.000		79.8	66.6	132			

#### 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

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

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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 **BLAGG** Work Order Number: 1703F37 Client Name: RcptNo: 1 Received By: 3/31/2017 6:56:00 AM Lindsay Mangin Completed By: Lindsay Mangin 3/31/2017 7:32:46 AM 3/31/17 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 Loa In No 🗌 NA 🗌 4. Was an attempt made to cool the samples? Yes 🗹 NA 🗆 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No 🗌 6. Sample(s) in proper container(s)? Yes 🔽 No 🗌 Yes 🔽 7. Sufficient sample volume for indicated test(s)? No 🗌 Yes 🗸 8. Are samples (except VOA and ONG) properly preserved? No 🗸 NA 🗌 Yes 9. Was preservative added to bottles? No 🗆 No VOA Vials 🗹 Yes 🔲 10.VOA vials have zero headspace? Yes 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? No  $\square$ Yes 🗸 13. Are matrices correctly identified on Chain of Custody? Yes 🗸 No 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) 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 1.5 Good Yes

Standard   Standard   Klush   Standard   Type   Typ		Shain	-of-Cı	Chain-of-Custody Record	Turn-Around Time:	Time;	いみが		-			1		-	-			
Subject   Subj	Client		AMANICA	*	☐ Standard	X Rush		11			Ž Ž		N P	¥ .	5	2	ATOD	. >
Flack-wife Set		2		E/G	Project Name	1		Ш		_	www	hallen	vironi	penta	9 00	2	20	
SOS - 320 - 1183   Project Received   Project Rec	Mailing	Addres:	100		FLORA	39	T 16A		4901	Hawk	N Su		prond	France	Z	87109		
Each:   Each:					Project #:				10	505-34	15-39		Fax	505-3	5-4	107		
Fooks   Area	Phone		-1	20-1183								Ana	lysis	Reque	st			ØY.
Sample Request   D. Container   C.	email	or Fax#:			Project Mana	ger:		-	-	las	Ì		(40	E	-			
Contains   Sample Request   Day   Contains   Sample   Type   Day   Contains   Day   Conta	QA/QC XStar	Package. ndard		☐ Level 4 (Full Validation)	5					11AL 1 01	95,000	(SIMIS)	)S,pOq	bcB,a				
Time   Matrix   Sample Request   Donainer   Preservative   Sample Temperature   Sample Temp	Accreo	litation			6					_	_	30/	NO <sup>3</sup>	2808	-			(1
Time   Matrix   Sample Request   D Container   Preservative   Fig.   F	O NE	AP	O D	er .	On Ice:		ON []	_				_	_	3/6	10	(4)		A 10
Heal No.   Heal No.	□ ED	(Type)			Sample Tem	perature.	\ <u>\</u>	_		_			_	_				(Y o
1418   Soll   AREA 49   402 ×   Cay   -001   X   X   X   X   X   X   X   X   X	Date		Matrix	Sample Request ID	Container Type and #	Preservative Type	1		A - 100 C C C C C C C C C C C C C C C C C C			and the second of the second						Air Bubbles
H2   AREA 50	13 fee		5012		403×	Cer	100-	×	×							1000		
1426 AREA 52 -073 1432 AREA 53 -074 1436 AREA 54 -006 1436 AREA 57 -007 1426 AREA 57 -007 1426 AREA 57 -007 1426 AREA 57 -007 1426 AREA 57 -008 1426 AREA 57 -008 1426 AREA 57 -008 1426 AREA 51 -009 1426 AREA 57 -008 1426 AREA 57 -008 1426 AREA 57 -008 1426 AREA 57 -008 1426 AREA 57 -008 1426 AREA 57 -009 1427 AREA 57 -009 1426 AREA 57	-						700-	7							-			
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1456   AREA 55   -006   -1074		1436		- 1			-02											
1456 AREA 51 1722 AREA 57 1724 AREA 57 1724 AREA 57 1725 AREA 57 1727 AND Step (Minds Louth 32/2 1717 1737 AND Step (Minds Louth 32/2 1717 1737 AND Step (Minds Louth 32/2 1717 1737 AND Step (Minds Louth 32/2 1717 1738 Received by (CS (S) (1/3 1/2)) 1738 Minds Lub (L) 0018 M - E: FLRNCGCT (L)		1445					-000											
1503   AREA 57   -008		1450		100			+90-			21	-	_						
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Time. Relinguished by Black Received by: The Received by: The Received by: The Received by: The Received by: The Mountain Date Ine Time L1-0018 N-E: FLRNCCCT II	-	1450		AREA 51		-	500						7.5			-		
Time. Relinguished by Black Received by:  The Relinguished by Received by (Mindty Louth 32/7 1717 VHLXONEVEN)  Time Relinguished by (Mindty II) Date Time Remarks: Blu BP Steve 1  VHLXONEVEN  L1-0018.N-E: FLRNCCCT II									+	4		183	I	7	+			
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	Date:		Refinquish	1	Received by:	8	) Pate T			7	20-	181	1.1	ŭ,	3	3	491	



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

April 06, 2017

Jeff Blagg

Blagg Engineering P. O. Box 87

Bloomfield, NM 87413 TEL: (505) 632-1199 FAX (505) 632-3903

RE: Florance GC J 16A OrderNo.: 1704116

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/5/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

Sample container temperature is out of limit as specified

Date Reported: 4/6/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: AREA 58

 Project:
 Florance GC J 16A
 Collection Date: 4/4/2017 1:55:00 PM

 Lab ID:
 1704116-001
 Matrix: SOIL
 Received Date: 4/5/2017 6:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/5/2017 10:51:11 AM	31086
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	4/5/2017 10:39:33 AM	31083
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/5/2017 10:39:33 AM	31083
Surr: DNOP	85.0	70-130	%Rec	1	4/5/2017 10:39:33 AM	31083
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	4/5/2017 9:42:27 AM	31074
Surr: BFB	65.4	54-150	%Rec	1	4/5/2017 9:42:27 AM	31074
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	4/5/2017 9:42:27 AM	31074
Toluene	ND	0.037	mg/Kg	1	4/5/2017 9:42:27 AM	31074
Ethylbenzene	ND	0.037	mg/Kg	1	4/5/2017 9:42:27 AM	31074
Xylenes, Total	ND	0.075	mg/Kg	1	4/5/2017 9:42:27 AM	31074
Surr: 4-Bromofluorobenzene	73.5	66.6-132	%Rec	1	4/5/2017 9:42:27 AM	31074

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 10 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: 4/6/2017

**CLIENT:** Blagg Engineering Client Sample ID: AREA 59

 Project:
 Florance GC J 16A
 Collection Date: 4/4/2017 2:01:00 PM

 Lab ID:
 1704116-002
 Matrix: SOIL
 Received Date: 4/5/2017 6:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/5/2017 11:03:36 AM	31086
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	: ТОМ
Diesel Range Organics (DRO)	14	9.7	mg/Kg	1	4/5/2017 11:03:41 AM	31083
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2017 11:03:41 AM	31083
Surr: DNOP	84.8	70-130	%Rec	1	4/5/2017 11:03:41 AM	31083
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	7.1	mg/Kg	2	4/5/2017 10:08:44 AM	31074
Surr: BFB	81.6	54-150	%Rec	2	4/5/2017 10:08:44 AM	31074
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.036	mg/Kg	2	4/5/2017 10:08:44 AM	31074
Toluene	ND	0.071	mg/Kg	2	4/5/2017 10:08:44 AM	31074
Ethylbenzene	ND	0.071	mg/Kg	2	4/5/2017 10:08:44 AM	31074
Xylenes, Total	ND	0.14	mg/Kg	2	4/5/2017 10:08:44 AM	31074
Surr: 4-Bromofluorobenzene	93.8	66.6-132	%Rec	2	4/5/2017 10:08:44 AM	31074

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 10 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: 4/6/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: AREA 60

 Project:
 Florance GC J 16A
 Collection Date: 4/4/2017 2:04:00 PM

 Lab ID:
 1704116-003
 Matrix: SOIL
 Received Date: 4/5/2017 6:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: MRA
Chloride	ND	30	mg/Kg	20	4/5/2017 11:16:00 AM	31086
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	S			Analys	: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/5/2017 11:27:52 AM	31083
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2017 11:27:52 AM	31083
Surr: DNOP	83.0	70-130	%Rec	1	4/5/2017 11:27:52 AM	31083
EPA METHOD 8015D: GASOLINE RAM	NGE				Analys	:: NSB
Gasoline Range Organics (GRO)	ND	7.4	mg/Kg	2	4/5/2017 10:35:07 AM	31074
Surr: BFB	81.7	54-150	%Rec	2	4/5/2017 10:35:07 AM	31074
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.037	mg/Kg	2	4/5/2017 10:35:07 AM	31074
Toluene	ND	0.074	mg/Kg	2	4/5/2017 10:35:07 AM	31074
Ethylbenzene	ND	0.074	mg/Kg	2	4/5/2017 10:35:07 AM	31074
Xylenes, Total	ND	0.15	mg/Kg	2	4/5/2017 10:35:07 AM	31074
Surr: 4-Bromofluorobenzene	94.6	66.6-132	%Rec	2	4/5/2017 10:35:07 AM	31074

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: 4/6/2017

CLIENT: Blagg Engineering Client Sample ID: AREA 61

 Project:
 Florance GC J 16A
 Collection Date: 4/4/2017 2:10:00 PM

 Lab ID:
 1704116-004
 Matrix: SOIL
 Received Date: 4/5/2017 6:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/5/2017 11:28:25 AM	31086
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	S			Analyst	: ТОМ
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/5/2017 11:52:11 AM	31083
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/5/2017 11:52:11 AM	31083
Surr: DNOP	83.9	70-130	%Rec	1	4/5/2017 11:52:11 AM	31083
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	4/5/2017 11:01:33 AM	31074
Surr: BFB	70.4	54-150	%Rec	1	4/5/2017 11:01:33 AM	31074
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	4/5/2017 11:01:33 AM	31074
Toluene	ND	0.038	mg/Kg	1	4/5/2017 11:01:33 AM	31074
Ethylbenzene	ND	0.038	mg/Kg	1	4/5/2017 11:01:33 AM	31074
Xylenes, Total	ND	0.075	mg/Kg	1	4/5/2017 11:01:33 AM	31074
Surr: 4-Bromofluorobenzene	80.5	66.6-132	%Rec	1	4/5/2017 11:01:33 AM	31074

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

#### Qualifiers: \* V

- \* 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

## Hall Environmental Analysis Laboratory, Inc. Date Reported: 4/6/2017

CLIENT: Blagg Engineering Client Sample ID: AREA 62

 Project:
 Florance GC J 16A
 Collection Date: 4/4/2017 2:15:00 PM

 Lab ID:
 1704116-005
 Matrix: SOIL
 Received Date: 4/5/2017 6:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/5/2017 11:40:49 AM	31086
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	S			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/5/2017 12:16:22 PM	31083
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2017 12:16:22 PM	31083
Surr: DNOP	85.5	70-130	%Rec	1	4/5/2017 12:16:22 PM	31083
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	7.8	mg/Kg	2	4/5/2017 11:27:51 AM	31074
Surr: BFB	82.4	54-150	%Rec	2	4/5/2017 11:27:51 AM	31074
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.039	mg/Kg	2	4/5/2017 11:27:51 AM	31074
Toluene	ND	0.078	mg/Kg	2	4/5/2017 11:27:51 AM	31074
Ethylbenzene	ND	0.078	mg/Kg	2	4/5/2017 11:27:51 AM	31074
Xylenes, Total	ND	0.16	mg/Kg	2	4/5/2017 11:27:51 AM	31074
Surr: 4-Bromofluorobenzene	95.4	66.6-132	%Rec	2	4/5/2017 11:27:51 AM	31074

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

# Date Reported: 4/6/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: AREA 63

 Project:
 Florance GC J 16A
 Collection Date: 4/4/2017 2:23:00 PM

 Lab ID:
 1704116-006
 Matrix: SOIL
 Received Date: 4/5/2017 6:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: MRA
Chloride	ND	30	mg/Kg	20	4/5/2017 11:53:14 AM	31086
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analys	: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/5/2017 12:40:43 PM	31083
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2017 12:40:43 PM	31083
Surr: DNOP	83.7	70-130	%Rec	1	4/5/2017 12:40:43 PM	31083
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	: NSB
Gasoline Range Organics (GRO)	ND	7.8	mg/Kg	2	4/5/2017 11:54:09 AM	31074
Surr: BFB	85.1	54-150	%Rec	2	4/5/2017 11:54:09 AM	31074
EPA METHOD 8021B: VOLATILES					Analys	:: NSB
Benzene	ND	0.039	mg/Kg	2	4/5/2017 11:54:09 AM	31074
Toluene	ND	0.078	mg/Kg	2	4/5/2017 11:54:09 AM	31074
Ethylbenzene	ND	0.078	mg/Kg	2	4/5/2017 11:54:09 AM	31074
Xylenes, Total	ND	0.16	mg/Kg	2	4/5/2017 11:54:09 AM	31074
Surr: 4-Bromofluorobenzene	97.8	66.6-132	%Rec	2	4/5/2017 11:54:09 AM	31074

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 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#: **1704116** 

06-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31086 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 31086 RunNo: 41906

Prep Date: 4/5/2017 Analysis Date: 4/5/2017 SeqNo: 1316637 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31086 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31086 RunNo: 41906

Prep Date: 4/5/2017 Analysis Date: 4/5/2017 SeqNo: 1316638 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.6 90 110

#### 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 10

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1704116** 

06-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31083 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: **PBS** Batch ID: 31083 RunNo: 41862 Prep Date: 4/5/2017 Analysis Date: 4/5/2017 SeqNo: 1315434 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 7.9 78.6 70 10.00 130

Sample ID LCS-31083 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 31083 RunNo: 41862 Analysis Date: 4/5/2017 Prep Date: 4/5/2017 SeqNo: 1315523 Units: mg/Kg Analyte SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 42 10 63.8 50.00 83.7 116 Surr: DNOP 3.9 5.000 78.4 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 10

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1704116

06-Apr-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-31074 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 31074 RunNo: 41907

Prep Date: 4/4/2017 Analysis Date: 4/5/2017 SeqNo: 1316562 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 620 1000 62.3 54 150

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-31074 SampType: LCS

Client ID: LCSS Batch ID: 31074 RunNo: 41907

Prep Date: Analysis Date: 4/5/2017 SeqNo: 1316563 4/4/2017 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 27 5.0 25.00 107 76.4 125 760 1000 76.0 Surr: BFB 54 150

#### 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#: 1704116

06-Apr-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID MB-31074 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 31074 RunNo: 41907 Prep Date: 4/4/2017 Analysis Date: 4/5/2017 SeqNo: 1316571 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 0.71 1.000 71.2 66.6 132

Sample ID LCS-31074	SampT	Гуре: <b>LC</b>	s	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batcl	h ID: <b>31</b>	074	R	RunNo: 4	1907				
Prep Date: 4/4/2017	Analysis D	Date: 4/	5/2017	S	SeqNo: 1	316572	Units: mg/k	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	0.69		1.000		68.6	66.6	132			

#### 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 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:	BLAGG	Work Order Number	er: <b>1704116</b>		RcptNo	o: 1
Received By:	Lindsay Mangin	4/5/2017 6:45:00 AM	1	Jimahry Hloday 20		
Completed By:	Lindsay Mangin	4/5/2017 6:59:48 AM	1	Jimaky Hopogo		
Reviewed By:	ਜ਼ੁਰ	4/5/17				
Chain of Cus	tody					
1. Custody sea	als intact on sample bottle	s? ·	Yes 🗌	. No 🗀	Not Present	
2. Is Chain of 0	Custody complete?		Yes 🗹	No 🗌	Not Present	
3. How was the	e sample delivered?		Courier			
<u>Log In</u>						
4. Was an atte	empt made to cool the san	nples?	Yes 🗹	No 🗔	NA 🗆	
5. Were all sar	mples received at a tempe	rature of >0° C to 6.0°C	Yes 🗸	No 🗌	NA []	
6. Sample(s) in	n proper container(s)?		Yes 🗸	No 🗀		
7. Sufficient sa	mple volume for indicated	test(s)?	Yes 🗹	No 🗌		
8. Are samples	(except VOA and ONG)	properly preserved?	Yes 🗸	No 🗌		
9. Was preserv	rative added to bottles?		Yes []	No. 🗹	NA 🗔	
10.VOA vials ha	ave zero headspace?		Yes 🗔	No 🗔	No VOA Vials 🗹	
11. Were any sa	ample containers received	broken?	Yes	No 🗹 🏻	# of preserved	
12 Dags	wantanan katula 1. 1. 1. 0.			[7]	bottles checked	
	vork match bottle labels? pancies on chain of custoo	iv)	Yes 🔽	No 🗔	for pH:	or >12 unless noted)
	correctly identified on Ch		Yes 🗸	No 🗔	Adjusted?	
	at analyses were requeste	•	Yes 🗹	No 🗔	-	
	ling times able to be met? customer for authorization		Yes 🔽	No 🗌	Checked by:	
	ling (if applicable)					
16. Was client no	otified of all discrepancies	with this order?	Yes 🗌	No []	NA 🗹	
Person	Notified:	Date:				İ
By Who	om:	Via:	eMail	Phone 🗌 Fax	[]] In Person	
Regard	ling:				1.201.000 (Sec. ) 1.111.000 (Sec. ) 1.201.000 (Sec. ) 1.201.000 (Sec. ) 1.201.000 (Sec. ) 1.201.000 (Sec. )	
Client I	nstructions:					
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18. <u>Cooler Info</u>						
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r necessary, samples sur	it necessary, saniples submitted to hair Environmental may be subcontracted to of		ner accredited laboratories.	Ins serves as notice	of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	Any sub	contracte	d data w	ll be clea	ly notater	f on the	: analyti	cal repoi	ť		



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

April 18, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1704452

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/12/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

#### Date Reported: 4/18/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: AREA 65

**Project:** Florance GC J 16A Collection Date: 4/11/2017 10:00:00 AM Lab ID: 1704452-001 Matrix: MEOH (SOIL) **Received Date:** 4/12/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analys	: MRA
Chloride	ND	30	mg/Kg	20	4/12/2017 12:24:15 PM	1 31203
EPA METHOD 8015D MOD: GASOL	NE RANGE				Analys	: AG
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	4/12/2017 10:19:33 AM	1 A42061
Surr: BFB	95.3	70-130	%Rec	1	4/12/2017 10:19:33 AM	1 A42061
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	}			Analys	:: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/12/2017 11:46:39 AM	1 31195
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/12/2017 11:46:39 AM	1 31195
Surr: DNOP	104	70-130	%Rec	1	4/12/2017 11:46:39 AM	1 31195
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analys	: AG
Benzene	ND	0.019	mg/Kg	1	4/12/2017 10:19:33 AM	R42061
Toluene	ND	0.037	mg/Kg	1	4/12/2017 10:19:33 AM	R42061
Ethylbenzene	ND	0.037	mg/Kg	1	4/12/2017 10:19:33 AM	R42061
Xylenes, Total	ND	0.075	mg/Kg	1	4/12/2017 10:19:33 AM	R42061
Surr: 1,2-Dichloroethane-d4	85.0	70-130	%Rec	1	4/12/2017 10:19:33 AM	R42061
Surr: 4-Bromofluorobenzene	108	70-130	%Rec	1	4/12/2017 10:19:33 AM	R42061
Surr: Dibromofluoromethane	93.8	70-130	%Rec	1	4/12/2017 10:19:33 AM	R42061
Surr: Toluene-d8	111	70-130	%Rec	1	4/12/2017 10:19:33 AM	R42061

Qualifiers: *		Value exceeds Maximum Contaminant Level.	
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- 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 12 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

## Date Reported: 4/18/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: AREA 64

**Project:** Florance GC J 16A Collection Date: 4/11/2017 10:10:00 AM Lab ID: 1704452-002 Matrix: MEOH (SOIL) **Received Date:** 4/12/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/12/2017 12:36:40 PM	A 31203
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analys	t: <b>AG</b>
Gasoline Range Organics (GRO)	9.6	3.8	mg/Kg	1	4/12/2017 10:49:05 AN	/ A42061
Surr: BFB	105	70-130	%Rec	1	4/12/2017 10:49:05 AN	/ A42061
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	14	9.4	mg/Kg	1	4/12/2017 12:08:44 PN	<i>I</i> 31195
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/12/2017 12:08:44 PN	A 31195
Surr: DNOP	108	70-130	%Rec	1	4/12/2017 12:08:44 PN	<i>I</i> 31195
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analys	t: <b>AG</b>
Benzene	ND	0.019	mg/Kg	1	4/12/2017 10:49:05 AM	/ R42061
Toluene	ND	0.038	mg/Kg	1	4/12/2017 10:49:05 AM	/ R42061
Ethylbenzene	ND	0.038	mg/Kg	1	4/12/2017 10:49:05 AN	/I R42061
Xylenes, Total	ND	0.077	mg/Kg	1	4/12/2017 10:49:05 AN	/I R42061
Surr: 1,2-Dichloroethane-d4	90.6	70-130	%Rec	1	4/12/2017 10:49:05 AN	/I R42061
Surr: 4-Bromofluorobenzene	99.3	70-130	%Rec	1	4/12/2017 10:49:05 AN	/I R42061
Surr: Dibromofluoromethane	95.3	70-130	%Rec	1	4/12/2017 10:49:05 AN	/I R42061
Surr: Toluene-d8	118	70-130	%Rec	1	4/12/2017 10:49:05 AM	/I R42061

Qualifiers:	*	Value exceeds Maximum Contaminant Level.

- 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 2 of 12 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

# Lab Order **1704452**Date Reported: **4/18/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: AREA 57 (DEEP)

Project: Florance GC J 16A Collection Date: 4/11/2017 10:17:00 AM

**Lab ID:** 1704452-003 **Matrix:** MEOH (SOIL) **Received Date:** 4/12/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/12/2017 12:49:04 PM	31203
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	4/12/2017 11:18:14 AM	A42061
Surr: BFB	102	70-130	%Rec	1	4/12/2017 11:18:14 AM	A42061
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS	}			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/12/2017 12:30:42 PM	31195
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/12/2017 12:30:42 PM	31195
Surr: DNOP	109	70-130	%Rec	1	4/12/2017 12:30:42 PM	31195
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: AG
Benzene	ND	0.019	mg/Kg	1	4/12/2017 11:18:14 AM	R42061
Toluene	ND	0.038	mg/Kg	1	4/12/2017 11:18:14 AM	R42061
Ethylbenzene	ND	0.038	mg/Kg	1	4/12/2017 11:18:14 AM	R42061
Xylenes, Total	ND	0.076	mg/Kg	1	4/12/2017 11:18:14 AM	R42061
Surr: 1,2-Dichloroethane-d4	82.3	70-130	%Rec	1	4/12/2017 11:18:14 AM	R42061
Surr: 4-Bromofluorobenzene	106	70-130	%Rec	1	4/12/2017 11:18:14 AM	R42061
Surr: Dibromofluoromethane	91.0	70-130	%Rec	1	4/12/2017 11:18:14 AM	R42061
Surr: Toluene-d8	111	70-130	%Rec	1	4/12/2017 11:18:14 AM	R42061

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 12 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

# Lab Order **1704452**Date Reported: **4/18/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: AREA 57 (SHALLOW)

 Project:
 Florance GC J 16A
 Collection Date: 4/11/2017 10:20:00 AM

 Lab ID:
 1704452-004
 Matrix: MEOH (SOIL)
 Received Date: 4/12/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/12/2017 1:01:29 PM	31203
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	4/12/2017 11:47:19 AM	A42061
Surr: BFB	95.8	70-130	%Rec	1	4/12/2017 11:47:19 AM	A42061
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analyst	: ТОМ
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/12/2017 12:52:40 PM	31195
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/12/2017 12:52:40 PM	31195
Surr: DNOP	106	70-130	%Rec	1	4/12/2017 12:52:40 PM	31195
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	: AG
Benzene	ND	0.021	mg/Kg	1	4/12/2017 11:47:19 AM	R42061
Toluene	ND	0.043	mg/Kg	1	4/12/2017 11:47:19 AM	R42061
Ethylbenzene	ND	0.043	mg/Kg	1	4/12/2017 11:47:19 AM	R42061
Xylenes, Total	ND	0.085	mg/Kg	1	4/12/2017 11:47:19 AM	R42061
Surr: 1,2-Dichloroethane-d4	81.8	70-130	%Rec	1	4/12/2017 11:47:19 AM	R42061
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	4/12/2017 11:47:19 AM	R42061
Surr: Dibromofluoromethane	91.3	70-130	%Rec	1	4/12/2017 11:47:19 AM	R42061
Surr: Toluene-d8	109	70-130	%Rec	1	4/12/2017 11:47:19 AM	R42061

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 12
	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

#### Lab Order 1704452 Date Reported: 4/18/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: AREA 54 (DEEP)

**Project:** Florance GC J 16A Collection Date: 4/11/2017 10:23:00 AM

Lab ID: 1704452-005 Matrix: MEOH (SOIL) Received Date: 4/12/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/12/2017 1:13:54 PM	31203
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/17/2017 10:40:56 AM	31248
Surr: BFB	108	70-130	%Rec	1	4/17/2017 10:40:56 AM	31248
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/12/2017 1:14:58 PM	31195
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/12/2017 1:14:58 PM	31195
Surr: DNOP	107	70-130	%Rec	1	4/12/2017 1:14:58 PM	31195
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: DJF
Benzene	ND	0.024	mg/Kg	1	4/17/2017 10:40:56 AM	31248
Toluene	ND	0.048	mg/Kg	1	4/17/2017 10:40:56 AM	31248
Ethylbenzene	ND	0.048	mg/Kg	1	4/17/2017 10:40:56 AM	31248
Xylenes, Total	ND	0.097	mg/Kg	1	4/17/2017 10:40:56 AM	31248
Surr: 1,2-Dichloroethane-d4	83.5	70-130	%Rec	1	4/17/2017 10:40:56 AM	31248
Surr: 4-Bromofluorobenzene	105	70-130	%Rec	1	4/17/2017 10:40:56 AM	31248
Surr: Dibromofluoromethane	83.5	70-130	%Rec	1	4/17/2017 10:40:56 AM	31248
Surr: Toluene-d8	102	70-130	%Rec	1	4/17/2017 10:40:56 AM	31248

Qualifiers:	*	Value exceeds Maximum Contaminant Level
	_	~

- 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 5 of 12 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

# Lab Order **1704452**Date Reported: **4/18/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: AREA 54 (SHALLOW)

 Project:
 Florance GC J 16A
 Collection Date: 4/11/2017 10:29:00 AM

 Lab ID:
 1704452-006
 Matrix: MEOH (SOIL)
 Received Date: 4/12/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/12/2017 1:26:19 PM	31203
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	500	25	mg/Kg	5	4/17/2017 11:09:26 AM	31248
Surr: BFB	116	70-130	%Rec	5	4/17/2017 11:09:26 AM	31248
EPA METHOD 8015M/D: DIESEL RA	1			Analyst	: TOM	
Diesel Range Organics (DRO)	1400	19	mg/Kg	2	4/12/2017 2:21:09 PM	31195
Motor Oil Range Organics (MRO)	260	93	mg/Kg	2	4/12/2017 2:21:09 PM	31195
Surr: DNOP	122	70-130	%Rec	2	4/12/2017 2:21:09 PM	31195
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	DJF
Benzene	ND	0.12	mg/Kg	5	4/17/2017 11:09:26 AM	31248
Toluene	ND	0.25	mg/Kg	5	4/17/2017 11:09:26 AM	31248
Ethylbenzene	ND	0.25	mg/Kg	5	4/17/2017 11:09:26 AM	31248
Xylenes, Total	8.1	0.50	mg/Kg	5	4/17/2017 11:09:26 AM	31248
Surr: 1,2-Dichloroethane-d4	90.0	70-130	%Rec	5	4/17/2017 11:09:26 AM	31248
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	5	4/17/2017 11:09:26 AM	31248
Surr: Dibromofluoromethane	87.6	70-130	%Rec	5	4/17/2017 11:09:26 AM	31248
Surr: Toluene-d8	100	70-130	%Rec	5	4/17/2017 11:09:26 AM	31248

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

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1704452** 

18-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31203 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 31203 RunNo: 42066

Prep Date: 4/12/2017 Analysis Date: 4/12/2017 SeqNo: 1322090 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31203 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31203 RunNo: 42066

Prep Date: 4/12/2017 Analysis Date: 4/12/2017 SeqNo: 1322091 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 93.9 90 110

#### 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 12

#### Hall Environmental Analysis Laboratory, Inc.

SampType: MBLK

WO#: 1704452

18-Apr-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-31195

Sample ID LCS-31195 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 31195 RunNo: 42045 Prep Date: 4/12/2017 Analysis Date: 4/12/2017 SeqNo: 1320584 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 49 10 O 97.1 63.8 50.00 116 Surr: DNOP 5.1 5.000 102 70 130

TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 31195 RunNo: 42045 Analysis Date: 4/12/2017 Prep Date: 4/12/2017 SeqNo: 1320585 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 10.00 112 70 130 11

Sample ID 1704452-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: AREA 65 Batch ID: 31195 RunNo: 42045 Prep Date: 4/12/2017 Analysis Date: 4/12/2017 SeqNo: 1321290 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 48 10 49.80 5.578 86.0 51.6 130 Surr: DNOP 5.0 4.980 99.6 70 130

TestCode: EPA Method 8015M/D: Diesel Range Organics Sample ID 1704452-001AMSD SampType: MSD Client ID: AREA 65 Batch ID: 31195 RunNo: 42045 Prep Date: 4/12/2017 Analysis Date: 4/12/2017 SeqNo: 1321298 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual Diesel Range Organics (DRO) 51 9.7 48.69 5.578 92.7 51.6 130 4.71 20 Surr: DNOP 5.1 4.869 105 70 130 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 Sample container temperature is out of limit as specified Page 8 of 12

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1704452

18-Apr-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID rb	SampType: MBLK TestCode: EPA Method					l 8260B: Volatiles Short List					
Client ID: PBS	Batch ID: R42061			F	RunNo: <b>42061</b>						
Prep Date:	Analysis D	Date: 4/	12/2017	S	SeqNo: <b>1321103</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: 1,2-Dichloroethane-d4	0.45		0.5000		89.1	70	130				
Surr: 4-Bromofluorobenzene	0.53		0.5000		106	70	130				
Surr: Dibromofluoromethane	0.50		0.5000		99.9	70	130				
Surr: Toluene-d8	0.51		0.5000		102	70	130				
					· ·						

Sample ID 100ng Ics	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: LCSS	Batch	h ID: <b>R4</b>	2061	F	RunNo: 4	2061				
Prep Date:	Analysis D	Date: 4/	12/2017	5	SeqNo: 1	321840	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	96.8	70	130			
Toluene	0.94	0.050	1.000	0	93.7	70	130			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.9	70	130			
Surr: 4-Bromofluorobenzene	0.56		0.5000		112	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		99.6	70	130			
Surr: Toluene-d8	0.48		0.5000		96.9	70	130			

Sample ID 1704452-002ams	d Samp1	SampType: MSD TestCode: EPA Method						8260B: Volatiles Short List				
Client ID: AREA 64	Batcl	n ID: <b>R4</b>	n ID: <b>R42061</b> RunNo: <b>42100</b>									
Prep Date:	Analysis D	Date: 4/	13/2017	8	SeqNo: 1	322432	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.70	0.019	0.7663	0	91.0	61.9	146	3.85	20			
Toluene	0.84	0.038	0.7663	0.006069	109	70	130	6.68	20			
Surr: 1,2-Dichloroethane-d4	0.31		0.3832		81.8	70	130	0	0			
Surr: 4-Bromofluorobenzene	0.37		0.3832		97.5	70	130	0	0			
Surr: Dibromofluoromethane	0.35		0.3832		90.2	70	130	0	0			
Surr: Toluene-d8	0.43		0.3832		113	70	130	0	0			

Sample ID mb-31248	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8260B: Volat	tiles Short	List	
Client ID: PBS	Batch	n ID: <b>31</b>	248	R	RunNo: 4	2156				
Prep Date: 4/14/2017	Analysis D	oate: 4/	17/2017	S	SeqNo: 1	324765	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								

#### 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

Page 9 of 12

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1704452** 

18-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID mb-31248	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: PBS	Batch	n ID: <b>31</b>	248	F	RunNo: 4	2156				
Prep Date: 4/14/2017	Analysis D	ate: 4/	17/2017	5	SeqNo: 1	324765	Units: mg/K	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.1	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.2	70	130			
Surr: Toluene-d8	0.49		0.5000		98.9	70	130			

Sample ID Ics-31248	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: LCSS	Batcl	n ID: <b>31</b>	248	F	RunNo: 4	2156				
Prep Date: 4/14/2017	Analysis D	ate: <b>4/</b>	17/2017	5	SeqNo: 1	324766	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.0	70	130			
Toluene	1.0	0.050	1.000	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		97.3	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.2	70	130			
Surr: Toluene-d8	0.50		0.5000		99.1	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

the associated Method Brank

Page 10 of 12

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1704452** 

18-Apr-17

	g Engineering nce GC J 16A							
Sample ID rb	SampTyp	e: MBLK	TestCod	: EPA Method	l 8015D Mod:	Gasoline	Range	
Client ID: PBS	Batch II	D: <b>A42061</b>	RunN	: <b>42061</b>				
Prep Date:	Analysis Dat	e: <b>4/12/2017</b>	SeqN	: 1321112	Units: mg/k	<b>K</b> g		
Analyte	Result	PQL SPK value	SPK Ref Val %R	EC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 490	5.0 500.0	9	3.8 70	130			
Sample ID 1704452-001A	AMSD SampTyp	pe: MS	TestCod	: EPA Method	l 8015D Mod:	Gasoline	Range	
Client ID: AREA 65	Batch II	D: <b>A42061</b>	RunN	: 42061				
Prep Date:	Analysis Dat	e: <b>4/12/2017</b>	SeqN	: 1321819	Units: mg/h	<b>K</b> g		
Analyte	Result	PQL SPK value	SPK Ref Val %R	EC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	21 360	3.7 18.70 374.0		07 63.2 5.2 70				
Sample ID 1704452-001A	AMS SampTyp	pe: MSD	TestCod	: EPA Method	l 8015D Mod:	Gasoline	Range	
Client ID: AREA 65	Batch II	D: <b>A42061</b>	RunN	: 42061				
Prep Date:	Analysis Dat	e: <b>4/12/2017</b>	SeqN	: 1321820	Units: mg/k	<b>K</b> g		
Analyte	Result	PQL SPK value	SPK Ref Val %R	EC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	3.7 18.70	1.466	13 63.2	128	4.83	20	
Surr: BFB	350	374.0	9	2.6 70	130	0	0	
Sample ID 2.5 gro lcs	SampTyp	pe: LCS	TestCod	: EPA Method	l 8015D Mod:	Gasoline	Range	
Client ID: LCSS	Batch II	D: <b>A42061</b>	RunN	: 42061				
Prep Date:	Analysis Dat	e: <b>4/12/2017</b>	SeqN	: 1321834	Units: mg/k	<b>〈</b> g		
Analyte	Result	PQL SPK value	SPK Ref Val %R	EC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0 25.00	0	09 70	130			
Surr: BFB	490	500.0	9	7.1 70	130			
Sample ID mb-31248	SampTyp	e: MBLK	TestCod	: EPA Method	l 8015D Mod:	Gasoline	Range	
Client ID: PBS	Batch II	D: <b>31248</b>	RunN	42156				
Prep Date: 4/14/2017	Analysis Dat	e: <b>4/17/2017</b>	SeqN	: 1324773	Units: mg/k	<b>K</b> g		
Analyte	Result	PQL SPK value	SPK Ref Val %R	EC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 530	5.0 500.0		06 70	130			
Sample ID Ics-31248	SampTyp	pe: <b>LCS</b>	TestCod	: EPA Method	l 8015D Mod:	Gasoline	Range	
i .								
Client ID: LCSS	Batch II	D: <b>31248</b>	RunN	: <b>42156</b>				
Client ID: LCSS Prep Date: 4/14/2017		D: <b>31248</b> re: <b>4/17/2017</b>		: 42156 : 1324774	Units: mg/h	<b>K</b> g		

#### 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.

540

WO#: **1704452** 

18-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Surr: BFB

Sample ID Ics-31248 SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: LCSS Batch ID: 31248 RunNo: 42156

Prep Date: 4/14/2017 Analysis Date: 4/17/2017 SeqNo: 1324774 Units: mg/Kg

500.0

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 28 5.0 25.00 0 110 70 130

109

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 12 of 12



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109

Sample Log-In Check List

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

Client Name:	BLAGG	Work Order Number:	1704	452		RoptNo	: 1
Received By:	Lindsay Mangin	4/12/2017 7:00:00 AM			Sinaly Hope	)	
Completed By:	Lindsay Mangin	4/12/2017 7:28:22 AM			Jimsby Herige Finnby Herige	)	
Reviewed By:	ENM	04/12/17			000		
Chain of Cus	<u>tody</u>						
1. Custody sea	ls intact on sample bottl	es?	Yes		No	Not Present 🗸	
2. Is Chain of C	Sustody complete?		Yes	V,	No	Not Present	
3. How was the	sample delivered?		<u>Cou</u>	ier			
<u>Log In</u>							
4. Was an atte	mpt made to cool the sa	imples?	Yes	i <b>√</b> ,	No !	NA	
5. Were all san	nples received at a temp	perature of >0° C to 6.0°C	Yes	<b>v</b>	No : i	NA :	
6. Sample(s) in	proper container(s)?		Yes	V	No		
7. Sufficient sar	mple volume for indicate	ed test(s)?	Yes	<b>√</b> .	No :		
8. Are samples	(except VOA and ONG)	properly preserved?	Yes	<b>√</b> ,	No :		
9. Was preserv	ative added to bottles?		Yes	1	No 🗸	NA	
10.VOA vials ha	ve zero headspace?		Yes	:	No	No VOA Vials 🗸	
11. Were any sa	mple containers receive	d broken?	Yes	!	No 😾	# of preserved	
12.Does paperw	ork match bottle labels?	<b>,</b>	Yes	. ,	No :	bottles checked for pH:	
(Note discrep	pancies on chain of cust	ody)				(<2	or >12 unless noted)
	correctly identified on C	•	Yes		No	Adjusted?	
	at analyses were reques		Yes		No	<b>.</b>	
	ing times able to be me customer for authorization		Yes	•	No	Checked by:	
Special Handl	ing (if applicable)						
16. Was client no	tified of all discrepancie	s with this order?	Yes	: v	No .	NA 🗸	
Person	Notified:	Date:	SALVA NAMES	maci primas (C) de			
i By Who	om:	Via:	еМа	il ·	Phone Fax	in Person	
Regard	ing:	delen men propinsi dan kananan kenanggan dan menganggan dan pengangan dan penganggan dan penganggan penganggan	iaki i seletakan	#634502394°	and and a supplementation of the supplementat	SEE VELVE SEES NE ALALIANA AMERICA NEW COLUM	
Client Ir	nstructions:	ere pillede kallende kallen kilde i silde siste de kilde de kort yn 1944 i 1945 i 1945 i 1956 i 1966 i 1966 i On silde siste de kilde i 1966 i 1966 i 1966 i 1966 i 1966 i 1966 i 1966 i 1966 i 1966 i 1966 i 1966 i 1966 i	244 WET 2/27996.#	io. Addinero.	literate artin leit de tri de metallica in lei delicalistica in lei delicalistica in quanting	- Prince (Part Carlos de Art. Prince Part Carlos (Carlos Carlos C	
17. Additional rei	marks:						
18. <u>Cooler Infor</u> Cooler No		n   Seal Intact   Seal No   S	eal Da	te	Signed By		

Client	80	BP AMENEG			□ Standard	XRush		П	H	4	I	Ž	v	AB	Č	TA Y	ANAL ENVIRONMENTAL ANALYSTS LABORATORY
Mailin	Mailing Address		ENGINEERNE	INC.	Project Name:	(M)	T 16A			3	им.на	www.hallervironmental.com	nment	al.co	8	5	
20	2000				Project #:				4901 Hawkins NE	awkin	NE -		Albuquerque, NM 87109	e N	1871	60	
Dhomes	Drong # 1505	-	320-110.3	10					Tel. 505-345-3975	5-345	3975	Analysis Beginset	Fax 505-345-4107	345-4	1107		
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GA/QC Package	OA/QC Package:  X Standard		D level 4	T Level 4 (Full Validation)	Project Manager:	Ser.			ALCOHOL Y		(SM	05 00	_				
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D NELAP	AP	□ Other	E		100	N	ON II			111					(∀		
☐ EDD (Type)	(Type)				Sample Temperature:	perature: /	5						-	()	-	-	
Date	Time	Matrix	Sampl	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	IM + X3T8	TM + X3T8 82108 H9T	TPH (Metho	EDB (Metho	RCRA 8 Me Anions (F.C	8081 Pestic	40V) 808S8	Im98) 07S8	CHURCIPE	
1/217	1000	7105	AREA	36 67	40341	7.000	100-	×	×						^	×	
	0101		AREA	B XB			-005	8 21							Ξ		
	1017		GREA	ST (DEER) VIII	96		-003										
	0201		AMEA	57 (Swellow)			t00-										
-	1023		DAREA	S4 (DEEP)			-002										
	1029	-	AREA :	54 (shallow)	9	-	-000-	-	=					H	~		- 1
	M														++		
Date:	Time	Relinquisne	Relinquished by:	6	Received by:	cel	1/11/7 1740	Remarks:		1 . 7	NH KO	NAIXONEVEN	U	Co-chect	2	Jen J	Mark
Date:		Relinquished by	Sned by:	+	Received ov	1	UNT TY THE	T	fe Ters	1	16	- Coren		2 4	3 %	There is the	4200



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

April 13, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1704453

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/12/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order 1704453

Date Reported: 4/13/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: Trench-Point 1

 Project:
 Florance GC J 16A
 Collection Date: 4/11/2017 10:58:00 AM

 Lab ID:
 1704453-001
 Matrix: MEOH (SOIL)
 Received Date: 4/12/2017 7:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30		mg/Kg	20	4/12/2017 1:38:43 PM	31203
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3				Analyst	:: TOM
Diesel Range Organics (DRO)	1100	19		mg/Kg	2	4/12/2017 1:58:54 PM	31195
Motor Oil Range Organics (MRO)	170	97		mg/Kg	2	4/12/2017 1:58:54 PM	31195
Surr: DNOP	120	70-130		%Rec	2	4/12/2017 1:58:54 PM	31195
EPA METHOD 8015D: GASOLINE RAM	IGE					Analyst	:: NSB
Gasoline Range Organics (GRO)	140	20		mg/Kg	5	4/12/2017 9:40:40 AM	SG42060
Surr: BFB	286	54-150	S	%Rec	5	4/12/2017 9:40:40 AM	SG42060
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.10		mg/Kg	5	4/12/2017 9:40:40 AM	SB42060
Toluene	ND	0.20		mg/Kg	5	4/12/2017 9:40:40 AM	SB42060
Ethylbenzene	0.36	0.20		mg/Kg	5	4/12/2017 9:40:40 AM	SB42060
Xylenes, Total	3.3	0.40		mg/Kg	5	4/12/2017 9:40:40 AM	SB42060
Surr: 4-Bromofluorobenzene	129	66.6-132		%Rec	5	4/12/2017 9:40:40 AM	SB42060

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

#### Lab Order **1704453**

Date Reported: 4/13/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: Trench-Point 2

 Project:
 Florance GC J 16A
 Collection Date: 4/11/2017 11:05:00 AM

 Lab ID:
 1704453-002
 Matrix: MEOH (SOIL)
 Received Date: 4/12/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	4/12/2017 1:51:08 PM	31203
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	S			Analyst:	TOM
Diesel Range Organics (DRO)	280	9.6	mg/Kg	1	4/12/2017 10:17:48 AM	31195
Motor Oil Range Organics (MRO)	59	48	mg/Kg	1	4/12/2017 10:17:48 AM	31195
Surr: DNOP	111	70-130	%Rec	1	4/12/2017 10:17:48 AM	31195
EPA METHOD 8015D: GASOLINE RANG	E				Analyst:	NSB
Gasoline Range Organics (GRO)	26	20	mg/Kg	5	4/12/2017 10:04:06 AM	SG4206(
Surr: BFB	134	54-150	%Rec	5	4/12/2017 10:04:06 AM	SG42060
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.10	mg/Kg	5	4/12/2017 10:04:06 AM	SB42060
Toluene	ND	0.20	mg/Kg	5	4/12/2017 10:04:06 AM	SB42060
Ethylbenzene	ND	0.20	mg/Kg	5	4/12/2017 10:04:06 AM	SB42060
Xylenes, Total	ND	0.40	mg/Kg	5	4/12/2017 10:04:06 AM	SB42060
Surr: 4-Bromofluorobenzene	121	66.6-132	%Rec	5	4/12/2017 10:04:06 AM	SB42060

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age 2 of 8
uge 2 01 0
specified
ag

#### Lab Order **1704453**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 4/13/2017

**CLIENT:** Blagg Engineering Client Sample ID: Trench-Point 3

 Project:
 Florance GC J 16A
 Collection Date: 4/11/2017 11:09:00 AM

 Lab ID:
 1704453-003
 Matrix: MEOH (SOIL)
 Received Date: 4/12/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	1.5	mg/Kg	1	4/12/2017 2:28:21 PM	31203
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	310	10	mg/Kg	1	4/12/2017 10:40:01 AM	31195
Motor Oil Range Organics (MRO)	77	50	mg/Kg	1	4/12/2017 10:40:01 AM	31195
Surr: DNOP	111	70-130	%Rec	1	4/12/2017 10:40:01 AM	31195
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	4/12/2017 10:27:30 AM	SG42060
Surr: BFB	120	54-150	%Rec	5	4/12/2017 10:27:30 AM	SG42060
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.096	mg/Kg	5	4/12/2017 10:27:30 AM	SB42060
Toluene	ND	0.19	mg/Kg	5	4/12/2017 10:27:30 AM	SB42060
Ethylbenzene	ND	0.19	mg/Kg	5	4/12/2017 10:27:30 AM	SB42060
Xylenes, Total	ND	0.38	mg/Kg	5	4/12/2017 10:27:30 AM	SB42060
Surr: 4-Bromofluorobenzene	118	66.6-132	%Rec	5	4/12/2017 10:27:30 AM	SB42060

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 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

#### Lab Order **1704453**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 4/13/2017

**CLIENT:** Blagg Engineering Client Sample ID: Trench-Point 4

 Project:
 Florance GC J 16A
 Collection Date: 4/11/2017 11:12:00 AM

 Lab ID:
 1704453-004
 Matrix: MEOH (SOIL)
 Received Date: 4/12/2017 7:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	30		mg/Kg	20	4/12/2017 2:40:45 PM	31203
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3				Analyst:	TOM
Diesel Range Organics (DRO)	420	9.2		mg/Kg	1	4/12/2017 11:02:17 AM	31195
Motor Oil Range Organics (MRO)	95	46		mg/Kg	1	4/12/2017 11:02:17 AM	31195
Surr: DNOP	114	70-130		%Rec	1	4/12/2017 11:02:17 AM	31195
EPA METHOD 8015D: GASOLINE RANGI	E					Analyst:	NSB
Gasoline Range Organics (GRO)	56	20		mg/Kg	5	4/12/2017 10:51:02 AM	SG42060
Surr: BFB	179	54-150	S	%Rec	5	4/12/2017 10:51:02 AM	SG42060
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.099		mg/Kg	5	4/12/2017 10:51:02 AM	SB42060
Toluene	ND	0.20		mg/Kg	5	4/12/2017 10:51:02 AM	SB42060
Ethylbenzene	ND	0.20		mg/Kg	5	4/12/2017 10:51:02 AM	SB42060
Xylenes, Total	0.86	0.40		mg/Kg	5	4/12/2017 10:51:02 AM	SB42060
Surr: 4-Bromofluorobenzene	122	66.6-132		%Rec	5	4/12/2017 10:51:02 AM	SB42060

				-		
Qualifiers:	*	Value exceeds Maximum Contaminant Level.		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		

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1704453** 

13-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31203 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 31203 RunNo: 42066

Prep Date: 4/12/2017 Analysis Date: 4/12/2017 SeqNo: 1322090 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31203 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31203 RunNo: 42066

Prep Date: 4/12/2017 Analysis Date: 4/12/2017 SeqNo: 1322091 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 93.9 90 110

#### 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 8

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1704453** 

Qual

%RPD

**RPDLimit** 

13-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID LCS-31195 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 31195 RunNo: 42045

Prep Date: 4/12/2017 Analysis Date: 4/12/2017 SeqNo: 1320584 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit Diesel Range Organics (DRO) 10 49 50.00 0 97.1 63.8 116 Surr: DNOP 5.000 5.1 102 70 130

Sample ID MB-31195 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 31195 RunNo: 42045

Prep Date: 4/12/2017 Analysis Date: 4/12/2017 SeqNo: 1320585 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 11 10.00 112 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#: 1704453

13-Apr-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

Client ID: **PBS** Batch ID: SG42060 RunNo: 42060

Prep Date: Analysis Date: 4/12/2017 SeqNo: 1321736 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 91.4 Surr: BFB 910 54 150

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

Client ID: LCSS Batch ID: SG42060 RunNo: 42060

Prep Date: Analysis Date: 4/12/2017 SeqNo: 1321737 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 0 103 76.4 125 Surr: BFB 990 1000 99.1 54 150

Sample ID 1704453-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: **Trench-Point 1** Batch ID: SG42060 RunNo: 42060

Prep Date: Analysis Date: 4/12/2017 SeqNo: 1321738 Units: mg/Kg

SPK value %REC %RPD **RPDLimit** Analyte Result PQL SPK Ref Val LowLimit HighLimit Qual Gasoline Range Organics (GRO) 280 20 99.68 142.5 134 61.3 150

Surr: BFB 13000 3987 54 150 S 324

Sample ID 1704453-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: Trench-Point 1 Batch ID: SG42060 RunNo: 42060

Analysis Date: 4/12/2017 Prep Date: SeqNo: 1321739 Units: mg/Kg

%REC Analyte Result **PQL** SPK value SPK Ref Val LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 270 20 99.68 142.5 132 61.3 150 0.797 20 Surr: BFB 13000 3987 325 54 150 0 0 S

#### 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 8

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1704453** 

13-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: SB42060 RunNo: 42060

Prep Date: Analysis Date: 4/12/2017 SeqNo: 1321763 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 1.2 1.000 115 66.6 132

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: SB42060 RunNo: 42060 Analysis Date: 4/12/2017 Prep Date: SeqNo: 1321764 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual LowLimit 1.1 0.025 1.000 O 114 80 120 Benzene Toluene 1.1 0.050 1.000 0 107 80 120

Ethylbenzene 0.050 0 104 80 120 1.0 1.000 Xylenes, Total 2.9 0.10 3.000 0 96.3 80 120 Surr: 4-Bromofluorobenzene 1.2 1.000 117 66.6 132

Sample ID 1704453-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: Trench-Point 2 Batch ID: SB42060 RunNo: 42060

Prep Date: Analysis Date: 4/12/2017 SeqNo: 1321765 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 5.3 0.10 4.049 130 61.5 138 0 Toluene 4.9 0.20 4.049 0 120 71.4 127 70.9 Ethylbenzene 0.20 4.049 0 120 132 4.9 0.2811 Xylenes, Total 13 0.40 12.15 108 76.2 123 Surr: 4-Bromofluorobenzene 5.0 4.049 123 66.6 132

Sample ID 1704453-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles

Client ID: Trench-Point 2 Batch ID: SB42060 RunNo: 42060

OHOTE ID: HOHOTT OHIE Z	Editio: 4200									l
Prep Date:	Analysis Date: 4/12/2017			S	SeqNo: 1	321766	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	5.2	0.10	4.049	0	128	61.5	138	1.30	20	
Toluene	4.9	0.20	4.049	0	121	71.4	127	0.389	20	
Ethylbenzene	4.8	0.20	4.049	0	118	70.9	132	1.58	20	
Xylenes, Total	13	0.40	12.15	0.2811	107	76.2	123	1.33	20	
Surr: 4-Bromofluorobenzene	5.0		4.049		125	66.6	132	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 8



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: B	LAGG	Work Order Number	1704453	And the second s	RcptNo: 1	positives are go of a large and a large an
Received By:	₋indsay Mangin	4/12/2017 7:00:00 AM		January Hagay		
Completed By:	₋indsay Mangin	4/12/2017 7:35:33 AM		Simoky Alexand		
Reviewed By: E	M	04/12/17				
Chain of Custo	<u>dy</u>					
1. Custody seals	intact on sample bottle	s?	Yes []	No 🗔	Not Present 🗹	
2. Is Chain of Cus	tody complete?		Yes 🗸	No 🗌	Not Present	
3. How was the sa	ample delivered?		Courier			
<u>Log In</u>						
4. Was an attemp	ot made to cool the san	nples?	Yes 😾	No 🗌	NA []	
5. Were all sample	es received at a tempe	erature of >0° C to 6.0°C	Yes 🗹	No 🗌	NA 🗌	
6. Sample(s) in p	roper container(s)?		Yes 🔽	No 🗆		
7. Sufficient samp	le volume for indicated	I test(s)?	Yes 🗹	No 🛄		
8. Are samples (e	xcept VOA and ONG)	properly preserved?	Yes 🗸	No 🗌		
9. Was preservati	ve added to bottles?		Yes 🗔	No 🗸	NA 🗀	
10.VOA vials have	zero headspace?		Yes 🗌	No 🗌	No VOA Vials 🔽	
11. Were any sam	ple containers received	l broken?	Yes 🗀	No 🛂	# of preserved bottles checked	
• •	k match bottle labels?	dy)	Yes 🗹	No 🗀	for pH:	12 unless noted
13 Are matrices co	orrectly identified on Ch	nain of Custody?	Yes 🗸	No 🗀	Adjusted?	
14, is it clear what	analyses were request	ed?	Yes 🔽	No 🗔		
	g times able to be met stomer for authorization		Yes 🗹	No 🗌	Checked by:	
Propini Handlis	na (if annliachle)					
	ng (if applicable) Tied of all discrepancies	s with this order?	Yes 🗀	No 🗀	NA 🗹	
Person N	otified:	Date:				
By Whom	1:	Via:	] eMail]	Phone 🗌 Fax	n Person	
Regardin	g:					
Client Ins	tructions:					
17. Additional rem	arks:					
18. <u>Cooler Inform</u> Cooler No	ation Temp °C   Condition	Seal Intact   Seal No	Seal Date	Signed By		
	1.5 Good	Yes		2:3:12n 21		

HALL ENVIRONMENTAL	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis Request	(\$\O\)	(SV)	OA MIS	(1.8 (1.8 (1.4) (1.4) (1.4) (1.8) (1.8)	\\O\ \\O\ \\O\ \\O\ \\O\ \\O\ \\O\ \\O	Metse (OA)	BTEX + ## BTEX + N TPH 8015 TPH (Met PPH's (83 RCRA 8 N Anions (F 8081 Pes 8081 Pes 8081 Pes 8081 Pes 8081 Pes 8081 Pes 8081 Pes	×								,	<b>∞</b>	WAS FLACOUST ( F. CAMERCETTLA	, <del>]</del>	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: SAME	□ Standard XRush	)	NE OC I IOA	Project #:						Tarmaratina:		Container Preservative HEAL No. X Type Type Type Type Type Type Type Type	400x ( 100 - 100) X		-6033	180-						Received by: Date Time Remain	wholet Info 120	Received by:  OH 12 17 070	
n-of-Custody Record	SP AMERICA	BLAGO ENGINEERING INC.			Phone #: (505) 320 · (19 3	email or Fax#:	ii	X Standard □ Level 4 (Full Validation)	Accreditation	١.	☐ EDD (1ype)	Date Time Matrix Sample Request ID	Wilher 1058 Soll TRENCH- Powr 1	105			ļ					Time: Relinquished by:	07-11	Date: Time: Refinquished by:	necessary, samples submitted to Hall I

# Appendix C

# Treated Soil Pile Laboratory Analytical Data Reports



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

January 18, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1701592

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 10 sample(s) on 1/14/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# **Analytical Report**

# Lab Order **1701592**Date Reported: **1/18/2017**

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: BP-TSP 1

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 1:48:00 PM

 Lab ID:
 1701592-001
 Matrix: SOIL
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	: LGT
Chloride	ND	30		mg/Kg	20	1/17/2017 2:06:03 PM	29727
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S				Analys	: TOM
Diesel Range Organics (DRO)	31	10		mg/Kg	1	1/17/2017 12:45:00 PM	1 29711
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/17/2017 12:45:00 PM	1 29711
Surr: DNOP	97.8	70-130		%Rec	1	1/17/2017 12:45:00 PM	1 29711
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	:: NSB
Gasoline Range Organics (GRO)	32	4.8		mg/Kg	1	1/17/2017 2:41:03 PM	29708
Surr: BFB	312	68.3-144	S	%Rec	1	1/17/2017 2:41:03 PM	29708
EPA METHOD 8021B: VOLATILES						Analys	:: NSB
Benzene	ND	0.024		mg/Kg	1	1/17/2017 2:41:03 PM	29708
Toluene	ND	0.048		mg/Kg	1	1/17/2017 2:41:03 PM	29708
Ethylbenzene	ND	0.048		mg/Kg	1	1/17/2017 2:41:03 PM	29708
Xylenes, Total	0.12	0.096		mg/Kg	1	1/17/2017 2:41:03 PM	29708
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	1/17/2017 2:41:03 PM	29708

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

# Date Reported: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: BP-TSP 2

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 1:52:00 PM

 Lab ID:
 1701592-002
 Matrix: SOIL
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: LGT
Chloride	ND	30		mg/Kg	20	1/17/2017 2:43:17 PM	29727
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	s				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	40	9.3		mg/Kg	1	1/17/2017 1:06:35 PM	29711
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/17/2017 1:06:35 PM	29711
Surr: DNOP	98.3	70-130		%Rec	1	1/17/2017 1:06:35 PM	29711
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	41	4.7		mg/Kg	1	1/17/2017 3:04:37 PM	29708
Surr: BFB	408	68.3-144	S	%Rec	1	1/17/2017 3:04:37 PM	29708
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.024		mg/Kg	1	1/17/2017 3:04:37 PM	29708
Toluene	ND	0.047		mg/Kg	1	1/17/2017 3:04:37 PM	29708
Ethylbenzene	ND	0.047		mg/Kg	1	1/17/2017 3:04:37 PM	29708
Xylenes, Total	0.11	0.095		mg/Kg	1	1/17/2017 3:04:37 PM	29708
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	1/17/2017 3:04:37 PM	29708

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: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: BP-TSP 3

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 1:55:00 PM

 Lab ID:
 1701592-003
 Matrix: SOIL
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	1/17/2017 3:20:30 PM	29727
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	32	9.9		mg/Kg	1	1/17/2017 1:27:59 PM	29711
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/17/2017 1:27:59 PM	29711
Surr: DNOP	104	70-130		%Rec	1	1/17/2017 1:27:59 PM	29711
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	40	4.6		mg/Kg	1	1/17/2017 3:28:15 PM	29708
Surr: BFB	388	68.3-144	S	%Rec	1	1/17/2017 3:28:15 PM	29708
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.023		mg/Kg	1	1/17/2017 3:28:15 PM	29708
Toluene	ND	0.046		mg/Kg	1	1/17/2017 3:28:15 PM	29708
Ethylbenzene	ND	0.046		mg/Kg	1	1/17/2017 3:28:15 PM	29708
Xylenes, Total	0.17	0.093		mg/Kg	1	1/17/2017 3:28:15 PM	29708
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	1/17/2017 3:28:15 PM	29708

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

# Date Reported: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: BP-TSP 4

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 1:58:00 PM

 Lab ID:
 1701592-004
 Matrix: SOIL
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: LGT
Chloride	ND	30		mg/Kg	20	1/17/2017 3:32:54 PM	29727
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	s				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	31	10		mg/Kg	1	1/17/2017 1:49:50 PM	29711
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/17/2017 1:49:50 PM	29711
Surr: DNOP	98.9	70-130		%Rec	1	1/17/2017 1:49:50 PM	29711
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	36	4.8		mg/Kg	1	1/17/2017 3:51:53 PM	29708
Surr: BFB	387	68.3-144	S	%Rec	1	1/17/2017 3:51:53 PM	29708
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.024		mg/Kg	1	1/17/2017 3:51:53 PM	29708
Toluene	ND	0.048		mg/Kg	1	1/17/2017 3:51:53 PM	29708
Ethylbenzene	ND	0.048		mg/Kg	1	1/17/2017 3:51:53 PM	29708
Xylenes, Total	0.11	0.096		mg/Kg	1	1/17/2017 3:51:53 PM	29708
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	1/17/2017 3:51:53 PM	29708

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: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: BP-TSP 5

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 2:02:00 PM

 Lab ID:
 1701592-005
 Matrix: SOIL
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	1/17/2017 3:45:18 PM	29727
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	14	9.8		mg/Kg	1	1/17/2017 2:11:26 PM	29711
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/17/2017 2:11:26 PM	29711
Surr: DNOP	99.2	70-130		%Rec	1	1/17/2017 2:11:26 PM	29711
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	38	4.9		mg/Kg	1	1/17/2017 4:15:20 PM	29708
Surr: BFB	390	68.3-144	S	%Rec	1	1/17/2017 4:15:20 PM	29708
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.024		mg/Kg	1	1/17/2017 4:15:20 PM	29708
Toluene	ND	0.049		mg/Kg	1	1/17/2017 4:15:20 PM	29708
Ethylbenzene	ND	0.049		mg/Kg	1	1/17/2017 4:15:20 PM	29708
Xylenes, Total	0.12	0.098		mg/Kg	1	1/17/2017 4:15:20 PM	29708
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	1/17/2017 4:15:20 PM	29708

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 limi		
	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: 1/18/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: BP-TSP 6

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 2:06:00 PM

 Lab ID:
 1701592-006
 Matrix: SOIL
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: LGT
Chloride	ND	30		mg/Kg	20	1/17/2017 3:57:42 PM	29727
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	s				Analyst	: TOM
Diesel Range Organics (DRO)	25	9.9		mg/Kg	1	1/17/2017 2:33:02 PM	29711
Motor Oil Range Organics (MRO)	61	49		mg/Kg	1	1/17/2017 2:33:02 PM	29711
Surr: DNOP	99.4	70-130		%Rec	1	1/17/2017 2:33:02 PM	29711
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	: NSB
Gasoline Range Organics (GRO)	27	4.8		mg/Kg	1	1/17/2017 4:38:49 PM	29708
Surr: BFB	295	68.3-144	S	%Rec	1	1/17/2017 4:38:49 PM	29708
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.024		mg/Kg	1	1/17/2017 4:38:49 PM	29708
Toluene	ND	0.048		mg/Kg	1	1/17/2017 4:38:49 PM	29708
Ethylbenzene	ND	0.048		mg/Kg	1	1/17/2017 4:38:49 PM	29708
Xylenes, Total	0.11	0.095		mg/Kg	1	1/17/2017 4:38:49 PM	29708
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	1/17/2017 4:38:49 PM	29708

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: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: BP-TSP 7

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 2:21:00 PM

 Lab ID:
 1701592-007
 Matrix: SOIL
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	1/17/2017 4:10:07 PM	29727
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S				Analys	t: TOM
Diesel Range Organics (DRO)	250	10		mg/Kg	1	1/17/2017 2:54:33 PM	29711
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	1/17/2017 2:54:33 PM	29711
Surr: DNOP	105	70-130		%Rec	1	1/17/2017 2:54:33 PM	29711
EPA METHOD 8015D: GASOLINE RANG	E					Analys	t: NSB
Gasoline Range Organics (GRO)	44	4.8		mg/Kg	1	1/17/2017 5:02:17 PM	29708
Surr: BFB	410	68.3-144	S	%Rec	1	1/17/2017 5:02:17 PM	29708
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.024		mg/Kg	1	1/17/2017 5:02:17 PM	29708
Toluene	ND	0.048		mg/Kg	1	1/17/2017 5:02:17 PM	29708
Ethylbenzene	ND	0.048		mg/Kg	1	1/17/2017 5:02:17 PM	29708
Xylenes, Total	0.26	0.096		mg/Kg	1	1/17/2017 5:02:17 PM	29708
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	1/17/2017 5:02:17 PM	29708

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

## Date Reported: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: BP-TSP 8

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 2:18:00 PM

 Lab ID:
 1701592-008
 Matrix: SOIL
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: LGT
Chloride	ND	30		mg/Kg	20	1/17/2017 4:22:31 PM	29727
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	230	9.9		mg/Kg	1	1/17/2017 3:16:11 PM	29711
Motor Oil Range Organics (MRO)	130	49		mg/Kg	1	1/17/2017 3:16:11 PM	29711
Surr: DNOP	104	70-130		%Rec	1	1/17/2017 3:16:11 PM	29711
EPA METHOD 8015D: GASOLINE RAN	GE					Analys	t: NSB
Gasoline Range Organics (GRO)	45	4.8		mg/Kg	1	1/17/2017 5:25:43 PM	29708
Surr: BFB	431	68.3-144	S	%Rec	1	1/17/2017 5:25:43 PM	29708
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.024		mg/Kg	1	1/17/2017 5:25:43 PM	29708
Toluene	ND	0.048		mg/Kg	1	1/17/2017 5:25:43 PM	29708
Ethylbenzene	ND	0.048		mg/Kg	1	1/17/2017 5:25:43 PM	29708
Xylenes, Total	0.20	0.095		mg/Kg	1	1/17/2017 5:25:43 PM	29708
Surr: 4-Bromofluorobenzene	115	80-120		%Rec	1	1/17/2017 5:25:43 PM	29708

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

Date Reported: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: BP-TSP 9

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 2:15:00 PM

 Lab ID:
 1701592-009
 Matrix: SOIL
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	:: LGT
Chloride	ND	30		mg/Kg	20	1/17/2017 4:34:56 PM	29727
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	S				Analys	: TOM
Diesel Range Organics (DRO)	400	9.7		mg/Kg	1	1/17/2017 3:37:42 PM	29711
Motor Oil Range Organics (MRO)	190	49		mg/Kg	1	1/17/2017 3:37:42 PM	29711
Surr: DNOP	106	70-130		%Rec	1	1/17/2017 3:37:42 PM	29711
EPA METHOD 8015D: GASOLINE RAN	GE					Analys	:: NSB
Gasoline Range Organics (GRO)	61	4.7		mg/Kg	1	1/17/2017 9:43:50 PM	29708
Surr: BFB	527	68.3-144	S	%Rec	1	1/17/2017 9:43:50 PM	29708
EPA METHOD 8021B: VOLATILES						Analys	: NSB
Benzene	ND	0.024		mg/Kg	1	1/17/2017 9:43:50 PM	29708
Toluene	ND	0.047		mg/Kg	1	1/17/2017 9:43:50 PM	29708
Ethylbenzene	ND	0.047		mg/Kg	1	1/17/2017 9:43:50 PM	29708
Xylenes, Total	0.43	0.095		mg/Kg	1	1/17/2017 9:43:50 PM	29708
Surr: 4-Bromofluorobenzene	120	80-120	S	%Rec	1	1/17/2017 9:43:50 PM	29708

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

W Sample container temperature is out of limit as specified

S % Recovery outside of range due to dilution or matrix

Date Reported: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: BP-TSP 10

 Project:
 Florance GC J 16A
 Collection Date: 1/13/2017 2:12:00 PM

 Lab ID:
 1701592-010
 Matrix: SOIL
 Received Date: 1/14/2017 9:00:00 AM

Analyses	Result	PQL (	Qual U	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	1/17/2017 4:47:21 PM	29727
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S				Analys	t: TOM
Diesel Range Organics (DRO)	400	9.6		mg/Kg	1	1/17/2017 3:59:23 PM	29711
Motor Oil Range Organics (MRO)	200	48		mg/Kg	1	1/17/2017 3:59:23 PM	29711
Surr: DNOP	109	70-130		%Rec	1	1/17/2017 3:59:23 PM	29711
EPA METHOD 8015D: GASOLINE RANG	E					Analys	t: NSB
Gasoline Range Organics (GRO)	61	4.7		mg/Kg	1	1/17/2017 10:07:12 PM	<i>I</i> 29708
Surr: BFB	537	68.3-144	S	%Rec	1	1/17/2017 10:07:12 PM	<i>I</i> 29708
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.024		mg/Kg	1	1/17/2017 10:07:12 PM	A 29708
Toluene	ND	0.047		mg/Kg	1	1/17/2017 10:07:12 PM	<i>I</i> 29708
Ethylbenzene	ND	0.047		mg/Kg	1	1/17/2017 10:07:12 PM	<i>I</i> 29708
Xylenes, Total	0.34	0.095		mg/Kg	1	1/17/2017 10:07:12 PM	<i>I</i> 29708
Surr: 4-Bromofluorobenzene	118	80-120		%Rec	1	1/17/2017 10:07:12 PM	<i>I</i> 29708

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 limit Page 10 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#: 1701592

18-Jan-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-29727 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 29727 RunNo: 40074

Prep Date: 1/16/2017 Analysis Date: 1/17/2017 SeqNo: 1256647 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29727 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29727 RunNo: 40074

Prep Date: 1/16/2017 Analysis Date: 1/17/2017 SeqNo: 1256648 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 92.8 110

#### 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#: **1701592** 

18-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29708 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 29708 RunNo: 40079

Prep Date: 1/16/2017 Analysis Date: 1/17/2017 SeqNo: 1256299 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 840 1000 84.0 68.3 144

Sample ID LCS-29708 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 29708 RunNo: 40079

Prep Date: 1/16/2017 Analysis Date: 1/17/2017 SeqNo: 1256300 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
 74.6
 123

 Surr: BFB
 930
 1000
 93.3
 68.3
 144

Sample ID 1701592-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: **BP-TSP 1** Batch ID: **29708** RunNo: **40079** 

Prep Date: 1/16/2017 Analysis Date: 1/17/2017 SeqNo: 1256302 Units: mg/Kg

SPK value SPK Ref Val LowLimit %RPD **RPDLimit** Qual Analyte Result **PQL** %REC HighLimit Gasoline Range Organics (GRO) 41 23.41 31.51 42.4 61.3 150 S Surr: BFB 2300 936.3 251 68.3 S 144

Sample ID 1701592-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: BP-TSP 1 Batch ID: 29708 RunNo: 40079

Prep Date: 1/16/2017 Analysis Date: 1/17/2017 SeqNo: 1256303 Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 63 4.7 23.47 31.51 134 61.3 150 41.2 20 R Surr: BFB 3200 939.0 346 68.3 144 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 / L D

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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#: **1701592** 

18-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29708 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: 29708 RunNo: 40079 Prep Date: 1/16/2017 Analysis Date: 1/17/2017 SeqNo: 1256328 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 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 0.89 1.000 89.5 80 120

Sample ID LCS-29708 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: 29708 RunNo: 40079 SeqNo: 1256329 Prep Date: 1/16/2017 Analysis Date: 1/17/2017 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result 1.0 0.025 1.000 O 99.8 75.2 115 Benzene Toluene 0.93 0.050 1.000 0 93.5 80.7 112 Ethylbenzene 0.91 0.050 0 91.4 78.9 1.000 117 Xylenes, Total 2.8 0.10 3.000 0 91.7 79.2 115 Surr: 4-Bromofluorobenzene 0.94 1.000 94.4 80 120

Sample ID 1701592-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles **BP-TSP 2** RunNo: 40079 Client ID: Batch ID: 29708 Prep Date: 1/16/2017 Analysis Date: 1/17/2017 SeqNo: 1256333 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.99 0.024 0.9681 103 61.5 138 0 Toluene 0.048 0.9681 0 105 71.4 127 1.0 70.9 Ethylbenzene 0.048 0.9681 0 108 132 1.0 0.1055 Xylenes, Total 3.2 0.097 2.904 106 76.2 123 Surr: 4-Bromofluorobenzene 0.9681 1.1 115 80 120

Sample ID 1701592-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles										
Client ID: BP-TSP 2	Client ID: <b>BP-TSP 2</b> Batch ID: <b>29708</b> RunNo: <b>40079</b>									
Prep Date: 1/16/2017	Analysis D	ate: <b>1/</b>	17/2017	S	SeqNo: 1	256334	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9416	0	108	61.5	138	2.44	20	
Toluene	1.0	0.047	0.9416	0	106	71.4	127	2.07	20	
Ethylbenzene	1.0	0.047	0.9416	0	107	70.9	132	3.68	20	
Xylenes, Total	3.1	0.094	2.825	0.1055	106	76.2	123	2.98	20	
Surr: 4-Bromofluorobenzene	1.1		0.9416		113	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

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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:	BLAGG	Work Order Nu	ımber: <b>170</b> 1	592		·	RcptN	o: <b>1</b>
Received by/da	ate: (#	01/4/17	· · · · · · · · · · · · · · · · · · ·					
Logged By:	Lindsay Mangi	n 1/14/2017 9:00:0	00 AM		Joneky	4Hayyo		
Completed By:	Lindsay Mangi	n 1/14/2017 10:25:	52 AM		Amely	Albago		
Reviewed By:/	Ka o	1/16/17			00	U		
Chain of Cu	stody	45 × 1 5 6						
1. Custody se	eals intact on sample	e bottles?	Yes		No	[]	Not Present ✓	†
2. Is Chain of	Custody complete?	•	Yes	<b>V</b>			Not Present	
3. How was th	ne sample delivered	?	Cou					
Log In								
4. Was an at	tempt made to cool	the samples?	Yes	V	No		NA 🗆	
5. Were all sa	amples received at a	a temperature of >0° C to 6.0°C	Yes	<b>✓</b>	No		na []	
6. Sample(s)	in proper container(	(s)?	Yes	<b>✓</b>	No			
7. Sufficient s	ample volume for in	dicated test(s)?	Yes	$\mathbf{Z}$	No			
8. Are sample	s (except VOA and	ONG) properly preserved?	Yes		No			
9. Was preser	vative added to bot	tles?	Yes		No	✓	NA []	
10.VOA vials h	nave zero headspac	e?	Yes	[-]	No		No VOA Vials 🗹	
	sample containers re		Yes			<u> </u>	THO VOA VIAIS	
							# of preserved bottles checked	
	work match bottle la epancies on chain o		Yes	<b>Y</b>	No		for pH:	or >12 unless noted)
		on Chain of Custody?	Yes	<b>Y</b>	No	[-]	(<2 Adjusted?	or >12 unless noted)
	hat analyses were re	•		V	No		•	
	lding times able to b customer for autho		Yes		No		Checked by:	
		,						
<u>Special Hand</u>	dling (if applica	ble)						
16. Was client r	notified of all discrep	pancies with this order?	Yes	[.]	No		na 🗹	
Perso	n Notified:	Da	ıte:			***************		
By Wi		. Via	a: [] eMa	il [ <u>.</u> ]	Phone [	Fax	in Person	
Regar								:
Client	Instructions:							
17. Additional r	emarks:							
18. <u>Cooler Info</u>	TRACE TO A STATE OF THE STATE OF	the of the own street						
Cooler N	lo Temp °C Co 1.6 Goo	ondition Seal Intact Seal No d Yes	Seal Da	te	Signed B	У		
L	11.5	V 163		SW SW SW SW SW SW SW SW SW SW SW SW SW S				

HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	TPH 8015B (GRO / DRO / MRO)  TPH (Method 418.1)  EDB (Method 504.1)  PAH's (8310 or 8270 SIMS)  RCRA 8 Metals  Anions (F,Cl,NO₃,NO₂,PO₄,SO₄)  8081 Pesticides / 8082 PCB's  8260B (VOA)  8270 (Semi-VOA)  CHANADE		×	×	×	\ \times \	×	X	×	×	X	ZIV 80	<b>%</b> Z		y sub-contracted data will be clearly notated on the analytical report.
4901 Tel. (	BTEX + MTBE + TPH (Gas only)  TPH 80158 (GBO / DBO / MBO)		×	×	X	X	X	X			х Х	Remarks:		Soll 7	ssibility. Any
Turn-Around Time: By WED.    1/18/2017   Standard XRush   1/18/2017   Project Name:   Florance (SC I No.)   Project #:     Project #:	Project Manager:  J. B.A.C. Sampler: J. B.A.C. On loe: A. B.A.C. Sample Temperature: A.C. Container Preservative The AL No. Type and # Type		200- W	x 200- n	x 1-00- N )	$\times$ $\frac{1}{200}$	× 200- 11 11	x ±00-   n   n	× 800 - 11 11	K R COO X	/ QIQ- //	Received by: Date Time R	rilliado 1717	Received by Time DIVIII Pate 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 ient: BP AMERICA BLASO ENGANEERING INC. ailing Address:	ckage: rrd	1201 1348 SOU EP-TSP I.	dS1-d2 " 25El	1 1355 " BP-75 P 3	42T - 93 )1	5 421 - 62 11 2011		1 man 11 20- 75 7	8 45T - 98 12 PA 13	1 MIS " BP- 75P Q	01 451 - 48 h 21/h 11	ate: Relinquished by:	TH FI	ate: Time: Refinquished by:	<b>]</b>



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

January 24, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1701928

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 12 sample(s) on 1/21/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 1/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-11

**Project:** Florance GC J 16A Collection Date: 1/20/2017 10:38:00 AM Lab ID: 1701928-001 Matrix: MEOH (SOIL) **Received Date:** 1/21/2017 9:15:00 AM

Analyses	Result	PQL Q	Qual Unit	ts D	F Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/	Kg 2	0 1/23/2017 9:18:47 AM	29834
EPA METHOD 8015D MOD: GASOLINE F	RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	74	3.4	mg/	Kg 1	1/21/2017 7:47:20 PM	C40186
Surr: BFB	128	70-130	%R	ec 1	1/21/2017 7:47:20 PM	C40186
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	360	10	mg/	Kg 1	1/23/2017 10:10:55 AM	29817
Motor Oil Range Organics (MRO)	240	51	mg/	Kg 1	1/23/2017 10:10:55 AM	29817
Surr: DNOP	111	70-130	%R	ec 1	1/23/2017 10:10:55 AM	29817
EPA METHOD 8260B: VOLATILES SHOP	RT LIST				Analyst	: DJF
Benzene	ND	0.017	mg/	Kg 1	1/21/2017 7:47:20 PM	A40186
Toluene	ND	0.034	mg/	Kg 1	1/21/2017 7:47:20 PM	A40186
Ethylbenzene	ND	0.034	mg/	Kg 1	1/21/2017 7:47:20 PM	A40186
Xylenes, Total	ND	0.068	mg/	Kg 1	1/21/2017 7:47:20 PM	A40186
Surr: 1,2-Dichloroethane-d4	87.8	70-130	%R	ec 1	1/21/2017 7:47:20 PM	A40186
Surr: 4-Bromofluorobenzene	130	70-130	S %R	ec 1	1/21/2017 7:47:20 PM	A40186
Surr: Dibromofluoromethane	86.6	70-130	%R	ec 1	1/21/2017 7:47:20 PM	A40186
Surr: Toluene-d8	102	70-130	%R	ec 1	1/21/2017 7:47:20 PM	A40186

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 1 of 19 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 1/24/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-12

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 10:41:00 AM

 Lab ID:
 1701928-002
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL (	Qual \	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	1/23/2017 9:31:11 AM	29834
EPA METHOD 8015D MOD: GASOL	INE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	71	3.4		mg/Kg	1	1/21/2017 8:16:06 PM	C40186
Surr: BFB	129	70-130		%Rec	1	1/21/2017 8:16:06 PM	C40186
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS					Analyst	: TOM
Diesel Range Organics (DRO)	320	9.7		mg/Kg	1	1/23/2017 10:33:59 AM	29817
Motor Oil Range Organics (MRO)	290	49		mg/Kg	1	1/23/2017 10:33:59 AM	29817
Surr: DNOP	114	70-130		%Rec	1	1/23/2017 10:33:59 AM	29817
EPA METHOD 8260B: VOLATILES S	SHORT LIST					Analyst	DJF
Benzene	ND	0.017		mg/Kg	1	1/21/2017 8:16:06 PM	A40186
Toluene	ND	0.034		mg/Kg	1	1/21/2017 8:16:06 PM	A40186
Ethylbenzene	ND	0.034		mg/Kg	1	1/21/2017 8:16:06 PM	A40186
Xylenes, Total	ND	0.067		mg/Kg	1	1/21/2017 8:16:06 PM	A40186
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%Rec	1	1/21/2017 8:16:06 PM	A40186
Surr: 4-Bromofluorobenzene	134	70-130	S	%Rec	1	1/21/2017 8:16:06 PM	A40186
Surr: Dibromofluoromethane	90.0	70-130		%Rec	1	1/21/2017 8:16:06 PM	A40186
Surr: Toluene-d8	102	70-130		%Rec	1	1/21/2017 8:16:06 PM	A40186

Qualifiers:	~	Value 6	exc

- \* 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 19
- 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: 1/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-13

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 10:44:00 AM

 Lab ID:
 1701928-003
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30		mg/Kg	20	1/23/2017 9:43:35 AM	29834
EPA METHOD 8015D MOD: GASOLIN	E RANGE					Analyst	: DJF
Gasoline Range Organics (GRO)	84	3.7		mg/Kg	1	1/21/2017 8:44:55 PM	C40186
Surr: BFB	130	70-130	S	%Rec	1	1/21/2017 8:44:55 PM	C40186
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS					Analyst	: TOM
Diesel Range Organics (DRO)	380	9.8		mg/Kg	1	1/23/2017 10:57:12 AM	29817
Motor Oil Range Organics (MRO)	250	49		mg/Kg	1	1/23/2017 10:57:12 AM	29817
Surr: DNOP	112	70-130		%Rec	1	1/23/2017 10:57:12 AM	29817
EPA METHOD 8260B: VOLATILES SH	ORT LIST					Analyst	DJF
Benzene	ND	0.018		mg/Kg	1	1/21/2017 8:44:55 PM	A40186
Toluene	ND	0.037		mg/Kg	1	1/21/2017 8:44:55 PM	A40186
Ethylbenzene	ND	0.037		mg/Kg	1	1/21/2017 8:44:55 PM	A40186
Xylenes, Total	ND	0.073		mg/Kg	1	1/21/2017 8:44:55 PM	A40186
Surr: 1,2-Dichloroethane-d4	88.2	70-130		%Rec	1	1/21/2017 8:44:55 PM	A40186
Surr: 4-Bromofluorobenzene	133	70-130	S	%Rec	1	1/21/2017 8:44:55 PM	A40186
Surr: Dibromofluoromethane	89.0	70-130		%Rec	1	1/21/2017 8:44:55 PM	A40186
Surr: Toluene-d8	99.2	70-130		%Rec	1	1/21/2017 8:44:55 PM	A40186

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 19
	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: 1/24/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-14

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 10:49:00 AM

 Lab ID:
 1701928-004
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	1/23/2017 9:55:59 AM	29834
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	73	3.5	mg/Kg	1	1/21/2017 9:13:46 PM	C40186
Surr: BFB	127	70-130	%Rec	1	1/21/2017 9:13:46 PM	C40186
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	360	9.6	mg/Kg	1	1/23/2017 11:20:25 AM	29817
Motor Oil Range Organics (MRO)	180	48	mg/Kg	1	1/23/2017 11:20:25 AM	29817
Surr: DNOP	114	70-130	%Rec	1	1/23/2017 11:20:25 AM	29817
EPA METHOD 8260B: VOLATILES SHO	RT LIST				Analyst	: DJF
Benzene	ND	0.018	mg/Kg	1	1/21/2017 9:13:46 PM	A40186
Toluene	ND	0.035	mg/Kg	1	1/21/2017 9:13:46 PM	A40186
Ethylbenzene	ND	0.035	mg/Kg	1	1/21/2017 9:13:46 PM	A40186
Xylenes, Total	ND	0.070	mg/Kg	1	1/21/2017 9:13:46 PM	A40186
Surr: 1,2-Dichloroethane-d4	86.2	70-130	%Rec	1	1/21/2017 9:13:46 PM	A40186
Surr: 4-Bromofluorobenzene	130	70-130	%Rec	1	1/21/2017 9:13:46 PM	A40186
Surr: Dibromofluoromethane	86.8	70-130	%Rec	1	1/21/2017 9:13:46 PM	A40186
Surr: Toluene-d8	99.1	70-130	%Rec	1	1/21/2017 9:13:46 PM	A40186

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 19
	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: 1/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-15

**Project:** Florance GC J 16A Collection Date: 1/20/2017 10:53:00 AM 1701928-005 Lab ID: Matrix: MEOH (SOIL) **Received Date:** 1/21/2017 9:15:00 AM

Analyses	Result	PQL Q	Qual Units	DF Date Analyzed Batch	atch
EPA METHOD 300.0: ANIONS				Analyst: <b>MRA</b>	IRA
Chloride	ND	30	mg/Kg	20 1/23/2017 10:08:23 AM 2983	9834
EPA METHOD 8015D MOD: GASOLINI	ERANGE			Analyst: DJF	JF
Gasoline Range Organics (GRO)	73	3.4	mg/Kg	1 1/21/2017 9:42:28 PM C401	40186
Surr: BFB	125	70-130	%Rec	1 1/21/2017 9:42:28 PM C401	40186
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	;		Analyst: <b>TOM</b>	OM
Diesel Range Organics (DRO)	330	9.6	mg/Kg	1 1/23/2017 11:43:44 AM 2981	9817
Motor Oil Range Organics (MRO)	170	48	mg/Kg	1 1/23/2017 11:43:44 AM 2981	9817
Surr: DNOP	115	70-130	%Rec	1 1/23/2017 11:43:44 AM 2981	9817
EPA METHOD 8260B: VOLATILES SH	ORT LIST			Analyst: <b>DJF</b>	JF
Benzene	ND	0.017	mg/Kg	1 1/21/2017 9:42:28 PM A401	40186
Toluene	ND	0.034	mg/Kg	1 1/21/2017 9:42:28 PM A401	40186
Ethylbenzene	ND	0.034	mg/Kg	1 1/21/2017 9:42:28 PM A401	40186
Xylenes, Total	ND	0.067	mg/Kg	1 1/21/2017 9:42:28 PM A401	40186
Surr: 1,2-Dichloroethane-d4	85.7	70-130	%Rec	1 1/21/2017 9:42:28 PM A401	40186
Surr: 4-Bromofluorobenzene	134	70-130	S %Rec	1 1/21/2017 9:42:28 PM A401	40186
Surr: Dibromofluoromethane	84.6	70-130	%Rec	1 1/21/2017 9:42:28 PM A401	40186
Surr: Toluene-d8	99.4	70-130	%Rec	1 1/21/2017 9:42:28 PM A401	40186

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
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range

age 5 of 19 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: 1/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-16

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 10:57:00 AM

 Lab ID:
 1701928-006
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL Q	ual Units	DF Date Analyzed Batch
EPA METHOD 300.0: ANIONS				Analyst: <b>MRA</b>
Chloride	ND	30	mg/Kg	20 1/23/2017 10:20:48 AM 29834
EPA METHOD 8015D MOD: GASOLINE F	RANGE			Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	76	3.6	mg/Kg	1 1/22/2017 1:03:51 AM C40186
Surr: BFB	126	70-130	%Rec	1 1/22/2017 1:03:51 AM C40186
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	6		Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	370	10	mg/Kg	1 1/23/2017 12:07:03 PM 29817
Motor Oil Range Organics (MRO)	200	51	mg/Kg	1 1/23/2017 12:07:03 PM 29817
Surr: DNOP	116	70-130	%Rec	1 1/23/2017 12:07:03 PM 29817
EPA METHOD 8260B: VOLATILES SHOP	RT LIST			Analyst: <b>DJF</b>
Benzene	ND	0.018	mg/Kg	1 1/22/2017 1:03:51 AM A40186
Toluene	ND	0.036	mg/Kg	1 1/22/2017 1:03:51 AM A40186
Ethylbenzene	ND	0.036	mg/Kg	1 1/22/2017 1:03:51 AM A40186
Xylenes, Total	ND	0.072	mg/Kg	1 1/22/2017 1:03:51 AM A40186
Surr: 1,2-Dichloroethane-d4	91.1	70-130	%Rec	1 1/22/2017 1:03:51 AM A40186
Surr: 4-Bromofluorobenzene	135	70-130	S %Rec	1 1/22/2017 1:03:51 AM A40186
Surr: Dibromofluoromethane	91.1	70-130	%Rec	1 1/22/2017 1:03:51 AM A40186
Surr: Toluene-d8	99.4	70-130	%Rec	1 1/22/2017 1:03:51 AM A40186

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 19
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accented recovery limits	RI.	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: 1/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-17

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 11:00:00 AM

 Lab ID:
 1701928-007
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL (	Qual Unit	s DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/l	<b>K</b> g 20	1/23/2017 10:33:13 AM	29834
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	71	3.3	mg/l	<b>K</b> g 1	1/22/2017 1:32:36 AM	C40186
Surr: BFB	123	70-130	%Re	ec 1	1/22/2017 1:32:36 AM	C40186
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	i			Analyst	: TOM
Diesel Range Organics (DRO)	370	9.6	mg/l	<b>K</b> g 1	1/23/2017 12:30:31 PM	29817
Motor Oil Range Organics (MRO)	200	48	mg/l	<b>K</b> g 1	1/23/2017 12:30:31 PM	29817
Surr: DNOP	106	70-130	%Re	ec 1	1/23/2017 12:30:31 PM	29817
<b>EPA METHOD 8260B: VOLATILES S</b>	HORT LIST				Analyst	: DJF
Benzene	ND	0.016	mg/l	<b>K</b> g 1	1/22/2017 1:32:36 AM	A40186
Toluene	ND	0.033	mg/l	<b>K</b> g 1	1/22/2017 1:32:36 AM	A40186
Ethylbenzene	ND	0.033	mg/l	<b>K</b> g 1	1/22/2017 1:32:36 AM	A40186
Xylenes, Total	ND	0.065	mg/l	<b>K</b> g 1	1/22/2017 1:32:36 AM	A40186
Surr: 1,2-Dichloroethane-d4	89.8	70-130	%Re	ec 1	1/22/2017 1:32:36 AM	A40186
Surr: 4-Bromofluorobenzene	144	70-130	S %Re	ec 1	1/22/2017 1:32:36 AM	A40186
Surr: Dibromofluoromethane	89.1	70-130	%Re	ec 1	1/22/2017 1:32:36 AM	A40186
Surr: Toluene-d8	97.7	70-130	%Re	ec 1	1/22/2017 1:32:36 AM	A40186

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 qua			Analyte detected below quantitation limits Page 7 of 19
	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: 1/24/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-18

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 11:04:00 AM

 Lab ID:
 1701928-008
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed Batch
EPA METHOD 300.0: ANIONS				Analyst: <b>MRA</b>
Chloride	ND	30	mg/Kg	20 1/23/2017 10:45:38 AM 29834
EPA METHOD 8015D MOD: GASOLIN	E RANGE			Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	82	3.6	mg/Kg	1 1/22/2017 2:01:21 AM C40186
Surr: BFB	127	70-130	%Rec	1 1/22/2017 2:01:21 AM C40186
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;		Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	390	10	mg/Kg	1 1/23/2017 12:53:53 PM 29817
Motor Oil Range Organics (MRO)	210	50	mg/Kg	1 1/23/2017 12:53:53 PM 29817
Surr: DNOP	108	70-130	%Rec	1 1/23/2017 12:53:53 PM 29817
EPA METHOD 8260B: VOLATILES SH	ORT LIST			Analyst: <b>DJF</b>
Benzene	ND	0.018	mg/Kg	1 1/22/2017 2:01:21 AM A40186
Toluene	ND	0.036	mg/Kg	1 1/22/2017 2:01:21 AM A40186
Ethylbenzene	ND	0.036	mg/Kg	1 1/22/2017 2:01:21 AM A40186
Xylenes, Total	ND	0.072	mg/Kg	1 1/22/2017 2:01:21 AM A40186
Surr: 1,2-Dichloroethane-d4	90.0	70-130	%Rec	1 1/22/2017 2:01:21 AM A40186
Surr: 4-Bromofluorobenzene	136	70-130	S %Rec	1 1/22/2017 2:01:21 AM A40186
Surr: Dibromofluoromethane	89.6	70-130	%Rec	1 1/22/2017 2:01:21 AM A40186
Surr: Toluene-d8	99.2	70-130	%Rec	1 1/22/2017 2:01:21 AM A40186

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 19
	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: 1/24/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-19

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 11:08:00 AM

 Lab ID:
 1701928-009
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL (	Qual Ur	nits	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30	m	ıg/Kg	20	1/23/2017 11:22:52 AM	29834
EPA METHOD 8015D MOD: GASOLI	NE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	80	3.9	m	ıg/Kg	1	1/22/2017 2:30:01 AM	C40186
Surr: BFB	122	70-130	%	Rec	1	1/22/2017 2:30:01 AM	C40186
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS					Analyst	: TOM
Diesel Range Organics (DRO)	350	9.6	m	ıg/Kg	1	1/23/2017 1:20:31 PM	29817
Motor Oil Range Organics (MRO)	250	48	m	ıg/Kg	1	1/23/2017 1:20:31 PM	29817
Surr: DNOP	105	70-130	%	Rec	1	1/23/2017 1:20:31 PM	29817
EPA METHOD 8260B: VOLATILES S	SHORT LIST					Analyst	DJF
Benzene	ND	0.020	m	ıg/Kg	1	1/22/2017 2:30:01 AM	A40186
Toluene	ND	0.039	m	ıg/Kg	1	1/22/2017 2:30:01 AM	A40186
Ethylbenzene	ND	0.039	m	ıg/Kg	1	1/22/2017 2:30:01 AM	A40186
Xylenes, Total	ND	0.078	m	ıg/Kg	1	1/22/2017 2:30:01 AM	A40186
Surr: 1,2-Dichloroethane-d4	87.8	70-130	%	Rec	1	1/22/2017 2:30:01 AM	A40186
Surr: 4-Bromofluorobenzene	135	70-130	S %	Rec	1	1/22/2017 2:30:01 AM	A40186
Surr: Dibromofluoromethane	87.8	70-130	%	Rec	1	1/22/2017 2:30:01 AM	A40186
Surr: Toluene-d8	98.0	70-130	%	Rec	1	1/22/2017 2:30:01 AM	A40186

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 9 of 19
- 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: 1/24/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-20

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 11:11:00 AM

 Lab ID:
 1701928-010
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	1/23/2017 11:35:16 AM	29834
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	87	3.6	mg/Kg	1	1/22/2017 2:58:43 AM	D40186
Surr: BFB	123	70-130	%Rec	1	1/22/2017 2:58:43 AM	D40186
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	: TOM
Diesel Range Organics (DRO)	500	9.5	mg/Kg	1	1/23/2017 1:43:52 PM	29818
Motor Oil Range Organics (MRO)	260	47	mg/Kg	1	1/23/2017 1:43:52 PM	29818
Surr: DNOP	109	70-130	%Rec	1	1/23/2017 1:43:52 PM	29818
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: DJF
Benzene	ND	0.018	mg/Kg	1	1/22/2017 2:58:43 AM	B40186
Toluene	ND	0.036	mg/Kg	1	1/22/2017 2:58:43 AM	B40186
Ethylbenzene	ND	0.036	mg/Kg	1	1/22/2017 2:58:43 AM	B40186
Xylenes, Total	ND	0.073	mg/Kg	1	1/22/2017 2:58:43 AM	B40186
Surr: 1,2-Dichloroethane-d4	84.5	70-130	%Rec	1	1/22/2017 2:58:43 AM	B40186
Surr: 4-Bromofluorobenzene	138	70-130	S %Rec	1	1/22/2017 2:58:43 AM	B40186
Surr: Dibromofluoromethane	86.1	70-130	%Rec	1	1/22/2017 2:58:43 AM	B40186
Surr: Toluene-d8	96.9	70-130	%Rec	1	1/22/2017 2:58:43 AM	B40186

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 10 of 19
	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: 1/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-21

**Project:** Florance GC J 16A Collection Date: 1/20/2017 11:16:00 AM Lab ID: 1701928-011 Matrix: MEOH (SOIL) **Received Date:** 1/21/2017 9:15:00 AM

Analyses	Result	PQL (	Qual U	J <b>nits</b>	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	1/23/2017 11:47:41 AM	29834
EPA METHOD 8015D MOD: GASOL	INE RANGE					Analyst	: DJF
Gasoline Range Organics (GRO)	79	3.9		mg/Kg	1	1/22/2017 4:24:30 AM	D40186
Surr: BFB	123	70-130		%Rec	1	1/22/2017 4:24:30 AM	D40186
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS					Analyst	: TOM
Diesel Range Organics (DRO)	420	9.6		mg/Kg	1	1/23/2017 2:11:00 PM	29818
Motor Oil Range Organics (MRO)	290	48		mg/Kg	1	1/23/2017 2:11:00 PM	29818
Surr: DNOP	112	70-130		%Rec	1	1/23/2017 2:11:00 PM	29818
EPA METHOD 8260B: VOLATILES S	SHORT LIST					Analyst	: DJF
Benzene	ND	0.020		mg/Kg	1	1/22/2017 4:24:30 AM	B40186
Toluene	ND	0.039		mg/Kg	1	1/22/2017 4:24:30 AM	B40186
Ethylbenzene	ND	0.039		mg/Kg	1	1/22/2017 4:24:30 AM	B40186
Xylenes, Total	ND	0.079		mg/Kg	1	1/22/2017 4:24:30 AM	B40186
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%Rec	1	1/22/2017 4:24:30 AM	B40186
Surr: 4-Bromofluorobenzene	145	70-130	S	%Rec	1	1/22/2017 4:24:30 AM	B40186
Surr: Dibromofluoromethane	90.6	70-130		%Rec	1	1/22/2017 4:24:30 AM	B40186
Surr: Toluene-d8	96.1	70-130		%Rec	1	1/22/2017 4:24:30 AM	B40186

Qualifiers:	*	Value exceeds Maximum Contaminar	nt 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 11 of 19 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 1/24/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-22

 Project:
 Florance GC J 16A
 Collection Date: 1/20/2017 11:19:00 AM

 Lab ID:
 1701928-012
 Matrix: MEOH (SOIL)
 Received Date: 1/21/2017 9:15:00 AM

Analyses	Result	PQL (	Qual U	J <b>nits</b>	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30	I	mg/Kg	20	1/23/2017 12:00:05 PM	29834
EPA METHOD 8015D MOD: GASOLI	NE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	73	3.8	1	mg/Kg	1	1/22/2017 5:50:20 AM	D40186
Surr: BFB	126	70-130	(	%Rec	1	1/22/2017 5:50:20 AM	D40186
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS					Analyst	TOM
Diesel Range Organics (DRO)	390	9.8	1	mg/Kg	1	1/23/2017 2:32:45 PM	29818
Motor Oil Range Organics (MRO)	330	49	1	mg/Kg	1	1/23/2017 2:32:45 PM	29818
Surr: DNOP	111	70-130	(	%Rec	1	1/23/2017 2:32:45 PM	29818
EPA METHOD 8260B: VOLATILES S	SHORT LIST					Analyst	DJF
Benzene	ND	0.019	1	mg/Kg	1	1/22/2017 5:50:20 AM	B40186
Toluene	ND	0.038	1	mg/Kg	1	1/22/2017 5:50:20 AM	B40186
Ethylbenzene	ND	0.038		mg/Kg	1	1/22/2017 5:50:20 AM	B40186
Xylenes, Total	ND	0.075		mg/Kg	1	1/22/2017 5:50:20 AM	B40186
Surr: 1,2-Dichloroethane-d4	85.4	70-130	•	%Rec	1	1/22/2017 5:50:20 AM	B40186
Surr: 4-Bromofluorobenzene	141	70-130	S '	%Rec	1	1/22/2017 5:50:20 AM	B40186
Surr: Dibromofluoromethane	90.2	70-130	•	%Rec	1	1/22/2017 5:50:20 AM	B40186
Surr: Toluene-d8	98.8	70-130	•	%Rec	1	1/22/2017 5:50:20 AM	B40186

Qualifiers:	•	V
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- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
  - % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 12 of 19
- 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#: 1701928

24-Jan-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-29834 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 29834 RunNo: 40216

Prep Date: 1/23/2017 Analysis Date: 1/23/2017 SeqNo: 1260604 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29834 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29834 RunNo: 40216

Prep Date: 1/23/2017 Analysis Date: 1/23/2017 SeqNo: 1260605 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 93.9 110

#### 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
- 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

Ε Value above quantitation range

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**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: **1701928** 

24-Jan-17

Project: Florance	GC J 16A									
Sample ID LCS-29817	SampTy	pe: <b>LC</b>	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batch	ID: <b>29</b>	817	F	RunNo: 4	0199				
Prep Date: 1/21/2017	Analysis Da	te: 1/	23/2017	8	SeqNo: 1	260281	Units: mg/K	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO) Surr: DNOP	49 5.0	10	50.00 5.000	0	98.5 99.5	63.8 70	116 130			
Sample ID MB-29817	SampTy	pe: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batch	ID: <b>29</b>	817	F	RunNo: 4	0199				
Prep Date: 1/21/2017	Analysis Da	te: 1/	23/2017	S	SeqNo: 1	260282	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP	ND ND 10	10 50	10.00		101	70	130			
Sample ID MB-29818	SampTy	ре: МЕ	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batch	ID: <b>29</b>	818	F	RunNo: 4	0201				
Prep Date: 1/21/2017	Analysis Da	te: 1/	23/2017	S	SeqNo: 1	260286	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP	ND ND 11	10 50	10.00		112	70	130			
Sample ID LCS-29818	SampTy	pe: <b>LC</b>	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batch	ID: <b>29</b> 8	818	F	RunNo: 4	0201			-	
Prep Date: 1/21/2017	Analysis Da	te: 1/	23/2017	8	SeqNo: 1	260291	Units: mg/K	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO) Surr: DNOP	48 6.0	10	50.00 5.000	0	95.5 119	63.8 70	116 130			
Sample ID 1701928-010AMS	SampTy	pe: <b>MS</b>	 S	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: TSP-20	Batch	ID: <b>29</b>	818	F	RunNo: 4	0200				
Prep Date: 1/21/2017	Analysis Da	te: 1/	23/2017	S	SeqNo: 1	260575	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	520	9.7	48.45	501.3	47.1	51.6	130			S

#### Qualifiers:

Surr: DNOP

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

5.3

4.845

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

130

E Value above quantitation range

110

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#: 1701928

24-Jan-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID 1701928-010AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: TSP-20 Batch ID: 29818 RunNo: 40200 Analysis Date: 1/23/2017 Prep Date: 1/21/2017 SeqNo: 1260576 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 530 10 501.3 60.9 51.6 1.44 50.00 130 20 Surr: DNOP 5.6 5.000 111 70 130

Sample ID LCS-29802 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 29802 RunNo: 40200 Analysis Date: 1/23/2017 SeqNo: 1261137 Prep Date: 1/20/2017 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: DNOP 4.9 5.000 97.2 130

Sample ID MB-29802 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: **PBS** Batch ID: 29802 RunNo: 40200 Prep Date: 1/20/2017 Analysis Date: 1/23/2017 SeqNo: 1261138 Units: %Rec **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Analyte Result LowLimit 106 10.00 70 130 Surr: DNOP 11

#### 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

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#### Hall Environmental Analysis Laboratory, Inc.

SampType: MBLK

WO#: **1701928** 

24-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID rb

Client ID: PBS	Batch ID: <b>A40186</b> RunNo: <b>40186</b>					0186				
Prep Date:	Analysis [	Date: 1/	21/2017	S	SeqNo: 1	259842	Units: mg/K	<b>(</b> 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: 1,2-Dichloroethane-d4	0.46		0.5000		92.0	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.6	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			
Sample ID 100ng Ics	Samp	ype: <b>LC</b>	s	Tes	Code: El	PA Method	8260B: Volat	tiles Short	List	
Client ID: LCSS	Batc	h ID: <b>A4</b>	0186	R	tunNo: 4	0186				
Prep Date:	Analysis [	Date: 1/	21/2017	S	SeqNo: 1	259843	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.2	70	130			
Toluene	1.0	0.050	1.000	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.5	70	130			
	0.47		0.0000							
Surr: Toluene-d8	0.47		0.5000		103	70	130			

TestCode: EPA Method 8260B: Volatiles Short List

Sample ID rb1	1 71				ype: MBLK TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: PBS	Batch	n ID: <b>B4</b>	0186	R	RunNo: 4	0186					
Prep Date:	Analysis D	Date: 1/	22/2017	S	SeqNo: 1	259878	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: 1,2-Dichloroethane-d4	0.46		0.5000		91.1	70	130				
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.6	70	130				
Surr: Dibromofluoromethane	0.45		0.5000		90.8	70	130				
Surr: Toluene-d8	0.52		0.5000		104	70	130				

Sample ID 100ng Ics2 SampType: LCS TestCode: EPA Method 8260B: Volatiles Short List

Client ID: LCSS Batch ID: B40186 RunNo: 40186

Prep Date: Analysis Date: 1/21/2017 SeqNo: 1259879 Units: mg/Kg

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

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#: **1701928** 

24-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID 100ng lcs2 Client ID: LCSS		SampType: <b>LCS</b> Batch ID: <b>B40186</b>					8260B: Vola	tiles Short	List	
Client ID: LCSS Prep Date:	Analysis Date: 1/21/2017				RunNo: 4 SeqNo: 1		Units: mg/k	<b>K</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.8	70	130			
Toluene	1.0	0.050	1.000	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.6	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		104	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.9	70	130			
Surr: Toluene-d8	0.49		0.5000		97.7	70	130			

Sample ID 1701928-010am	s2 SampT	SampType: MS TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: TSP-20	Batch	n ID: <b>B4</b>	0186	F	RunNo: 4	0186				
Prep Date:	Analysis D	oate: 1/	22/2017	5	SeqNo: 1	259881	Units: mg/h	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.59	0.018	0.7278	0	80.7	61.9	146			
Toluene	0.76	0.036	0.7278	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	0.30		0.3639		83.5	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.3639		144	70	130			S
Surr: Dibromofluoromethane	0.31		0.3639		84.7	70	130			
Surr: Toluene-d8	0.36		0.3639		99.8	70	130			

Sample ID 1701928-010am	8260B: Vola	tiles Short	List							
Client ID: TSP-20	Batch	n ID: <b>B4</b>	0186	F	RunNo: 4	0186				
Prep Date:	Analysis D	ate: 1/	22/2017	9	SeqNo: 1	259882	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.59	0.018	0.7278	0	80.6	61.9	146	0.0298	20	
Toluene	0.70	0.036	0.7278	0	95.5	70	130	8.87	20	
Surr: 1,2-Dichloroethane-d4	0.32		0.3639		87.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.50		0.3639		137	70	130	0	0	S
Surr: Dibromofluoromethane	0.32		0.3639		88.1	70	130	0	0	
Surr: Toluene-d8	0.35		0.3639		96.0	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 17 of 19

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: 1701928

24-Jan-17

Project:	Florance	GC J 16A									
Sample ID	rb	SampT	уре: МІ	BLK	Test	Code: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	PBS	Batch	1D: <b>C</b> 4	10186	R	tunNo: 4	0186				
Prep Date:		Analysis D	ate: 1	/21/2017	S	SeqNo: 1	259894	Units: mg/k	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	ge Organics (GRO)	ND 500	5.0	500.0		100	70	130			
Sample ID	2.5ug gro lcs	SampT	ype: <b>LC</b>	s	Test	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	LCSS	Batch	1D: <b>C</b> 4	10186	R	tunNo: 4	0186				
Prep Date:		Analysis D	ate: 1	/21/2017	S	seqNo: 1	259895	Units: mg/k	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	ge Organics (GRO)	26 500	5.0	25.00 500.0	0	104 99.0	62.9 70	123 130			
Sample ID	rb1	SampT	уре: МІ	BLK	Test	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	PBS	Batch	1D: <b>D</b> 4	10186	R	tunNo: 4	0186				
Prep Date:		Analysis D	ate: 1	/22/2017	S	SeqNo: 1	259935	Units: mg/l	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	ge Organics (GRO)	ND 480	5.0	500.0		96.2	70	130			
Sample ID	2.5ug gro lcs2	SampT	ype: <b>LC</b>	s	Test	Code: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	LCSS	Batch	1D: <b>D</b> 4	10186	R	tunNo: 4	0186				
Prep Date:		Analysis D	ate: 1	/22/2017	S	SeqNo: 1	259936	Units: mg/k	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	ge Organics (GRO)	24	5.0	25.00	0	97.5	62.9	123			
Surr: BFB		480		500.0		96.9	70	130			
Sample ID	1701928-011ams2	SampT	ype: <b>M</b> \$	S	Test	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	TSP-21	Batch	1D: <b>D</b> 4	10186	R	tunNo: 4	0186				
Prep Date:		Analysis D	ate: 1	/22/2017	S	SeqNo: 1	259939	Units: mg/l	<b>K</b> g		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	ge Organics (GRO)	94 500	3.9	19.66 393.1	79.30	76.5 127	52.3 70	132 130			
	1701928-011amsd	2 SamnT	ype: <b>M</b> \$	SD	Test	Code: El	PA Method	8015D Mod:	Gasoline	Range	
Sample ID	1701920-011aiiisu	Z Campi	,,								
Sample ID Client ID:		•	1D: <b>D</b> 4	10186	R	tunNo: 4	0186				
		•	1D: <b>D</b> 4			tunNo: 4 seqNo: 1		Units: mg/h	<b>&lt;</b> g		

#### 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 18 of 19

P Sample pH Not In Range RLReporting Detection Limit

Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1701928

24-Jan-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID 1701928-011amsd2 SampType: MSD TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: TSP-21 RunNo: 40186 Batch ID: **D40186** 

Prep Date: Analysis Date: 1/22/2017 SeqNo: 1259940 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	95	3.9	19.66	79.30	77.4	52.3	132	0.191	20	
Surr: BFB	480		393.1		123	70	130	0	0	

#### 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

Reporting Detection Limit RL

Sample container temperature is out of limit as specified

Page 19 of 19



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: **BLAGG** Work Order Number: 1701928 RcptNo: 1 Received by/date: Logged By: Lindsay\Mangin 1/21/2017 9:15:00 AM Completed By: Lindsay Mangin 1/21/2017 9:43:35 AM Reviewed By: The 1/21/2017 Chain of Custody 1 Custody seals intact on sample bottles? Yes No 🗌 Not Present No 🗀 2. Is Chain of Custody complete? Yes V Not Present 3. How was the sample delivered? Courier Log In No 🗀 4. Was an attempt made to cool the samples? NA 🗀 Yes 🗸 5. Were all samples received at a temperature of >0° C to 6.0°C NA 🗀 Yes 🗸 Sample(s) in proper container(s)? No [] Yes 🗸 No [ 7. Sufficient sample volume for indicated test(s)? Yes 🗸 8. Are samples (except VOA and ONG) properly preserved? No 🗀 Yes 🗸 9. Was preservative added to bottles? No 🗸 NA 🗔 Yes 10.VOA vials have zero headspace? No VOA Vials 🗹 No 🗌 Yes 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) Adjusted? No 🗌 13. Are matrices correctly identified on Chain of Custody? ~ 14. Is it clear what analyses were requested? No ... ~ 15. Were all holding times able to be met? Yes 🗸 No ... Checked by: (If no, notify customer for authorization.) Special Handling (if applicable) Yes 16. Was client notified of all discrepancies with this order? 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

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Turn-Around Time:	□ Standard	Project Name:	TLORAGE	Project #:	D (RD4 D)	Project Manager:	H 120		Sampler: 🧸	On ice: - C	Sample Temperature:	Container Pr Type and #	1 03 x1	) !!	<b>.</b> #	l <sub>1</sub>	11	li li	T Day	=	=	),	11	l li	Received by:	Received by:	2	ontracted to other accr
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hain		7	Mailing Address:			email or Fax#:	AA/QC Package:	ndard	Accreditation	٩ ا	☐ EDD (Type)	Тіте	1038	1041	hho1	5401	1053	(057	1100	104	<u>.</u> 88		9111	1119	) Time: Time: 7/2017 1548	Time:	(10/m) 19 (v)	If necessary
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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

January 27, 2017

Jeff Blagg

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413 TEL: (505) 632-1199

FAX (505) 632-3903

RE: Florance GC J 16A OrderNo.: 1701A12

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 21 sample(s) on 1/25/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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: 1/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-23

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:03:00 AM

 Lab ID:
 1701A12-001
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 4:01:16 AM	29892
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S				Analyst	:: ТОМ
Diesel Range Organics (DRO)	100	9.3		mg/Kg	1	1/26/2017 7:52:30 PM	29872
Motor Oil Range Organics (MRO)	360	47		mg/Kg	1	1/26/2017 7:52:30 PM	29872
Surr: DNOP	117	70-130		%Rec	1	1/26/2017 7:52:30 PM	29872
EPA METHOD 8015D: GASOLINE RANG	GE					Analyst	:: NSB
Gasoline Range Organics (GRO)	38	10		mg/Kg	2	1/26/2017 10:57:53 AM	29880
Surr: BFB	197	68.3-144	S	%Rec	2	1/26/2017 10:57:53 AM	1 29880
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.050		mg/Kg	2	1/26/2017 10:57:53 AM	29880
Toluene	ND	0.10		mg/Kg	2	1/26/2017 10:57:53 AM	29880
Ethylbenzene	ND	0.10		mg/Kg	2	1/26/2017 10:57:53 AM	29880
Xylenes, Total	ND	0.20		mg/Kg	2	1/26/2017 10:57:53 AM	29880
Surr: 4-Bromofluorobenzene	97.1	80-120		%Rec	2	1/26/2017 10:57:53 AM	29880

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 25
	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: 1/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-24

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:08:00 AM

 Lab ID:
 1701A12-002
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DI	F Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: MRA
Chloride	ND	30		mg/Kg	20	0 1/26/2017 4:38:29 AM	29892
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S				Analys	t: TOM
Diesel Range Organics (DRO)	300	9.7		mg/Kg	1	1/26/2017 8:14:04 PM	29872
Motor Oil Range Organics (MRO)	190	49		mg/Kg	1	1/26/2017 8:14:04 PM	29872
Surr: DNOP	116	70-130		%Rec	1	1/26/2017 8:14:04 PM	29872
EPA METHOD 8015D: GASOLINE RANG	iΕ					Analys	t: NSB
Gasoline Range Organics (GRO)	26	9.7		mg/Kg	2	1/26/2017 11:21:23 AM	1 29889
Surr: BFB	203	68.3-144	S	%Rec	2	1/26/2017 11:21:23 AM	1 29889
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.049		mg/Kg	2	1/26/2017 11:21:23 AM	1 29889
Toluene	ND	0.097		mg/Kg	2	1/26/2017 11:21:23 AM	1 29889
Ethylbenzene	ND	0.097		mg/Kg	2	1/26/2017 11:21:23 AM	1 29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 11:21:23 AM	1 29889
Surr: 4-Bromofluorobenzene	97.9	80-120		%Rec	2	1/26/2017 11:21:23 AM	1 29889

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 25
	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: 1/27/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-25

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:14:00 AM

 Lab ID:
 1701A12-003
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual U	nits	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30	r	mg/Kg	20	1/26/2017 4:50:54 AM	29892
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S				Analyst	: TOM
Diesel Range Organics (DRO)	250	9.5	r	mg/Kg	1	1/26/2017 12:40:40 PM	29872
Motor Oil Range Organics (MRO)	150	48	r	mg/Kg	1	1/26/2017 12:40:40 PM	29872
Surr: DNOP	112	70-130	g	%Rec	1	1/26/2017 12:40:40 PM	29872
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	: NSB
Gasoline Range Organics (GRO)	20	9.7	r	mg/Kg	2	1/26/2017 12:32:19 PM	29889
Surr: BFB	183	68.3-144	S 9	%Rec	2	1/26/2017 12:32:19 PM	29889
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.049	r	mg/Kg	2	1/26/2017 12:32:19 PM	29889
Toluene	ND	0.097	r	mg/Kg	2	1/26/2017 12:32:19 PM	29889
Ethylbenzene	ND	0.097	r	mg/Kg	2	1/26/2017 12:32:19 PM	29889
Xylenes, Total	ND	0.19	r	mg/Kg	2	1/26/2017 12:32:19 PM	29889
Surr: 4-Bromofluorobenzene	98.1	80-120	Q.	%Rec	2	1/26/2017 12:32:19 PM	29889

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 25
	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: 1/27/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-26

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:18:00 AM

 Lab ID:
 1701A12-004
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual U	Jnits	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30	ı	mg/Kg	20	1/26/2017 5:03:18 AM	29892
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S				Analyst	: TOM
Diesel Range Organics (DRO)	260	9.8	ı	mg/Kg	1	1/26/2017 1:02:44 PM	29872
Motor Oil Range Organics (MRO)	180	49	1	mg/Kg	1	1/26/2017 1:02:44 PM	29872
Surr: DNOP	116	70-130	•	%Rec	1	1/26/2017 1:02:44 PM	29872
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	: NSB
Gasoline Range Organics (GRO)	22	9.4	1	mg/Kg	2	1/26/2017 1:42:55 PM	29889
Surr: BFB	187	68.3-144	S	%Rec	2	1/26/2017 1:42:55 PM	29889
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.047	I	mg/Kg	2	1/26/2017 1:42:55 PM	29889
Toluene	ND	0.094	1	mg/Kg	2	1/26/2017 1:42:55 PM	29889
Ethylbenzene	ND	0.094	1	mg/Kg	2	1/26/2017 1:42:55 PM	29889
Xylenes, Total	ND	0.19	1	mg/Kg	2	1/26/2017 1:42:55 PM	29889
Surr: 4-Bromofluorobenzene	99.8	80-120	•	%Rec	2	1/26/2017 1:42:55 PM	29889

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		
	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: 1/27/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-27

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:22:00 AM

 Lab ID:
 1701A12-005
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 5:15:42 AM	29892
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3				Analyst	: ТОМ
Diesel Range Organics (DRO)	200	9.4		mg/Kg	1	1/26/2017 1:24:12 PM	29872
Motor Oil Range Organics (MRO)	250	47		mg/Kg	1	1/26/2017 1:24:12 PM	29872
Surr: DNOP	114	70-130		%Rec	1	1/26/2017 1:24:12 PM	29872
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst	: NSB
Gasoline Range Organics (GRO)	22	9.8		mg/Kg	2	1/26/2017 2:06:27 PM	29889
Surr: BFB	187	68.3-144	S	%Rec	2	1/26/2017 2:06:27 PM	29889
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.049		mg/Kg	2	1/26/2017 2:06:27 PM	29889
Toluene	ND	0.098		mg/Kg	2	1/26/2017 2:06:27 PM	29889
Ethylbenzene	ND	0.098		mg/Kg	2	1/26/2017 2:06:27 PM	29889
Xylenes, Total	ND	0.20		mg/Kg	2	1/26/2017 2:06:27 PM	29889
Surr: 4-Bromofluorobenzene	97.9	80-120		%Rec	2	1/26/2017 2:06:27 PM	29889

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 25
	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: 1/27/2017

#### Hall Environmental Analysis Laboratory, Inc.

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CLIENT: Blagg Engineering Client Sample ID: TSP-28

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:26:00 AM

 Lab ID:
 1701A12-006
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analysi	: MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 5:52:56 AM	29892
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S				Analyst	:: TOM
Diesel Range Organics (DRO)	140	10		mg/Kg	1	1/26/2017 1:45:53 PM	29872
Motor Oil Range Organics (MRO)	140	50		mg/Kg	1	1/26/2017 1:45:53 PM	29872
Surr: DNOP	110	70-130		%Rec	1	1/26/2017 1:45:53 PM	29872
EPA METHOD 8015D: GASOLINE RANG	E					Analyst	:: NSB
Gasoline Range Organics (GRO)	25	9.4		mg/Kg	2	1/26/2017 2:29:57 PM	29889
Surr: BFB	205	68.3-144	S	%Rec	2	1/26/2017 2:29:57 PM	29889
EPA METHOD 8021B: VOLATILES						Analyst	:: NSB
Benzene	ND	0.047		mg/Kg	2	1/26/2017 2:29:57 PM	29889
Toluene	ND	0.094		mg/Kg	2	1/26/2017 2:29:57 PM	29889
Ethylbenzene	ND	0.094		mg/Kg	2	1/26/2017 2:29:57 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 2:29:57 PM	29889
Surr: 4-Bromofluorobenzene	98.9	80-120		%Rec	2	1/26/2017 2:29:57 PM	29889

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 25 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.

Date Reported: 1/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-29

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:30:00 AM

 Lab ID:
 1701A12-007
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual U	J <b>nits</b>	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: MRA
Chloride	ND	30	ı	mg/Kg	20	1/26/2017 6:05:21 AM	29892
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	8				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	200	10	1	mg/Kg	1	1/26/2017 2:07:30 PM	29872
Motor Oil Range Organics (MRO)	160	51		mg/Kg	1	1/26/2017 2:07:30 PM	29872
Surr: DNOP	110	70-130	(	%Rec	1	1/26/2017 2:07:30 PM	29872
EPA METHOD 8015D: GASOLINE RANG	GE					Analys	t: NSB
Gasoline Range Organics (GRO)	21	9.7	1	mg/Kg	2	1/26/2017 2:53:32 PM	29889
Surr: BFB	187	68.3-144	S	%Rec	2	1/26/2017 2:53:32 PM	29889
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.048	1	mg/Kg	2	1/26/2017 2:53:32 PM	29889
Toluene	ND	0.097	1	mg/Kg	2	1/26/2017 2:53:32 PM	29889
Ethylbenzene	ND	0.097		mg/Kg	2	1/26/2017 2:53:32 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 2:53:32 PM	29889
Surr: 4-Bromofluorobenzene	97.5	80-120	•	%Rec	2	1/26/2017 2:53:32 PM	29889

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 7 c		
	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: 1/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-30

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:33:00 AM

 Lab ID:
 1701A12-008
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 6:17:46 AM	29892
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S				Analys	t: TOM
Diesel Range Organics (DRO)	170	9.8		mg/Kg	1	1/26/2017 2:29:07 PM	29872
Motor Oil Range Organics (MRO)	120	49		mg/Kg	1	1/26/2017 2:29:07 PM	29872
Surr: DNOP	110	70-130		%Rec	1	1/26/2017 2:29:07 PM	29872
EPA METHOD 8015D: GASOLINE RANG	E					Analys	t: NSB
Gasoline Range Organics (GRO)	24	9.6		mg/Kg	2	1/26/2017 3:17:11 PM	29889
Surr: BFB	203	68.3-144	S	%Rec	2	1/26/2017 3:17:11 PM	29889
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.048		mg/Kg	2	1/26/2017 3:17:11 PM	29889
Toluene	ND	0.096		mg/Kg	2	1/26/2017 3:17:11 PM	29889
Ethylbenzene	ND	0.096		mg/Kg	2	1/26/2017 3:17:11 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 3:17:11 PM	29889
Surr: 4-Bromofluorobenzene	97.1	80-120		%Rec	2	1/26/2017 3:17:11 PM	29889

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 (		
	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: 1/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-31

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:37:00 AM

 Lab ID:
 1701A12-009
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DI	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 6:30:10 AM	29892
EPA METHOD 8015M/D: DIESEL RANGE	E ORGANIC	S				Analyst	: TOM
Diesel Range Organics (DRO)	220	9.2		mg/Kg	1	1/26/2017 2:50:36 PM	29872
Motor Oil Range Organics (MRO)	150	46		mg/Kg	1	1/26/2017 2:50:36 PM	29872
Surr: DNOP	111	70-130		%Rec	1	1/26/2017 2:50:36 PM	29872
EPA METHOD 8015D: GASOLINE RANG	iΕ					Analyst	: NSB
Gasoline Range Organics (GRO)	24	9.3		mg/Kg	2	1/26/2017 3:40:44 PM	29889
Surr: BFB	212	68.3-144	S	%Rec	2	1/26/2017 3:40:44 PM	29889
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.047		mg/Kg	2	1/26/2017 3:40:44 PM	29889
Toluene	ND	0.093		mg/Kg	2	1/26/2017 3:40:44 PM	29889
Ethylbenzene	ND	0.093		mg/Kg	2	1/26/2017 3:40:44 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 3:40:44 PM	29889
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	2	1/26/2017 3:40:44 PM	29889

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 25
	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: 1/27/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-32

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:40:00 AM

 Lab ID:
 1701A12-010
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual \	Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS						Analys	: MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 6:42:34 AM	29892
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3				Analys	: TOM
Diesel Range Organics (DRO)	230	9.7		mg/Kg	1	1/26/2017 3:12:12 PM	29872
Motor Oil Range Organics (MRO)	160	49		mg/Kg	1	1/26/2017 3:12:12 PM	29872
Surr: DNOP	112	70-130		%Rec	1	1/26/2017 3:12:12 PM	29872
EPA METHOD 8015D: GASOLINE RAN	GE					Analys	: NSB
Gasoline Range Organics (GRO)	23	9.5		mg/Kg	2	1/26/2017 4:04:08 PM	29889
Surr: BFB	205	68.3-144	S	%Rec	2	1/26/2017 4:04:08 PM	29889
EPA METHOD 8021B: VOLATILES						Analys	:: NSB
Benzene	ND	0.048		mg/Kg	2	1/26/2017 4:04:08 PM	29889
Toluene	ND	0.095		mg/Kg	2	1/26/2017 4:04:08 PM	29889
Ethylbenzene	ND	0.095		mg/Kg	2	1/26/2017 4:04:08 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 4:04:08 PM	29889
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	2	1/26/2017 4:04:08 PM	29889

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 limit Page 10 of 25
	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: 1/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-33

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:45:00 AM

 Lab ID:
 1701A12-011
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 6:54:58 AM	29892
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3				Analyst	: TOM
Diesel Range Organics (DRO)	150	9.4		mg/Kg	1	1/26/2017 3:33:43 PM	29872
Motor Oil Range Organics (MRO)	120	47		mg/Kg	1	1/26/2017 3:33:43 PM	29872
Surr: DNOP	109	70-130		%Rec	1	1/26/2017 3:33:43 PM	29872
EPA METHOD 8015D: GASOLINE RAI	NGE					Analyst	:: NSB
Gasoline Range Organics (GRO)	26	9.4		mg/Kg	2	1/26/2017 7:35:05 PM	29889
Surr: BFB	213	68.3-144	S	%Rec	2	1/26/2017 7:35:05 PM	29889
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.047		mg/Kg	2	1/26/2017 7:35:05 PM	29889
Toluene	ND	0.094		mg/Kg	2	1/26/2017 7:35:05 PM	29889
Ethylbenzene	ND	0.094		mg/Kg	2	1/26/2017 7:35:05 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 7:35:05 PM	29889
Surr: 4-Bromofluorobenzene	95.9	80-120		%Rec	2	1/26/2017 7:35:05 PM	29889

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 limit Page 11 of 25
	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: 1/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-34

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 10:57:00 AM

 Lab ID:
 1701A12-012
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 7:07:23 AM	29892
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	210	9.3		mg/Kg	1	1/26/2017 4:16:48 PM	29872
Motor Oil Range Organics (MRO)	140	46		mg/Kg	1	1/26/2017 4:16:48 PM	29872
Surr: DNOP	114	70-130		%Rec	1	1/26/2017 4:16:48 PM	29872
EPA METHOD 8015D: GASOLINE RAN	GE					Analys	t: NSB
Gasoline Range Organics (GRO)	24	9.4		mg/Kg	2	1/26/2017 7:58:26 PM	29889
Surr: BFB	209	68.3-144	S	%Rec	2	1/26/2017 7:58:26 PM	29889
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.047		mg/Kg	2	1/26/2017 7:58:26 PM	29889
Toluene	ND	0.094		mg/Kg	2	1/26/2017 7:58:26 PM	29889
Ethylbenzene	ND	0.094		mg/Kg	2	1/26/2017 7:58:26 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 7:58:26 PM	29889
Surr: 4-Bromofluorobenzene	97.0	80-120		%Rec	2	1/26/2017 7:58:26 PM	29889

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 12 of 25
	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: 1/27/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-35

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 11:03:00 AM

 Lab ID:
 1701A12-013
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 7:19:48 AM	29892
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S				Analyst	: TOM
Diesel Range Organics (DRO)	270	9.7		mg/Kg	1	1/26/2017 4:38:24 PM	29872
Motor Oil Range Organics (MRO)	200	49		mg/Kg	1	1/26/2017 4:38:24 PM	29872
Surr: DNOP	113	70-130		%Rec	1	1/26/2017 4:38:24 PM	29872
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	: NSB
Gasoline Range Organics (GRO)	29	9.7		mg/Kg	2	1/26/2017 8:21:53 PM	29889
Surr: BFB	228	68.3-144	S	%Rec	2	1/26/2017 8:21:53 PM	29889
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.048		mg/Kg	2	1/26/2017 8:21:53 PM	29889
Toluene	ND	0.097		mg/Kg	2	1/26/2017 8:21:53 PM	29889
Ethylbenzene	ND	0.097		mg/Kg	2	1/26/2017 8:21:53 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 8:21:53 PM	29889
Surr: 4-Bromofluorobenzene	96.0	80-120		%Rec	2	1/26/2017 8:21:53 PM	29889

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 13 of 25
	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: 1/27/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-36

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 11:08:00 AM

 Lab ID:
 1701A12-014
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/K	g 20	1/26/2017 12:32:30 PM	29917
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	TOM
Diesel Range Organics (DRO)	180	9.6	mg/K	g 1	1/26/2017 4:59:57 PM	29872
Motor Oil Range Organics (MRO)	180	48	mg/K	g 1	1/26/2017 4:59:57 PM	29872
Surr: DNOP	113	70-130	%Red	: 1	1/26/2017 4:59:57 PM	29872
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst	NSB
Gasoline Range Organics (GRO)	21	9.7	mg/K	g 2	1/26/2017 8:45:26 PM	29889
Surr: BFB	187	68.3-144	S %Red	2	1/26/2017 8:45:26 PM	29889
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.049	mg/K	g 2	1/26/2017 8:45:26 PM	29889
Toluene	ND	0.097	mg/K	g 2	1/26/2017 8:45:26 PM	29889
Ethylbenzene	ND	0.097	mg/K	g 2	1/26/2017 8:45:26 PM	29889
Xylenes, Total	ND	0.19	mg/K	g 2	1/26/2017 8:45:26 PM	29889
Surr: 4-Bromofluorobenzene	95.3	80-120	%Red	2	1/26/2017 8:45:26 PM	29889

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 limit Page 14 of 25
	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: 1/27/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-37

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 11:12:00 AM

 Lab ID:
 1701A12-015
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	1/26/2017 1:09:43 PM	29917
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	310	9.6		mg/Kg	1	1/26/2017 5:21:30 PM	29872
Motor Oil Range Organics (MRO)	290	48		mg/Kg	1	1/26/2017 5:21:30 PM	29872
Surr: DNOP	114	70-130		%Rec	1	1/26/2017 5:21:30 PM	29872
EPA METHOD 8015D: GASOLINE RANG	E					Analys	t: NSB
Gasoline Range Organics (GRO)	31	9.5		mg/Kg	2	1/26/2017 9:09:01 PM	29889
Surr: BFB	237	68.3-144	S	%Rec	2	1/26/2017 9:09:01 PM	29889
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.048		mg/Kg	2	1/26/2017 9:09:01 PM	29889
Toluene	ND	0.095		mg/Kg	2	1/26/2017 9:09:01 PM	29889
Ethylbenzene	ND	0.095		mg/Kg	2	1/26/2017 9:09:01 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 9:09:01 PM	29889
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	2	1/26/2017 9:09:01 PM	29889

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 15 of 25 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.

Date Reported: 1/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-38

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 11:17:00 AM

 Lab ID:
 1701A12-016
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual (	J <b>nits</b>	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 1:22:07 PM	29917
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	6				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	180	9.3		mg/Kg	1	1/26/2017 5:43:09 PM	29872
Motor Oil Range Organics (MRO)	130	46		mg/Kg	1	1/26/2017 5:43:09 PM	29872
Surr: DNOP	110	70-130		%Rec	1	1/26/2017 5:43:09 PM	29872
EPA METHOD 8015D: GASOLINE RANG	GE					Analys	t: NSB
Gasoline Range Organics (GRO)	21	9.6		mg/Kg	2	1/26/2017 9:32:25 PM	29889
Surr: BFB	185	68.3-144	S	%Rec	2	1/26/2017 9:32:25 PM	29889
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.048		mg/Kg	2	1/26/2017 9:32:25 PM	29889
Toluene	ND	0.096		mg/Kg	2	1/26/2017 9:32:25 PM	29889
Ethylbenzene	ND	0.096		mg/Kg	2	1/26/2017 9:32:25 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 9:32:25 PM	29889
Surr: 4-Bromofluorobenzene	98.8	80-120		%Rec	2	1/26/2017 9:32:25 PM	29889

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 16 of 25
	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: 1/27/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-39

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 11:26:00 AM

 Lab ID:
 1701A12-017
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual (	U <b>nits</b>	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 1:34:31 PM	29917
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3				Analyst	:: TOM
Diesel Range Organics (DRO)	230	9.7		mg/Kg	1	1/26/2017 6:04:39 PM	29872
Motor Oil Range Organics (MRO)	160	49		mg/Kg	1	1/26/2017 6:04:39 PM	29872
Surr: DNOP	112	70-130		%Rec	1	1/26/2017 6:04:39 PM	29872
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	: NSB
Gasoline Range Organics (GRO)	14	9.6		mg/Kg	2	1/26/2017 9:55:45 PM	29889
Surr: BFB	148	68.3-144	S	%Rec	2	1/26/2017 9:55:45 PM	29889
EPA METHOD 8021B: VOLATILES						Analyst	:: NSB
Benzene	ND	0.048		mg/Kg	2	1/26/2017 9:55:45 PM	29889
Toluene	ND	0.096		mg/Kg	2	1/26/2017 9:55:45 PM	29889
Ethylbenzene	ND	0.096		mg/Kg	2	1/26/2017 9:55:45 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 9:55:45 PM	29889
Surr: 4-Bromofluorobenzene	95.9	80-120		%Rec	2	1/26/2017 9:55:45 PM	29889

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 17 of 25 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.

Date Reported: 1/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-40

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 11:31:00 AM

 Lab ID:
 1701A12-018
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed Bato	ch
EPA METHOD 300.0: ANIONS					Analyst: MRA	A
Chloride	ND	30	mg/Kg	20	1/26/2017 1:46:55 PM 2991	17
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst: TON	<b>V</b> I
Diesel Range Organics (DRO)	210	10	mg/Kg	1	1/26/2017 6:26:13 PM 2987	72
Motor Oil Range Organics (MRO)	85	50	mg/Kg	1	1/26/2017 6:26:13 PM 2987	72
Surr: DNOP	114	70-130	%Rec	1	1/26/2017 6:26:13 PM 2987	72
EPA METHOD 8015D: GASOLINE RANG	E				Analyst: NSE	3
Gasoline Range Organics (GRO)	ND	9.5	mg/Kg	2	1/26/2017 10:19:02 PM 2988	39
Surr: BFB	127	68.3-144	%Rec	2	1/26/2017 10:19:02 PM 2988	39
EPA METHOD 8021B: VOLATILES					Analyst: <b>NSE</b>	3
Benzene	ND	0.048	mg/Kg	2	1/26/2017 10:19:02 PM 2988	39
Toluene	ND	0.095	mg/Kg	2	1/26/2017 10:19:02 PM 2988	39
Ethylbenzene	ND	0.095	mg/Kg	2	1/26/2017 10:19:02 PM 2988	39
Xylenes, Total	ND	0.19	mg/Kg	2	1/26/2017 10:19:02 PM 2988	39
Surr: 4-Bromofluorobenzene	94.8	80-120	%Rec	2	1/26/2017 10:19:02 PM 2988	39

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 18 of 25
	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: 1/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-41

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 11:40:00 AM

 Lab ID:
 1701A12-019
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL (	Qual 1	Units	DI	F Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30		mg/Kg	20	1/26/2017 1:59:19 PM	29917
EPA METHOD 8015M/D: DIESEL RANGI	E ORGANICS	S				Analyst	: TOM
Diesel Range Organics (DRO)	310	9.5		mg/Kg	1	1/26/2017 6:47:52 PM	29872
Motor Oil Range Organics (MRO)	220	48		mg/Kg	1	1/26/2017 6:47:52 PM	29872
Surr: DNOP	115	70-130		%Rec	1	1/26/2017 6:47:52 PM	29872
EPA METHOD 8015D: GASOLINE RANG	E					Analyst	: NSB
Gasoline Range Organics (GRO)	23	9.6		mg/Kg	2	1/26/2017 10:42:21 PM	29889
Surr: BFB	198	68.3-144	S	%Rec	2	1/26/2017 10:42:21 PM	29889
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.048		mg/Kg	2	1/26/2017 10:42:21 PM	29889
Toluene	ND	0.096		mg/Kg	2	1/26/2017 10:42:21 PM	29889
Ethylbenzene	ND	0.096		mg/Kg	2	1/26/2017 10:42:21 PM	29889
Xylenes, Total	ND	0.19		mg/Kg	2	1/26/2017 10:42:21 PM	29889
Surr: 4-Bromofluorobenzene	98.8	80-120		%Rec	2	1/26/2017 10:42:21 PM	29889

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 19 of 25
	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: 1/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-42

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 11:48:00 AM

 Lab ID:
 1701A12-020
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	1/26/2017 2:36:32 PM	29917
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	110	9.9	mg/Kg	1	1/26/2017 7:09:23 PM	29872
Motor Oil Range Organics (MRO)	58	50	mg/Kg	1	1/26/2017 7:09:23 PM	29872
Surr: DNOP	111	70-130	%Rec	1	1/26/2017 7:09:23 PM	29872
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	9.8	mg/Kg	2	1/26/2017 11:05:39 PM	29889
Surr: BFB	106	68.3-144	%Rec	2	1/26/2017 11:05:39 PM	29889
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.049	mg/Kg	2	1/26/2017 11:05:39 PM	29889
Toluene	ND	0.098	mg/Kg	2	1/26/2017 11:05:39 PM	29889
Ethylbenzene	ND	0.098	mg/Kg	2	1/26/2017 11:05:39 PM	29889
Xylenes, Total	ND	0.20	mg/Kg	2	1/26/2017 11:05:39 PM	29889
Surr: 4-Bromofluorobenzene	93.6	80-120	%Rec	2	1/26/2017 11:05:39 PM	29889

				-
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 limit Page 20 of 25
	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: 1/27/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-43

 Project:
 Florance GC J 16A
 Collection Date: 1/24/2017 11:52:00 AM

 Lab ID:
 1701A12-021
 Matrix: SOIL
 Received Date: 1/25/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: MRA
Chloride	ND	30	mg/Kg	20	1/26/2017 2:48:57 PM	29917
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	st: TOM
Diesel Range Organics (DRO)	120	9.7	mg/Kg	1	1/26/2017 7:30:59 PM	29873
Motor Oil Range Organics (MRO)	53	48	mg/Kg	1	1/26/2017 7:30:59 PM	29873
Surr: DNOP	108	70-130	%Rec	1	1/26/2017 7:30:59 PM	29873
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	9.6	mg/Kg	2	1/27/2017 12:39:09 Al	M 29889
Surr: BFB	110	68.3-144	%Rec	2	1/27/2017 12:39:09 Al	M 29889
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.048	mg/Kg	2	1/27/2017 12:39:09 Al	M 29889
Toluene	ND	0.096	mg/Kg	2	1/27/2017 12:39:09 Al	M 29889
Ethylbenzene	ND	0.096	mg/Kg	2	1/27/2017 12:39:09 Al	M 29889
Xylenes, Total	ND	0.19	mg/Kg	2	1/27/2017 12:39:09 Al	M 29889
Surr: 4-Bromofluorobenzene	92.8	80-120	%Rec	2	1/27/2017 12:39:09 Al	M 29889

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 limit Page 21 of 25
	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#: **1701A12** 

27-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29892 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 29892 RunNo: 40294

Prep Date: 1/25/2017 Analysis Date: 1/26/2017 SeqNo: 1263146 Units: mg/Kg

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

Chloride ND 1.5

 Sample ID
 LCS-29892
 SampType: Ics
 TestCode: EPA Method 300.0: Anions

 Client ID:
 LCSS
 Batch ID: 29892
 RunNo: 40294

 Prep Date:
 1/25/2017
 Analysis Date: 1/26/2017
 SeqNo: 1263147
 Units: mg/Kg

SPK value SPK Ref Val %REC **RPDLimit** Analyte Result PQL LowLimit HighLimit %RPD Qual Chloride 14 1.5 15.00 0 92.7 110

Sample ID MB-29917 SampType: mblk TestCode: EPA Method 300.0: Anions Client ID: **PBS** Batch ID: 29917 RunNo: 40328 Prep Date: Analysis Date: 1/26/2017 SeqNo: 1264105 Units: mg/Kg 1/26/2017 Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Chloride ND 1.5

Sample ID LCS-29917 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29917 RunNo: 40328

Prep Date: 1/26/2017 Analysis Date: 1/26/2017 SeqNo: 1264106 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.2 90 110

#### 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#: **1701A12** 

27-Jan-17

	Engineering e GC J 16A									
Sample ID LCS-29873	SampType: LCS	TestCode: EPA Method 8015M/D	: Diesel Range Organics							
Client ID: LCSS	Batch ID: 29873	29873 RunNo: 40298								
Prep Date: 1/25/2017	Analysis Date: 1/26/2017	SeqNo: <b>1263368</b> Units: <b>n</b>	Units: mg/Kg							
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLin	nit %RPD RPDLimit Qual							
Diesel Range Organics (DRO)	46 10 50.00	0 91.7 63.8 1	16							
Surr: DNOP	4.9 5.000	98.6 70 13	30							
Sample ID MB-29873	SampType: <b>MBLK</b>	TestCode: EPA Method 8015M/D	: Diesel Range Organics							
Client ID: PBS	Batch ID: 29873	RunNo: 40298								
Prep Date: 1/25/2017	Analysis Date: 1/26/2017	SeqNo: <b>1263369</b> Units: <b>n</b>	ng/Kg							
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLin	nit %RPD RPDLimit Qual							
Diesel Range Organics (DRO)	ND 10									
Motor Oil Range Organics (MRO)	ND 50									
Surr: DNOP	10 10.00	99.9 70 13	30							
Sample ID LCS-29872	SampType: LCS	TestCode: EPA Method 8015M/D	: Diesel Range Organics							
Client ID: LCSS	Batch ID: 29872	RunNo: 40298								
Prep Date: 1/25/2017	Analysis Date: 1/26/2017	SeqNo: <b>1263482</b> Units: <b>n</b>	ng/Kg							
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLin	nit %RPD RPDLimit Qual							
Diesel Range Organics (DRO)	46 10 50.00	0 92.2 63.8 1	16							
Surr: DNOP	4.9 5.000	98.6 70 13	30							
Sample ID MB-29872	SampType: MBLK	TestCode: EPA Method 8015M/D	: Diesel Range Organics							
Client ID: PBS	Batch ID: 29872	RunNo: 40298								
Prep Date: 1/25/2017	Analysis Date: 1/26/2017	SeqNo: <b>1263483</b> Units: <b>n</b>	ng/Kg							
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLin	nit %RPD RPDLimit Qual							
Diesel Range Organics (DRO)	ND 10									
Notor Oil Range Organics (MRO)	ND 50									

10.00

#### Qualifiers:

Surr: DNOP

- \* 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. Canala all Nat In Danas

105

70

130

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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#: **1701A12** 

Qual

27-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29889 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: **PBS** Batch ID: 29889 RunNo: 40299 Prep Date: 1/25/2017 Analysis Date: 1/26/2017 SeqNo: 1263937 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 840 1000 83.7 68.3 144

Sample ID LCS-29889 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range
Client ID: LCSS Batch ID: 29889 RunNo: 40299

Prep Date: 1/25/2017 Analysis Date: 1/26/2017 SeqNo: 1263939 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Gasoline Range Organics (GRO) 5.0 25.00 106 74.6 123 Surr: BFB 940 144 1000 93.6 68.3

Sample ID MB-29880 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: PBS Batch ID: 29880 RunNo: 40299 SeqNo: 1263962 Prep Date: 1/25/2017 Analysis Date: 1/26/2017 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual

 Gasoline Range Organics (GRO)
 ND
 5.0

 Surr: BFB
 860
 1000
 86.1
 68.3
 144

Sample ID LCS-29880 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 29880 RunNo: 40299

Prep Date: 1/25/2017 Analysis Date: 1/26/2017 SeqNo: 1263963 Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 28 5.0 25.00 113 74.6 123 Λ Surr: BFB 920 1000 91.9 68.3 144

#### 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

Reporting Detection Limit

J Analyte detected below quantitation limits

D C 1 HALLED

P Sample pH Not In Range

RL

W Sample container temperature is out of limit as specified

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1701A12** 

27-Jan-17

Client:	Blagg Engineering
Project:	Florance GC J 16A

Sample ID MB-29889	Samp	Гуре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8021B: Vola	B: Volatiles										
Client ID: PBS	Batc	h ID: <b>29</b>	889	F	RunNo: 4	0299												
Prep Date: 1/25/2017	Analysis [	Date: 1/	26/2017	\$	SeqNo: 1	263980	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	0.86		1.000		86.0	80	120											
Sample ID LCS-29889	Samp	Type: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Vola	/olatiles										
Client ID: LCSS	Batc	h ID: <b>29</b>	889	F	RunNo: 4	0299												
Prep Date: 1/25/2017	Analysis [	Date: 1/	26/2017	9	SeqNo: 1	263981	Units: mg/k											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual								
Benzene	0.88	0.025	1.000	0	88.2	75.2	115											
Toluene	0.84	0.050	1.000	0	84.1	80.7	112											
Ethylbenzene	0.84	0.050	1.000	0	83.7	78.9	117											
Xylenes, Total	2.5	0.10	3.000	0	84.4	79.2	115											
Surr: 4-Bromofluorobenzene	0.92		1.000		92.4	80	120											
Sample ID MB-29880	Samp	Гуре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles										
Sample ID MB-29880 Client ID: PBS	•	Гуре: <b>МЕ</b> h ID: <b>29</b>			tCode: El		8021B: Vola	tiles										
·	•	h ID: <b>29</b>	880	F		0299	8021B: Vola											
Client ID: PBS	Batc	h ID: <b>29</b>	880 26/2017	F	RunNo: 4 SeqNo: 1	0299			RPDLimit	Qual								
Client ID: <b>PBS</b> Prep Date: <b>1/25/2017</b>	Batcl Analysis [	h ID: <b>29</b> Date: <b>1/</b>	880 26/2017	F	RunNo: 4 SeqNo: 1	0299 264004	Units: mg/h	(g	RPDLimit	Qual								
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Client ID: PBS Prep Date: 1/25/2017 Analyte Benzene Toluene Ethylbenzene	Result  ND  ND  ND	PQL 0.025 0.050	880 26/2017	F	RunNo: 4 SeqNo: 1	0299 264004	Units: mg/h	(g	RPDLimit	Qual								
Client ID: PBS Prep Date: 1/25/2017 Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Batci Analysis I Result ND ND	PQL 0.025 0.050	880 26/2017	F	RunNo: 4 SeqNo: 1	0299 264004	Units: mg/h	(g	RPDLimit	Qual								
Client ID: PBS Prep Date: 1/25/2017 Analyte Benzene Toluene Ethylbenzene	Result  ND  ND  ND	PQL 0.025 0.050	880 26/2017	F	RunNo: 4 SeqNo: 1	0299 264004	Units: mg/h	(g	RPDLimit	Qual								
Client ID: PBS Prep Date: 1/25/2017 Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Result  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	PQL 0.025 0.050	880 26/2017 SPK value 1.000	F SPK Ref Val	RunNo: 4 SeqNo: 1 %REC 89.8	0299 264004 LowLimit	Units: <b>mg/k</b> HighLimit	<b>(g</b> %RPD	RPDLimit	Qual								
Client ID: PBS Prep Date: 1/25/2017 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene	Result  ND  ND  ND  ND  ND  Samp	PQL 0.025 0.050 0.050 0.050	26/2017 SPK value	SPK Ref Val	RunNo: 4 SeqNo: 1 %REC 89.8	264004 LowLimit 80	Units: mg/k HighLimit 120	<b>(g</b> %RPD	RPDLimit	Qual								
Client ID: PBS Prep Date: 1/25/2017 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID LCS-29880	Result  ND  ND  ND  ND  ND  Samp	PQL 0.025 0.050 0.10 0.10 0.10 0.10 0.29 0.10	26/2017 SPK value 1.000	SPK Ref Val	RunNo: 4 SeqNo: 1 %REC 89.8	264004 LowLimit 80 PA Method 0299	Units: mg/k HighLimit 120	%RPD	RPDLimit	Qual								
Client ID: PBS Prep Date: 1/25/2017 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID LCS-29880 Client ID: LCSS	Result  ND  ND  ND  ND  O  Samp  Batcl	PQL 0.025 0.050 0.10 0.10 0.10 0.10 0.29 0.10	1.000 SS 880 26/2017	SPK Ref Val	RunNo: 4 SeqNo: 1 %REC  89.8 tCode: El	264004 LowLimit 80 PA Method 0299	Units: mg/k HighLimit 120 8021B: Vola	%RPD	RPDLimit RPDLimit	Qual								
Client ID: PBS Prep Date: 1/25/2017 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID LCS-29880 Client ID: LCSS Prep Date: 1/25/2017	Result  ND  ND  ND  ND  O.90  Sample  Batcl  Analysis E	PQL 0.025 0.050 0.050 0.10 0.10 0.10 0.10 0.10 0	1.000 SS 880 26/2017	SPK Ref Val  Tes	RunNo: 4 SeqNo: 1 %REC  89.8 tCode: Ell RunNo: 4 SeqNo: 1	264004 LowLimit 80 PA Method 0299 264005	Units: mg/h HighLimit  120  8021B: Volat  Units: mg/h	%RPD tiles										
Client ID: PBS Prep Date: 1/25/2017 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID LCS-29880 Client ID: LCSS Prep Date: 1/25/2017 Analyte	Result  Result  ND  ND  ND  ND  O.90  Samp  Batcl  Analysis E	PQL 0.025 0.050 0.10 0.10 0.10 0.10 0.10 0.10 0.	26/2017  SPK value  1.000  SS 880 26/2017  SPK value	SPK Ref Val  Tes  SPK Ref Val	RunNo: 4 SeqNo: 1  **REC  89.8  tCode: El RunNo: 4 SeqNo: 1  **REC	264004 LowLimit  80  PA Method 0299 264005  LowLimit	Units: mg/h HighLimit  120  8021B: Volat  Units: mg/h HighLimit	%RPD tiles										
Client ID: PBS Prep Date: 1/25/2017 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID LCS-29880 Client ID: LCSS Prep Date: 1/25/2017 Analyte Benzene	Batcl Analysis I Result ND ND ND ND Samp Batcl Analysis I Result 1.0	PQL 0.025 0.050 0.10 0.10 0.025 0.050 0.10 0.10 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025	1.000 26/2017 SPK value 1.000 SS 880 26/2017 SPK value 1.000	Tes SPK Ref Val  O	89.8 89.8 800: 4 800: 4 800: 4 800: 4 800: 4 800: 1 800: 1	264004 LowLimit 80 PA Method 0299 264005 LowLimit 75.2	Units: mg/k HighLimit  120  8021B: Volat  Units: mg/k HighLimit  115	%RPD tiles										
Client ID: PBS Prep Date: 1/25/2017 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID LCS-29880 Client ID: LCSS Prep Date: 1/25/2017 Analyte Benzene Toluene	Result  ND ND ND ND O.90  Samp Batcl Analysis E Result 1.0 0.91	PQL 0.025 0.050 0.10 PQL 0.025 0.050 0.10 PQL 0.025 0.050 0.050 0.10 PQL 0.025 0.050	1.000 26/2017 SPK value 1.000 26/2017 SPK value 1.000 1.000	SPK Ref Val  Tes  SPK Ref Val  0 0	89.8 89.8 80.8 80.8 80.8 80.8 80.8 80.8	264004 LowLimit  80  PA Method 0299 264005  LowLimit 75.2 80.7	Units: mg/k HighLimit  120  8021B: Volat  Units: mg/k HighLimit 115 112	%RPD tiles										

#### 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

Page 25 of 25

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laborutory 4901 Hawkins NE Albuquerque, NM 87109

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

#### Sample Log-In Check List

Work Order Number: 1701A12 Client Name: **BLAGG** RcptNo: 1 Received by/date: LM 01/25/17 anne Stran 1/25/2017 7:30:00 AM Logged By: Anne Thorne Completed By: Anne Thorne 1/25/2017 8:51:16 AM 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 Log In No 🗌 NA 🗔 Yes 🗸 4. Was an attempt made to cool the samples? Yes 🗸 No  $\square$ 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No 🗔 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 🗸 9. Was preservative added to bottles? Yes 🔲 No 🗌 No VOA Vials 🗹 10. VOA vials have zero headspace? Yes 📙 Yes No 🗸 11. Were any sample containers received broken? # of preserved bottles checked Yes 🗸 No  $\square$ 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: No 🗌 Yes 🗸 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) No 🗌 NA 🗹 Yes 16. Was client notified of all discrepancies with this order? Person Notified: Date By Whom: ☐ eMail ☐ Phone ☐ Fax ☐ In Person Via: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp ºC Condition Seal Intact | Seal No Seal Date 1.8 Good

HALL ENVIRONMENTAL	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	. 505-345-3975 Fax 505-345-4107	Anal	(*0	(SI	MIS DG. <sub>s</sub>	(1.8 (1.4) 0738 000,8 (4)	41 20 30 30 30 41	od 10 (10 (10 (10 (10 (10 (10 (10 (10 (10 (	TPH 8015E TPH (Meth PPH's (83° RCRA 8 M Anions (F., 8081 Pesti 8270 (Sen S270 (Sen CHUK)													,	UID: VHIXONEVAM	1-	b-contracted data will be clearl
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Es Messado	I WAVE COMPANY COMPANY CONTRACTED TO OTHER BY	coredited laboratories.	ハンハ / レ (ス)   34mmの IREMED いれ 12~2 This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	Sestinity. A	ov sub-cont	SAMAS IKENTED COTON DESCRIPTION OF COTON DESCRIPTIO	ill be clearly r	Z notated on t	the analytical r	eport.	



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

February 07, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1702211

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 10 sample(s) on 2/4/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order **1702211**

Date Reported: 2/7/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-100-01

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 9:47:00 AM

 Lab ID:
 1702211-001
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses Result **PQL Qual Units DF** Date Analyzed Batch **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: DJF 2/6/2017 11:14:46 AM Gasoline Range Organics (GRO) 13 3.3 mg/Kg G40534 1 Surr: BFB 100 70-130 %Rec 2/6/2017 11:14:46 AM G40534 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) 9.4 mg/Kg 1 2/6/2017 12:18:31 PM 30057 ND Motor Oil Range Organics (MRO) 47 mg/Kg 2/6/2017 12:18:31 PM 30057 Surr: DNOP 107 70-130 %Rec 2/6/2017 12:18:31 PM 30057

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

Date Reported: 2/7/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-100-02

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 9:50:00 AM

 Lab ID:
 1702211-002
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analys	t: DJF
Gasoline Range Organics (GRO)	15	2.7	mg/Kg	1	2/6/2017 11:43:46 AM	G40534
Surr: BFB	105	70-130	%Rec	1	2/6/2017 11:43:46 AM	G40534
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	39	9.3	mg/Kg	1	2/6/2017 12:40:06 PM	30057
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/6/2017 12:40:06 PM	30057
Surr: DNOP	110	70-130	%Rec	1	2/6/2017 12:40:06 PM	30057

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 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

#### Lab Order **1702211**

Date Reported: 2/7/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-100-03

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 9:53:00 AM

 Lab ID:
 1702211-003
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL	NE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	16	3.0	mg/Kg	1	2/6/2017 12:12:45 PM	G40534
Surr: BFB	101	70-130	%Rec	1	2/6/2017 12:12:45 PM	G40534
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	:: TOM
Diesel Range Organics (DRO)	100	9.4	mg/Kg	1	2/6/2017 1:01:41 PM	30057
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/6/2017 1:01:41 PM	30057
Surr: DNOP	112	70-130	%Rec	1	2/6/2017 1:01:41 PM	30057

llue exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
mple Diluted Due to Matrix	E	Value above quantitation range
olding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 13
ot Detected at the Reporting Limit	P	Sample pH Not In Range
PD 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
	mple Diluted Due to Matrix Iding times for preparation or analysis exceeded t Detected at the Reporting Limit D outside accepted recovery limits	mple Diluted Due to Matrix E Iding times for preparation or analysis exceeded J t Detected at the Reporting Limit P D outside accepted recovery limits RL

**Received Date:** 2/4/2017 8:30:00 AM

Date Reported: 2/7/2017

## Hall Environmental Analysis Laboratory, Inc.

Lab ID:

1702211-004

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-100-04

**Project:** Florance GC J 16A Collection Date: 2/3/2017 9:56:00 AM Matrix: MEOH (SOIL)

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analysi	:: DJF
Gasoline Range Organics (GRO)	15	3.1	mg/Kg	1	2/6/2017 12:41:47 PM	G40534
Surr: BFB	108	70-130	%Rec	1	2/6/2017 12:41:47 PM	G40534
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	:: TOM
Diesel Range Organics (DRO)	14	9.8	mg/Kg	1	2/6/2017 1:23:21 PM	30057
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/6/2017 1:23:21 PM	30057
Surr: DNOP	110	70-130	%Rec	1	2/6/2017 1:23:21 PM	30057

*	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
	ND	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	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: 2/7/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-RT-100-05

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 9:59:00 AM

 Lab ID:
 1702211-005
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analys	t: <b>DJF</b>
Gasoline Range Organics (GRO)	14	3.0	mg/Kg	1	2/6/2017 1:10:52 PM	G40534
Surr: BFB	104	70-130	%Rec	1	2/6/2017 1:10:52 PM	G40534
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	30	9.8	mg/Kg	1	2/6/2017 1:44:59 PM	30057
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/6/2017 1:44:59 PM	30057
Surr: DNOP	109	70-130	%Rec	1	2/6/2017 1:44:59 PM	30057

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 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: 2/7/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-100-06

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 10:02:00 AM

 Lab ID:
 1702211-006
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analys	t: <b>AG</b>
Gasoline Range Organics (GRO)	30	2.9	mg/Kg	1	2/6/2017 10:51:18 AM	G40524
Surr: BFB	100	70-130	%Rec	1	2/6/2017 10:51:18 AM	G40524
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	31	9.6	mg/Kg	1	2/6/2017 2:06:44 PM	30057
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/6/2017 2:06:44 PM	30057
Surr: DNOP	113	70-130	%Rec	1	2/6/2017 2:06:44 PM	30057

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 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

## Lab Order **1702211**

Date Reported: 2/7/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-100-07

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 10:05:00 AM

 Lab ID:
 1702211-007
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	24	3.0	mg/Kg	1	2/6/2017 11:20:08 AM	G40524
Surr: BFB	101	70-130	%Rec	1	2/6/2017 11:20:08 AM	G40524
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	: MAB
Diesel Range Organics (DRO)	47	9.9	mg/Kg	1	2/6/2017 12:16:33 PM	30057
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/6/2017 12:16:33 PM	30057
Surr: DNOP	93.8	70-130	%Rec	1	2/6/2017 12:16:33 PM	30057

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 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
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified
		RPD outside accepted recovery limits	P RL	Reporting Detection Limit

#### Lab Order **1702211**

Date Reported: 2/7/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-RT-100-08

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 10:08:00 AM

 Lab ID:
 1702211-008
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

**Analyses** Result **PQL Qual Units DF** Date Analyzed **Batch EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: AG Gasoline Range Organics (GRO) 2/6/2017 11:48:59 AM 3.0 mg/Kg 1 G40524 Surr: BFB 101 70-130 %Rec 2/6/2017 11:48:59 AM G40524 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: MAB Diesel Range Organics (DRO) 2/6/2017 11:48:58 AM 9.2 mg/Kg 1 30057 Motor Oil Range Organics (MRO) ND 46 mg/Kg 2/6/2017 11:48:58 AM 30057 Surr: DNOP 90.5 70-130 %Rec 2/6/2017 11:48:58 AM 30057

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 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

#### Lab Order **1702211**

Date Reported: 2/7/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-RT-100-09

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 10:11:00 AM

 Lab ID:
 1702211-009
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	31	3.1	mg/Kg	1	2/6/2017 12:17:51 PM	G40524
Surr: BFB	109	70-130	%Rec	1	2/6/2017 12:17:51 PM	G40524
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	: MAB
Diesel Range Organics (DRO)	38	10	mg/Kg	1	2/6/2017 11:21:22 AM	30057
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/6/2017 11:21:22 AM	30057
Surr: DNOP	91.6	70-130	%Rec	1	2/6/2017 11:21:22 AM	30057

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

#### Lab Order **1702211**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/7/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-100-10

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 10:14:00 AM

 Lab ID:
 1702211-010
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLI	INE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	16	3.2	mg/Kg	1	2/6/2017 12:46:41 PM	G40524
Surr: BFB	101	70-130	%Rec	1	2/6/2017 12:46:41 PM	G40524
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	: MAB
Diesel Range Organics (DRO)	50	10	mg/Kg	1	2/6/2017 10:53:48 AM	30057
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/6/2017 10:53:48 AM	30057
Surr: DNOP	92.1	70-130	%Rec	1	2/6/2017 10:53:48 AM	30057

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 limit Page 10 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#: 1702211

07-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30057 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: **PBS** Batch ID: 30057 RunNo: 40519

Prep Date: 2/6/2017 Analysis Date: 2/6/2017 SeqNo: 1269695 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 10 100 70 10.00 130

Sample ID LCS-30057 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 30057 RunNo: 40519

Analysis Date: 2/6/2017 Prep Date: 2/6/2017 SeqNo: 1269900 Units: mg/Kg

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

Diesel Range Organics (DRO) 47 10 93.1 63.8 50.00 116 Surr: DNOP 4.8 5.000 96.1 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 11 of 13

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: 1702211

07-Feb-17

Project:	Florance GC J 16A	L							
Sample ID rb	Samp	Type: <b>MBLK</b>	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: PBS	Bato	h ID: <b>G40534</b>	R	RunNo: 4	0534				
Prep Date:	Analysis [	Date: <b>2/6/2017</b>	S	SeqNo: 1	270278	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics Surr: BFB	(GRO) ND 450	5.0 500.0		90.9	70	130			
Sample ID 2.5ug g	ro Ics Samp	Type: <b>LCS</b>	Tes	tCode: EI	PA Method	8015D Mod:	Gasoline	Range	
Client ID: LCSS	Bato	h ID: <b>G40534</b>	R	RunNo: 4	0534				
Prep Date:	Analysis [	Date: <b>2/6/2017</b>	S	SeqNo: 1	270282	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics		5.0 25.00	0	109	70 70	130			
Surr: BFB	460	500.0		92.6	70	130			
Sample ID 1702211	I-001ams Samp	Type: <b>MS</b>	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: TSP-RT	-100-01 Batc	h ID: <b>G40534</b>	R	RunNo: 4	0534				
Prep Date:	Analysis I	Date: <b>2/6/2017</b>	S	SeqNo: 1	270284	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics Surr: BFB	(GRO) 30 340	3.3 16.57 331.4	13.29	99.7 102	63.2 70	128 130			
Sample ID <b>170221</b> 1	I-001amsd Samp	Type: <b>MSD</b>	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: TSP-RT	-100-01 Batc	h ID: <b>G40534</b>	R	RunNo: 4	0534				
Prep Date:	Analysis [	Date: <b>2/6/2017</b>	S	SeqNo: 1	270286	Units: mg/h	<b>(</b> g		
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics		3.3 16.57	13.29	100	63.2	128	0.377	20	
Surr: BFB	330	331.4		98.3	70	130	0	0	
Sample ID 1702211	I-006ams Samp	Туре: <b>МЅ</b>	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: TSP-RT	-100-06 Batc	h ID: <b>G40524</b>	R	RunNo: 4	0524				
Prep Date:	Analysis [	Date: <b>2/7/2017</b>	S	SeqNo: 1	270317	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics Surr: BFB	(GRO) 45 290	2.9 14.41 288.2	29.77	109 102	63.2 70	128 130			
Sample ID <b>170221</b> 1	I-006amsd Samp	Type: <b>MSD</b>	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: TSP-RT	-100-06 Batc	h ID: <b>G40524</b>	R	RunNo: 4	0524				
Prep Date:	Analysis [	Date: <b>2/7/2017</b>	S	SeqNo: 1	270318	Units: mg/h	<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

Reporting Detection Limit

J Analyte detected below quantitation limits

Sample pH Not In Range

P

RL

Sample container temperature is out of limit as specified

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1702211

07-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID 1702211-006amsd SampType: MSD TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: TSP-RT-100-06 Batch ID: G40524 RunNo: 40524 Analysis Date: 2/7/2017 Prep Date: SeqNo: 1270318 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 44 2.9 29.77 96.4 63.2 3.95 20 14.41 128 300 Surr: BFB 288.2 103 70 130 0

Sample ID 2.5ug gro Ics SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: LCSS Batch ID: G40524 RunNo: 40524 Prep Date: Analysis Date: 2/6/2017 SeqNo: 1270323 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 0 95.2 70 130 490 70 Surr: BFB 500.0 97.7 130

Sample ID RB3 SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: PBS Batch ID: G40524 RunNo: 40524 Analysis Date: 2/7/2017 Prep Date: SeqNo: 1270330 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result **PQL** Qual Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 480 500.0 96.9 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
- 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: **BLAGG** Work Order Number: 1702211 RcptNo: 1 Received by/date: 2/4/2017 8:30:00 AM Logged By: Lindsay Mangin 2/4/2017 9:00:23 AM Lindsay Mangin Completed By: 02/06/17 Reviewed By: Chain of Custody Yes 🗀 No [] 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 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 🗸 Yes 🗸 No [ Sample(s) in proper container(s)? Yes 🗸 No [...] 7. Sufficient sample volume for indicated test(s)? Yes 🗸 Nο 8. Are samples (except VOA and ONG) properly preserved? No 🔽 NA 🔲 Yes 🗍 9. Was preservative added to bottles? Yes 🗌 No VOA Vials No ... 10.VOA vials have zero headspace? 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 🗸 14. Is it clear what analyses were requested? Yes 🔽 No 🛄 Yes 🗸 No 🗔 Checked by: 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes 🗌 No 🗌 16. Was client notified of all discrepancies with this order? 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 Good Yes

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-	f necessary, s	samples' subi	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories.	ontracted to other acc	redited laboratorie	es. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	ossibility.	Any sub-	contracte	data wi	be clear	learly notate	ted on the	analytical re	sport.	



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

February 07, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1702210

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 4 sample(s) on 2/4/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1702210**Date Reported: **2/7/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-500-01

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 9:24:00 AM

 Lab ID:
 1702210-001
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	s				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	27	9.2		mg/Kg	1	2/6/2017 10:51:59 AM	30057
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/6/2017 10:51:59 AM	30057
Surr: DNOP	104	70-130		%Rec	1	2/6/2017 10:51:59 AM	30057
EPA METHOD 8015D: GASOLINE RAM	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	3.7	3.2		mg/Kg	1	2/6/2017 10:18:11 AM	30023
Surr: BFB	153	68.3-144	S	%Rec	1	2/6/2017 10:18:11 AM	30023

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 6
	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

Lab Order **1702210**Date Reported: **2/7/2017** 

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-500-02

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 9:27:00 AM

 Lab ID:
 1702210-002
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANIC	S				Analys	st: TOM
Diesel Range Organics (DRO)	49	9.9		mg/Kg	1	2/6/2017 11:13:43 AM	30057
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/6/2017 11:13:43 AM	30057
Surr: DNOP	108	70-130		%Rec	1	2/6/2017 11:13:43 AM	30057
EPA METHOD 8015D: GASOLINE RA	ANGE					Analys	t: NSB
Gasoline Range Organics (GRO)	4.5	3.5		mg/Kg	1	2/6/2017 11:05:14 AM	30023
Surr: BFB	166	68.3-144	S	%Rec	1	2/6/2017 11:05:14 AM	30023

*	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 6
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
	ND	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	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

Lab Order **1702210**Date Reported: **2/7/2017** 

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-500-03

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 9:31:00 AM

 Lab ID:
 1702210-003
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	s				Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	28	9.2		mg/Kg	1	2/6/2017 11:35:19 AM	30057
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/6/2017 11:35:19 AM	30057
Surr: DNOP	106	70-130		%Rec	1	2/6/2017 11:35:19 AM	30057
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	3.3	3.0		mg/Kg	1	2/6/2017 11:28:52 AM	30023
Surr: BFB	155	68.3-144	S	%Rec	1	2/6/2017 11:28:52 AM	30023

*	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 3 of 6
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
	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

# Lab Order **1702210**Date Reported: **2/7/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-RT-500-04

 Project:
 Florance GC J 16A
 Collection Date: 2/3/2017 9:39:00 AM

 Lab ID:
 1702210-004
 Matrix: MEOH (SOIL)
 Received Date: 2/4/2017 8:30:00 AM

Analyses	Result	PQL (	Qual 1	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	S				Analys	t: TOM	
Diesel Range Organics (DRO)	32	9.8		mg/Kg	1	2/6/2017 11:56:58 AM	30057
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/6/2017 11:56:58 AM	30057
Surr: DNOP	107	70-130		%Rec	1	2/6/2017 11:56:58 AM	30057
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	4.2	3.2		mg/Kg	1	2/6/2017 11:52:25 AM	30023
Surr: BFB	163	68.3-144	S	%Rec	1	2/6/2017 11:52:25 AM	30023

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 6 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#: 1702210

07-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30057 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: **PBS** Batch ID: 30057 RunNo: 40519 Prep Date: 2/6/2017 Analysis Date: 2/6/2017 SeqNo: 1269695 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 10 100 70 10.00 130

Sample ID LCS-30057 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 30057 RunNo: 40519 Analysis Date: 2/6/2017 Prep Date: 2/6/2017 SeqNo: 1269900 Units: mg/Kg Analyte SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 47 10 93.1 63.8 50.00 116 Surr: DNOP 4.8 5.000 96.1 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
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 5 of 6

**Client:** 

Analyte

Sample ID LCS-30023

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1702210

Qual

Qual

07-Feb-17

**Project:** Florance GC J 16A Sample ID MB-30023 SampType: MBLK Client ID: PBS Batch ID: 30023 Prep Date: 2/2/2017 Analysis Date: 2/6/2017

Result

Blagg Engineering

Gasoline Range Organics (GRO) ND 5.0 1000 90.4 Surr: BFB 900 68.3 144

SPK value SPK Ref Val

SampType: LCS Client ID: LCSS Batch ID: 30023 RunNo: 40531 Analysis Date: 2/6/2017 Prep Date: 2/2/2017 SeqNo: 1270185

**PQL** 

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Gasoline Range Organics (GRO) 5.0 25.00 97.8 76.4 125 Surr: BFB 970 1000 97.2 68.3 144

Sample ID MB-30051 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: PBS Batch ID: 30051 RunNo: 40531 Prep Date: 2/3/2017 Analysis Date: 2/6/2017 SeqNo: 1270196 Units: %Rec SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual Surr: BFB 890 1000 68.3

TestCode: EPA Method 8015D: Gasoline Range

TestCode: EPA Method 8015D: Gasoline Range

Units: mg/Kg

Units: mg/Kg

%RPD

**RPDLimit** 

**RPDLimit** 

HighLimit

RunNo: 40531

%REC

SeqNo: 1270184

LowLimit

Sample ID LCS-30051 TestCode: EPA Method 8015D: Gasoline Range SampType: LCS Batch ID: 30051 Client ID: LCSS RunNo: 40531 Analysis Date: 2/6/2017 Prep Date: 2/3/2017 SeqNo: 1270197 Units: %Rec SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual

990 Surr: BFB 1000 98.5 68.3 144

#### 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

Sample container temperature is out of limit as specified

Page 6 of 6



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: BLAGG Work Order Number: 1702210 RcptNo: 1 Received by/date: Logged By: Lindsay Mangin 2/4/2017 8:30:00 AM Completed By: Lindsay Mangin 2/4/2017 8:56:04 AM 02/06/17 Reviewed By: Chain of Custody 1. Custody seals intact on sample bottles? Yes No Not Present No 🗌 2. Is Chain of Custody complete? Yes 🗸 Not Present 3. How was the sample delivered? <u>Courier</u> Log In 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 🗀 Sample(s) in proper container(s)? Yes 🗸 No 7. Sufficient sample volume for indicated test(s)? Yes 🗸 No 🗌 8. Are samples (except VOA and ONG) properly preserved? Yes 🗸 Nο 9. Was preservative added to bottles? No 🗸 NA 🛄 Yes 10.VOA vials have zero headspace? No VOA Vials 🗹 No ... Yes Yes  $\square$ 11. Were any sample containers received broken? No 🗸 # of preserved bottles checked 12. Does paperwork match bottle labels? No 🔲 for pH: Yes 🗸 (Note discrepancies on chain of custody) (<2 or >12 unless noted) Adjusted? 13. Are matrices correctly identified on Chain of Custody? Νo 14. Is it clear what analyses were requested? No Yes 15. Were all holding times able to be met? **V** Checked by: No Yes (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 Good Yes



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

February 09, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1702358

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 6 sample(s) on 2/8/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order **1702358**

Date Reported: 2/9/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-RT-500-05

 Project:
 Florance GC J 16A
 Collection Date: 2/7/2017 1:43:00 PM

 Lab ID:
 1702358-001
 Matrix: MEOH (SOIL)
 Received Date: 2/8/2017 7:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	3				Analys	t: TOM	
Diesel Range Organics (DRO)	26	9.3		mg/Kg	1	2/8/2017 9:40:03 AM	30107
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/8/2017 9:40:03 AM	30107
Surr: DNOP	96.7	70-130		%Rec	1	2/8/2017 9:40:03 AM	30107
EPA METHOD 8015D: GASOLINE RA	ANGE					Analys	t: NSB
Gasoline Range Organics (GRO)	14	3.2		mg/Kg	1	2/8/2017 10:26:12 AM	30080
Surr: BFB	289	54-150	S	%Rec	1	2/8/2017 10:26:12 AM	30080

*	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		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
]	ND	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	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

#### Lab Order **1702358**

Date Reported: 2/9/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-500-06

 Project:
 Florance GC J 16A
 Collection Date: 2/7/2017 1:46:00 PM

 Lab ID:
 1702358-002
 Matrix: MEOH (SOIL)
 Received Date: 2/8/2017 7:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	;				Analys	t: <b>TOM</b>	
Diesel Range Organics (DRO)	20	9.7		mg/Kg	1	2/8/2017 10:01:51 AM	30107
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/8/2017 10:01:51 AM	30107
Surr: DNOP	96.8	70-130		%Rec	1	2/8/2017 10:01:51 AM	30107
EPA METHOD 8015D: GASOLINE R.	ANGE					Analys	t: NSB
Gasoline Range Organics (GRO)	13	3.3		mg/Kg	1	2/8/2017 10:49:49 AM	30080
Surr: BFB	284	54-150	S	%Rec	1	2/8/2017 10:49:49 AM	30080

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		Analyte detected below quantitation limits Page 2 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
	ND	Not Detected at the Reporting Limit RPD outside accepted recovery limits		Sample pH Not In Range Reporting Detection Limit

#### Lab Order **1702358**

Date Reported: 2/9/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-500-07

 Project:
 Florance GC J 16A
 Collection Date: 2/7/2017 1:49:00 PM

 Lab ID:
 1702358-003
 Matrix: MEOH (SOIL)
 Received Date: 2/8/2017 7:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	1				Analy	st: TOM	
Diesel Range Organics (DRO)	23	9.8		mg/Kg	1	2/8/2017 10:23:35 AN	1 30107
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/8/2017 10:23:35 AN	1 30107
Surr: DNOP	96.3	70-130		%Rec	1	2/8/2017 10:23:35 AM	1 30107
EPA METHOD 8015D: GASOLINE R	ANGE					Analy	st: NSB
Gasoline Range Organics (GRO)	16	3.4		mg/Kg	1	2/8/2017 11:13:32 AN	1 30080
Surr: BFB	318	54-150	S	%Rec	1	2/8/2017 11:13:32 AN	30080

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 Sample container temperature is out of limit as specified

# Lab Order **1702358**Date Reported: **2/9/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-500-08

 Project:
 Florance GC J 16A
 Collection Date: 2/7/2017 1:53:00 PM

 Lab ID:
 1702358-004
 Matrix: MEOH (SOIL)
 Received Date: 2/8/2017 7:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	3				Analys	t: TOM	
Diesel Range Organics (DRO)	21	9.5		mg/Kg	1	2/8/2017 10:45:08 AM	30107
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/8/2017 10:45:08 AM	30107
Surr: DNOP	98.4	70-130		%Rec	1	2/8/2017 10:45:08 AM	30107
EPA METHOD 8015D: GASOLINE R	ANGE					Analys	t: NSB
Gasoline Range Organics (GRO)	12	3.2		mg/Kg	1	2/8/2017 11:37:18 AM	30080
Surr: BFB	261	54-150	S	%Rec	1	2/8/2017 11:37:18 AM	30080

*	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		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
	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

# Lab Order **1702358**Date Reported: **2/9/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-RT-500-09

 Project:
 Florance GC J 16A
 Collection Date: 2/7/2017 1:57:00 PM

 Lab ID:
 1702358-005
 Matrix: MEOH (SOIL)
 Received Date: 2/8/2017 7:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	3				Analy	st: TOM	
Diesel Range Organics (DRO)	24	10		mg/Kg	1	2/8/2017 11:06:49 AM	1 30107
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/8/2017 11:06:49 AM	1 30107
Surr: DNOP	98.3	70-130		%Rec	1	2/8/2017 11:06:49 AM	1 30107
EPA METHOD 8015D: GASOLINE R	ANGE					Analy	st: NSB
Gasoline Range Organics (GRO)	21	3.3		mg/Kg	1	2/8/2017 12:01:07 PM	1 30080
Surr: BFB	333	54-150	S	%Rec	1	2/8/2017 12:01:07 PM	1 30080

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		Analyte detected below quantitation limits Page 5 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

# Lab Order **1702358**Date Reported: **2/9/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-500-10

 Project:
 Florance GC J 16A
 Collection Date: 2/7/2017 2:01:00 PM

 Lab ID:
 1702358-006
 Matrix: MEOH (SOIL)
 Received Date: 2/8/2017 7:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	3				Analys	t: <b>TOM</b>	
Diesel Range Organics (DRO)	53	9.2		mg/Kg	1	2/8/2017 11:28:23 AM	30107
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/8/2017 11:28:23 AM	30107
Surr: DNOP	98.0	70-130		%Rec	1	2/8/2017 11:28:23 AM	30107
EPA METHOD 8015D: GASOLINE RA	ANGE					Analys	t: NSB
Gasoline Range Organics (GRO)	28	3.1		mg/Kg	1	2/8/2017 12:24:53 PM	30080
Surr: BFB	401	54-150	S	%Rec	1	2/8/2017 12:24:53 PM	30080

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 6 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

**Client:** 

**Project:** 

#### Hall Environmental Analysis Laboratory, Inc.

64

4.6

9.3

46.64

4.664

**Blagg Engineering** 

Florance GC J 16A

WO#: 1702358

09-Feb-17

Sample ID LCS-30107	SampType: LCS	LCS TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 30107	RunNo:	RunNo: <b>40576</b>						
Prep Date: 2/8/2017	Analysis Date: 2/8/2017	SeqNo:	SeqNo: 1271435			Units: mg/Kg			
Analyte	Result PQL SPK	value SPK Ref Val %REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	51 10 5	50.00 0 103	63.8	116					
Surr: DNOP	4.7	5.000 94.2	? 70	130					
Sample ID MB-30107	le ID MB-30107 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 30107	RunNo:	RunNo: 40576						
Prep Date: 2/8/2017	Analysis Date: 2/8/2017	SeqNo:	SeqNo: 1271436			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	9.8	0.00 97.6	70	130					
Sample ID 1702358-001AM	S SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: TSP-RT-500-05	Batch ID: 30107	RunNo:	40576						
Prep Date: 2/8/2017	Analysis Date: 2/8/2017	SeqNo:	1271712	Units: mg/Kg	3				

Sample ID 1	702358-001AMSD	SD SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: T	Client ID: TSP-RT-500-05 Batch ID: 30107				RunNo: <b>40576</b>						
Prep Date:	2/8/2017 Analysis Date: 2/8/2017		SeqNo: 1271713			Units: mg/Kg					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Org	ganics (DRO)	71	9.6	48.17	25.76	93.5	51.6	130	10.4	20	
Surr: DNOP	4.8		4.817		100	70	130	0	0		

25.76

81.5

98.6

51.6

70

130

130

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Diesel Range Organics (DRO)

Surr: DNOP

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

Page 7 of 8

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#: **1702358** 

09-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30080 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 30080 RunNo: 40585

Prep Date: 2/7/2017 Analysis Date: 2/8/2017 SeqNo: 1272111 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 870 1000 87.4 54 150

Sample ID LCS-30080 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 30080 RunNo: 40585

930

Prep Date: 2/7/2017 Analysis Date: 2/8/2017 SeqNo: 1272112 Units: mg/Kg

1000

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 5.0 25.00 0 99.7 76.4 125

93.1

54

150

#### 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
- 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

and in the associated Wethou Brank

Page 8 of 8



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

Client Name: **BLAGG** Work Order Number: 1702358 RcptNo: 1 Received by/date: Logged By: Lindsay Mangin 2/8/2017 7:00:00 AM 2/8/2017 7:36:50 AM Completed By: **Lindsay Mangin** Reviewed By: TO Chain of Custody Yes No  $\square$ Not Present 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  $\square$ NA 🗌 4. Was an attempt made to cool the samples? Yes 🗹 NA 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No No [ 6. Sample(s) in proper container(s)? Yes 🗸 7. Sufficient sample volume for indicated test(s)? ~ 8. Are samples (except VOA and ONG) properly preserved? No 🗸 NA 🗌 9. Was preservative added to bottles? Yes 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: Yes 🗸 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 **V** 13 Are matrices correctly identified on Chain of Custody? ~ Nο 14. Is it clear what analyses were requested? Yes Yes 🗹 Checked by: Nο 15. Were all holding times able to be met? (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 Signed By 2.8 Good

Client: 36  Mailing Addre  Mailing Addre  Phone #:  Phone #:  Phone #:  Phone #:  Phone #:  Dato Time  134  1 133	Unain-or-Custody Record Control Control Control	Standard <b>X</b> Rush	Englineer's Inc. www.hallenvironme	J J FLORANCE GC J 16A 4901 Hawki	Tel. 505-345-3975	Analysis	Project Manager:	J. J. Les	(G <sub>88</sub> Đ)	Sampler: J. J. J. J. J. J. J. J. J. J. J. J. J.	□ Uner □ On lee:	Sample Temperature, 7,4	Matrix Sample Request ID Container Preservative HEAL No. HEAL NO.	5012 73P-RT-580-05 402×1 con -OOT X	" TSP-RT-500-06	<i>h</i>	)1	. 11	1 " TSF-RT-500-10 " " TSF-RT- SOU-025-170" " 1				Relinquished by:  Received by:	Whitely Willelian Calos/17070 Note: Samples.
Client:  Client:  Client:  Adailing A  Accredita  Coa/OC Pe  Coa/O	nain-or-cus	BP America	BLAGE ENGINE	Mailing Address: 🤝		1	email or Fax#:	QA/QC Package:	Standard	uo		□ EDD (Type)	Time Matrix				•	•	·	***			Time:	1831 Mother Walters



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

February 13, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1702507

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 3 sample(s) on 2/10/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order **1702507**

Date Reported: 2/13/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-300-11

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:31:00 AM

 Lab ID:
 1702507-001
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3				Analy	st: TOM
Diesel Range Organics (DRO)	23	9.9		mg/Kg	1	2/10/2017 10:02:00 A	AM 30153
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/10/2017 10:02:00 A	AM 30153
Surr: DNOP	101	70-130		%Rec	1	2/10/2017 10:02:00 A	AM 30153
EPA METHOD 8015D: GASOLINE RA	ANGE					Analy	st: NSB
Gasoline Range Organics (GRO)	23	3.6		mg/Kg	1	2/10/2017 11:27:49 A	AM 30145
Surr: BFB	333	54-150	S	%Rec	1	2/10/2017 11:27:49 A	AM 30145

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 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

#### Lab Order 1702507

Date Reported: 2/13/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-500-12

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:33:00 AM

 Lab ID:
 1702507-002
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	i				Analy	st: TOM
Diesel Range Organics (DRO)	30	10		mg/Kg	1	2/10/2017 10:25:20 A	M 30153
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/10/2017 10:25:20 A	M 30153
Surr: DNOP	104	70-130		%Rec	1	2/10/2017 10:25:20 A	M 30153
EPA METHOD 8015D: GASOLINE RA	NGE					Analy	st: NSB
Gasoline Range Organics (GRO)	22	3.6		mg/Kg	1	2/10/2017 12:06:09 F	PM 30145
Surr: BFB	352	54-150	S	%Rec	1	2/10/2017 12:06:09 F	PM 30145

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

#### Lab Order **1702507**

Date Reported: 2/13/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-RT-500-13

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:34:00 AM

 Lab ID:
 1702507-003
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS	3				Analy	st: TOM
Diesel Range Organics (DRO)	26	9.6		mg/Kg	1	2/10/2017 10:52:18 A	M 30153
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/10/2017 10:52:18 A	M 30153
Surr: DNOP	104	70-130		%Rec	1	2/10/2017 10:52:18 A	M 30153
EPA METHOD 8015D: GASOLINE R	ANGE					Analy	st: NSB
Gasoline Range Organics (GRO)	21	3.4		mg/Kg	1	2/10/2017 12:29:39 F	PM 30145
Surr: BFB	355	54-150	S	%Rec	1	2/10/2017 12:29:39 F	PM 30145

*	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 3 of 5
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
	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

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1702507** 

13-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID 1702507-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **TSP-RT-300-11** Batch ID: **30153** RunNo: **40645** 

Prep Date: 2/10/2017 Analysis Date: 2/10/2017 SeqNo: 1273721 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 59 9.3 23.28 75.9 51.6 46.47 130 Surr: DNOP 4.7 4.647 101 70 130

Sample ID 1702507-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: TSP-RT-300-11 Batch ID: 30153 RunNo: 40645

Prep Date: 2/10/2017 Analysis Date: 2/10/2017 SeqNo: 1274104 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 64 9.9 49.26 23.28 83.6 51.6 130 9.55 20 Surr: DNOP 5.1 70 0 4.926 103 130 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 4 of 5

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1702507** 

13-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30145 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 30145 RunNo: 40653

Prep Date: 2/9/2017 Analysis Date: 2/10/2017 SeqNo: 1274052 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 880 1000 88.3 54 150

Sample ID LCS-30145 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 30145 RunNo: 40653

Prep Date: 2/9/2017 Analysis Date: 2/10/2017 SeqNo: 1274053 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
 76.4
 125

 Surr: BFB
 950
 1000
 95.1
 54
 150

#### 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

Client Name:	BLAGG	Work Order Numbe				RcptNo:	1
Received by/dat	te:	02/10/17					
Logged By:	Lindsay Mangin	2/10/2017 8:30:00 AM	Λ		Junely Hopey		
Completed By:	Lindsay Mangin	2/10/2017 8:43:49 AM			Simber Albania		
Reviewed By:	1-1-	2/10/17			() 3 ···································	· .	
Chain of Cus	tody						
1. Custody sea	als intact on sample bo	ttles?	Yes		No 🗌	Not Present	
2, Is Chain of 0	Custody complete?		Yes	X	No 🗌	Not Present	
3. How was the	e sample delivered?		Cou	<u>ier</u>			
<u>Log In</u>							
4. Was an atte	empt made to cool the	samples?	Yes	<b>V</b>	No 🗀	NA 🗀	
5. Were all sar	mples received at a ten	nperature of >0° C to 6.0°C	Yes	<b>V</b>	No 🗌	NA 🗆	
6. Sample(s) ii	n proper container(s)?		Yes	<b>y</b>	No 🗌		
7. Sufficient sa	mple volume for indica	ted test(s)?	Yes	<b>y</b>	No 🗆		
8. Are samples	(except VOA and ON	G) properly preserved?	Yes	V	No 🗌		
9. Was preserv	ative added to bottles	•	Yes		No 🗹	NA 🗔	
10.VOA vials ha	ave zero headspace?		Yes		No 🗔	No VOA Vials	
11, Were any sa	ample containers recei	ved broken?	Yes		No 🗹		
40 -				15	F: 1	# of preserved bottles checked	
	vork match bottle label pancies on chain of cu		Yes	<b>V</b>	No 🗔	for pH:	r >12 unless noted)
	correctly identified on	• •	Yes	<b>v</b>	No 🗔	Adjusted?	· · · · · · · · · · · · · · · · · · ·
14. Is it clear wh	at analyses were requ	ested?	Yes	$\checkmark$	No 🗔		
	ding times able to be m customer for authoriza		Yes	<b>Y</b>	No 🔲	Checked by:	
() <b></b>		,					
Special Hand	ling (if applicable	)	-				
16.Was client n	otified of all discrepand	ies with this order?	Yes		No 🗀	NA 🗹	
Person	n Notified:	Date:		***************************************	(		
By Wh	om:	Via:	eМа	il 🗀	Phone [] Fax	☐ In Person	
Regard	ding:		Seeken conversion con				
Client I	Instructions:						
17. Additional re	emarks:						ı
18. <u>Cooler Info</u>							
Cooler No			Seal Da	ite	Signed By		
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Chain-of-Custody Record	Client: BP Amewica	BLAGGE ENGINEERING	Mailing Address:		505	ax#:	QA/QC Package:	ijon		ype)	Time	1131	1(33	1[34						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

February 13, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1702510

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 10 sample(s) on 2/10/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

## Lab Order **1702510**Date Reported: **2/13/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-44

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:37:00 AM

 Lab ID:
 1702510-001
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL Q	Qual Units	DF Date Analyzed Batch
EPA METHOD 300.0: ANIONS				Analyst: MRA
Chloride	ND	30	mg/Kg	20 2/10/2017 11:06:43 AM 30161
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS			Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	25	9.8	mg/Kg	1 2/10/2017 10:01:01 AM 30153
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1 2/10/2017 10:01:01 AM 30153
Surr: DNOP	98.3	70-130	%Rec	1 2/10/2017 10:01:01 AM 30153
EPA METHOD 8015D: GASOLINE RAN	GE			Analyst: NSB
Gasoline Range Organics (GRO)	13	3.0	mg/Kg	1 2/10/2017 12:52:50 PM 30145
Surr: BFB	270	54-150	S %Rec	1 2/10/2017 12:52:50 PM 30145
EPA METHOD 8021B: VOLATILES				Analyst: <b>NSB</b>
Benzene	ND	0.015	mg/Kg	1 2/10/2017 12:52:50 PM 30145
Toluene	ND	0.030	mg/Kg	1 2/10/2017 12:52:50 PM 30145
Ethylbenzene	ND	0.030	mg/Kg	1 2/10/2017 12:52:50 PM 30145
Xylenes, Total	ND	0.060	mg/Kg	1 2/10/2017 12:52:50 PM 30145
Surr: 4-Bromofluorobenzene	117	80-120	%Rec	1 2/10/2017 12:52:50 PM 30145

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 16
	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

## Lab Order **1702510**Date Reported: **2/13/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-45

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:39:00 AM

 Lab ID:
 1702510-002
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30		mg/Kg	20	2/10/2017 11:19:07 AM	30161
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	6				Analyst	:: ТОМ
Diesel Range Organics (DRO)	22	9.7		mg/Kg	1	2/10/2017 10:22:37 AM	30153
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/10/2017 10:22:37 AM	30153
Surr: DNOP	99.9	70-130		%Rec	1	2/10/2017 10:22:37 AM	30153
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst	:: NSB
Gasoline Range Organics (GRO)	16	3.3		mg/Kg	1	2/10/2017 1:15:43 PM	30145
Surr: BFB	295	54-150	S	%Rec	1	2/10/2017 1:15:43 PM	30145
EPA METHOD 8021B: VOLATILES						Analyst	:: NSB
Benzene	ND	0.016		mg/Kg	1	2/10/2017 1:15:43 PM	30145
Toluene	ND	0.033		mg/Kg	1	2/10/2017 1:15:43 PM	30145
Ethylbenzene	ND	0.033		mg/Kg	1	2/10/2017 1:15:43 PM	30145
Xylenes, Total	ND	0.066		mg/Kg	1	2/10/2017 1:15:43 PM	30145
Surr: 4-Bromofluorobenzene	119	80-120		%Rec	1	2/10/2017 1:15:43 PM	30145

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 16
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	S % Recovery outside of range due to dilution or matrix		Sample container temperature is out of limit as specified

## Lab Order **1702510**Date Reported: **2/13/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: TSP-46

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:41:00 AM

 Lab ID:
 1702510-003
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL (	)ual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: MRA
Chloride	ND	30		mg/Kg	20	2/10/2017 11:31:31 AM	1 30161
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS					Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	18	9.8		mg/Kg	1	2/10/2017 10:44:16 AN	1 30153
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/10/2017 10:44:16 AM	1 30153
Surr: DNOP	100	70-130		%Rec	1	2/10/2017 10:44:16 AM	1 30153
EPA METHOD 8015D: GASOLINE RAI	NGE					Analys	t: NSB
Gasoline Range Organics (GRO)	11	2.9		mg/Kg	1	2/10/2017 1:38:27 PM	30145
Surr: BFB	235	54-150	S	%Rec	1	2/10/2017 1:38:27 PM	30145
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.014		mg/Kg	1	2/10/2017 1:38:27 PM	30145
Toluene	ND	0.029		mg/Kg	1	2/10/2017 1:38:27 PM	30145
Ethylbenzene	ND	0.029		mg/Kg	1	2/10/2017 1:38:27 PM	30145
Xylenes, Total	ND	0.058		mg/Kg	1	2/10/2017 1:38:27 PM	30145
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	1	2/10/2017 1:38:27 PM	30145

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 16
	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

#### Lab Order **1702510**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/13/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-47

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:43:00 AM

 Lab ID:
 1702510-004
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	2/10/2017 11:43:56 AM	30161
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	40	3.2	mg/Kg	1	2/10/2017 10:39:02 AM	Y40654
Surr: BFB	101	70-130	%Rec	1	2/10/2017 10:39:02 AM	Y40654
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst	TOM
Diesel Range Organics (DRO)	31	9.9	mg/Kg	1	2/10/2017 11:05:48 AM	30153
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/10/2017 11:05:48 AM	30153
Surr: DNOP	100	70-130	%Rec	1	2/10/2017 11:05:48 AM	30153
EPA METHOD 8260B: VOLATILES \$	SHORT LIST				Analyst	DJF
Benzene	ND	0.016	mg/Kg	1	2/10/2017 10:39:02 AM	30145
Toluene	ND	0.032	mg/Kg	1	2/10/2017 10:39:02 AM	30145
Ethylbenzene	ND	0.032	mg/Kg	1	2/10/2017 10:39:02 AM	30145
Xylenes, Total	ND	0.064	mg/Kg	1	2/10/2017 10:39:02 AM	30145
Surr: 1,2-Dichloroethane-d4	96.6	70-130	%Rec	1	2/10/2017 10:39:02 AM	30145
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	2/10/2017 10:39:02 AM	30145
Surr: Dibromofluoromethane	90.8	70-130	%Rec	1	2/10/2017 10:39:02 AM	30145
Surr: Toluene-d8	96.8	70-130	%Rec	1	2/10/2017 10:39:02 AM	30145

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 16
	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

## Lab Order **1702510**Date Reported: **2/13/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-48

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:45:00 AM

 Lab ID:
 1702510-005
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL Ç	Qual Units	DF Da	nte Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20 2/	10/2017 11:56:21 AM	30161
EPA METHOD 8015D MOD: GASOL	NE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	39	3.1	mg/Kg	1 2/	10/2017 11:08:49 AM	Y40654
Surr: BFB	104	70-130	%Rec	1 2/	10/2017 11:08:49 AM	Y40654
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	}			Analyst	том
Diesel Range Organics (DRO)	29	9.6	mg/Kg	1 2/	10/2017 11:27:30 AM	30153
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1 2/	10/2017 11:27:30 AM	30153
Surr: DNOP	100	70-130	%Rec	1 2/	10/2017 11:27:30 AM	30153
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	DJF
Benzene	ND	0.015	mg/Kg	1 2/	10/2017 11:08:49 AM	30145
Toluene	ND	0.031	mg/Kg	1 2/	10/2017 11:08:49 AM	30145
Ethylbenzene	ND	0.031	mg/Kg	1 2/	10/2017 11:08:49 AM	30145
Xylenes, Total	ND	0.061	mg/Kg	1 2/	10/2017 11:08:49 AM	30145
Surr: 1,2-Dichloroethane-d4	97.6	70-130	%Rec	1 2/	10/2017 11:08:49 AM	30145
Surr: 4-Bromofluorobenzene	161	70-130	S %Rec	1 2/	10/2017 11:08:49 AM	30145
Surr: Dibromofluoromethane	92.2	70-130	%Rec	1 2/	10/2017 11:08:49 AM	30145
Surr: Toluene-d8	98.5	70-130	%Rec	1 2/	10/2017 11:08:49 AM	30145

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 16
	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

#### Lab Order 1702510 Date Reported: 2/13/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-49

**Project:** Florance GC J 16A **Collection Date:** 2/9/2017 11:46:00 AM Lab ID: 1702510-006 Matrix: MEOH (SOIL) Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/10/2017 12:08:46 PM	30161
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	12	3.6	mg/Kg	1	2/10/2017 11:38:42 AM	Y40654
Surr: BFB	88.1	70-130	%Rec	1	2/10/2017 11:38:42 AM	Y40654
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	}			Analyst	: TOM
Diesel Range Organics (DRO)	35	9.6	mg/Kg	1	2/10/2017 11:49:10 AM	30153
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/10/2017 11:49:10 AM	30153
Surr: DNOP	101	70-130	%Rec	1	2/10/2017 11:49:10 AM	30153
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	DJF
Benzene	ND	0.018	mg/Kg	1	2/10/2017 11:38:42 AM	30145
Toluene	ND	0.036	mg/Kg	1	2/10/2017 11:38:42 AM	30145
Ethylbenzene	ND	0.036	mg/Kg	1	2/10/2017 11:38:42 AM	30145
Xylenes, Total	ND	0.071	mg/Kg	1	2/10/2017 11:38:42 AM	30145
Surr: 1,2-Dichloroethane-d4	93.5	70-130	%Rec	1	2/10/2017 11:38:42 AM	30145
Surr: 4-Bromofluorobenzene	87.1	70-130	%Rec	1	2/10/2017 11:38:42 AM	30145
Surr: Dibromofluoromethane	89.3	70-130	%Rec	1	2/10/2017 11:38:42 AM	30145
Surr: Toluene-d8	95.2	70-130	%Rec	1	2/10/2017 11:38:42 AM	30145

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 6 of 16 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

**Qualifiers:** 

### Lab Order **1702510**Date Reported: **2/13/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-50

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:48:00 AM

 Lab ID:
 1702510-007
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	2/10/2017 12:21:10 PM	30161
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	15	3.8	mg/Kg	1	2/10/2017 12:07:58 PM	Y40654
Surr: BFB	92.5	70-130	%Rec	1	2/10/2017 12:07:58 PM	Y40654
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst	том
Diesel Range Organics (DRO)	54	9.6	mg/Kg	1	2/10/2017 12:10:56 PM	30153
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/10/2017 12:10:56 PM	30153
Surr: DNOP	102	70-130	%Rec	1	2/10/2017 12:10:56 PM	30153
EPA METHOD 8260B: VOLATILES \$	SHORT LIST				Analyst	DJF
Benzene	ND	0.019	mg/Kg	1	2/10/2017 12:07:58 PM	30145
Toluene	ND	0.038	mg/Kg	1	2/10/2017 12:07:58 PM	30145
Ethylbenzene	ND	0.038	mg/Kg	1	2/10/2017 12:07:58 PM	30145
Xylenes, Total	ND	0.076	mg/Kg	1	2/10/2017 12:07:58 PM	30145
Surr: 1,2-Dichloroethane-d4	95.0	70-130	%Rec	1	2/10/2017 12:07:58 PM	30145
Surr: 4-Bromofluorobenzene	113	70-130	%Rec	1	2/10/2017 12:07:58 PM	30145
Surr: Dibromofluoromethane	91.2	70-130	%Rec	1	2/10/2017 12:07:58 PM	30145
Surr: Toluene-d8	96.4	70-130	%Rec	1	2/10/2017 12:07:58 PM	30145

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 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Lab Order **1702510**Date Reported: **2/13/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-51

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:50:00 AM

 Lab ID:
 1702510-008
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/10/2017 12:33:34 PM	30161
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	16	3.6	mg/Kg	1	2/10/2017 12:36:51 PM	Y40654
Surr: BFB	91.3	70-130	%Rec	1	2/10/2017 12:36:51 PM	Y40654
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	}			Analyst	: TOM
Diesel Range Organics (DRO)	34	9.6	mg/Kg	1	2/10/2017 12:02:44 PM	30153
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/10/2017 12:02:44 PM	30153
Surr: DNOP	108	70-130	%Rec	1	2/10/2017 12:02:44 PM	30153
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst	DJF
Benzene	ND	0.018	mg/Kg	1	2/10/2017 12:36:51 PM	30145
Toluene	ND	0.036	mg/Kg	1	2/10/2017 12:36:51 PM	30145
Ethylbenzene	ND	0.036	mg/Kg	1	2/10/2017 12:36:51 PM	30145
Xylenes, Total	ND	0.072	mg/Kg	1	2/10/2017 12:36:51 PM	30145
Surr: 1,2-Dichloroethane-d4	91.6	70-130	%Rec	1	2/10/2017 12:36:51 PM	30145
Surr: 4-Bromofluorobenzene	116	70-130	%Rec	1	2/10/2017 12:36:51 PM	30145
Surr: Dibromofluoromethane	89.7	70-130	%Rec	1	2/10/2017 12:36:51 PM	30145
Surr: Toluene-d8	99.1	70-130	%Rec	1	2/10/2017 12:36:51 PM	30145

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 16 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

## Lab Order **1702510**Date Reported: **2/13/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-52

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:52:00 AM

 Lab ID:
 1702510-009
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	2/10/2017 1:10:48 PM	30161
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	14	3.5	mg/Kg	1	2/10/2017 1:05:53 PM	Y40654
Surr: BFB	93.4	70-130	%Rec	1	2/10/2017 1:05:53 PM	Y40654
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	28	9.2	mg/Kg	1	2/10/2017 11:39:09 AM	30153
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/10/2017 11:39:09 AM	30153
Surr: DNOP	110	70-130	%Rec	1	2/10/2017 11:39:09 AM	30153
EPA METHOD 8260B: VOLATILES \$	SHORT LIST				Analyst	: DJF
Benzene	ND	0.017	mg/Kg	1	2/10/2017 1:05:53 PM	30145
Toluene	ND	0.035	mg/Kg	1	2/10/2017 1:05:53 PM	30145
Ethylbenzene	ND	0.035	mg/Kg	1	2/10/2017 1:05:53 PM	30145
Xylenes, Total	ND	0.069	mg/Kg	1	2/10/2017 1:05:53 PM	30145
Surr: 1,2-Dichloroethane-d4	91.9	70-130	%Rec	1	2/10/2017 1:05:53 PM	30145
Surr: 4-Bromofluorobenzene	93.6	70-130	%Rec	1	2/10/2017 1:05:53 PM	30145
Surr: Dibromofluoromethane	89.7	70-130	%Rec	1	2/10/2017 1:05:53 PM	30145
Surr: Toluene-d8	97.4	70-130	%Rec	1	2/10/2017 1:05:53 PM	30145

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 16
	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

### Lab Order **1702510**Date Reported: **2/13/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-53

 Project:
 Florance GC J 16A
 Collection Date: 2/9/2017 11:54:00 AM

 Lab ID:
 1702510-010
 Matrix: MEOH (SOIL)
 Received Date: 2/10/2017 8:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/10/2017 1:23:13 PM	30161
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	15	3.4	mg/Kg	1	2/10/2017 1:35:24 PM	Y40654
Surr: BFB	93.8	70-130	%Rec	1	2/10/2017 1:35:24 PM	Y40654
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analyst	TOM
Diesel Range Organics (DRO)	26	9.1	mg/Kg	1	2/10/2017 11:15:45 AM	30153
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/10/2017 11:15:45 AM	30153
Surr: DNOP	103	70-130	%Rec	1	2/10/2017 11:15:45 AM	30153
EPA METHOD 8260B: VOLATILES \$	SHORT LIST				Analyst	DJF
Benzene	ND	0.017	mg/Kg	1	2/10/2017 1:35:24 PM	30145
Toluene	ND	0.034	mg/Kg	1	2/10/2017 1:35:24 PM	30145
Ethylbenzene	ND	0.034	mg/Kg	1	2/10/2017 1:35:24 PM	30145
Xylenes, Total	ND	0.067	mg/Kg	1	2/10/2017 1:35:24 PM	30145
Surr: 1,2-Dichloroethane-d4	93.4	70-130	%Rec	1	2/10/2017 1:35:24 PM	30145
Surr: 4-Bromofluorobenzene	117	70-130	%Rec	1	2/10/2017 1:35:24 PM	30145
Surr: Dibromofluoromethane	91.2	70-130	%Rec	1	2/10/2017 1:35:24 PM	30145
Surr: Toluene-d8	99.5	70-130	%Rec	1	2/10/2017 1:35:24 PM	30145

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

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1702510** 

13-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30161 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30161 RunNo: 40678

Prep Date: 2/10/2017 Analysis Date: 2/10/2017 SeqNo: 1274422 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30161 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30161 RunNo: 40678

Prep Date: 2/10/2017 Analysis Date: 2/10/2017 SeqNo: 1274423 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.2 90 110

#### 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 16

**Client:** 

#### Hall Environmental Analysis Laboratory, Inc.

SampType: MBLK

Batch ID: 30134

Analysis Date: 2/10/2017

Result

9.9

Blagg Engineering

WO#: 1702510

13-Feb-17

Project: Florance	e GC J 16A								
Sample ID LCS-30153	SampType: Lo	cs	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batch ID: 30	153	R	RunNo: 40	0644				
Prep Date: 2/10/2017	Analysis Date: 2	/10/2017	S	SeqNo: 12	273571	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50 10	50.00	0	99.7	63.8	116			
Surr: DNOP	4.7	5.000		93.8	70	130			
Sample ID MB-30153	SampType: <b>M</b>	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batch ID: 30	153	R	RunNo: 40	0644				
Prep Date: 2/10/2017	Analysis Date: 2	/10/2017	S	SeqNo: 12	273572	Units: mg/K	ζg		
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	9.8	10.00		98.3	70	130			
Sample ID LCS-30134	SampType: <b>L</b> 0	cs	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batch ID: 30	)134	R	RunNo: 40	0644				
Prep Date: 2/9/2017	Analysis Date: 2	/10/2017	S	SeqNo: 12	274158	Units: %Red	С		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6	5.000		92.5	70	130			

SPK value SPK Ref Val %REC

10.00

#### Qualifiers:

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

Sample ID MB-30134

Prep Date: 2/9/2017

Client ID: PBS

Analyte

Surr: DNOP

- 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
- E Value above quantitation range

RunNo: 40644

98.6

SeqNo: 1274159

LowLimit

70

- 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

Page 12 of 16

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

Units: %Rec

130

HighLimit

%RPD

**RPDLimit** 

Qual

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1702510

13-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30145 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 30145 RunNo: 40653

Prep Date: 2/9/2017 Analysis Date: 2/10/2017 SeqNo: 1274052 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 880 1000 88.3 54 150

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-30145 SampType: LCS

Client ID: LCSS Batch ID: 30145 RunNo: 40653

Prep Date: 2/9/2017 Analysis Date: 2/10/2017 SeqNo: 1274053 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 99.5 76.4 125 950 95.1 Surr: BFB 1000 54 150

#### 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
- 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

Analyte detected in the associated Method Blank

Page 13 of 16

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1702510

13-Feb-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID MB-30145 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 30145 RunNo: 40653 Prep Date: 2/9/2017 Analysis Date: 2/10/2017 SeqNo: 1274068 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 1.0 1.000 101 80 120

Sample ID LCS-30145	SampType: LCS			TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batc	h ID: <b>30</b>	145	F	RunNo: 4	0653					
Prep Date: 2/9/2017	Analysis [	Date: 2/	10/2017	S	SeqNo: 1	274069	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	75.2	115				
Toluene	0.99	0.050	1.000	0	98.9	80.7	112				
Ethylbenzene	1.0	0.050	1.000	0	101	78.9	117				
Xylenes, Total	3.0	0.10	3.000	0	101	79.2	115				
Surr: 4-Bromofluorobenzene	1.1		1.000		106	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
- 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#: 1702510

13-Feb-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID mb-30145 SampType: MBLK TestCode: EPA Method 8260B: Volatiles Short List Client ID: **PBS** Batch ID: 30145 RunNo: 40654 Analysis Date: 2/10/2017 Prep Date: 2/9/2017 SeqNo: 1274226 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.025 ND Toluene ND 0.050 0.050 Ethylbenzene ND Xylenes, Total ND 0.10 Surr: 1,2-Dichloroethane-d4 0.48 0.5000 96.2 70 130 Surr: 4-Bromofluorobenzene 0.45 0.5000 91.0 70 130 Surr: Dibromofluoromethane 0.47 0.5000 94.4 70 130 Surr: Toluene-d8 0.51 0.5000 103 70 130

Sample ID Ics-30145 SampType: LCS TestCode: EPA Method 8260B: Volatiles Short List Client ID: LCSS Batch ID: 30145 RunNo: 40654 Prep Date: Analysis Date: 2/10/2017 SeqNo: 1274227 2/9/2017 Units: mg/Kg Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte 0.90 0.025 1.000 90.0 70 Benzene 0 130 0.050 0 96.2 70 Toluene 0.96 1.000 130 Surr: 1,2-Dichloroethane-d4 0.48 0.5000 95.8 70 130 Surr: 4-Bromofluorobenzene 0.48 0.5000 95.7 70 130 Surr: Dibromofluoromethane 91.5 70 0.46 0.5000 130 Surr: Toluene-d8 0.50 0.5000 99.8 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
- RLReporting Detection Limit
- Sample container temperature is out of limit as specified

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1702510** 

13-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: Y40654 RunNo: 40654

Prep Date: Analysis Date: 2/10/2017 SeqNo: 1274252 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 420 500.0 83.4 70 130

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

Client ID: LCSS Batch ID: Y40654 RunNo: 40654

Prep Date: Analysis Date: 2/10/2017 SeqNo: 1274253 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
 105
 70
 130

 Surr: BFB
 450
 500.0
 90.3
 70
 130

Sample ID 1702510-004ams SampType: MS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: **TSP-47** Batch ID: **Y40654** RunNo: **40654** 

Prep Date: Analysis Date: 2/10/2017 SeqNo: 1274254 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual Gasoline Range Organics (GRO) 55 3.2 16.11 40.24 92.7 63.2 128 Surr: BFB 370 322.2 70 130 115

Sample ID 1702510-004amsd SampType: MSD TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: TSP-47 Batch ID: Y40654 RunNo: 40654

Prep Date: Analysis Date: 2/10/2017 SeqNo: 1274255 Units: mg/Kg

%REC Analyte Result **PQL** SPK value SPK Ref Val LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 55 3.2 16.11 40.24 92.1 63.2 128 0.175 20 Surr: BFB 360 322.2 112 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 16 of 16



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: **BLAGG** Work Order Number: 1702510 RcptNo: 1 Received by/date: Logged By: Lindsay/Mangin 2/10/2017 8:30:00 AM Completed By: Lindsay Mangin 2/10/2017 8:49:39 AM Reviewed By: Chain of Custody 1. Custody seals intact on sample bottles? 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 temperature of >0° C to 6.0°C Yes 🗸 No 🗌 NA 🗌 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? Yes **V** No ... 9. Was preservative added to bottles? Yes 🗀 No 🗸 NA [...] 10.VOA vials have zero headspace? No 🗔 No VOA Vials 🗸 Yes 🗌 11. Were any sample containers received broken? 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) Adjusted? 13. Are matrices correctly identified on Chain of Custody? Yes 🗸 No 🔲 14. Is it clear what analyses were requested? No 🗌 15. Were all holding times able to be met? Yes 🗸 Checked by: No ... (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 n 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 ENVIKONMENTAL ANALYSTS LABORATORY	F	Albuquerque, NM 87109	1107					1)		<i>₹</i>	ime2) 0728	×										ve Makal XON EVRM -0016D-EFFLRNCGCJ16A	H202
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Turn-Around Time: ASAD	Standard KRush SAME DOL	Project Name:		-	Treated Soil 17 105	Project Manager:	J. B. 846	)	Sampler: I- Butte	Onice: V/Yes INo	Sample Temperature: 1,006	Container Preservative Type and # Type $ \mathcal{FMS} O$	100- 1000 1-2011	700- 1 1	800-	120-	-005	<i>700-</i>	+0-	800-		010	Received by: Date Time	montracted to other decrepting laborationies. This serves as notice of this possibility. Any sub-contracted data will be closely noticed to the contracted data will be closely noticed to the contracted data will be closely noticed as
Chain-of-Custody Record	Client: BP Amenta	BLAGE ENGINEERING INC.	Malin g Address.		Phone #: 505 - 320 - 1(83	email or Fax#:	QA/QC Package:	X Standard □ Level 4 (Full Validation)	_	□ NELAP □ Other	□ EDD (Type)	Date Time Matrix Sample Request ID	137 SOIL TSP-44	1139 " 13P- 45	9h - USL 11 11 11	1143 1 178P - 47	4 1145 " 73P - 48	1 1146 1 130 - 49	" (148 " TSP-50	1150 11 TSP-5-1	7511	" 1154 " TSP-53	Date: Time: Relinquished by:  Seit 1449 Date: Time: Relinquished by:	7 197



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

February 20, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1702783

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 8 sample(s) on 2/17/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

## Lab Order **1702783**Date Reported: **2/20/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-54

 Project:
 Florance GC J 16A
 Collection Date: 2/16/2017 1:12:00 PM

 Lab ID:
 1702783-001
 Matrix: MEOH (SOIL)
 Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	2/17/2017 11:41:51 AM	И 30276
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	17	9.1	mg/Kg	1	2/17/2017 10:10:06 AM	Л 30267
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/17/2017 10:10:06 AM	И 30267
Surr: DNOP	106	70-130	%Rec	1	2/17/2017 10:10:06 AM	И 30267
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	2/17/2017 11:02:16 AM	И G40829
Surr: BFB	116	54-150	%Rec	1	2/17/2017 11:02:16 AM	M G40829
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.016	mg/Kg	1	2/17/2017 11:02:16 AM	Л B40829
Toluene	ND	0.031	mg/Kg	1	2/17/2017 11:02:16 AM	И B40829
Ethylbenzene	ND	0.031	mg/Kg	1	2/17/2017 11:02:16 AM	M B40829
Xylenes, Total	ND	0.062	mg/Kg	1	2/17/2017 11:02:16 AM	И B40829
Surr: 4-Bromofluorobenzene	97.5	80-120	%Rec	1	2/17/2017 11:02:16 AM	M B40829

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 12
	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

## Lab Order **1702783**Date Reported: **2/20/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-55

 Project:
 Florance GC J 16A
 Collection Date: 2/16/2017 1:15:00 PM

 Lab ID:
 1702783-002
 Matrix: MEOH (SOIL)
 Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	2/17/2017 11:54:15 Al	M 30276
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	6			Analys	st: <b>TOM</b>
Diesel Range Organics (DRO)	9.2	9.1	mg/Kg	1	2/17/2017 10:31:30 Al	M 30267
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/17/2017 10:31:30 Al	M 30267
Surr: DNOP	111	70-130	%Rec	1	2/17/2017 10:31:30 Al	M 30267
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	2/17/2017 11:25:51 Al	M G40829
Surr: BFB	109	54-150	%Rec	1	2/17/2017 11:25:51 Al	M G40829
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.018	mg/Kg	1	2/17/2017 11:25:51 Al	M B40829
Toluene	ND	0.036	mg/Kg	1	2/17/2017 11:25:51 Al	M B40829
Ethylbenzene	ND	0.036	mg/Kg	1	2/17/2017 11:25:51 Al	M B40829
Xylenes, Total	ND	0.072	mg/Kg	1	2/17/2017 11:25:51 Al	M B40829
Surr: 4-Bromofluorobenzene	95.4	80-120	%Rec	1	2/17/2017 11:25:51 Al	M B40829

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 12
	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

#### Lab Order 1702783

Date Reported: 2/20/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-56

 Project:
 Florance GC J 16A
 Collection Date: 2/16/2017 1:18:00 PM

 Lab ID:
 1702783-003
 Matrix: MEOH (SOIL)
 Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	2/17/2017 12:31:29 PM	1 30276
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analys	t: TOM
Diesel Range Organics (DRO)	15	9.6	mg/Kg	1	2/17/2017 10:53:08 AM	1 30267
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/17/2017 10:53:08 AM	1 30267
Surr: DNOP	103	70-130	%Rec	1	2/17/2017 10:53:08 AM	1 30267
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	2/17/2017 11:49:29 AM	1 G40829
Surr: BFB	96.6	54-150	%Rec	1	2/17/2017 11:49:29 AM	1 G40829
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.016	mg/Kg	1	2/17/2017 11:49:29 AM	1 B40829
Toluene	ND	0.033	mg/Kg	1	2/17/2017 11:49:29 AM	1 B40829
Ethylbenzene	ND	0.033	mg/Kg	1	2/17/2017 11:49:29 AM	1 B40829
Xylenes, Total	ND	0.065	mg/Kg	1	2/17/2017 11:49:29 AM	1 B40829
Surr: 4-Bromofluorobenzene	95.8	80-120	%Rec	1	2/17/2017 11:49:29 AM	1 B40829

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 3 of 12
	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

### Lab Order **1702783**Date Reported: **2/20/2017**

Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: TSP-57

Project: Florance GC J 16A Collection Date: 2/16/2017 1:21:00 PM

**Lab ID:** 1702783-004 **Matrix:** MEOH (SOIL) **Received Date:** 2/17/2017 6:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	2/17/2017 12:43:53 PI	M 30276
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	;			Analys	st: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	2/17/2017 11:14:50 Al	M 30267
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/17/2017 11:14:50 Al	M 30267
Surr: DNOP	104	70-130	%Rec	1	2/17/2017 11:14:50 Al	M 30267
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	2/17/2017 12:12:49 PI	M G40829
Surr: BFB	98.3	54-150	%Rec	1	2/17/2017 12:12:49 PI	M G40829
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.017	mg/Kg	1	2/17/2017 12:12:49 PI	M B40829
Toluene	ND	0.034	mg/Kg	1	2/17/2017 12:12:49 PI	M B40829
Ethylbenzene	ND	0.034	mg/Kg	1	2/17/2017 12:12:49 PI	M B40829
Xylenes, Total	ND	0.069	mg/Kg	1	2/17/2017 12:12:49 PI	M B40829
Surr: 4-Bromofluorobenzene	92.8	80-120	%Rec	1	2/17/2017 12:12:49 PI	M B40829

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

# Qualifiers: \* Value exceeds Maximum Contaminant Level. B 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 12 ND Not Detected at the Reporting Limit P Sample pH Not In Range

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

### Lab Order **1702783**Date Reported: **2/20/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-58

 Project:
 Florance GC J 16A
 Collection Date: 2/16/2017 1:23:00 PM

 Lab ID:
 1702783-005
 Matrix: MEOH (SOIL)
 Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	2/17/2017 12:56:18 PM	И 30276
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	12	9.8	mg/Kg	1	2/17/2017 11:36:30 AM	Л 30267
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/17/2017 11:36:30 Al	И 30267
Surr: DNOP	101	70-130	%Rec	1	2/17/2017 11:36:30 Af	И 30267
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.2	mg/Kg	1	2/17/2017 12:36:26 PM	И G40829
Surr: BFB	106	54-150	%Rec	1	2/17/2017 12:36:26 PM	M G40829
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.016	mg/Kg	1	2/17/2017 12:36:26 PM	Л B40829
Toluene	ND	0.032	mg/Kg	1	2/17/2017 12:36:26 PM	И B40829
Ethylbenzene	ND	0.032	mg/Kg	1	2/17/2017 12:36:26 PM	M B40829
Xylenes, Total	ND	0.064	mg/Kg	1	2/17/2017 12:36:26 PM	И B40829
Surr: 4-Bromofluorobenzene	94.0	80-120	%Rec	1	2/17/2017 12:36:26 PM	M B40829

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 12
	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

#### Lab Order **1702783**

Date Reported: 2/20/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-59

 Project:
 Florance GC J 16A
 Collection Date: 2/16/2017 1:25:00 PM

 Lab ID:
 1702783-006
 Matrix: MEOH (SOIL)
 Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed Batch
EPA METHOD 300.0: ANIONS				Analyst: <b>LGT</b>
Chloride	ND	30	mg/Kg	20 2/17/2017 1:08:43 PM 30276
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	;		Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	50	9.7	mg/Kg	1 2/17/2017 11:58:05 AM 30267
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1 2/17/2017 11:58:05 AM 30267
Surr: DNOP	105	70-130	%Rec	1 2/17/2017 11:58:05 AM 30267
EPA METHOD 8015D: GASOLINE RANG	E			Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	4.8	3.2	mg/Kg	1 2/17/2017 1:00:00 PM G40829
Surr: BFB	150	54-150	S %Rec	1 2/17/2017 1:00:00 PM G40829
EPA METHOD 8021B: VOLATILES				Analyst: <b>NSB</b>
Benzene	ND	0.016	mg/Kg	1 2/17/2017 1:00:00 PM B40829
Toluene	ND	0.032	mg/Kg	1 2/17/2017 1:00:00 PM B40829
Ethylbenzene	ND	0.032	mg/Kg	1 2/17/2017 1:00:00 PM B40829
Xylenes, Total	ND	0.065	mg/Kg	1 2/17/2017 1:00:00 PM B40829
Surr: 4-Bromofluorobenzene	95.7	80-120	%Rec	1 2/17/2017 1:00:00 PM B40829

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

#### Lab Order **1702783**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/20/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-60

 Project:
 Florance GC J 16A
 Collection Date: 2/16/2017 1:27:00 PM

 Lab ID:
 1702783-007
 Matrix: MEOH (SOIL)
 Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	:: LGT
Chloride	ND	30		mg/Kg	20	2/17/2017 1:21:07 PM	30276
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst	:: TOM
Diesel Range Organics (DRO)	64	9.7		mg/Kg	1	2/17/2017 12:19:40 PM	30267
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/17/2017 12:19:40 PM	30267
Surr: DNOP	102	70-130		%Rec	1	2/17/2017 12:19:40 PM	30267
EPA METHOD 8015D: GASOLINE RAM	NGE					Analyst	:: NSB
Gasoline Range Organics (GRO)	8.0	3.4		mg/Kg	1	2/17/2017 1:23:31 PM	G40829
Surr: BFB	188	54-150	S	%Rec	1	2/17/2017 1:23:31 PM	G40829
EPA METHOD 8021B: VOLATILES						Analyst	:: NSB
Benzene	ND	0.017		mg/Kg	1	2/17/2017 1:23:31 PM	B40829
Toluene	ND	0.034		mg/Kg	1	2/17/2017 1:23:31 PM	B40829
Ethylbenzene	ND	0.034		mg/Kg	1	2/17/2017 1:23:31 PM	B40829
Xylenes, Total	ND	0.069		mg/Kg	1	2/17/2017 1:23:31 PM	B40829
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	2/17/2017 1:23:31 PM	B40829

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		Analyte detected below quantitation limits Page 7 of 12	
	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	

# Lab Order **1702783**Date Reported: **2/20/2017**

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-61

 Project:
 Florance GC J 16A
 Collection Date: 2/16/2017 1:28:00 PM

 Lab ID:
 1702783-008
 Matrix: MEOH (SOIL)
 Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Analyst:	LGT
Chloride	ND	30	mg/Kg	20 2/17/2017 1:33:31 PM	30276
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	;		Analyst:	TOM
Diesel Range Organics (DRO)	63	9.9	mg/Kg	1 2/17/2017 12:41:15 PM	30267
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1 2/17/2017 12:41:15 PM	30267
Surr: DNOP	102	70-130	%Rec	1 2/17/2017 12:41:15 PM	30267
EPA METHOD 8015D: GASOLINE RANG	E			Analyst:	NSB
Gasoline Range Organics (GRO)	9.8	3.3	mg/Kg	1 2/17/2017 1:46:59 PM	G40829
Surr: BFB	218	54-150	S %Rec	1 2/17/2017 1:46:59 PM	G40829
EPA METHOD 8021B: VOLATILES				Analyst:	NSB
Benzene	ND	0.016	mg/Kg	1 2/17/2017 1:46:59 PM	R40829
Toluene	ND	0.033	mg/Kg	1 2/17/2017 1:46:59 PM	R40829
Ethylbenzene	ND	0.033	mg/Kg	1 2/17/2017 1:46:59 PM	R40829
Xylenes, Total	ND	0.066	mg/Kg	1 2/17/2017 1:46:59 PM	R40829
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1 2/17/2017 1:46:59 PM	R40829

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 12
	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#: **1702783** 

20-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30276 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30276 RunNo: 40822

Prep Date: 2/17/2017 Analysis Date: 2/17/2017 SeqNo: 1279310 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30276 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30276 RunNo: 40822

Prep Date: 2/17/2017 Analysis Date: 2/17/2017 SeqNo: 1279311 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.4 90 110

#### 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 12

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1702783

20-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID LCS-30267 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 30267 RunNo: 40813 Prep Date: 2/17/2017 Analysis Date: 2/17/2017 SeqNo: 1278706 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 54 50.00 0 108 63.8 116

Surr: DNOP 5.000 107 5.3 70 130

Sample ID MB-30267 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Batch ID: 30267 Client ID: PBS RunNo: 40813

Prep Date: 2/17/2017 Analysis Date: 2/17/2017 SeqNo: 1278707 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 9.4 10.00 94.4 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
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

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### Hall Environmental Analysis Laboratory, Inc.

WO#: 1702783

20-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

Client ID: **PBS** Batch ID: G40829 RunNo: 40829

Prep Date: Analysis Date: 2/17/2017 SeqNo: 1279140 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 85.8 54 150

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

Client ID: LCSS RunNo: 40829 Batch ID: G40829

Prep Date: Analysis Date: 2/17/2017 SeqNo: 1279141 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 94.7 76.4 125 920 91.7 Surr: BFB 1000 54 150

#### 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

Reporting Detection Limit

P Sample pH Not In Range

RL

Sample container temperature is out of limit as specified

Page 11 of 12

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1702783** 

20-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: B40829 RunNo: 40829

Prep Date: Analysis Date: 2/17/2017 SeqNo: 1279151 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 0.97 1.000 96.9 80 120

Sample ID 100NG BTEX LC	s	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batc	h ID: <b>B4</b>	0829	F	RunNo: 4					
Prep Date:	Analysis [	Date: <b>2/</b>	17/2017	5	SeqNo: 1	279152	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.8	75.2	115			
Toluene	0.91	0.050	1.000	0	91.5	80.7	112			
Ethylbenzene	0.90	0.050	1.000	0	89.9	78.9	117			
Xylenes, Total	2.7	0.10	3.000	0	90.6	79.2	115			
Surr: 4-Bromofluorobenzene	0.96		1.000		96.3	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 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: BLAGG Work Order	r Number: 170278:	3	Rept	No: 1
Received by/date: AQ 02/17/	/17 -			
Logged By: Ashley Gallegos 2/17/2017 6:0	0:00 AM	A		
Completed By: Ashley Gallegos 2/17/2017 6:2	28:36 AM	A		
Reviewed By: AT 621/7/17		2 , 0		
Chain of Custody		····································		
1. Custody seals intact on sample bottles?	Yes	No 🗔	Not Present	<b>√</b> 1
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 temperature of >0° C to 6.0	D°C Yes 🗹	No 🗆	NA [	
6. Sample(s) in proper container(s)?	Yes 🔽	No 🗌		
7. Sufficient sample volume for indicated test(s)?	Yes 🗸	No 🗍		
8. Are samples (except VOA and ONG) properly preserved?	Yes 🗸	No 🗌		
9. Was preservative added to bottles?	Yes [_	No 🗹	NA [	
10.VOA vials have zero headspace?	Yes 🗀	No 🗔	No VOA Viais 🕟	ä
11. Were any sample containers received broken?	Yes		140 VOA VIAIS	
			# of preserved bottles checked	
12. Does paperwork match bottle labels?	Yes 🗹	No 🗌	for pH:	
(Note discrepancies on chain of custody)  13. Are matrices correctly identified on Chain of Custody?	, ITTA		(< Adjusted?	2 or >12 unless noted
14. Is it clear what analyses were requested?	Yes ✔ Yes ✔	No [_]	Adjusted?	
15. Were all holding times able to be met?	res i <b>⊻</b> ) Yes <b>⊻</b>	No []	Checked by	r.
(If no, notify customer for authorization.)	.00	,,,		
pecial 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:		taan mininga keesta kalaan kan markee taan mininga keesta ka ka ka ka ka ka ka ka ka ka ka ka ka		
17. Additional remarks:			- 17.	
8. <u>Cooler Information</u>				
Cooler No Temp °C Condition Seal Intact Seal  1 1.8 Good Yes	No Seal Date	Signed By	]	

	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Ana	(>C)	(Gas oie 30 / MR 30 / MR	H9T +  10 \ OS  (1.81)  (1.40)  20728  200.60  2808 \ 2	BE:  (GF)  od 4  od 5  od 5  il,NG  il,NG  idese  d)	BTEX + MT BTEX + MT BTEX + MT TPH 8015B TPH (Methodethodethodethodethodethodethodethod	× ×									Remarks: But BP Courses?	W3S EVENEUT: L1-0016D-E: FLRNCGCT16A	Spo DUDO Note: Samples tredal with H2O2. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
Tum-Around Time: ASA	Standard KRush		FLORANCE GC J LEA		TREATED SOIL FILES	Project Manager:	J. BLAGE	Sampler: J. Bidler On Ice: X Yes DNo	Tem	Container Preservative HEAL No: Type and # Type	402×1 Ceol -001	1 1 -062	-003	h00-	-005	1001-	L00-	800-		Received by: Date Time	Regeived by: Date Time 62   17   17	Softracied to other perfectived labely profess. Wis serves as notice of the
Chain-of-Custody Record	Client: BP AMERICA	BLAGE ENGINEERING INC	Mailing Address:		Phone #: (505) 320 - 1193	email or Fax#:	QA/QC Package:  X Standard  □ Level 4 (Full Validation)	Accreditation	□ EDD (Type)	Date Time Matrix Sample Request ID	Hobert 1312 SOIL 175P-54	1 1315 1 759 - 55	1318 1758 - 56	1321 758-57	3 T3P-	(325   750-59	1327 759-60	1328 737-61		Date: Time: Relinquished by:	Time: Refinquished by:	If which is a place of the contraction of the contr



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

February 24, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1702999

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 9 sample(s) on 2/23/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1702999**Date Reported: **2/24/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-62

 Project:
 Florance GC J 16A
 Collection Date: 2/22/2017 1:15:00 PM

 Lab ID:
 1702999-001
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 12:57:27 PM	30373
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst	: MAB
Diesel Range Organics (DRO)	67	9.6	mg/Kg	1	2/23/2017 10:46:20 AM	30360
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/23/2017 10:46:20 AM	30360
Surr: DNOP	104	70-130	%Rec	1	2/23/2017 10:46:20 AM	30360
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/23/2017 9:59:17 AM	G40945
Surr: BFB	115	54-150	%Rec	5	2/23/2017 9:59:17 AM	G40945
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.084	mg/Kg	5	2/23/2017 9:59:17 AM	B40945
Toluene	ND	0.17	mg/Kg	5	2/23/2017 9:59:17 AM	B40945
Ethylbenzene	ND	0.17	mg/Kg	5	2/23/2017 9:59:17 AM	B40945
Xylenes, Total	ND	0.33	mg/Kg	5	2/23/2017 9:59:17 AM	B40945
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	5	2/23/2017 9:59:17 AM	B40945

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

# Lab Order **1702999**Date Reported: **2/24/2017**

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-63

**Project:** Florance GC J 16A
 Collection Date: 2/22/2017 1:19:00 PM

 **Lab ID:** 1702999-002
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 1:09:52 PM	30373
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analys	t: MAB
Diesel Range Organics (DRO)	100	9.3	mg/Kg	1	2/23/2017 11:07:59 AM	1 30360
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/23/2017 11:07:59 AM	1 30360
Surr: DNOP	109	70-130	%Rec	1	2/23/2017 11:07:59 AM	1 30360
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	2/23/2017 10:25:46 AM	1 G40945
Surr: BFB	136	54-150	%Rec	5	2/23/2017 10:25:46 AM	1 G40945
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.081	mg/Kg	5	2/23/2017 10:25:46 AM	1 B40945
Toluene	ND	0.16	mg/Kg	5	2/23/2017 10:25:46 AM	1 B40945
Ethylbenzene	ND	0.16	mg/Kg	5	2/23/2017 10:25:46 AM	1 B40945
Xylenes, Total	ND	0.33	mg/Kg	5	2/23/2017 10:25:46 AM	M B40945
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	5	2/23/2017 10:25:46 AM	1 B40945

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

#### Lab Order **1702999**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/24/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-64

 Project:
 Florance GC J 16A
 Collection Date: 2/22/2017 1:22:00 PM

 Lab ID:
 1702999-003
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 1:22:17 PM	30373
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analys	t: MAB
Diesel Range Organics (DRO)	70	9.6	mg/Kg	1	2/23/2017 11:29:35 AN	1 30360
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/23/2017 11:29:35 AM	1 30360
Surr: DNOP	102	70-130	%Rec	1	2/23/2017 11:29:35 AM	1 30360
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	15	mg/Kg	5	2/23/2017 10:52:07 AN	1 G40945
Surr: BFB	136	54-150	%Rec	5	2/23/2017 10:52:07 AN	1 G40945
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.077	mg/Kg	5	2/23/2017 10:52:07 AN	1 B40945
Toluene	ND	0.15	mg/Kg	5	2/23/2017 10:52:07 AN	1 B40945
Ethylbenzene	ND	0.15	mg/Kg	5	2/23/2017 10:52:07 AM	1 B40945
Xylenes, Total	ND	0.31	mg/Kg	5	2/23/2017 10:52:07 AN	M B40945
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	5	2/23/2017 10:52:07 AN	1 B40945

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

# Lab Order **1702999**Date Reported: **2/24/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-65

 Project:
 Florance GC J 16A
 Collection Date: 2/22/2017 1:25:00 PM

 Lab ID:
 1702999-004
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 1:34:42 PM	30373
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analyst	MAB
Diesel Range Organics (DRO)	10	9.2	mg/Kg	1	2/23/2017 11:51:09 AM	30360
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/23/2017 11:51:09 AM	30360
Surr: DNOP	102	70-130	%Rec	1	2/23/2017 11:51:09 AM	30360
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	2/23/2017 11:18:25 AM	G40945
Surr: BFB	119	54-150	%Rec	5	2/23/2017 11:18:25 AM	G40945
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.081	mg/Kg	5	2/23/2017 11:18:25 AM	B40945
Toluene	ND	0.16	mg/Kg	5	2/23/2017 11:18:25 AM	B40945
Ethylbenzene	ND	0.16	mg/Kg	5	2/23/2017 11:18:25 AM	B40945
Xylenes, Total	ND	0.32	mg/Kg	5	2/23/2017 11:18:25 AM	B40945
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	5	2/23/2017 11:18:25 AM	B40945

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

# Lab Order **1702999**Date Reported: **2/24/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-66

 Project:
 Florance GC J 16A
 Collection Date: 2/22/2017 1:27:00 PM

 Lab ID:
 1702999-005
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 1:47:06 PM	30373
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	6			Analyst	: MAB
Diesel Range Organics (DRO)	30	9.3	mg/Kg	1	2/23/2017 12:12:43 PM	30360
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/23/2017 12:12:43 PM	30360
Surr: DNOP	101	70-130	%Rec	1	2/23/2017 12:12:43 PM	30360
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/23/2017 11:44:33 AM	G40945
Surr: BFB	125	54-150	%Rec	5	2/23/2017 11:44:33 AM	G40945
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.083	mg/Kg	5	2/23/2017 11:44:33 AM	B40945
Toluene	ND	0.17	mg/Kg	5	2/23/2017 11:44:33 AM	B40945
Ethylbenzene	ND	0.17	mg/Kg	5	2/23/2017 11:44:33 AM	B40945
Xylenes, Total	ND	0.33	mg/Kg	5	2/23/2017 11:44:33 AM	B40945
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	5	2/23/2017 11:44:33 AM	B40945

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		

# Lab Order **1702999**Date Reported: **2/24/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-67

 Project:
 Florance GC J 16A
 Collection Date: 2/22/2017 1:29:00 PM

 Lab ID:
 1702999-006
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 1:59:31 PM	30373
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analyst	MAB
Diesel Range Organics (DRO)	39	9.6	mg/Kg	1	2/23/2017 12:34:30 PM	30360
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/23/2017 12:34:30 PM	30360
Surr: DNOP	102	70-130	%Rec	1	2/23/2017 12:34:30 PM	30360
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/23/2017 12:10:55 PM	G40945
Surr: BFB	114	54-150	%Rec	5	2/23/2017 12:10:55 PM	G40945
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.084	mg/Kg	5	2/23/2017 12:10:55 PM	B40945
Toluene	ND	0.17	mg/Kg	5	2/23/2017 12:10:55 PM	B40945
Ethylbenzene	ND	0.17	mg/Kg	5	2/23/2017 12:10:55 PM	B40945
Xylenes, Total	ND	0.34	mg/Kg	5	2/23/2017 12:10:55 PM	B40945
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	5	2/23/2017 12:10:55 PM	B40945

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

#### Lab Order **1702999**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/24/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-68

**Project:** Florance GC J 16A
 Collection Date: 2/22/2017 1:32:00 PM

 **Lab ID:** 1702999-007
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 2:11:55 PM	30373
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analys	t: MAB
Diesel Range Organics (DRO)	45	9.8	mg/Kg	1	2/23/2017 12:56:02 PM	1 30360
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/23/2017 12:56:02 PM	1 30360
Surr: DNOP	103	70-130	%Rec	1	2/23/2017 12:56:02 PM	1 30360
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	2/23/2017 12:37:14 PM	1 G40945
Surr: BFB	117	54-150	%Rec	5	2/23/2017 12:37:14 PM	1 G40945
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.080	mg/Kg	5	2/23/2017 12:37:14 PM	1 B40945
Toluene	ND	0.16	mg/Kg	5	2/23/2017 12:37:14 PM	1 B40945
Ethylbenzene	ND	0.16	mg/Kg	5	2/23/2017 12:37:14 PM	1 B40945
Xylenes, Total	ND	0.32	mg/Kg	5	2/23/2017 12:37:14 PM	1 B40945
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	5	2/23/2017 12:37:14 PM	1 B40945

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

# Lab Order **1702999**Date Reported: **2/24/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-69

 Project:
 Florance GC J 16A
 Collection Date: 2/22/2017 1:34:00 PM

 Lab ID:
 1702999-008
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	:: MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 2:24:20 PM	30373
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analys	: MAB
Diesel Range Organics (DRO)	34	9.6	mg/Kg	1	2/23/2017 1:17:45 PM	30360
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/23/2017 1:17:45 PM	30360
Surr: DNOP	99.4	70-130	%Rec	1	2/23/2017 1:17:45 PM	30360
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	:: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/23/2017 1:03:34 PM	G40945
Surr: BFB	115	54-150	%Rec	5	2/23/2017 1:03:34 PM	G40945
EPA METHOD 8021B: VOLATILES					Analys	:: NSB
Benzene	ND	0.083	mg/Kg	5	2/23/2017 1:03:34 PM	B40945
Toluene	ND	0.17	mg/Kg	5	2/23/2017 1:03:34 PM	B40945
Ethylbenzene	ND	0.17	mg/Kg	5	2/23/2017 1:03:34 PM	B40945
Xylenes, Total	ND	0.33	mg/Kg	5	2/23/2017 1:03:34 PM	B40945
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	5	2/23/2017 1:03:34 PM	B40945

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

#### Lab Order **1702999**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-70

**Project:** Florance GC J 16A
 Collection Date: 2/22/2017 1:36:00 PM

 **Lab ID:** 1702999-009
 Matrix: MEOH (SOIL)
 Received Date: 2/23/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	2/23/2017 2:36:45 PM	30373
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst	: MAB
Diesel Range Organics (DRO)	67	9.1	mg/Kg	1	2/23/2017 1:39:24 PM	30360
Motor Oil Range Organics (MRO)	75	46	mg/Kg	1	2/23/2017 1:39:24 PM	30360
Surr: DNOP	103	70-130	%Rec	1	2/23/2017 1:39:24 PM	30360
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	2/23/2017 1:29:52 PM	G40945
Surr: BFB	119	54-150	%Rec	5	2/23/2017 1:29:52 PM	G40945
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.093	mg/Kg	5	2/23/2017 1:29:52 PM	B40945
Toluene	ND	0.19	mg/Kg	5	2/23/2017 1:29:52 PM	B40945
Ethylbenzene	ND	0.19	mg/Kg	5	2/23/2017 1:29:52 PM	B40945
Xylenes, Total	ND	0.37	mg/Kg	5	2/23/2017 1:29:52 PM	B40945
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	5	2/23/2017 1:29:52 PM	B40945

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#: 1702999

24-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30373 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 30373 RunNo: 40946

Prep Date: 2/23/2017 Analysis Date: 2/23/2017 SeqNo: 1282951 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30373 SampType: LCS TestCode: EPA Method 300.0: Anions

Batch ID: 30373 Client ID: LCSS RunNo: 40946

Prep Date: 2/23/2017 Analysis Date: 2/23/2017 SeqNo: 1282952 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 96.1 110

#### 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

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P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1702999

24-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID LCS-30360 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

LCSS Client ID: Batch ID: 30360 RunNo: 40934

Prep Date: 2/23/2017 Analysis Date: 2/23/2017 SeqNo: 1282102 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 52 50.00 0 104 63.8 116

Surr: DNOP 4.7 5.000 93.1 70 130

TestCode: EPA Method 8015M/D: Diesel Range Organics Sample ID MB-30360 SampType: MBLK

Client ID: PBS Batch ID: 30360 RunNo: 40934

Prep Date: 2/23/2017 Analysis Date: 2/23/2017 SeqNo: 1282103 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 9.2 10.00 91.8 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
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

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### Hall Environmental Analysis Laboratory, Inc.

WO#: 1702999

24-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

Client ID: **PBS** Batch ID: **G40945** RunNo: 40945

Prep Date: Analysis Date: 2/23/2017 SeqNo: 1282908 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 980 1000 98.2 54 150

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

Client ID: LCSS RunNo: 40945 Batch ID: G40945

Prep Date: Analysis Date: 2/23/2017 SeqNo: 1282909 Units: mg/Kg

LowLimit Analyte Result **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 30 5.0 25.00 121 76.4 125 1100 1000 54 Surr: BFB 113 150

#### 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

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## Hall Environmental Analysis Laboratory, Inc.

WO#: 1702999

24-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

Client ID: **PBS** Batch ID: **B40945** RunNo: 40945

Analysis Date: 2/23/2017 Prep Date: SeqNo: 1282919 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 1.000 109 80 120

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: **B40945** RunNo: 40945

Prep Date: Analysis Date: 2/23/2017 SeqNo: 1282920 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 75.2 115 Benzene Toluene 1.0 0.050 1.000 0 101 80.7 112 Ethylbenzene 0.050 0 78.9 1.0 1.000 101 117 Xylenes, Total 3.1 0.10 3.000 0 104 79.2 115 Surr: 4-Bromofluorobenzene 1.1 1.000 107 80 120

Sample ID 1702999-001AMS SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: TSP-62 Batch ID: **B40945** RunNo: 40945

Prep Date:	Analysis Date: 2/23/2017		S	SeqNo: <b>1282921</b> Units:			Inits: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.3	0.084	3.346	0	98.2	61.5	138			
Toluene	3.4	0.17	3.346	0.02209	100	71.4	127			
Ethylbenzene	3.4	0.17	3.346	0.02644	101	70.9	132			
Xylenes, Total	11	0.33	10.04	0.05856	105	76.2	123			
Surr: 4-Bromofluorobenzene	3.6		3 346		107	80	120			

Sample ID 1702999-001AMSD TestCode: EPA Method 8021B: Volatiles SampType: MSD

Client ID: TSD-62 Batch ID: **B40945** RunNo: 40945

Ciletit ID. 13F-62	Datu	111D. <b>D4</b>	0945	Runno. 40943						
Prep Date: Analysis D		Date: <b>2/</b>	e: <b>2/23/2017</b>			SeqNo: <b>1282922</b>		(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.2	0.084	3.346	0	96.9	61.5	138	1.33	20	
Toluene	3.3	0.17	3.346	0.02209	99.0	71.4	127	1.13	20	
Ethylbenzene	3.4	0.17	3.346	0.02644	102	70.9	132	0.677	20	
Xylenes, Total	11	0.33	10.04	0.05856	105	76.2	123	0.375	20	
Surr: 4-Bromofluorobenzene	3.8		3.346		112	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

Sample container temperature is out of limit as specified

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

## Sample Log-In Check List

Work Order Number: 1702999 Client Name: BLAGG RoptNo: 1 02/23/17 a Received by/date: Logged By: Andy Jansson 2/23/2017 8:00:00 AM 02/23/17 Andy Jansson Completed By: 02/23/17 Reviewed By: Chain of Custody Not Present V Yes 1. Custody seals intact on sample bottles? No 🗌 Yes V Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No 🗌 NA 🗌 Yes V 4. Was an attempt made to cool the samples? No 🗆 Were all samples received at a temperature of >0" C to 6.0°C. Yes V 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 V NA L 9. Was preservative added to bottles? Yes No VOA Vials 10. VOA vials have zero headspace? Yes No 11. Were any sample containers received broken? No V # of preserved bottles checked for gH: No 12. Does paperwork match builtle 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: 15. Were all holding times able to be met? No . (If no, notify customer for authorization.) Special Handling (if applicable) Yes NA V 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 Signed By 1.0 Good Yes

Client	BP A	CHENT BP AMERICA		□ Standard	XRush	XRush Dans Day	Π	H	۵	M	ANAI YSTS	1	V	Ç	ANAI YSTS I ABODATODY	10
	BAGOS	ENSIN	ENSIDERANG TAC	Project Name:		0	Ш		\ \{ \}	ww.ha	www.hallenvironmental.com	1775	tal.co	, E	5	2
Mailing	Mailing Address:			FLORANCE	20	J 16A		4901 Hawkins NE	awkins		- Albuqueraue, NM 87109	neran	Z	M 871	60	
				Project #:				Tel. 505-345-3975	5-345		П	Fax 505-345-4107	345	4107		
Phone #:	# (50s) #	15) 32	320-1183	REATED	Sou	Pluss				,	Analysis Request	s Rec	uest			
email	email or Fax#:			Project Manager	100		_				1.0	120		H		
OA/QC Packa	OA/QC Package: XStandard		☐ Level 4 (Full Validation)	7.7	10.5g					(SMIS	JS - Qd					
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□ EDC	□ EDD (Type)			Sample Temperature:	perature:	7.001		1.0	_	_		_	(/			- NI
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX + MT	TM + X3T8 82108 H9T	orteM) H9T	EDB (Metho	RCRA 8 Me O,9) anoinA	our y should	8260B (VO	imač) 07S8	CHUOKIDE	Air Bubbles
12/2017	1315	Soil	TSP-62	4.03×9	Cear	100-	×	×						×		
	1369		TSP-63			700-		1								
-	1322		TSP-64			-003				5						
	1325		739-65			187										
	(327		750-66			500-										
	1329		TSP-67			900-		7								
	1332		752-68			100-		_								
	1334		75P-69			800-	_									
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Pate:	Time: (716	Relinquished by	O Stay	Received by:	_<	July Fizzkon (716	Remail VID	Remarks: Six. SP VID: VHIXONEVRM	X ONE	VRM.	9	Co.orther t	STEVE	7 7	MOSEA	1.
Date: 722/17	1854 1854	Relinquished by	ed by:		11	Joz (23/17 0800		Ý	7	1	100100	7	i	2	COLON-S. FERNISC. IN	t



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

February 28, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1702B46

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 8 sample(s) on 2/25/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1702B46**Date Reported: **2/28/2017**

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-70R

 Project:
 Florance GC J 16A
 Collection Date: 2/24/2017 1:02:00 PM

 Lab ID:
 1702B46-001
 Matrix: MEOH (SOIL)
 Received Date: 2/25/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	2/27/2017 11:10:46 AM	30417
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analyst	: TOM
Diesel Range Organics (DRO)	42	9.7	mg/Kg	1	2/27/2017 9:53:17 AM	30398
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/27/2017 9:53:17 AM	30398
Surr: DNOP	98.0	70-130	%Rec	1	2/27/2017 9:53:17 AM	30398
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/27/2017 10:01:27 AM	G41013
Surr: BFB	116	54-150	%Rec	5	2/27/2017 10:01:27 AM	G41013
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.084	mg/Kg	5	2/27/2017 10:01:27 AM	B41013
Toluene	ND	0.17	mg/Kg	5	2/27/2017 10:01:27 AM	B41013
Ethylbenzene	ND	0.17	mg/Kg	5	2/27/2017 10:01:27 AM	B41013
Xylenes, Total	ND	0.33	mg/Kg	5	2/27/2017 10:01:27 AM	B41013
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	5	2/27/2017 10:01:27 AM	B41013

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

# Lab Order **1702B46**Date Reported: **2/28/2017**

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-80

 Project:
 Florance GC J 16A
 Collection Date: 2/24/2017 1:04:00 PM

 Lab ID:
 1702B46-002
 Matrix: MEOH (SOIL)
 Received Date: 2/25/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	2/27/2017 11:23:10 AM	A 30417
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	39	9.2	mg/Kg	1	2/27/2017 10:14:46 AM	A 30398
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/27/2017 10:14:46 AM	Л 30398
Surr: DNOP	102	70-130	%Rec	1	2/27/2017 10:14:46 AM	A 30398
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/27/2017 10:27:54 AM	/ G41013
Surr: BFB	116	54-150	%Rec	5	2/27/2017 10:27:54 AM	/ G41013
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.087	mg/Kg	5	2/27/2017 10:27:54 AM	Л B41013
Toluene	ND	0.17	mg/Kg	5	2/27/2017 10:27:54 AM	И B41013
Ethylbenzene	ND	0.17	mg/Kg	5	2/27/2017 10:27:54 AM	И B41013
Xylenes, Total	ND	0.35	mg/Kg	5	2/27/2017 10:27:54 AM	И B41013
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	5	2/27/2017 10:27:54 AM	<i>I</i> B41013

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 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

# Lab Order **1702B46**Date Reported: **2/28/2017**

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-81

 Project:
 Florance GC J 16A
 Collection Date: 2/24/2017 1:06:00 PM

 Lab ID:
 1702B46-003
 Matrix: MEOH (SOIL)
 Received Date: 2/25/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	2/27/2017 11:35:35 AM	A 30417
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	78	9.5	mg/Kg	1	2/27/2017 10:36:18 AM	A 30398
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/27/2017 10:36:18 AM	Л 30398
Surr: DNOP	103	70-130	%Rec	1	2/27/2017 10:36:18 AM	A 30398
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	2/27/2017 10:54:21 AM	/ G41013
Surr: BFB	115	54-150	%Rec	5	2/27/2017 10:54:21 AM	/ G41013
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.088	mg/Kg	5	2/27/2017 10:54:21 AM	И В41013
Toluene	ND	0.18	mg/Kg	5	2/27/2017 10:54:21 AM	Л B41013
Ethylbenzene	ND	0.18	mg/Kg	5	2/27/2017 10:54:21 AM	И B41013
Xylenes, Total	ND	0.35	mg/Kg	5	2/27/2017 10:54:21 AM	/I B41013
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	5	2/27/2017 10:54:21 AM	/I B41013

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

# Lab Order **1702B46**Date Reported: **2/28/2017**

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-82

**Project:** Florance GC J 16A
 Collection Date: 2/24/2017 1:07:00 PM

 **Lab ID:** 1702B46-004
 Matrix: MEOH (SOIL)
 Received Date: 2/25/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/27/2017 11:47:59 AM	30417
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	;			Analyst	TOM
Diesel Range Organics (DRO)	60	9.6	mg/Kg	1	2/27/2017 10:57:49 AM	30398
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/27/2017 10:57:49 AM	30398
Surr: DNOP	102	70-130	%Rec	1	2/27/2017 10:57:49 AM	30398
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/27/2017 11:21:01 AM	G41013
Surr: BFB	137	54-150	%Rec	5	2/27/2017 11:21:01 AM	G41013
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.087	mg/Kg	5	2/27/2017 11:21:01 AM	B41013
Toluene	ND	0.17	mg/Kg	5	2/27/2017 11:21:01 AM	B41013
Ethylbenzene	ND	0.17	mg/Kg	5	2/27/2017 11:21:01 AM	B41013
Xylenes, Total	ND	0.35	mg/Kg	5	2/27/2017 11:21:01 AM	B41013
Surr: 4-Bromofluorobenzene	109	80-120	%Rec	5	2/27/2017 11:21:01 AM	B41013

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

# **Analytical Report**Lab Order **1702B46**

Date Reported: 2/28/2017

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-83

 Project:
 Florance GC J 16A
 Collection Date: 2/24/2017 1:10:00 PM

 Lab ID:
 1702B46-005
 Matrix: MEOH (SOIL)
 Received Date: 2/25/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	2/27/2017 12:00:24 PM	1 30417
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	55	9.9	mg/Kg	1	2/27/2017 11:19:20 AM	1 30398
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/27/2017 11:19:20 AM	1 30398
Surr: DNOP	102	70-130	%Rec	1	2/27/2017 11:19:20 AM	1 30398
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/27/2017 11:47:25 AN	M G41013
Surr: BFB	127	54-150	%Rec	5	2/27/2017 11:47:25 AN	4 G41013
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.084	mg/Kg	5	2/27/2017 11:47:25 AN	M B41013
Toluene	ND	0.17	mg/Kg	5	2/27/2017 11:47:25 AN	M B41013
Ethylbenzene	ND	0.17	mg/Kg	5	2/27/2017 11:47:25 AN	M B41013
Xylenes, Total	ND	0.34	mg/Kg	5	2/27/2017 11:47:25 AN	M B41013
Surr: 4-Bromofluorobenzene	111	80-120	%Rec	5	2/27/2017 11:47:25 AN	M B41013

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

# Lab Order **1702B46**Date Reported: **2/28/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-84

**Project:** Florance GC J 16A
 Collection Date: 2/24/2017 1:13:00 PM

 **Lab ID:** 1702B46-006
 Matrix: MEOH (SOIL)
 Received Date: 2/25/2017 8:35:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Analyst:	MRA
Chloride	ND	30	mg/Kg	20 2/27/2017 12:12:49 PM	30417
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	;		Analyst:	TOM
Diesel Range Organics (DRO)	74	9.8	mg/Kg	1 2/27/2017 11:40:51 AM	30398
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1 2/27/2017 11:40:51 AM	30398
Surr: DNOP	103	70-130	%Rec	1 2/27/2017 11:40:51 AM	30398
EPA METHOD 8015D: GASOLINE RANG	E			Analyst:	NSB
Gasoline Range Organics (GRO)	8.6	3.3	mg/Kg	1 2/27/2017 12:13:46 PM	G41013
Surr: BFB	270	54-150	S %Rec	1 2/27/2017 12:13:46 PM	G41013
EPA METHOD 8021B: VOLATILES				Analyst:	NSB
Benzene	ND	0.017	mg/Kg	1 2/27/2017 12:13:46 PM	B41013
Toluene	ND	0.033	mg/Kg	1 2/27/2017 12:13:46 PM	B41013
Ethylbenzene	ND	0.033	mg/Kg	1 2/27/2017 12:13:46 PM	B41013
Xylenes, Total	ND	0.067	mg/Kg	1 2/27/2017 12:13:46 PM	B41013
Surr: 4-Bromofluorobenzene	96.2	80-120	%Rec	1 2/27/2017 12:13:46 PM	B41013

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	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		

# Analytical Report Lab Order 1702B46

Date Reported: 2/28/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-85

 Project:
 Florance GC J 16A
 Collection Date: 2/24/2017 1:15:00 PM

 Lab ID:
 1702B46-007
 Matrix: MEOH (SOIL)
 Received Date: 2/25/2017 8:35:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed B	Batch
EPA METHOD 300.0: ANIONS				Analyst: N	MRA
Chloride	ND	30	mg/Kg	20 2/27/2017 12:25:14 PM 3	30417
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	;		Analyst: <b>1</b>	ГОМ
Diesel Range Organics (DRO)	54	9.7	mg/Kg	1 2/27/2017 12:02:26 PM 3	30398
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1 2/27/2017 12:02:26 PM 3	30398
Surr: DNOP	104	70-130	%Rec	1 2/27/2017 12:02:26 PM 3	30398
EPA METHOD 8015D: GASOLINE RANG	E			Analyst: N	NSB
Gasoline Range Organics (GRO)	7.5	3.5	mg/Kg	1 2/27/2017 12:40:13 PM (	G41013
Surr: BFB	235	54-150	S %Rec	1 2/27/2017 12:40:13 PM (	G41013
EPA METHOD 8021B: VOLATILES				Analyst: N	NSB
Benzene	ND	0.018	mg/Kg	1 2/27/2017 12:40:13 PM E	B41013
Toluene	ND	0.035	mg/Kg	1 2/27/2017 12:40:13 PM E	B41013
Ethylbenzene	ND	0.035	mg/Kg	1 2/27/2017 12:40:13 PM E	B41013
Xylenes, Total	ND	0.071	mg/Kg	1 2/27/2017 12:40:13 PM E	B41013
Surr: 4-Bromofluorobenzene	100	80-120	%Rec	1 2/27/2017 12:40:13 PM E	B41013

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

# Lab Order **1702B46**Date Reported: **2/28/2017**

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-86

 Project:
 Florance GC J 16A
 Collection Date: 2/24/2017 1:17:00 PM

 Lab ID:
 1702B46-008
 Matrix: MEOH (SOIL)
 Received Date: 2/25/2017 8:35:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	30		mg/Kg	20	2/27/2017 1:02:26 PM	30417
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	;				Analyst	ТОМ
Diesel Range Organics (DRO)	42	9.6		mg/Kg	1	2/27/2017 12:24:01 PM	30398
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/27/2017 12:24:01 PM	30398
Surr: DNOP	104	70-130		%Rec	1	2/27/2017 12:24:01 PM	30398
EPA METHOD 8015D: GASOLINE RANG	<b>GE</b>					Analyst:	NSB
Gasoline Range Organics (GRO)	7.5	4.4		mg/Kg	1	2/27/2017 1:06:40 PM	G41013
Surr: BFB	208	54-150	S	%Rec	1	2/27/2017 1:06:40 PM	G41013
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.022		mg/Kg	1	2/27/2017 1:06:40 PM	B41013
Toluene	ND	0.044		mg/Kg	1	2/27/2017 1:06:40 PM	B41013
Ethylbenzene	ND	0.044		mg/Kg	1	2/27/2017 1:06:40 PM	B41013
Xylenes, Total	ND	0.087		mg/Kg	1	2/27/2017 1:06:40 PM	B41013
Surr: 4-Bromofluorobenzene	96.3	80-120		%Rec	1	2/27/2017 1:06:40 PM	B41013

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		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.

WO#: **1702B46** 

28-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30417 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30417 RunNo: 41012

Prep Date: 2/27/2017 Analysis Date: 2/27/2017 SeqNo: 1285131 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30417 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30417 RunNo: 41012

Prep Date: 2/27/2017 Analysis Date: 2/27/2017 SeqNo: 1285132 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.3 90 110

#### 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

te detected in the associated Method Blank

Page 9 of 13

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1702B46

28-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30398 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: **PBS** Batch ID: 30398 RunNo: 40996 Prep Date: 2/27/2017 Analysis Date: 2/27/2017 SeqNo: 1283935 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 10 102 70 10.00 130

Sample ID LCS-30398 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 30398 RunNo: 40996 Analysis Date: 2/27/2017 Prep Date: 2/27/2017 SeqNo: 1283956 Units: mg/Kg Analyte SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 47 10 63.8 50.00 94.3 116 Surr: DNOP 4.6 5.000 91.2 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
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

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**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: **1702B46** 

28-Feb-17

Project:		GC J 16A										
Sample ID	RB	TestCode: EPA Method 8015D: Gasoline Range										
Client ID:	PBS	Batch ID: <b>G41013</b>			RunNo: <b>41013</b>							
Prep Date:		Analysis Date: 2/27/2017			SeqNo: 1284683			Units: mg/k	(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		102	54	150				
Sample ID	2.5UG GRO LCS	SampTyp	e: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е		
Client ID:	LCSS	Batch ID: <b>G41013</b>			RunNo: <b>41013</b>							
Prep Date:		Analysis Date: 2/27/2017			SeqNo: <b>1284684</b>			Units: mg/Kg				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Rang Surr: BFB	ge Organics (GRO)	26 1200	5.0	25.00 1000	0	104 119	76.4 54	125 150				
						110		100				
-	1702B46-001AMS	SampTyp			TestCode: EPA Method 8015D: Gasoline Range							
Client ID:	TSP-70R	Batch ID: <b>G41013</b>			RunNo: 41013							
Prep Date:		Analysis Dat	e: <b>2/</b>	27/2017	S	SeqNo: 1	284690	Units: mg/k	<b>(</b> g			
Analyte			PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Rang Surr: BFB	ge Organics (GRO)	100 4600	17	83.55 3342	0	123 136	61.3 54	150 150				
	1702B46-001AMS							8015D: Gaso	oline Rang	е		
Client ID:	TSP-70R	Batch ID: <b>G41013</b>			RunNo: <b>41013</b>							
Prep Date:		Analysis Dat	e: <b>2/</b>	27/2017	S	SeqNo: 1	284692	Units: mg/k	(g			
Analyte	0 (050)		PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Rang Surr: BFB	ge Organics (GRO)	98 4400	17	83.55 3342	0	117 133	61.3 54	150 150	5.30 0	20 0		
Sample ID MB-30385 SampType: MBLK  Client ID: PBS Batch ID: 30385					TestCode: EPA Method 8015D: Gasoline Range RunNo: 41013							
	PBS 2/24/2017	Batch ID: <b>30385</b> Analysis Date: <b>2/27/2017</b>			SeqNo: 1284702			Units: %Rec				
Analyte	2/2 1/20 11	•	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB		830		1000	Of It Itol Val	82.5	54	150	70111 15	THE DELINIT	Quai	
Sample ID	Sample ID LCS-30385 SampType: LCS					TestCode: EPA Method 8015D: Gasoline Range						
Client ID:	LCSS	Batch I	D: <b>30</b>	385	R	RunNo: 4	1013					
Pren Date:	2/24/2017	Analysis Dat	e: <b>2</b> /	27/2017	S	SeqNo: 1	284703	Units: %Re	С			
1 Top Bato.												
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
- 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#: 1702B46

28-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

Client ID: **PBS** Batch ID: **B41013** RunNo: 41013

Prep Date: Analysis Date: 2/27/2017 SeqNo: 1284736 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 1.000 112 80 120

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: **B41013** RunNo: 41013 Prep Date: Analysis Date: 2/27/2017 SeqNo: 1284749 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.025 1.000 O 97.5 75.2 115 Benzene 0.97 Toluene 1.0 0.050 1.000 0 101 80.7 112 Ethylbenzene 0.050 0 104 78.9 1.0 1.000 117 Xylenes, Total 3.2 0.10 3.000 0 108 79.2 115 1.2 Surr: 4-Bromofluorobenzene 1.000 117 80 120

Sample ID 1702B46-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles TSP-80 Client ID: Batch ID: **B41013** RunNo: 41013 Analysis Date: 2/27/2017 SeqNo: 1284758 Prep Date: Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 3.4 0.087 3.480 97.3 61.5 138 Λ

Toluene 3.5 0.17 3.480 0.01914 99.9 71.4 127 70.9 3.480 0.02992 103 132 Ethylbenzene 3.6 0.17 Xylenes, Total 11 0.35 10.44 106 76.2 123 Surr: 4-Bromofluorobenzene 3.8 3.480 108 80 120

3.480

RL

Sample ID 1702B46-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Client ID: TSP-80 Batch ID: **B41013** RunNo: 41013 Prep Date: Analysis Date: 2/27/2017 SeqNo: 1284759 Units: mg/Kg SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual 3.3 0.087 3.480 0 95.8 61.5 138 1.60 20 Benzene Toluene 3.4 0.17 3.480 0.01914 98.1 71.4 127 1.80 20 Ethylbenzene 3.5 0.17 3.480 0.02992 101 70.9 132 1.96 20 Xylenes, Total 0.35 10.44 105 76.2 123 1.20 20 11

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

Η Holding times for preparation or analysis exceeded

3.9

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

80

120

0

Е Value above quantitation range

112

J Analyte detected below quantitation limits

Reporting Detection Limit

P Sample pH Not In Range

W Sample container temperature is out of limit as specified Page 12 of 13

0

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1702B46

28-Feb-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID MB-30385 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 30385 RunNo: 41013

Prep Date: 2/24/2017 Analysis Date: 2/27/2017 SeqNo: 1284760 Units: %Rec

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

Surr: 4-Bromofluorobenzene 0.89 1.000 89.0 80 120

Sample ID LCS-30385 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Batch ID: 30385 Client ID: LCSS RunNo: 41013

Prep Date: 2/24/2017 Analysis Date: 2/27/2017 SeqNo: 1284761 Units: %Rec

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

Surr: 4-Bromofluorobenzene 0.84 1.000 84.4 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

Ε Value above quantitation range

J Analyte detected below quantitation limits

Page 13 of 13

P Sample pH Not In Range

RL Reporting Detection Limit

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: BLAGG Work Order Num	ber: <b>1702B46</b>		RcptNo: 1
Received by/date: 02/25/17			
Logged By: Lindsay Mangin 2/25/2017 8:35:00	AM	James Harago	
Completed By: Lindsay Mangin 2/27/2017 7:58:46	AM	Simelay Hopey D	
Reviewed By: 50 02/27(17		0 0	
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?	Yes 🔽	No []	NA
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🗸	No !	NA
6. Sample(s) in proper container(s)?	Yes 😾	No 🔝	
7. Sufficient sample volume for indicated test(s)?	Yes 🗸	No 👫	
8. Are samples (except VOA and ONG) properly preserved?	Yes 🗸	No [ ]	
9. Was preservative added to bottles?	Yes	No 🗸	NA L.
10.VOA vials have zero headspace?	Yes 🗔	No []	No VOA Vials
11. Were any sample containers received broken?	Yes 🗔	No 🔽	# of preserved
12.Does paperwork match bottle labels?	Yes 🗸	No 🗒	bottles checked for pH:
(Note discrepancies on chain of custody)	res ( <del>y</del> )	NO []	(<2 or >12 unless note
13. Are matrices correctly identified on Chain of Custody?	Yes 🗸	No 🗔	Adjusted?
14. Is it clear what analyses were requested?	Yes 🗸	No	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗸	No	Checked by:
Special Handling (if applicable)			
16. Was client notified of all discrepancies with this order?	Yes	No	NA 🗹
Person Notified: Dat	e:		
By Whom: Via:	eMail	Phone [ ] Fax	In Person
Regarding:			<u> </u>
Client Instructions:			
17. Additional remarks:			·
18. <u>Cooler Information</u>			
Cooler No Temp °C Condition Seal Intact Seal No	Seal Date	Signed By	
1 1.7 Good Yes			

Standard   Turn-Around   Turn-Around   Turn-Around   Project Name   FLORGN   Project Name   FLORGN   Project Manager   TREATE   TREATE   TREATE   TREATE   TREATE   TSP - 80   TSP - 80   TSP - 81   TSP - 82   TSP - 82   TSP - 82   TSP - 82   TSP - 83   TSP - 83   TSP - 85	SANE DAY  KRush SAME DAY  SCIL PIES  TYPE	X X BTEX+MTBE+TMB's (8021)	Anions (F,CI,NO <sub>3</sub> ,NO <sub>3</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Since A Substitution (F,CI,NO <sub>3</sub> ,NO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ) Since A Substitution (F,CI,NO <sub>3</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Since A Substitution (F,CI,NO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub> ,SO <sub>4</sub>	8 260B (VOA) 80268 (VOA) 8260B (VOA)	AOV-imes) OTS8  Serior 14  Serior
Chain-of-Cu Client Bran-of-Cu Brace Enign Mailing Address:  Availing Avail	TSP - 82   TSP - 83   TSP - 84	Standard   XRush   S4ME DAY   S4ME DAY   S4ME DAY   S6RME DAY	Sample Request ID   Standard   XRush   SAME DAY	Standard   XRush 54ME DA/   EERWE DA/   FLORAN CE GC J 16A	Distinction   Project Name   Proje
X Rush SAME DAY SAME DAY SAME DAY SAME DAY SAME DAY SErvalive HEAL No LOCAL COLL PILES Type 1702/8/10 X BTEX+MISS (8021)	X X BTEX + MIBE + TMB's (8021)		EDB (Method 504.1)  RAM: 8 (8310 or 8270 siMs)  A  A  A  A  A  A  A  A  A  A  A  A  A	PAH's (8310 or 8270 SIMS)	ALL ENVIRON   NALYEIN
Selvative Heal No Tree Coll Pies Col	(1.816 × 1.817)  A RTEX + MTBE + TMB's (8021)  B TEX + MTBE + TMB's (8021)	TPH (Method /18.1)		SISS A Participes Language Lan	Albuquerque, NA Albuquerque, N



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

February 27, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1702A90

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 9 sample(s) on 2/24/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 2/27/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-71

 Project:
 Florance GC J 16A
 Collection Date: 2/23/2017 1:10:00 PM

 Lab ID:
 1702A90-001
 Matrix: MEOH (SOIL)
 Received Date: 2/24/2017 8:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	:: LGT
Chloride	ND	30	mg/Kg	20	2/24/2017 10:54:03 AM	1 30388
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS				Analys	:: TOM
Diesel Range Organics (DRO)	57	9.2	mg/Kg	1	2/24/2017 9:50:15 AM	30376
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/24/2017 9:50:15 AM	30376
Surr: DNOP	108	70-130	%Rec	1	2/24/2017 9:50:15 AM	30376
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/24/2017 10:01:53 AM	G40982
Surr: BFB	121	54-150	%Rec	5	2/24/2017 10:01:53 AM	G40982
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.086	mg/Kg	5	2/24/2017 10:01:53 AM	B40982
Toluene	ND	0.17	mg/Kg	5	2/24/2017 10:01:53 AM	B40982
Ethylbenzene	ND	0.17	mg/Kg	5	2/24/2017 10:01:53 AM	B40982
Xylenes, Total	ND	0.34	mg/Kg	5	2/24/2017 10:01:53 AM	B40982
Surr: 4-Bromofluorobenzene	117	80-120	%Rec	5	2/24/2017 10:01:53 AM	B40982

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

Date Reported: 2/27/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-72

 Project:
 Florance GC J 16A
 Collection Date: 2/23/2017 1:12:00 PM

 Lab ID:
 1702A90-002
 Matrix: MEOH (SOIL)
 Received Date: 2/24/2017 8:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	2/24/2017 11:06:27 Al	M 30388
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analys	st: TOM
Diesel Range Organics (DRO)	55	9.8	mg/Kg	1	2/24/2017 10:11:51 Al	M 30376
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/24/2017 10:11:51 Al	M 30376
Surr: DNOP	108	70-130	%Rec	1	2/24/2017 10:11:51 Al	M 30376
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	2/24/2017 10:28:15 Al	M G40982
Surr: BFB	116	54-150	%Rec	5	2/24/2017 10:28:15 Al	M G40982
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.090	mg/Kg	5	2/24/2017 10:28:15 Al	И B40982
Toluene	ND	0.18	mg/Kg	5	2/24/2017 10:28:15 Al	M B40982
Ethylbenzene	ND	0.18	mg/Kg	5	2/24/2017 10:28:15 Al	M B40982
Xylenes, Total	ND	0.36	mg/Kg	5	2/24/2017 10:28:15 Al	M B40982
Surr: 4-Bromofluorobenzene	111	80-120	%Rec	5	2/24/2017 10:28:15 Al	M B40982

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 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: 2/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-73

**Project:** Florance GC J 16A
 Collection Date: 2/23/2017 1:15:00 PM

 **Lab ID:** 1702A90-003
 Matrix: MEOH (SOIL)
 Received Date: 2/24/2017 8:08:00 AM

Analyses	Result	PQL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	2/24/2017 11:18:52 AM	A 30388
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	47	10	mg/Kg	1	2/24/2017 10:33:23 AM	A 30376
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/24/2017 10:33:23 AM	A 30376
Surr: DNOP	106	70-130	%Rec	1	2/24/2017 10:33:23 AM	A 30376
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	2/24/2017 10:54:43 AM	/I G40982
Surr: BFB	110	54-150	%Rec	5	2/24/2017 10:54:43 AM	/I G40982
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.088	mg/Kg	5	2/24/2017 10:54:43 AM	Л B40982
Toluene	ND	0.18	mg/Kg	5	2/24/2017 10:54:43 AM	Л B40982
Ethylbenzene	ND	0.18	mg/Kg	5	2/24/2017 10:54:43 AM	Л B40982
Xylenes, Total	ND	0.35	mg/Kg	5	2/24/2017 10:54:43 AM	Л B40982
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	5	2/24/2017 10:54:43 AM	/I B40982

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 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
	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: 2/27/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-74

**Project:** Florance GC J 16A
 Collection Date: 2/23/2017 1:17:00 PM

 **Lab ID:** 1702A90-004
 Matrix: MEOH (SOIL)
 Received Date: 2/24/2017 8:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: LGT
Chloride	ND	30	mg/Kg	20	2/24/2017 11:31:17 AM	1 30388
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst	:: TOM
Diesel Range Organics (DRO)	60	9.7	mg/Kg	1	2/24/2017 10:55:17 AM	1 30376
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/24/2017 10:55:17 AM	1 30376
Surr: DNOP	108	70-130	%Rec	1	2/24/2017 10:55:17 AM	1 30376
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	2/24/2017 11:21:11 AM	G40982
Surr: BFB	114	54-150	%Rec	5	2/24/2017 11:21:11 AM	G40982
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.090	mg/Kg	5	2/24/2017 11:21:11 AM	B40982
Toluene	ND	0.18	mg/Kg	5	2/24/2017 11:21:11 AM	B40982
Ethylbenzene	ND	0.18	mg/Kg	5	2/24/2017 11:21:11 AM	B40982
Xylenes, Total	ND	0.36	mg/Kg	5	2/24/2017 11:21:11 AM	B40982
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	5	2/24/2017 11:21:11 AM	B40982

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: 2/27/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-75

**Project:** Florance GC J 16A
 Collection Date: 2/23/2017 1:18:00 PM

 **Lab ID:** 1702A90-005
 Matrix: MEOH (SOIL)
 Received Date: 2/24/2017 8:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	2/24/2017 11:43:42 AM	1 30388
EPA METHOD 8015M/D: DIESEL RANGE	E ORGANICS	6			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	57	10	mg/Kg	1	2/24/2017 11:16:49 AM	1 30376
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/24/2017 11:16:49 AM	1 30376
Surr: DNOP	109	70-130	%Rec	1	2/24/2017 11:16:49 AM	1 30376
EPA METHOD 8015D: GASOLINE RANG	E				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/24/2017 11:47:20 AM	1 G40982
Surr: BFB	116	54-150	%Rec	5	2/24/2017 11:47:20 AM	1 G40982
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.087	mg/Kg	5	2/24/2017 11:47:20 AM	1 B40982
Toluene	ND	0.17	mg/Kg	5	2/24/2017 11:47:20 AM	1 B40982
Ethylbenzene	ND	0.17	mg/Kg	5	2/24/2017 11:47:20 AM	1 B40982
Xylenes, Total	ND	0.35	mg/Kg	5	2/24/2017 11:47:20 AM	1 B40982
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	5	2/24/2017 11:47:20 AM	1 B40982

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: 2/27/2017

**CLIENT:** Blagg Engineering

Client Sample ID: TSP-76

 Project:
 Florance GC J 16A
 Collection Date: 2/23/2017 1:19:00 PM

 Lab ID:
 1702A90-006
 Matrix: MEOH (SOIL)
 Received Date: 2/24/2017 8:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	2/24/2017 11:56:07 A	M 30388
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	51	9.3	mg/Kg	1	2/24/2017 11:38:33 AM	И 30376
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/24/2017 11:38:33 Al	И 30376
Surr: DNOP	108	70-130	%Rec	1	2/24/2017 11:38:33 Al	И 30376
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/24/2017 12:13:28 PM	И G40982
Surr: BFB	115	54-150	%Rec	5	2/24/2017 12:13:28 PM	M G40982
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.087	mg/Kg	5	2/24/2017 12:13:28 PM	И B40982
Toluene	ND	0.17	mg/Kg	5	2/24/2017 12:13:28 PM	И B40982
Ethylbenzene	ND	0.17	mg/Kg	5	2/24/2017 12:13:28 PM	И B40982
Xylenes, Total	ND	0.35	mg/Kg	5	2/24/2017 12:13:28 PM	И B40982
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	5	2/24/2017 12:13:28 PM	И B40982

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

Date Reported: 2/27/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-77

 Project:
 Florance GC J 16A
 Collection Date: 2/23/2017 1:21:00 PM

 Lab ID:
 1702A90-007
 Matrix: MEOH (SOIL)
 Received Date: 2/24/2017 8:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	2/24/2017 12:33:21 PM	A 30388
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	62	9.3	mg/Kg	1	2/24/2017 12:00:10 PM	A 30376
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/24/2017 12:00:10 PM	Л 30376
Surr: DNOP	109	70-130	%Rec	1	2/24/2017 12:00:10 PM	A 30376
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	2/24/2017 12:39:37 PM	/I G40982
Surr: BFB	116	54-150	%Rec	5	2/24/2017 12:39:37 PM	/I G40982
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.090	mg/Kg	5	2/24/2017 12:39:37 PM	Л B40982
Toluene	ND	0.18	mg/Kg	5	2/24/2017 12:39:37 PM	Л B40982
Ethylbenzene	ND	0.18	mg/Kg	5	2/24/2017 12:39:37 PM	Л B40982
Xylenes, Total	ND	0.36	mg/Kg	5	2/24/2017 12:39:37 PM	Л B40982
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	5	2/24/2017 12:39:37 PM	/I B40982

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

#### Date Reported: 2/27/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-78

 Project:
 Florance GC J 16A
 Collection Date: 2/23/2017 1:24:00 PM

 Lab ID:
 1702A90-008
 Matrix: MEOH (SOIL)
 Received Date: 2/24/2017 8:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	2/24/2017 12:45:46 PM	30388
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	50	9.9	mg/Kg	1	2/24/2017 11:51:13 AM	30376
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/24/2017 11:51:13 AM	30376
Surr: DNOP	102	70-130	%Rec	1	2/24/2017 11:51:13 AM	30376
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	2/24/2017 1:05:51 PM	G40982
Surr: BFB	109	54-150	%Rec	5	2/24/2017 1:05:51 PM	G40982
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.084	mg/Kg	5	2/24/2017 1:05:51 PM	B40982
Toluene	ND	0.17	mg/Kg	5	2/24/2017 1:05:51 PM	B40982
Ethylbenzene	ND	0.17	mg/Kg	5	2/24/2017 1:05:51 PM	B40982
Xylenes, Total	ND	0.34	mg/Kg	5	2/24/2017 1:05:51 PM	B40982
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	5	2/24/2017 1:05:51 PM	B40982

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

### Date Reported: 2/27/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-79

 Project:
 Florance GC J 16A
 Collection Date: 2/23/2017 1:26:00 PM

 Lab ID:
 1702A90-009
 Matrix: MEOH (SOIL)
 Received Date: 2/24/2017 8:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	2/24/2017 12:58:10 PM	30388
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	83	9.8	mg/Kg	1	2/24/2017 10:29:10 AM	30376
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/24/2017 10:29:10 AM	30376
Surr: DNOP	103	70-130	%Rec	1	2/24/2017 10:29:10 AM	30376
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	2/24/2017 1:32:06 PM	G40982
Surr: BFB	122	54-150	%Rec	5	2/24/2017 1:32:06 PM	G40982
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.089	mg/Kg	5	2/24/2017 1:32:06 PM	B40982
Toluene	ND	0.18	mg/Kg	5	2/24/2017 1:32:06 PM	B40982
Ethylbenzene	ND	0.18	mg/Kg	5	2/24/2017 1:32:06 PM	B40982
Xylenes, Total	ND	0.36	mg/Kg	5	2/24/2017 1:32:06 PM	B40982
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	5	2/24/2017 1:32:06 PM	B40982

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#: 1702A90

27-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30388 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 30388 RunNo: 40976

Prep Date: 2/24/2017 Analysis Date: 2/24/2017 SeqNo: 1283735 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30388 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30388 RunNo: 40976

Prep Date: 2/24/2017 Analysis Date: 2/24/2017 SeqNo: 1283736 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.8 110

#### 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

Reporting Detection Limit

P Sample pH Not In Range

RL

Sample container temperature is out of limit as specified

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1702A90

27-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID LCS-30376 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

LCSS Client ID: Batch ID: 30376 RunNo: 40959

Prep Date: 2/24/2017 Analysis Date: 2/24/2017 SeqNo: 1283317 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 48 50.00 0 96.3 63.8 116

Surr: DNOP 5.000 97.6 4.9 70 130

TestCode: EPA Method 8015M/D: Diesel Range Organics Sample ID MB-30376 SampType: MBLK

Client ID: PBS Batch ID: 30376 RunNo: 40959

Prep Date: Analysis Date: 2/24/2017 SeqNo: 1283318 2/24/2017 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 10.00 103 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
- Ε 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#: **1702A90** 

27-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: G40982 RunNo: 40982

Prep Date: Analysis Date: 2/24/2017 SeqNo: 1283841 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 54 150

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

Client ID: LCSS Batch ID: G40982 RunNo: 40982

Prep Date: Analysis Date: 2/24/2017 SeqNo: 1283842 Units: mg/Kg

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

Gasoline Range Organics (GRO) 28 5.0 25.00 0 112 76.4 125
Surr: BFB 1200 1000 125 54 150

Sample ID 1702A90-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: **TSP-71** Batch ID: **G40982** RunNo: **40982** 

Prep Date: Analysis Date: 2/24/2017 SeqNo: 1283843 Units: mg/Kg

SPK value SPK Ref Val %REC **PQL** %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual Gasoline Range Organics (GRO) 97 17 85.79 114 61.3 150

Surr: BFB 4200 3432 122 54 150

Sample ID 1702A90-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: **TSP-71** Batch ID: **G40982** RunNo: **40982** 

Prep Date: Analysis Date: 2/24/2017 SeqNo: 1283844 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 110 17 85.79 129 61.3 150 12.6 20 Λ Surr: BFB 4500 3432 132 54 150 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 12 of 13

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1702A90** 

27-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: B40982 RunNo: 40982

Prep Date: Analysis Date: 2/24/2017 SeqNo: 1283851 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 1.000 113 80 120

Sample ID 100NG BTEX LCS	Samp1	Type: <b>LC</b>	s	Tes	tCode: El						
Client ID: LCSS	Batc	h ID: <b>B4</b>	0982	F	RunNo: 4						
Prep Date:	Analysis [	Date: 2/	24/2017	S	SeqNo: 1	283852	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	96.0	75.2	115				
Toluene	0.98	0.050	1.000	0	98.2	80.7	112				
Ethylbenzene	1.0	1.0 0.050 1.000		0	0 100 78		117				
Xylenes, Total	3.1	3.1 0.10 3.000			0 103 79.2						
Surr: 4-Bromofluorobenzene	1.1	1.1 1.000			114 80						

Sample ID 1702A90-002AMS	SampT	уре: М	3	TestCode: EPA Method 8021B: Volatiles									
Client ID: TSP-72	Batch	n ID: <b>B4</b>	0982	R	RunNo: 4	0982							
Prep Date:	Analysis D	ate: <b>2/</b>	24/2017	S	SeqNo: 1	283853	Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	3.5	0.090	3.584	0	97.3	61.5	138						
Toluene	3.6	0.18	3.584	0.02007	99.4	71.4	127						
Ethylbenzene	3.7 0.18 3.584			0.02939	0.02939 102 70.9								
Xylenes, Total	11 0.36 10.75			0.06451	0.06451 105 76.2								

3.584

Sample ID 1702A90-002AM	SD SampT	уре: М	SD	TestCode: EPA Method 8021B: Volatiles										
Client ID: TSP-72	Batch	n ID: <b>B4</b>	0982	F	RunNo: 4									
Prep Date:	Analysis D	oate: 2/	24/2017	8	SeqNo: 1	283855	Units: mg/k	Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Benzene	3.5	0.090	3.584	0	96.4	61.5	138	0.919	20					
Toluene	3.5	0.18	3.584	0.02007	97.0	71.4	127	2.44	20					
Ethylbenzene	3.5	0.18	3.584	0.02939	98.2	70.9	132	3.47	20					
Xylenes, Total	11	11 0.36 10.75			0.06451 102 76.2		123 3.1		20					
Surr: 4-Bromofluorobenzene	3.7 3.584				103 80		120	0	0					

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

H Holding times for preparation or analysis exceeded

3.8

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

105

80

120

J Analyte detected below quantitation limits

D Commission Mark In Donner

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

Client Name: BLAGG Work Order Number: 1702A90 RcptNo: 1 Received by/date: Logged By: Ashley Gallegos 2/24/2017 8:08:00 AM Completed By: **Ashley Gallegos** 2/24/2017 8:17:50 AM Reviewed By: Chain of Custody 1. Custody seals intact on sample bottles? Yes No [...] Not Present 2. Is Chain of Custody complete? No [ Yes 🔽 Not Present 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 🗌 Sample(s) in proper container(s)? No 🗔 Yes 🗸 7. Sufficient sample volume for indicated test(s)? Yes V No [ 8. Are samples (except VOA and ONG) properly preserved? Yes 🗸 No 🗌 9. Was preservative added to bottles? Yes 🗌 No 🗸 NA 🛄 10.VOA vials have zero headspace? No 🗀 No VOA Vials 🗹 Yes .... Yes 🗌 11. Were any sample containers received broken? 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) Adjusted? 13. Are matrices correctly identified on Chain of Custody? 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 Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date Signed By

LAIT ENVIDONMENTAL	S LABORATORY	mental.com	Albuquerque, NM 87109	505-345-4107					(	/ s	•bide -√C	8081 Pestic 8260B (VO, 8270 (Semi CHLORI Nir Bubbles	×										TANK WALLEY		POSTED - C: FLKNCGCJ JGA	notated on the
	ANALYSIS	www.hallenvironmental.com	4901 Hawkins NE - Albuqı	10	Analysis		(SN	IIS	(۱.4 (۱.4) 07S	8 20 20 11 8	bd 5 bd 5 lo 0	B6108 H9T TPH (Methor TEB) 8'HA9 TE8) 8'HA9 BM 8 AROR D,3) SnoinA											000	NEVRA	i t	sub-contracted data will be clea
			4901	Tel.		(ʎʃu	998 0	5) F	łЧТ	. +	BE	## <del>*</del> + X3T8 TM + X3T8 #3108 H9T											Domarks: 2	VID: VHIXONE	Nore:	possibility. Any
ASAP	SAME DAY		(6)	i	rives							HEAL No.	- 001	-002	800-	400-	-005	ACO ~	-00J	-CDS	600-		Date Time		Date Time 1 02/24/17	ss. This ferves as notice of this
Time:	X Rush		SE CC J		D 501	ger:	BLAGE	6	- 15 CATOR	X Yes	ierature:	Preservative Type	COOL			<b></b> ,						:		ANT-	Chai	predited laboration
Turn-Around Time:	☐ Standard	Project Name:	FLORANCE	Project #:	TREATED	Project Manager:	りら		Sampler: 🗸 -	On Ice: X Yes	Sample Temperature:	Container Type and #	402×1										Received by:	7,	Received by:	contracted to other of
Chain-of-Custody Record		ERING INC.			(183		: : : : : : :	☐ Level 4 (Full Validation)				Sample Request ID	TSP-71	TSP-72	75P-73	TSP-74	22-87	TSP-76	TSF-77	82-957	12-52		ad by:	Blogs	Mistriko 11	samples submitted to Hall Environmental may be subcontracted to other population labor
1-of-Cu	BP AMERICA	BLAGG ENGINEERING	38:		15) 320-		.w.		[ ]			Matrix	Soil										yd bodsingrijed		Į.	ry, samples subn
Chair	Client: BP	Best	Mailing Address:		Phone #: (505) 320- [183	email or Fax#:	QA/QC Package:	Standard	Accreditation	□ NELAP	☐ EDD (Type)	Date Time	23/2017 13to	1 1312	1315	(317	8121	6121	1251	1324	1 1326			135/17 1527	Date: Time:	_ =



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

March 01, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1702B89

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 5 sample(s) on 2/28/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1702B89**Date Reported: **3/1/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-87

 Project:
 Florance GC J 16A
 Collection Date: 2/27/2017 12:57:00 PM

 Lab ID:
 1702B89-001
 Matrix: MEOH (SOIL)
 Received Date: 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	2/28/2017 12:41:58 PM	30447
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	6			Analyst	TOM
Diesel Range Organics (DRO)	24	10	mg/Kg	1	2/28/2017 10:12:17 AM	30431
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/28/2017 10:12:17 AM	30431
Surr: DNOP	98.8	70-130	%Rec	1	2/28/2017 10:12:17 AM	30431
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	2/28/2017 1:44:38 PM	G41049
Surr: BFB	126	54-150	%Rec	1	2/28/2017 1:44:38 PM	G41049
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.016	mg/Kg	1	2/28/2017 1:44:38 PM	B41049
Toluene	ND	0.031	mg/Kg	1	2/28/2017 1:44:38 PM	B41049
Ethylbenzene	ND	0.031	mg/Kg	1	2/28/2017 1:44:38 PM	B41049
Xylenes, Total	ND	0.062	mg/Kg	1	2/28/2017 1:44:38 PM	B41049
Surr: 4-Bromofluorobenzene	84.6	80-120	%Rec	1	2/28/2017 1:44:38 PM	B41049

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 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

# Lab Order **1702B89**Date Reported: **3/1/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-88

 Project:
 Florance GC J 16A
 Collection Date: 2/27/2017 1:00:00 PM

 Lab ID:
 1702B89-002
 Matrix: MEOH (SOIL)
 Received Date: 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	2/28/2017 12:54:22 PM	30447
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	ТОМ
Diesel Range Organics (DRO)	28	9.5	mg/Kg	1	2/28/2017 10:36:48 AM	30431
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/28/2017 10:36:48 AM	30431
Surr: DNOP	99.2	70-130	%Rec	1	2/28/2017 10:36:48 AM	30431
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	2/28/2017 2:10:54 PM	G41049
Surr: BFB	120	54-150	%Rec	1	2/28/2017 2:10:54 PM	G41049
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.017	mg/Kg	1	2/28/2017 2:10:54 PM	B41049
Toluene	ND	0.034	mg/Kg	1	2/28/2017 2:10:54 PM	B41049
Ethylbenzene	ND	0.034	mg/Kg	1	2/28/2017 2:10:54 PM	B41049
Xylenes, Total	ND	0.067	mg/Kg	1	2/28/2017 2:10:54 PM	B41049
Surr: 4-Bromofluorobenzene	78.6	66.6-132	%Rec	1	2/28/2017 2:10:54 PM	B41049

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 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

## Lab Order **1702B89**Date Reported: **3/1/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-89

 Project:
 Florance GC J 16A
 Collection Date: 2/27/2017 1:03:00 PM

 Lab ID:
 1702B89-003
 Matrix: MEOH (SOIL)
 Received Date: 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	2/28/2017 1:06:46 PM	30447
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	;			Analyst	: TOM
Diesel Range Organics (DRO)	23	9.8	mg/Kg	1	2/28/2017 11:25:40 AM	30431
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/28/2017 11:25:40 AM	30431
Surr: DNOP	98.0	70-130	%Rec	1	2/28/2017 11:25:40 AM	30431
EPA METHOD 8015D: GASOLINE RANG	Ε				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	2/28/2017 11:11:32 AM	G41048
Surr: BFB	118	54-150	%Rec	1	2/28/2017 11:11:32 AM	G41048
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	2/28/2017 11:11:32 AM	B41048
Toluene	ND	0.037	mg/Kg	1	2/28/2017 11:11:32 AM	B41048
Ethylbenzene	ND	0.037	mg/Kg	1	2/28/2017 11:11:32 AM	B41048
Xylenes, Total	ND	0.075	mg/Kg	1	2/28/2017 11:11:32 AM	B41048
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	2/28/2017 11:11:32 AM	B41048

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

# Lab Order **1702B89**Date Reported: **3/1/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-90

 Project:
 Florance GC J 16A
 Collection Date: 2/27/2017 1:06:00 PM

 Lab ID:
 1702B89-004
 Matrix: MEOH (SOIL)
 Received Date: 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: MRA
Chloride	ND	30	mg/Kg	20	2/28/2017 1:19:11 PM	30447
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	30	9.5	mg/Kg	1	2/28/2017 11:50:07 AM	1 30431
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/28/2017 11:50:07 AM	1 30431
Surr: DNOP	100	70-130	%Rec	1	2/28/2017 11:50:07 AM	1 30431
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	4.2	3.3	mg/Kg	1	2/28/2017 11:35:01 AM	1 G41048
Surr: BFB	135	54-150	%Rec	1	2/28/2017 11:35:01 AM	1 G41048
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.017	mg/Kg	1	2/28/2017 11:35:01 AM	1 B41048
Toluene	ND	0.033	mg/Kg	1	2/28/2017 11:35:01 AM	1 B41048
Ethylbenzene	ND	0.033	mg/Kg	1	2/28/2017 11:35:01 AM	1 B41048
Xylenes, Total	ND	0.066	mg/Kg	1	2/28/2017 11:35:01 AM	1 B41048
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	2/28/2017 11:35:01 AM	1 B41048

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

# Lab Order **1702B89**Date Reported: **3/1/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-91

**Project:** Florance GC J 16A
 Collection Date: 2/27/2017 1:09:00 PM

 **Lab ID:** 1702B89-005
 Matrix: MEOH (SOIL)
 Received Date: 2/28/2017 7:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	2/28/2017 1:31:35 PM	30447
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analys	t: TOM
Diesel Range Organics (DRO)	32	9.7	mg/Kg	1	2/28/2017 12:14:38 PM	1 30431
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/28/2017 12:14:38 PM	1 30431
Surr: DNOP	99.6	70-130	%Rec	1	2/28/2017 12:14:38 PM	1 30431
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	3.9	3.5	mg/Kg	1	2/28/2017 11:58:38 AN	1 G41048
Surr: BFB	133	54-150	%Rec	1	2/28/2017 11:58:38 AN	1 G41048
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.017	mg/Kg	1	2/28/2017 11:58:38 AN	1 B41048
Toluene	ND	0.035	mg/Kg	1	2/28/2017 11:58:38 AM	1 B41048
Ethylbenzene	ND	0.035	mg/Kg	1	2/28/2017 11:58:38 AM	1 B41048
Xylenes, Total	ND	0.069	mg/Kg	1	2/28/2017 11:58:38 AN	1 B41048
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	1	2/28/2017 11:58:38 AM	1 B41048

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

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1702B89

01-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30447 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 30447 RunNo: 41047

Prep Date: 2/28/2017 Analysis Date: 2/28/2017 SeqNo: 1286758 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30447 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30447 RunNo: 41047

Prep Date: 2/28/2017 Analysis Date: 2/28/2017 SeqNo: 1286759 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 93.0 110

#### 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

Reporting Detection Limit

P Sample pH Not In Range

RL

Sample container temperature is out of limit as specified

Page 6 of 10

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: **1702B89** 

01-Mar-17

	e GC J 16A	
Sample ID MB-30431	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 30431	RunNo: 41032
Prep Date: 2/28/2017	Analysis Date: 2/28/2017	SeqNo: 1285370 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	9.7 10.00	96.8 70 130
Sample ID LCS-30399	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 30399	RunNo: 41033
Prep Date: 2/27/2017	Analysis Date: 2/28/2017	SeqNo: 1285372 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.7 5.000	93.9 70 130
Sample ID MB-30399	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 30399	RunNo: 41033
Prep Date: 2/27/2017	Analysis Date: 2/28/2017	SeqNo: 1285373 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	11 10.00	108 70 130
Sample ID LCS-30431	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 30431	RunNo: 41032
Prep Date: 2/28/2017	Analysis Date: 2/28/2017	SeqNo: <b>1285512</b> Units: <b>mg/Kg</b>
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	45 10 50.00	0 90.6 63.8 116

5.000

4.4

#### Qualifiers:

Surr: DNOP

- \* 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

88.5

70

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

Page 7 of 10

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1702B89** 

Page 8 of 10

01-Mar-17

Client: Project:		gineering GC J 16A									
Sample ID	RB	SampT	уре: М	BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: <b>G</b> 4	11049	RunNo: 41049						
Prep Date:		Analysis D	ate: 2/	/28/2017	5	SeqNo: 1	286082	Units: mg/k	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 960	5.0	1000		95.8	54	150			
Sample ID	2.5UG GRO LCS	SampT	ype: <b>LC</b>	s	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	е	
Client ID:	LCSS	Batch ID: <b>G41049</b>			F	RunNo: 4	11049				
Prep Date:		Analysis D	ate: 2/	/28/2017	(	SeqNo: 1	286083	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	29	5.0	25.00	0	114	76.4	125			
Surr: BFB		1200		1000		116	54	150			
Sample ID	MB-30408	SampT	уре: М	BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	е	
Client ID:	PBS	Batch	ID: 30	408	F	RunNo: 4	11049				
Prep Date:	2/27/2017	Analysis D	ate: 2/	/28/2017		SeqNo: 1	286086	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		890		1000		89.4	54	150			
Sample ID	LCS-30408	SampT	ype: <b>LC</b>	s	Tes	tCode: <b>E</b>	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: <b>30</b>	408	RunNo: 41049						
Prep Date:	2/27/2017	Analysis D	ate: 2/	/28/2017	5	SeqNo: 1	286087	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1000		1000		101	54	150			
Sample ID	RB	SampT	vpe: Mi	BLK	Tes	tCode: <b>E</b>	PA Method	8015D: Gaso	oline Rang	<u> </u>	
Client ID:			ID: <b>G</b> 4			RunNo: 4			J		
Prep Date:		Analysis D	ate: 2/	/28/2017	(	SeqNo: 1	286126	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e Organics (GRO)	ND	5.0			,,,,,			,,,,,,		
Surr: BFB		880		1000		87.6	54	150			
Sample ID	2.5UG GRO LCS	SampT	ype: <b>LC</b>	s	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	е	
Client ID:	LCSS	Batch	ID: G4	11048	F	RunNo: 4	11048				
		Analysis D	ate: 2/	/28/2017	5	SeqNo: 1	286127	Units: mg/k	(g		
Prep Date:											
Prep Date: Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte	e Organics (GRO)	Result 25 940	PQL 5.0	SPK value 25.00 1000	SPK Ref Val	%REC 98.8 94.3	LowLimit 76.4 54	HighLimit 125 150	%RPD	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

D

Η

ND

R

Sample Diluted Due to Matrix

Not Detected at the Reporting Limit

RPD outside accepted recovery limits

Holding times for preparation or analysis exceeded

% Recovery outside of range due to dilution or matrix

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1702B89** 

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01-Mar-17

Client: Project:	Blagg En Florance	_									
Sample ID	RB	Samp	Гуре: МЕ	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBS	Batc	h ID: <b>B4</b>	1049	RunNo: 41049						
Prep Date:		Analysis D	Date: <b>2/</b>	28/2017	\$	SeqNo: 1286104 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	a officiar a bandara a	ND	0.10	4 000		405	00.0	400			
Surr: 4-Bron	nofluorobenzene	1.0		1.000		105	66.6	132			
Sample ID	100NG BTEX LCS		Гуре: <b>LC</b>					8021B: Volat	iles		
Client ID:	LCSS	Batch ID: <b>B41049</b>				RunNo: 4	1049				
Prep Date:		Analysis D	Date: <b>2/</b>	28/2017	Ş	SeqNo: 1	286105	Units: mg/K	g		
Analyte		Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.98	0.025	1.000	0	98.3	75.2	115			
Toluene		1.0	0.050	1.000	0	101	80.7	112			
Ethylbenzene		1.0	0.050	1.000	0	103	78.9	117			
Xylenes, Total		3.2	0.10	3.000	0	107	79.2	115			
Surr: 4-Brom	nofluorobenzene	1.1		1.000		106	66.6	132			
Sample ID	MB-30408	Samp	Гуре: МЕ	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	PBS	Batc	h ID: <b>30</b>	408	RunNo: <b>41049</b>						
Prep Date:	2/27/2017	Analysis [	Date: <b>2/</b>	28/2017	5	SeqNo: 1	286108	Units: %Red	:		
Analyte		Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	0.99		1.000		99.0	66.6	132			
Sample ID	LCS-30408	Samp1	Гуре: <b>LC</b>	S	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	LCSS	Batc	h ID: <b>30</b>	408	F	RunNo: 4	1049				
Prep Date:	2/27/2017	Analysis D	Date: <b>2/</b>	28/2017	5	SeqNo: 1	286109	Units: %Red	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	nofluorobenzene	0.90		1.000		90.1	66.6	132			
Sample ID	RB	Samp	Гуре: <b>МЕ</b>	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID:	PBS		 h ID: <b>B4</b>		F	RunNo: 4	1048				
Prep Date:	. 20	Analysis D				SeqNo: 1		Units: mg/K	(a		
Analyte		Result	PQL		SPK Ref Val	·	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025	J	3 vul	,31120		9112.11111	,,,,,,,		~~~
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Qualifiers:  * Value	exceeds Maximum C	ontaminant	Level.		B Analyte	detected i	n the associa	ted Method Bla	nk		

Е

J

P

RL

Value above quantitation range

Sample pH Not In Range

Reporting Detection Limit

Analyte detected below quantitation limits

Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

1.1

2.2

0.82

0.075

2.244

0.7479

WO#: 1702B89

01-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Surr: 4-Bromofluorobenzene

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

Client ID: **PBS** Batch ID: **B41048** RunNo: 41048

Prep Date: Analysis Date: 2/28/2017 SeqNo: 1286140 Units: mg/Kg

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

Surr: 4-Bromofluorobenzene 1.0 66.6 1.000 103 132

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: **B41048** RunNo: 41048 Prep Date: Analysis Date: 2/28/2017 SeqNo: 1286141 Units: mg/Kg SPK value SPK Ref Val **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit %RPD Qual Benzene 0.93 0.025 1.000 0 92.7 75.2 115 Toluene 0.93 0.050 1.000 0 93.1 80.7 112 0.95 0 78.9 Ethylbenzene 0.050 1.000 94.7 117 Xylenes, Total 0.10 3.000 0 95.3 79.2 2.9 115

107

66.6

132

TestCode: EPA Method 8021B: Volatiles Sample ID 1702B89-003AMS SampType: MS TSP-89 RunNo: 41048 Client ID: Batch ID: **B41048** 

1.000

Prep Date: Analysis Date: 2/28/2017 SeqNo: 1286142 Units: mg/Kg **PQL** SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result HighLimit Qual Benzene 0.70 0.019 0.7479 93.1 61.5 138 Toluene 0.70 0.037 0.7479 0.01183 92.2 71.4 127 0.72 0.037 0.7479 95.0 70.9 Ethylbenzene 0.01248 132 Xylenes, Total 2.2 0.075 2.244 0.03983 95.2 76.2 123 Surr: 4-Bromofluorobenzene 0.80 0.7479 107 66.6 132

Sample ID 1702B89-003AMSD TestCode: EPA Method 8021B: Volatiles SampType: MSD Client ID: **TSP-89** Batch ID: **B41048** RunNo: 41048 Prep Date: Analysis Date: 2/28/2017 SeqNo: 1286143 Units: mg/Kg %RPD **RPDLimit** LowLimit PQL SPK value SPK Ref Val %REC HighLimit Analyte Result Qual Benzene 0.68 0.019 0.7479 91.2 61.5 138 1.99 20 Toluene 0.71 0.037 0.7479 0.01183 92.9 71.4 127 0.680 20 Ethylbenzene 0.72 0.037 0.7479 0.01248 95.1 70.9 132 0.133 20

0.03983

#### Qualifiers:

Xylenes, Total

Surr: 4-Bromofluorobenzene

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

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

Е Value above quantitation range

95.7

110

J Analyte detected below quantitation limits

76.2

66.6

123

132

0.470

0

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

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20

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

Client Name: BLAGG Work Order Number	: 1702B89		RcptNo:	1
Received by/date: 0.2/28/17				
Logged By: Lindsay Mangin 2/28/2017 7:30:00 AN	1	Junday Albert 20		
Completed By: Lindsay Mangin 2/28/2017 8:18:03 AW	ļ	Simby Hope		
Reviewed By: 40 07 178/17		0 5 0		
Chain of Custody	<u> </u>			
Custody seals intact on sample bottles?	Yes	No 🗆	Not Present <b>✓</b>	
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?	Yes 🗹	No 🗌	NA $\square$	
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🔽	No 🗌	NA $\square$	
6. Sample(s) in proper container(s)?	Yes 🔽	No 🗆		
7. Sufficient sample volume for indicated test(s)?	Yes 🔽	No 🗆		
8. Are samples (except VOA and ONG) properly preserved?	Yes 🗹	No 🗌		
9. Was preservative added to bottles?	Yes	No 🗸	NA 🗌	
10.VOA vials have zero headspace?	Yes 🗌	No 🗆	No VOA Vials ☑	
11. Were any sample containers received broken?	Yes	No 🗹	# of preserved	
12. Does paperwork match bottle labels?	Yes 🗹	No 🗆	bottles checked for pH:	
(Note discrepancies on chain of custody)	162 🖭	140 🗖	·	>12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes 🗸	No 🗆	Adjusted?	
14. Is it clear what analyses were requested?	Yes 🗹	No 🗌		
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No ∐ ॄ	Checked by:	
Special Handling (if applicable)				
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:	CIVIZII	Thoric Tax		
Client Instructions:	00 1 1 2 k 1 2 5000000 107 A 00 A 1 A 0 1	**************************************	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
17. Additional remarks:		THE REPORT OF THE PARTY OF THE	anno cammingo na cantino co esta minimo mad	
18. Cooler Information				
process and the state of the st	Seal Date	Signed By		

	HALL ENVIKONMENTAL Anai ystsi aboratory	ental.com	- Albuquerque, NM 87109	505-345-4107	equest		PCB's	(	() 3(	8081 Pesticio 8260B (VOA 6-im-8-10-10-10-10-10-10-10-10-10-10-10-10-10-	×	4									L1-0016D-E: FIRNCGCJ16A	Notated on the alraytical report.
	MALL ENV.	www.hallenvironmental.com	4901 Hawkins NE - Albuque	Tel. 505-345-3975 Fax 5	Analysis		(SWI	(1.4 (1.4)	1 41 3 10 3 10	TPH 8015B 6 EDB (Method PAH's (8310 RCRA 8 Met Anions (F,Cl											S. KILL BY VID: VHIXONEVRM ELEMENT: L1-0016]	Ally sub-collidated data will be seenly
	36.04		490	<u>a</u>						81EX + MTE	-					-				-	Kemarks: W25 E	is pussionity.
Turn-Around Time: ASAP	Standard X Rush	<b>,</b>	FLORANCE GC I 16A	,	IREATED SOIL FLES	Project Manager:	J. BAGG	I, But	ember	Container Preservative HEAL No.	×1 con -00	700-	520-	160-	500-					<u> </u>	Lade 77/2017 1643 ved by: (2/28/17 073)	if necessary, shippes submitted to hall environmental may be subcontracted to other achievated in the arialytical report.
Tum-		Projec		Project #:	= 	Projec		Sampler:	Samp		40+							_			Received by:	UDICOTRIBACION
Chain-of-Custody Record	4	BLAGG ENGANTERING INC			Phone #: (505) 320 - (183		☐ Level 4 (Full Validation)			Sample Request ID	758-87	TSP-88	75P-89	750-90	16-651						elinquished by:  Who the Male	JOMITTEO to mail Environmental may see
n-of-C	Client: BP AMERCA	is ENG	SS:		505) 32	ا. ،	<u>::</u>	Offber	1_	e Matrix	7 501L	)			1   6						Relinfuished by	ary, samples or
Chair	BP	BAG	Mailing Address:		3# (5	email or Fax#:	QA/QC Package: X Standard	Accreditation	☐ EDD (Type)	Time	1257	1300	1303	1306	6021		_			<u>;</u>	Joseph 1643 Date: Time:  Jan/17 (855)	II necessa
-	Client		Mailin		Phone	email	QA/QC	Accreditati		Date	11/12/	_								  -  -	2017 Date:	



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

March 09, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1703350

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 13 sample(s) on 3/8/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order **1703350**

Date Reported: 3/9/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-92

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:09:00 PM

 Lab ID:
 1703350-001
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/8/2017 11:01:38 AM	30589
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	S			Analyst	: TOM
Diesel Range Organics (DRO)	31	10	mg/Kg	1	3/8/2017 9:46:18 AM	30576
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	3/8/2017 9:46:18 AM	30576
Surr: DNOP	108	70-130	%Rec	1	3/8/2017 9:46:18 AM	30576
EPA METHOD 8015D: GASOLINE RANG	iΕ				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.2	mg/Kg	1	3/8/2017 10:02:21 AM	G41228
Surr: BFB	133	54-150	%Rec	1	3/8/2017 10:02:21 AM	G41228
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.016	mg/Kg	1	3/8/2017 10:02:21 AM	B41228
Toluene	ND	0.032	mg/Kg	1	3/8/2017 10:02:21 AM	B41228
Ethylbenzene	ND	0.032	mg/Kg	1	3/8/2017 10:02:21 AM	B41228
Xylenes, Total	ND	0.063	mg/Kg	1	3/8/2017 10:02:21 AM	B41228
Surr: 4-Bromofluorobenzene	89.5	66.6-132	%Rec	1	3/8/2017 10:02:21 AM	B41228

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

#### Lab Order **1703350**

Date Reported: 3/9/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-93

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:12:00 PM

 Lab ID:
 1703350-002
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/8/2017 11:14:03 AM	30589
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	42	9.7	mg/Kg	1	3/8/2017 10:07:42 AM	30576
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/8/2017 10:07:42 AM	30576
Surr: DNOP	115	70-130	%Rec	1	3/8/2017 10:07:42 AM	30576
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	3/8/2017 10:28:36 AM	G41228
Surr: BFB	109	54-150	%Rec	1	3/8/2017 10:28:36 AM	G41228
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.017	mg/Kg	1	3/8/2017 10:28:36 AM	B41228
Toluene	ND	0.033	mg/Kg	1	3/8/2017 10:28:36 AM	B41228
Ethylbenzene	ND	0.033	mg/Kg	1	3/8/2017 10:28:36 AM	B41228
Xylenes, Total	ND	0.067	mg/Kg	1	3/8/2017 10:28:36 AM	B41228
Surr: 4-Bromofluorobenzene	87.1	66.6-132	%Rec	1	3/8/2017 10:28:36 AM	B41228

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

#### Lab Order **1703350**

Date Reported: 3/9/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-94

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:15:00 PM

 Lab ID:
 1703350-003
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/8/2017 11:26:27 AM	30589
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	S			Analyst	: TOM
Diesel Range Organics (DRO)	20	9.3	mg/Kg	1	3/8/2017 10:29:20 AM	30576
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	3/8/2017 10:29:20 AM	30576
Surr: DNOP	108	70-130	%Rec	1	3/8/2017 10:29:20 AM	30576
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	3/8/2017 10:55:02 AM	G41228
Surr: BFB	112	54-150	%Rec	1	3/8/2017 10:55:02 AM	G41228
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.016	mg/Kg	1	3/8/2017 10:55:02 AM	B41228
Toluene	ND	0.031	mg/Kg	1	3/8/2017 10:55:02 AM	B41228
Ethylbenzene	ND	0.031	mg/Kg	1	3/8/2017 10:55:02 AM	B41228
Xylenes, Total	ND	0.063	mg/Kg	1	3/8/2017 10:55:02 AM	B41228
Surr: 4-Bromofluorobenzene	85.2	66.6-132	%Rec	1	3/8/2017 10:55:02 AM	B41228

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 19 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

# Lab Order **1703350**Date Reported: **3/9/2017**

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-95

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:18:00 PM

 Lab ID:
 1703350-004
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL (	Qual	Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS						Analyst	:: LGT
Chloride	ND	30		mg/Kg	20	3/8/2017 11:38:52 AM	30589
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS					Analyst	:: TOM
Diesel Range Organics (DRO)	34	9.7		mg/Kg	1	3/8/2017 10:50:47 AM	30576
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/8/2017 10:50:47 AM	30576
Surr: DNOP	108	70-130		%Rec	1	3/8/2017 10:50:47 AM	30576
EPA METHOD 8015D: GASOLINE RAM	NGE					Analyst	:: NSB
Gasoline Range Organics (GRO)	3.5	3.3		mg/Kg	1	3/8/2017 11:21:28 AM	G41228
Surr: BFB	169	54-150	S	%Rec	1	3/8/2017 11:21:28 AM	G41228
EPA METHOD 8021B: VOLATILES						Analyst	:: NSB
Benzene	ND	0.016		mg/Kg	1	3/8/2017 11:21:28 AM	B41228
Toluene	ND	0.033		mg/Kg	1	3/8/2017 11:21:28 AM	B41228
Ethylbenzene	ND	0.033		mg/Kg	1	3/8/2017 11:21:28 AM	B41228
Xylenes, Total	ND	0.065		mg/Kg	1	3/8/2017 11:21:28 AM	B41228
Surr: 4-Bromofluorobenzene	84.1	66.6-132		%Rec	1	3/8/2017 11:21:28 AM	B41228

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 19
	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

### Lab Order **1703350**

Date Reported: 3/9/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-96

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:21:00 PM

 Lab ID:
 1703350-005
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed Batch
EPA METHOD 300.0: ANIONS				Analyst: <b>LGT</b>
Chloride	ND	30	mg/Kg	20 3/8/2017 11:51:16 AM 30589
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	S		Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	22	9.6	mg/Kg	1 3/8/2017 11:12:24 AM 30576
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1 3/8/2017 11:12:24 AM 30576
Surr: DNOP	109	70-130	%Rec	1 3/8/2017 11:12:24 AM 30576
EPA METHOD 8015D: GASOLINE RANG	E			Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1 3/8/2017 11:47:41 AM G41228
Surr: BFB	153	54-150	S %Rec	1 3/8/2017 11:47:41 AM G41228
EPA METHOD 8021B: VOLATILES				Analyst: NSB
Benzene	ND	0.017	mg/Kg	1 3/8/2017 11:47:41 AM B41228
Toluene	ND	0.034	mg/Kg	1 3/8/2017 11:47:41 AM B41228
Ethylbenzene	ND	0.034	mg/Kg	1 3/8/2017 11:47:41 AM B41228
Xylenes, Total	ND	0.069	mg/Kg	1 3/8/2017 11:47:41 AM B41228
Surr: 4-Bromofluorobenzene	83.8	66.6-132	%Rec	1 3/8/2017 11:47:41 AM B41228

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 19
	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

## Lab Order **1703350**Date Reported: **3/9/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-97

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:24:00 PM

 Lab ID:
 1703350-006
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/8/2017 12:28:31 PM	30589
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	26	9.2	mg/Kg	1	3/8/2017 11:33:56 AM	30576
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	3/8/2017 11:33:56 AM	30576
Surr: DNOP	105	70-130	%Rec	1	3/8/2017 11:33:56 AM	30576
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	3/8/2017 12:14:00 PM	G41228
Surr: BFB	131	54-150	%Rec	1	3/8/2017 12:14:00 PM	G41228
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.017	mg/Kg	1	3/8/2017 12:14:00 PM	B41228
Toluene	ND	0.033	mg/Kg	1	3/8/2017 12:14:00 PM	B41228
Ethylbenzene	ND	0.033	mg/Kg	1	3/8/2017 12:14:00 PM	B41228
Xylenes, Total	ND	0.067	mg/Kg	1	3/8/2017 12:14:00 PM	B41228
Surr: 4-Bromofluorobenzene	87.0	66.6-132	%Rec	1	3/8/2017 12:14:00 PM	B41228

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

### Lab Order **1703350**

Date Reported: 3/9/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-98

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:27:00 PM

 Lab ID:
 1703350-007
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/8/2017 12:40:55 PM	30589
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	23	9.4	mg/Kg	1	3/8/2017 11:55:34 AM	30576
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/8/2017 11:55:34 AM	30576
Surr: DNOP	104	70-130	%Rec	1	3/8/2017 11:55:34 AM	30576
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	3/8/2017 12:40:07 PM	G41228
Surr: BFB	146	54-150	%Rec	1	3/8/2017 12:40:07 PM	G41228
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.018	mg/Kg	1	3/8/2017 12:40:07 PM	B41228
Toluene	ND	0.035	mg/Kg	1	3/8/2017 12:40:07 PM	B41228
Ethylbenzene	ND	0.035	mg/Kg	1	3/8/2017 12:40:07 PM	B41228
Xylenes, Total	ND	0.071	mg/Kg	1	3/8/2017 12:40:07 PM	B41228
Surr: 4-Bromofluorobenzene	90.2	66.6-132	%Rec	1	3/8/2017 12:40:07 PM	B41228

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 19
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Lab Order **1703350**Date Reported: **3/9/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-99

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:30:00 PM

 Lab ID:
 1703350-008
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: LGT
Chloride	ND	30	mg/Kg	20	3/8/2017 12:53:20 PM	30589
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	;			Analyst	:: ТОМ
Diesel Range Organics (DRO)	33	10	mg/Kg	1	3/8/2017 12:17:14 PM	30576
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/8/2017 12:17:14 PM	30576
Surr: DNOP	103	70-130	%Rec	1	3/8/2017 12:17:14 PM	30576
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	3/8/2017 1:06:17 PM	G41228
Surr: BFB	117	54-150	%Rec	1	3/8/2017 1:06:17 PM	G41228
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.016	mg/Kg	1	3/8/2017 1:06:17 PM	B41228
Toluene	ND	0.033	mg/Kg	1	3/8/2017 1:06:17 PM	B41228
Ethylbenzene	ND	0.033	mg/Kg	1	3/8/2017 1:06:17 PM	B41228
Xylenes, Total	ND	0.066	mg/Kg	1	3/8/2017 1:06:17 PM	B41228
Surr: 4-Bromofluorobenzene	80.2	66.6-132	%Rec	1	3/8/2017 1:06:17 PM	B41228

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 19 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

### Lab Order **1703350**

Date Reported: 3/9/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-100

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:33:00 PM

 Lab ID:
 1703350-009
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/8/2017 1:05:44 PM	30589
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	36	10	mg/Kg	1	3/8/2017 12:38:56 PM	30576
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/8/2017 12:38:56 PM	30576
Surr: DNOP	105	70-130	%Rec	1	3/8/2017 12:38:56 PM	30576
EPA METHOD 8015D: GASOLINE RANG	<b>GE</b>				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	3/8/2017 1:32:23 PM	G41228
Surr: BFB	140	54-150	%Rec	1	3/8/2017 1:32:23 PM	G41228
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.017	mg/Kg	1	3/8/2017 1:32:23 PM	B41228
Toluene	ND	0.033	mg/Kg	1	3/8/2017 1:32:23 PM	B41228
Ethylbenzene	ND	0.033	mg/Kg	1	3/8/2017 1:32:23 PM	B41228
Xylenes, Total	ND	0.067	mg/Kg	1	3/8/2017 1:32:23 PM	B41228
Surr: 4-Bromofluorobenzene	80.4	66.6-132	%Rec	1	3/8/2017 1:32:23 PM	B41228

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 19
	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

# Lab Order **1703350**Date Reported: **3/9/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: TSP-101

**Project:** Florance GC J 16A **Collection Date:** 3/7/2017 1:36:00 PM

**Lab ID:** 1703350-010 **Matrix:** MEOH (SOIL) **Received Date:** 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/8/2017 11:13:45 AM	30589
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	:: ТОМ
Diesel Range Organics (DRO)	14	9.6	mg/Kg	1	3/8/2017 1:00:54 PM	30576
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/8/2017 1:00:54 PM	30576
Surr: DNOP	105	70-130	%Rec	1	3/8/2017 1:00:54 PM	30576
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	4.3	3.4	mg/Kg	1	3/8/2017 12:18:26 PM	G41229
Surr: BFB	140	54-150	%Rec	1	3/8/2017 12:18:26 PM	G41229
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.017	mg/Kg	1	3/8/2017 12:18:26 PM	B41229
Toluene	ND	0.034	mg/Kg	1	3/8/2017 12:18:26 PM	B41229
Ethylbenzene	ND	0.034	mg/Kg	1	3/8/2017 12:18:26 PM	B41229
Xylenes, Total	ND	0.068	mg/Kg	1	3/8/2017 12:18:26 PM	B41229
Surr: 4-Bromofluorobenzene	119	66.6-132	%Rec	1	3/8/2017 12:18:26 PM	B41229

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 10 of 19
	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

# Lab Order **1703350**Date Reported: **3/9/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-102

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:39:00 PM

 Lab ID:
 1703350-011
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	3/8/2017 11:26:10 AM	30589
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	41	9.7	mg/Kg	1	3/8/2017 1:22:46 PM	30576
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/8/2017 1:22:46 PM	30576
Surr: DNOP	105	70-130	%Rec	1	3/8/2017 1:22:46 PM	30576
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	3/8/2017 12:41:49 PM	G41229
Surr: BFB	135	54-150	%Rec	1	3/8/2017 12:41:49 PM	G41229
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.018	mg/Kg	1	3/8/2017 12:41:49 PM	B41229
Toluene	ND	0.035	mg/Kg	1	3/8/2017 12:41:49 PM	B41229
Ethylbenzene	ND	0.035	mg/Kg	1	3/8/2017 12:41:49 PM	B41229
Xylenes, Total	ND	0.071	mg/Kg	1	3/8/2017 12:41:49 PM	B41229
Surr: 4-Bromofluorobenzene	120	66.6-132	%Rec	1	3/8/2017 12:41:49 PM	B41229

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 11 of 19			
	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			

# Lab Order **1703350**Date Reported: **3/9/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-103

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:42:00 PM

 Lab ID:
 1703350-012
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/8/2017 11:38:35 AM	30589
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	19	9.4	mg/Kg	1	3/8/2017 1:44:33 PM	30576
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/8/2017 1:44:33 PM	30576
Surr: DNOP	105	70-130	%Rec	1	3/8/2017 1:44:33 PM	30576
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	4.9	3.3	mg/Kg	1	3/8/2017 1:05:11 PM	G41229
Surr: BFB	146	54-150	%Rec	1	3/8/2017 1:05:11 PM	G41229
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.017	mg/Kg	1	3/8/2017 1:05:11 PM	B41229
Toluene	ND	0.033	mg/Kg	1	3/8/2017 1:05:11 PM	B41229
Ethylbenzene	ND	0.033	mg/Kg	1	3/8/2017 1:05:11 PM	B41229
Xylenes, Total	ND	0.067	mg/Kg	1	3/8/2017 1:05:11 PM	B41229
Surr: 4-Bromofluorobenzene	121	66.6-132	%Rec	1	3/8/2017 1:05:11 PM	B41229

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 12 of 19 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 Sample container temperature is out of limit as specified % Recovery outside of range due to dilution or matrix

### Lab Order **1703350**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/9/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-104

 Project:
 Florance GC J 16A
 Collection Date: 3/7/2017 1:45:00 PM

 Lab ID:
 1703350-013
 Matrix: MEOH (SOIL)
 Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/8/2017 11:51:00 AM	30589
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	S			Analyst	: TOM
Diesel Range Organics (DRO)	26	10	mg/Kg	1	3/8/2017 2:06:29 PM	30576
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/8/2017 2:06:29 PM	30576
Surr: DNOP	106	70-130	%Rec	1	3/8/2017 2:06:29 PM	30576
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	3.5	3.5	mg/Kg	1	3/8/2017 1:28:33 PM	G41229
Surr: BFB	135	54-150	%Rec	1	3/8/2017 1:28:33 PM	G41229
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.018	mg/Kg	1	3/8/2017 1:28:33 PM	B41229
Toluene	ND	0.035	mg/Kg	1	3/8/2017 1:28:33 PM	B41229
Ethylbenzene	ND	0.035	mg/Kg	1	3/8/2017 1:28:33 PM	B41229
Xylenes, Total	ND	0.070	mg/Kg	1	3/8/2017 1:28:33 PM	B41229
Surr: 4-Bromofluorobenzene	121	66.6-132	%Rec	1	3/8/2017 1:28:33 PM	B41229

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 limit Page 13 of 19
	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#: 1703350

09-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30589 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 30589 RunNo: 41226

Analysis Date: 3/8/2017 Prep Date: 3/8/2017 SeqNo: 1292439 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30589 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30589 RunNo: 41226

Prep Date: 3/8/2017 Analysis Date: 3/8/2017 SeqNo: 1292440 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.8 110

Sample ID MB-30589 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 30589 RunNo: 41227

Prep Date: Analysis Date: 3/8/2017 SeqNo: 1292528 Units: mg/Kg 3/8/2017

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

Chloride ND 1.5

Sample ID LCS-30589 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: Batch ID: 30589 RunNo: 41227 **LCSS** 

Analysis Date: 3/8/2017 Prep Date: 3/8/2017 SeqNo: 1292529 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC I owl imit HighLimit %RPD **RPDLimit** Qual

Chloride 14 1.5 15.00 0 94.8 90 110

#### 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

Reporting Detection Limit

P Sample pH Not In Range

RL

Sample container temperature is out of limit as specified

Page 14 of 19

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1703350

09-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID LCS-30576 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics LCSS Client ID: Batch ID: 30576 RunNo: 41217 Prep Date: 3/8/2017 Analysis Date: 3/8/2017 SeqNo: 1291504 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 10 46 50.00 0 92.0 63.8 116

Diesel Range Organics (DRO) Surr: DNOP 4.7 5.000 94.0 70 130

Sample ID MB-30576 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 30576 RunNo: 41217

Prep Date: 3/8/2017 Analysis Date: 3/8/2017 SeqNo: 1291505 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 10.00 104 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
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 15 of 19

**Blagg Engineering** 

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1703350

09-Mar-17

Project: Florance	GC J 16A								
Sample ID RB	SampType:	MBLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch ID:	G41228	R	RunNo: 4	1228				
Prep Date:	Analysis Date:	3/8/2017	S	SeqNo: 1	292188	Units: mg/k	(g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		.0							
Surr: BFB	920	1000		92.0	54	150			
Sample ID 2.5UG GRO LCS	SampType:	LCS	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: LCSS	Batch ID:	G41228	R	RunNo: 4	1228				
Prep Date:	Analysis Date:	3/8/2017	S	SeqNo: 1	292189	Units: mg/k	(g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		.0 25.00	0	108	76.4	125			
Surr: BFB	1100	1000		111	54	150			
Sample ID 1703350-001AMS	SampType:	MS	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: TSP-92	Batch ID:	G41228	R	RunNo: 4	1228				
Prep Date:	Analysis Date:	3/8/2017	S	SeqNo: 1	292190	Units: mg/k	(g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		.2 15.87	1.809	92.4	61.3	150			
Surr: BFB	860	634.9		135	54	150			
Sample ID 1703350-001AMS	<b>D</b> SampType:	MSD	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: TSP-92	Batch ID:	G41228	R	RunNo: 4	1228				
Prep Date:	Analysis Date:	3/8/2017	S	SeqNo: 1	292191	Units: mg/k	(g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		.2 15.87	1.809	123	61.3	150	25.7	20	R
Surr: BFB	840	634.9		132	54	150	0	0	
Sample ID RB	SampType:	MBLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch ID:	G41229	R	RunNo: 4	1229				
Prep Date:	Analysis Date:	3/8/2017	S	SeqNo: 1	292216	Units: mg/k	(g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		.0							
Surr: BFB	860	1000		85.5	54	150			
Sample ID 2.5UG GRO LCS	SampType:	LCS	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: LCSS	Batch ID:	G41229	R	RunNo: 4	1229				
Prep Date:	Analysis Date:	3/8/2017	S	SeqNo: 1	292217	Units: mg/k	(g		
Analyte	Result PQ	L 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 16 of 19

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703350** 

09-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: LCSS Batch ID: G41229 RunNo: 41229

Prep Date: Analysis Date: 3/8/2017 SeqNo: 1292217 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
 94.1
 76.4
 125

 Surr: BFB
 940
 1000
 93.5
 54
 150

#### 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 19

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1703350

09-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

Client ID: **PBS** Batch ID: **B41228** RunNo: 41228

Prep Date: Analysis Date: 3/8/2017 SeqNo: 1292204 Units: mg/Kg

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

Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene 1.0 1.000 101 66.6 132

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: **B41228** RunNo: 41228

Prep Date: Analysis Date: 3/8/2017 SeqNo: 1292205 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result 0.95 0.025 1.000 0 95.4 75.2 115 Benzene Toluene 0.98 0.050 1.000 0 98.4 80.7 112 Ethylbenzene 0.050 0 101 78.9 1.0 1.000 117 Xylenes, Total 3.1 0.10 3.000 0 105 79.2 115 Surr: 4-Bromofluorobenzene 1.0 1.000 102 66.6 132

Sample ID 1703350-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: TSP-93 Batch ID: **B41228** RunNo: 41228

Prep Date:	Analysis [	Date: 3/	/8/2017	S	SeqNo: 1	292207	Units: mg/K	ξg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.63	0.017	0.6676	0	94.5	61.5	138			
Toluene	0.64	0.033	0.6676	0.003805	96.0	71.4	127			
Ethylbenzene	0.65	0.033	0.6676	0.005541	96.7	70.9	132			
Xylenes, Total	2.0	0.067	2.003	0.01349	96.9	76.2	123			
Surr: 4-Bromofluorobenzene	0.49		0.6676		73.5	66.6	132			

Sample ID 1703350-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles

Client ID: TSP-93 Batch ID: **B41228** RunNo: 41228

Oliciti IB. 101-33	Dato	110. <b>4</b>	1220	• • • • • • • • • • • • • • • • • • • •	(dili 10. <del>-</del>	1220				
Prep Date:	Analysis D	oate: 3/	8/2017	S	SeqNo: 12	292208	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.017	0.6676	0	105	61.5	138	10.5	20	
Toluene	0.72	0.033	0.6676	0.003805	107	71.4	127	11.0	20	
Ethylbenzene	0.70	0.033	0.6676	0.005541	104	70.9	132	7.13	20	
Xylenes, Total	2.1	0.067	2.003	0.01349	106	76.2	123	8.64	20	
Surr: 4-Bromofluorobenzene	0.45		0.6676		67.6	66.6	132	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

Sample container temperature is out of limit as specified

Page 18 of 19

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1703350

09-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: **B41229** RunNo: 41229

Prep Date: Analysis Date: 3/8/2017 SeqNo: 1292222 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 1.000 112 66.6 132

Sample ID 100NG BTEX LC	CS Samp1	ype: <b>LC</b>	s	Tes	tCode: E	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batcl	n ID: <b>B4</b>	1229	F	RunNo: 4	1229				
Prep Date:	Analysis D	oate: 3/	8/2017	S	SeqNo: 1	292223	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	102	75.2	115			
Toluene	1.1	0.050	1.000	0	105	80.7	112			
Ethylbenzene	1.1	0.050	1.000	0	107	78.9	117			
Xylenes, Total	3.2	0.10	3.000	0	108	79.2	115			
Surr: 4-Bromofluorobenzene	1.2		1.000		118	66.6	132			

#### 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

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

Page 19 of 19

P Sample pH Not In Range

RL Reporting Detection Limit

 $\mathbf{W}$ 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

**BLAGG** Client Name: Work Order Number: 1703350 RcptNo: 1 Received by/date: Logged By: Lindsay Mångin 3/8/2017 7:35:00 AM 3/8/2017 7:53:17 AM Completed By: Lindsay Mangin 03/08/17 Reviewed By: Chain of Custody No 🗌 Not Present 1. Custody seals intact on sample bottles? Yes No 🗌 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? NA 🗆 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 Yes 🗸 No 🗌 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? No 🔽 NA 🗌 Yes 9. Was preservative added to bottles? No 🗌 No VOA Vials Yes 10.VOA vials have zero headspace? Yes No 🗸 11. Were any sample containers received broken? # 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) Adjusted? No 🗔 13. Are matrices correctly identified on Chain of Custody? Yes 🗹 No 🗌 14. Is it clear what analyses were requested? Yes 🔽 15. Were all holding times able to be met? Checked by: No (If no, notify customer for authorization.) Special Handling (if applicable) Yes 16. Was client notified of all discrepancies with this order? 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 | 1.6 Good Yes

Address:  #:(505)  #:(505)  r Fax#: dard tration  AP  Time	Salve.		Tourse of Almondo					Ę	4	1	n	1	Š	ANALISIS LABORALOR	-
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(Type)	□ Other		On Ice.	XYes	□ No		30		_	-	_		(A		1 10
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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

March 10, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1703438

### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/9/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/10/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-105

 Project:
 Florance GC J 16A
 Collection Date: 3/8/2017 1:15:00 PM

 Lab ID:
 1703438-001
 Matrix: MEOH (SOIL)
 Received Date: 3/9/2017 7:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	3/9/2017 1:13:17 PM	30612
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	16	3.4	mg/Kg	1	3/9/2017 11:06:59 AM	G41263
Surr: BFB	89.1	70-130	%Rec	1	3/9/2017 11:06:59 AM	G41263
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analyst	: TOM
Diesel Range Organics (DRO)	19	9.6	mg/Kg	1	3/9/2017 9:51:21 AM	30606
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/9/2017 9:51:21 AM	30606
Surr: DNOP	95.9	70-130	%Rec	1	3/9/2017 9:51:21 AM	30606
EPA METHOD 8260B: VOLATILES \$	SHORT LIST				Analyst	: DJF
Benzene	ND	0.017	mg/Kg	1	3/9/2017 11:06:59 AM	S41263
Toluene	ND	0.034	mg/Kg	1	3/9/2017 11:06:59 AM	S41263
Ethylbenzene	ND	0.034	mg/Kg	1	3/9/2017 11:06:59 AM	S41263
Xylenes, Total	ND	0.068	mg/Kg	1	3/9/2017 11:06:59 AM	S41263
Surr: 1,2-Dichloroethane-d4	110	70-130	%Rec	1	3/9/2017 11:06:59 AM	S41263
Surr: 4-Bromofluorobenzene	89.8	70-130	%Rec	1	3/9/2017 11:06:59 AM	S41263
Surr: Dibromofluoromethane	107	70-130	%Rec	1	3/9/2017 11:06:59 AM	S41263
Surr: Toluene-d8	91.9	70-130	%Rec	1	3/9/2017 11:06:59 AM	S41263

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
- 8 % 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

Date Reported: 3/10/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-106

 Project:
 Florance GC J 16A
 Collection Date: 3/8/2017 1:19:00 PM

 Lab ID:
 1703438-002
 Matrix: MEOH (SOIL)
 Received Date: 3/9/2017 7:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/9/2017 1:25:42 PM	30612
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	7.8	3.3	mg/Kg	1	3/9/2017 11:36:08 AM	G41263
Surr: BFB	88.8	70-130	%Rec	1	3/9/2017 11:36:08 AM	G41263
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	27	9.8	mg/Kg	1	3/9/2017 10:15:53 AM	30606
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/9/2017 10:15:53 AM	30606
Surr: DNOP	94.3	70-130	%Rec	1	3/9/2017 10:15:53 AM	30606
EPA METHOD 8260B: VOLATILES SHO	RT LIST				Analyst	: DJF
Benzene	ND	0.017	mg/Kg	1	3/9/2017 11:36:08 AM	S41263
Toluene	ND	0.033	mg/Kg	1	3/9/2017 11:36:08 AM	S41263
Ethylbenzene	ND	0.033	mg/Kg	1	3/9/2017 11:36:08 AM	S41263
Xylenes, Total	ND	0.067	mg/Kg	1	3/9/2017 11:36:08 AM	S41263
Surr: 1,2-Dichloroethane-d4	111	70-130	%Rec	1	3/9/2017 11:36:08 AM	S41263
Surr: 4-Bromofluorobenzene	88.3	70-130	%Rec	1	3/9/2017 11:36:08 AM	S41263
Surr: Dibromofluoromethane	114	70-130	%Rec	1	3/9/2017 11:36:08 AM	S41263
Surr: Toluene-d8	91.7	70-130	%Rec	1	3/9/2017 11:36:08 AM	S41263

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 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: 3/10/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-107

 Project:
 Florance GC J 16A
 Collection Date: 3/8/2017 1:22:00 PM

 Lab ID:
 1703438-003
 Matrix: MEOH (SOIL)
 Received Date: 3/9/2017 7:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/9/2017 1:38:07 PM	30612
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	:: DJF
Gasoline Range Organics (GRO)	9.7	3.3	mg/Kg	1	3/9/2017 12:04:51 PM	G41263
Surr: BFB	88.3	70-130	%Rec	1	3/9/2017 12:04:51 PM	G41263
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS				Analyst	:: TOM
Diesel Range Organics (DRO)	22	9.4	mg/Kg	1	3/9/2017 10:40:17 AM	30606
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/9/2017 10:40:17 AM	30606
Surr: DNOP	91.2	70-130	%Rec	1	3/9/2017 10:40:17 AM	30606
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	:: DJF
Benzene	ND	0.017	mg/Kg	1	3/9/2017 12:04:51 PM	S41263
Toluene	ND	0.033	mg/Kg	1	3/9/2017 12:04:51 PM	S41263
Ethylbenzene	ND	0.033	mg/Kg	1	3/9/2017 12:04:51 PM	S41263
Xylenes, Total	ND	0.066	mg/Kg	1	3/9/2017 12:04:51 PM	S41263
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	3/9/2017 12:04:51 PM	S41263
Surr: 4-Bromofluorobenzene	84.4	70-130	%Rec	1	3/9/2017 12:04:51 PM	S41263
Surr: Dibromofluoromethane	105	70-130	%Rec	1	3/9/2017 12:04:51 PM	S41263
Surr: Toluene-d8	94.9	70-130	%Rec	1	3/9/2017 12:04:51 PM	S41263

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

### Date Reported: 3/10/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-108

 Project:
 Florance GC J 16A
 Collection Date: 3/8/2017 1:25:00 PM

 Lab ID:
 1703438-004
 Matrix: MEOH (SOIL)
 Received Date: 3/9/2017 7:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/9/2017 1:50:32 PM	30612
EPA METHOD 8015D MOD: GASOLIN	E RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	9.9	3.4	mg/Kg	1	3/9/2017 12:33:29 PM	G41263
Surr: BFB	93.1	70-130	%Rec	1	3/9/2017 12:33:29 PM	G41263
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	44	9.9	mg/Kg	1	3/9/2017 11:04:52 AM	30606
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/9/2017 11:04:52 AM	30606
Surr: DNOP	91.4	70-130	%Rec	1	3/9/2017 11:04:52 AM	30606
EPA METHOD 8260B: VOLATILES SH	IORT LIST				Analyst	: DJF
Benzene	ND	0.017	mg/Kg	1	3/9/2017 12:33:29 PM	S41263
Toluene	ND	0.034	mg/Kg	1	3/9/2017 12:33:29 PM	S41263
Ethylbenzene	ND	0.034	mg/Kg	1	3/9/2017 12:33:29 PM	S41263
Xylenes, Total	ND	0.067	mg/Kg	1	3/9/2017 12:33:29 PM	S41263
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	3/9/2017 12:33:29 PM	S41263
Surr: 4-Bromofluorobenzene	87.1	70-130	%Rec	1	3/9/2017 12:33:29 PM	S41263
Surr: Dibromofluoromethane	106	70-130	%Rec	1	3/9/2017 12:33:29 PM	S41263
Surr: Toluene-d8	93.4	70-130	%Rec	1	3/9/2017 12:33:29 PM	S41263

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 10 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: 3/10/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-109

 Project:
 Florance GC J 16A
 Collection Date: 3/8/2017 1:28:00 PM

 Lab ID:
 1703438-005
 Matrix: MEOH (SOIL)
 Received Date: 3/9/2017 7:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/9/2017 2:02:56 PM	30612
EPA METHOD 8015D MOD: GASOLINE F	RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	7.3	3.6	mg/Kg	1	3/9/2017 1:02:47 PM	G41263
Surr: BFB	88.6	70-130	%Rec	1	3/9/2017 1:02:47 PM	G41263
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	20	9.3	mg/Kg	1	3/9/2017 11:29:21 AM	30606
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/9/2017 11:29:21 AM	30606
Surr: DNOP	91.8	70-130	%Rec	1	3/9/2017 11:29:21 AM	30606
EPA METHOD 8260B: VOLATILES SHOP	RT LIST				Analyst	: DJF
Benzene	ND	0.018	mg/Kg	1	3/9/2017 1:02:47 PM	S41263
Toluene	ND	0.036	mg/Kg	1	3/9/2017 1:02:47 PM	S41263
Ethylbenzene	ND	0.036	mg/Kg	1	3/9/2017 1:02:47 PM	S41263
Xylenes, Total	ND	0.071	mg/Kg	1	3/9/2017 1:02:47 PM	S41263
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	3/9/2017 1:02:47 PM	S41263
Surr: 4-Bromofluorobenzene	85.9	70-130	%Rec	1	3/9/2017 1:02:47 PM	S41263
Surr: Dibromofluoromethane	101	70-130	%Rec	1	3/9/2017 1:02:47 PM	S41263
Surr: Toluene-d8	92.2	70-130	%Rec	1	3/9/2017 1:02:47 PM	S41263

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

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703438** 

10-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30612 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30612 RunNo: 41268

Prep Date: 3/9/2017 Analysis Date: 3/9/2017 SeqNo: 1293993 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30612 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30612 RunNo: 41268

Prep Date: 3/9/2017 Analysis Date: 3/9/2017 SeqNo: 1293994 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.4 90 110

#### 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#: 1703438

10-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID LCS-30606 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 30606 RunNo: 41253 Prep Date: 3/9/2017 Analysis Date: 3/9/2017 SeqNo: 1292385 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 43 10 O 86.3 63.8 50.00 116 Surr: DNOP 4.3 5.000 86.2 70 130 Sample ID MB-30606 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 30606 RunNo: 41253 Analysis Date: 3/9/2017 Prep Date: 3/9/2017 SeqNo: 1292386 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 9.3 10.00 93.5 70 130

Sample ID 1703438-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: TSP-105 Batch ID: 30606 RunNo: 41253 Prep Date: 3/9/2017 Analysis Date: 3/9/2017 SeqNo: 1293007 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 64 9.3 46.55 18.91 97.6 51.6 130 Surr: DNOP 4.0 4.655 85.6 70 130

TestCode: EPA Method 8015M/D: Diesel Range Organics Sample ID 1703438-001AMSD SampType: MSD Client ID: TSP-105 Batch ID: 30606 RunNo: 41253 Prep Date: 3/9/2017 Analysis Date: 3/9/2017 SeqNo: 1293011 Units: mg/Kg LowLimit SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual Diesel Range Organics (DRO) 69 9.3 46.30 18.91 108 51.6 130 6.89 20 Surr: DNOP 4.2 4.630 90.5 70 130 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

Sample container temperature is out of limit as specified

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**Client:** 

**Project:** 

### Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

Florance GC J 16A

WO#: **1703438** 

10-Mar-17

Sample ID rb	Samp1	уре: МЕ	BLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batcl	n ID: <b>S4</b>	1263	R	RunNo: 41263							
Prep Date:	Analysis D	Date: <b>3/</b> 9	9/2017	S	seqNo: 1	293673	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: 1,2-Dichloroethane-d4	0.52		0.5000		105	70	130					
Surr: 4-Bromofluorobenzene	0.43		0.5000		85.8	70	130					
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130					
Surr: Toluene-d8	0.48		0.5000		96.4	70	130					
Sample ID 100ng lcs	SampT	ype: <b>LC</b>	s	Tes	Code: El	PA Method	8260B: Volat	iles Short	List			
Client ID: LCSS	Batcl	h ID: <b>S4</b>	1263	R	tunNo: 4	1263						
Prep Date:	Analysis D	Date: 3/	9/2017	S	SeqNo: 1	293674	Units: mg/K	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	1.2	0.025	1.000	0	117	70	130					
Toluene	1.0	0.050	1.000	0	99.9	70	130					
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		104	70	130					
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.3	70	130					
Surr: Dibromofluoromethane	0.54		0.5000		109	70	130					
Surr: Toluene-d8	0.48		0.5000		97.0	70	130					

Sample ID 1703438-001ams	SampT	ype: MS	3	Tes	tCode: El	PA Method	d 8260B: Volatiles Short List							
Client ID: TSP-105	Batch	n ID: <b>S4</b>	1263	F	RunNo: 4	1263								
Prep Date:	Analysis D	ate: 3/	9/2017	8	SeqNo: 1	293675	Units: mg/K	(g						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Benzene	0.82	0.017	0.6826	0	120	61.9	146							
Toluene	0.70	0.034	0.6826	0	103	70	130							
Surr: 1,2-Dichloroethane-d4	0.36		0.3413		105	70	130							
Surr: 4-Bromofluorobenzene	0.31		0.3413		90.7	70	130							
Surr: Dibromofluoromethane	0.37		0.3413		108	70	130							
Surr: Toluene-d8	0.33		0.3413		97.9	70	130							

Sample ID	1703438-001amsd	SampTy	pe: MS	SD	Tes	tCode: E	PA Method	8260B: Vola	tiles Short	List	
Client ID:	TSP-105	Batch	ID: <b>S4</b>	1263	F	RunNo: 4	1263				
Prep Date:		Analysis Da	te: 3/	/9/2017	8	SeqNo: 1	293676	Units: mg/h	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.77	0.017	0.6826	0	113	61.9	146	5.96	20	
Toluene		0.66	0.034	0.6826	0	96.0	70	130	7.02	20	

#### 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.

0.33

WO#: **1703438** 

10-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Surr: Toluene-d8

Sample ID 1703438-001amsd SampType: MSD TestCode: EPA Method 8260B: Volatiles Short List Client ID: TSP-105 Batch ID: **\$41263** RunNo: 41263 SeqNo: 1293676 Prep Date: Analysis Date: 3/9/2017 Units: mg/Kg Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: 1,2-Dichloroethane-d4 0.36 0.3413 106 70 0 130 0 0.31 0.3413 90.7 70 0 Surr: 4-Bromofluorobenzene 130 0 Surr: Dibromofluoromethane 0.36 0.3413 107 70 0 130 0

95.3

70

130

0

0

0.3413

#### 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#: 1703438

10-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

Client ID: **PBS** Batch ID: **G41263** RunNo: 41263

Prep Date: Analysis Date: 3/9/2017 SeqNo: 1293761 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 440 500.0 88.9 70 130

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

Client ID: LCSS Batch ID: G41263 RunNo: 41263

Prep Date: Analysis Date: 3/9/2017 SeqNo: 1293762 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 23 5.0 25.00 0 92.8 70 130 450 500.0 90.3 70 Surr: BFB 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
- 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

### Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: **BLAGG** Work Order Number: 1703438 RcptNo: 1 Received by/date: Logged By: **Lindsay Mangin** 3/9/2017 7:10:00 AM Completed By: Lindsay Mangin 3/9/2017 8:11:14 AM 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 Yes 🗹 No  $\square$ NA 🗆 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 No 🗌 Yes 🔽 Sample(s) in proper container(s)? Yes 🔽 7. Sufficient sample volume for indicated test(s)? Yes 🗸 Nο 8, Are samples (except VOA and ONG) properly preserved? Yes 🗌 No 🗹 NA  $\square$ 9. Was preservative added to bottles? Yes 🗌 No 🗆 No VOA Vials 10. VOA vials have zero headspace? Yes 11. Were any sample containers received broken? No 🗹 # of preserved bottles checked No 🔲 12. Does paperwork match bottle labels? Yes 🗹 for pH: (Note discrepancies on chain of custody) (<2 or >12 unless noted) Adjusted? Yes 🔽 No 13. Are matrices correctly identified on Chain of Custody? Yes 🗹 No 🗌 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) 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

1.0

Good

Yes

	HALL ENVIRONMENTAL	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	10	Analysis	(O)	OS'*( SI V WE	OA MIS	Ο / Ο (1.8 (1.4 (1.4 (1.4 (1.4 (1.4 (1.4 (1.4 (1.4	+ 1 03 03 8 10 8 10 AC	20 (Ac (Ac (Ac (Ac (Ac (Ac (Ac (Ac (Ac (Ac	BTEX + MT TPH 8015E TPH (Methorent) PAH's (831 PAH's (831 PAH's (831 RCRA 8 M6 RO81 Pestions (F,C) 8081 Pestions (F,C) 8081 Pestions (F,C) 8270 (Semions (F,C) 8270 (S	×	×	×	×	×				Remarks: Blu BP CONTACT! FIEVE MOSKAL VID: VHIXONEVRA	WBS ELEMENT: L1-00167-E: FLANCOCT 16A
ימוויד איסמוות וווופ.	SAMIC DAP		FLORANCE GC J 16A	Project #:		Project Manager:	Ank		が No. The state of the state		sample emperature: $ \mathcal{O} $	Container Preservative HEAL No. X Type and # Type   1703423   HEAL	403×1 (000 )X	700- n	X 800- h	x (700- 1, 1)	x 500- 11 11				Received by:  About Time Right  About The	Time
Chain-or-Custody Record		SERING INC.	Mailing Address:		Phone #: (505) 320 - 1183		:eß	XStandard □ Level 4 (Full Validation)	Accreditation S. D. Other		□ EUU (Iype)	Date Time Matrix Sample Request ID	19:15   2011   TSP - 105	13:19 "   TSP - 106;	1 13:22 "   TSP - 107.	n 52:21	13:28 " 73P - 109.				2 mgg	Time: Relinquished by:



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

March 13, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703535

### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/10/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

### Lab Order **1703535**

Date Reported: 3/13/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-110

 Project:
 Florance GC J 16A
 Collection Date: 3/9/2017 1:34:00 PM

 Lab ID:
 1703535-001
 Matrix: MEOH (SOIL)
 Received Date: 3/10/2017 7:08:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/10/2017 10:30:29 AM	1 30632
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	22	9.1	mg/Kg	1	3/10/2017 11:09:22 AM	1 30626
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	3/10/2017 11:09:22 AM	1 30626
Surr: DNOP	105	70-130	%Rec	1	3/10/2017 11:09:22 AM	1 30626
EPA METHOD 8015D: GASOLINE RAM	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	13	mg/Kg	4	3/10/2017 10:27:42 AM	1 30613
Surr: BFB	97.6	54-150	%Rec	4	3/10/2017 10:27:42 AM	1 30613
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.065	mg/Kg	4	3/10/2017 10:27:42 AM	1 30613
Toluene	ND	0.13	mg/Kg	4	3/10/2017 10:27:42 AM	1 30613
Ethylbenzene	ND	0.13	mg/Kg	4	3/10/2017 10:27:42 AM	1 30613
Xylenes, Total	ND	0.26	mg/Kg	4	3/10/2017 10:27:42 AM	1 30613
Surr: 4-Bromofluorobenzene	96.4	66.6-132	%Rec	4	3/10/2017 10:27:42 AM	1 30613

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 1 of 5
	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#: 1703535

13-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30632 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30632 RunNo: 41301

Prep Date: 3/10/2017 Analysis Date: 3/10/2017 SeqNo: 1294615 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30632 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30632 RunNo: 41301

Prep Date: 3/10/2017 Analysis Date: 3/10/2017 SeqNo: 1294616 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 96.6 90 110

#### 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 2 of 5

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

Result

50

4.7

10

**Blagg Engineering** 

WO#: 1703535

13-Mar-17

Project:	Florance	GC J 16A									
Sample ID LCS	LCS-30608 SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LC:	SS	Batch	ID: 30	0608	F	RunNo: 4	1288				
Prep Date: 3/	9/2017	Analysis D	ate: 3	/10/2017	9	SeqNo: 1	293867	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.8		5.000		96.8	70	130			
Sample ID MB	TestCode: EPA Method 8015M/D: Diesel Range Organics										
Client ID: PB	S	Batch ID: 30608			RunNo: <b>41288</b>						
Prep Date: 3/9	9/2017	Analysis Date: 3/10/2017		SeqNo: 1293868			Units: %Rec				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		10		40.00		00.7	70				
Juli. Divoi		10		10.00		99.7	70	130			
Sample ID MB	3-30626	SampT	уре: М		Tes			130 <b>8015M/D: Di</b>	esel Rang	e Organics	
		SampT	ype: <b>M</b>	BLK			PA Method		esel Rang	e Organics	
Sample ID MB Client ID: PB		SampT	ID: <b>3</b> (	BLK 0626	F	tCode: E	PA Method		J	e Organics	
Sample ID MB Client ID: PB	s	SampT Batch	ID: <b>3</b> (	BLK 0626 /10/2017	F	tCode: E RunNo: 4 SeqNo: 1	PA Method	8015M/D: Did	J	e Organics RPDLimit	Qual
Sample ID MB Client ID: PB: Prep Date: 3/ Analyte Diesel Range Organ	10/2017 nics (DRO)	SampT Batch Analysis D Result ND	ate: <b>3</b> PQL 10	BLK 0626 /10/2017 SPK value	F	tCode: E RunNo: 4 SeqNo: 1	PA Method 1288 293876	8015M/D: Did	(g	J	Qual
Sample ID MB Client ID: PB: Prep Date: 3/ Analyte Diesel Range Organ Motor Oil Range Organ	10/2017 nics (DRO)	SampT Batch Analysis D Result ND ND	ID: <b>3(</b> ate: <b>3</b>	BLK 0626 /10/2017 SPK value	F	tCode: E RunNo: 4 SeqNo: 1 %REC	PA Method 1288 293876 LowLimit	8015M/D: Die Units: mg/K HighLimit	(g	J	Qual
Sample ID MB Client ID: PB: Prep Date: 3/ Analyte Diesel Range Organ	10/2017 nics (DRO)	SampT Batch Analysis D Result ND	ate: <b>3</b> PQL 10	BLK 0626 /10/2017 SPK value	F	tCode: E RunNo: 4 SeqNo: 1	PA Method 1288 293876	8015M/D: Did	(g	J	Qual
Sample ID MB Client ID: PB: Prep Date: 3/ Analyte Diesel Range Organ Motor Oil Range Organ	S 10/2017 nics (DRO) ganics (MRO)	SampT Batch Analysis D Result ND ND	PQL 105	BLK 0626 /10/2017 SPK value	F SPK Ref Val	tCode: E RunNo: 4 SeqNo: 1 %REC	PA Method 1288 293876 LowLimit	8015M/D: Die Units: mg/K HighLimit	<b>Sg</b> %RPD	RPDLimit	Qual
Sample ID MB Client ID: PB: Prep Date: 3/ Analyte Diesel Range Organ Motor Oil Range Org Surr: DNOP	S 10/2017  nics (DRO) ganics (MRO)  S-30626	SampT Batch Analysis D Result ND ND 10 SampT	PQL 105	BLK 0626 /10/2017 SPK value 10.00	SPK Ref Val	tCode: E RunNo: 4 SeqNo: 1 %REC	PA Method 1288 293876 LowLimit 70 PA Method	8015M/D: Die Units: mg/K HighLimit	<b>Sg</b> %RPD	RPDLimit	Qual

SPK value SPK Ref Val

50.00

5.000

0

#### Qualifiers:

Analyte

Surr: DNOP

Diesel Range Organics (DRO)

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

%REC

101

94.6

LowLimit

63.8

70

HighLimit

116

130

%RPD

**RPDLimit** 

Qual

J Analyte detected below quantitation limits

Page 3 of 5

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#: 1703535

13-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30613 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 30613 RunNo: 41306

Prep Date: 3/9/2017 Analysis Date: 3/10/2017 SeqNo: 1294532 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 820 1000 81.9 54 150

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-30613 SampType: LCS

Client ID: LCSS Batch ID: 30613 RunNo: 41306

Prep Date: 3/9/2017 Analysis Date: 3/10/2017 SeqNo: 1294534 Units: mg/Kg

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

Gasoline Range Organics (GRO) 24 5.0 25.00 96.2 76.4 125 990 99.4 Surr: BFB 1000 54 150

#### 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 4 of 5

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703535** 

13-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30613 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 30613 RunNo: 41306 Prep Date: 3/9/2017 Analysis Date: 3/10/2017 SeqNo: 1294570 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 0.90 Surr: 4-Bromofluorobenzene 1.000 89.9 66.6 132

Sample ID LCS-30613	Samp	Гуре: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	F	RunNo: 41306								
Prep Date: 3/9/2017	Analysis [	Date: 3/	10/2017	S	SeqNo: 1	294577	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	95.7	80	120			
Toluene	0.96	0.050	1.000	0	96.4	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.6	80	120			
Surr: 4-Bromofluorobenzene	0.86		1.000		86.1	66.6	132			

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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 invironmental 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:	BLAGG	Work Order Number:	17035	35		RcptNo: 1
Received by/da	te: A	03/10/14				
Logged By:	Lindsay Mangin	3/10/2017 7:08:00 AM			July Hlago	
Completed By	Lindsay Mangin	3/10/2017 7:47:05 AM			July House	
Reviewed By.	W)	03/10/17			C. J. J.	
Chain of Cus	stody					
1. Custody sea	als intact on sample bottles	\$?	Yes		No 🗆	Not Present 🗹
2. Is Chain of	Custody complete?		Yes	V	No 🗆	Not Present
3. How was the	e sample delivered?		Cour	er		
Log In						
4. Was an atte	empt made to cool the san	nples?	Yes	~	No 🗆	NA 🗆
5. Were all sar	mples received at a tempe	rature of >0° C to 6.0°C	Yes	<b>v</b>	No 🗆	NA 🗆
6. Sample(s) i	n proper container(s)?		Yes	<b>v</b>	No 🗆	
7. Sufficient sa	ample volume for indicated	test(s)?	Yes	<b>v</b>	No 🗆	
8. Are samples	s (except VOA and ONG) (	properly preserved?	Yes	Y	No 🗔	
9. Was presen	vative added to bottles?		Yes		No 🔽	NA 🗆
10, VOA vials h	ave zero headspace?		Yes		No 🗆	No VOA Vials 🗹
11. Were any s	ample containers received	broken?	Yes		No 🗸	No a construction
						# of preserved bottles checked
	work match bottle labels? pancies on chain of custor	40	Yes	V	No 🗆	for pH: (<2 or >12 unless noted
	correctly identified on Ch	The second of the second	Yes	~	No 🗆	Adjusted?
	nat analyses were requeste		10.000	~	No 🗆	
15. Were all hol	ding times able to be met? customer for authorization		Yes	<b>V</b>	No 🗆	Checked by:
30.000.0000						
Special Hand	lling (if applicable)					
16. Was client n	ctified of all discrepancies	with this order?	Yes		No 🗆	NA 🗹
Person	n Notified:	Date				
By Wh	iom:	Via:	eMa	Œ	Phone Fax	In Person
Regard	ding:					AND AND THE PROPERTY OF THE PR
Client	Instructions:	***************************************				WWW.
17. Additional re	emarks:					
18. Cooler Info	to the second second second	I bentalan languari	- i N	. 1	estable 1	
Cooler No	1.3 Good	Seal Intact Seal No S Yes	eal Da	te	Signed By	

	HALL ENVIRONMENTAL	7007 Have	Tel. 505-345-3975 Fax. 505-345-4107	Analysis Request	(P)()	(Gas or	H9T (1.8 (1.4 ≥ 0726 5 0008	(GRades)))	HEATEX + MATE BTEX + MATE BTEX + MATE TPH 80158 TPH (Method FCRA 8 Method RCRA 9 Metho	×		7 1635 NO. VAIKONEVELA Time WSS. L1-0016D-5: FLENCECT 16A ()708 H202 In Souple
Turn-Around Time: SAM	D Standard X/Rush De.Y	. 'J	Project #:		Project Manager:	J Bette	Sampler: 7-18/47	Temperature: /	er Preservative	40=x1 cool -0		Time Relinguished by Control of Lot 1635 Will by Carter Sove Was 1635 Will William Even Cocci 16 William Remarks: 571 97 Carter Sove Was 1635 William Even Was 1635 William Even Cocci 16 William Was 1635 William Was 1635 William Cocci 16 William Was 1635 William
Chain-of-Custody Record	BP AMENICA	Bless Euswery Mailing Address:	,	# 505-320-1193	r Fax#	Package:   Card   Lavel 4 (Full Validation)	talion Dother		Time Matrix Sample Request ID	1334 Sol 139-110		1635 H Bays Time. Relinguished by. 1851 Allahul William
O	Clicht	Mailing		₽hone #	email or Fax#	OA/OC Package	Accreditation	□ EDD (Type)	Date	3/0/17		38 2



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

March 14, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703589

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/11/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order **1703589**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/14/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-111

 Project:
 Florance GC J 16A
 Collection Date: 3/10/2017 1:25:00 PM

 Lab ID:
 1703589-001
 Matrix: MEOH (SOIL)
 Received Date: 3/11/2017 8:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30		mg/Kg	20	3/13/2017 10:35:08 AM	30664
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S				Analyst	: TOM
Diesel Range Organics (DRO)	43	9.6		mg/Kg	1	3/13/2017 9:32:39 AM	30650
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/13/2017 9:32:39 AM	30650
Surr: DNOP	93.3	70-130		%Rec	1	3/13/2017 9:32:39 AM	30650
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	: NSB
Gasoline Range Organics (GRO)	4.1	3.5		mg/Kg	1	3/13/2017 9:10:41 AM	30631
Surr: BFB	158	54-150	S	%Rec	1	3/13/2017 9:10:41 AM	30631
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.018		mg/Kg	1	3/13/2017 9:10:41 AM	30631
Toluene	ND	0.035		mg/Kg	1	3/13/2017 9:10:41 AM	30631
Ethylbenzene	ND	0.035		mg/Kg	1	3/13/2017 9:10:41 AM	30631
Xylenes, Total	ND	0.070		mg/Kg	1	3/13/2017 9:10:41 AM	30631
Surr: 4-Bromofluorobenzene	82.5	66.6-132		%Rec	1	3/13/2017 9:10:41 AM	30631

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

# Lab Order **1703589**Date Reported: **3/14/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-112

 Project:
 Florance GC J 16A
 Collection Date: 3/10/2017 1:28:00 PM

 Lab ID:
 1703589-002
 Matrix: MEOH (SOIL)
 Received Date: 3/11/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/13/2017 10:47:33 AM	30664
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst	:: ТОМ
Diesel Range Organics (DRO)	44	10	mg/Kg	1	3/13/2017 9:56:58 AM	30650
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	3/13/2017 9:56:58 AM	30650
Surr: DNOP	91.1	70-130	%Rec	1	3/13/2017 9:56:58 AM	30650
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/13/2017 9:37:05 AM	30631
Surr: BFB	125	54-150	%Rec	5	3/13/2017 9:37:05 AM	30631
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.084	mg/Kg	5	3/13/2017 9:37:05 AM	30631
Toluene	ND	0.17	mg/Kg	5	3/13/2017 9:37:05 AM	30631
Ethylbenzene	ND	0.17	mg/Kg	5	3/13/2017 9:37:05 AM	30631
Xylenes, Total	ND	0.33	mg/Kg	5	3/13/2017 9:37:05 AM	30631
Surr: 4-Bromofluorobenzene	106	66.6-132	%Rec	5	3/13/2017 9:37:05 AM	30631

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

#### Lab Order 1703589

Date Reported: 3/14/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-113

 Project:
 Florance GC J 16A
 Collection Date: 3/10/2017 1:30:00 PM

 Lab ID:
 1703589-003
 Matrix: MEOH (SOIL)
 Received Date: 3/11/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/13/2017 10:59:57 AM	30664
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	29	9.1	mg/Kg	1	3/13/2017 10:21:18 AM	30650
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	3/13/2017 10:21:18 AM	30650
Surr: DNOP	90.2	70-130	%Rec	1	3/13/2017 10:21:18 AM	30650
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	3/13/2017 10:03:26 AM	30631
Surr: BFB	116	54-150	%Rec	5	3/13/2017 10:03:26 AM	30631
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.082	mg/Kg	5	3/13/2017 10:03:26 AM	30631
Toluene	ND	0.16	mg/Kg	5	3/13/2017 10:03:26 AM	30631
Ethylbenzene	ND	0.16	mg/Kg	5	3/13/2017 10:03:26 AM	30631
Xylenes, Total	ND	0.33	mg/Kg	5	3/13/2017 10:03:26 AM	30631
Surr: 4-Bromofluorobenzene	102	66.6-132	%Rec	5	3/13/2017 10:03:26 AM	30631

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

#### Lab Order **1703589**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/14/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-114

 Project:
 Florance GC J 16A
 Collection Date: 3/10/2017 1:34:00 PM

 Lab ID:
 1703589-004
 Matrix: MEOH (SOIL)
 Received Date: 3/11/2017 8:00:00 AM

Analyses	Result	PQL (	Qual U	nits	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30	m	ng/Kg	20	3/13/2017 11:12:21 AM	30664
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S				Analyst	: TOM
Diesel Range Organics (DRO)	45	9.8	m	ng/Kg	1	3/13/2017 10:45:47 AM	30650
Motor Oil Range Organics (MRO)	ND	49	n	ng/Kg	1	3/13/2017 10:45:47 AM	30650
Surr: DNOP	91.1	70-130	%	%Rec	1	3/13/2017 10:45:47 AM	30650
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	: NSB
Gasoline Range Organics (GRO)	4.8	3.3	m	ng/Kg	1	3/13/2017 10:29:51 AM	30631
Surr: BFB	175	54-150	S %	6Rec	1	3/13/2017 10:29:51 AM	30631
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.016	m	ng/Kg	1	3/13/2017 10:29:51 AM	30631
Toluene	ND	0.033	n	ng/Kg	1	3/13/2017 10:29:51 AM	30631
Ethylbenzene	ND	0.033	m	ng/Kg	1	3/13/2017 10:29:51 AM	30631
Xylenes, Total	ND	0.066	n	ng/Kg	1	3/13/2017 10:29:51 AM	30631
Surr: 4-Bromofluorobenzene	90.7	66.6-132	%	%Rec	1	3/13/2017 10:29:51 AM	30631

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Page 4 of 9
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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703589** 

14-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30664 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30664 RunNo: 41329

Prep Date: 3/13/2017 Analysis Date: 3/13/2017 SeqNo: 1296016 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30664 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30664 RunNo: 41329

Prep Date: 3/13/2017 Analysis Date: 3/13/2017 SeqNo: 1296017 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 91.7 90 110

#### 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 9

**Client:** 

#### Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: 1703589

14-Mar-17

Project:	Florance	GC J 16A										
Sample ID	LCS-30650	SampTy	/pe: <b>LC</b>	s	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID:	LCSS	Batch	ID: <b>30</b>	650	R	RunNo: 41323						
Prep Date:	3/13/2017	Analysis Da	ate: <b>3/</b>	13/2017	S	SeqNo: 1	294853	Units: mg/k	<b>K</b> g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
_	Organics (DRO)	47	10	50.00	0	93.8	63.8	116				
Surr: DNOP		4.8		5.000		95.8	70	130				
Sample ID	MB-30650	SampTy	/pe: <b>ME</b>	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID:	PBS	Batch	ID: <b>30</b>	650	R	tunNo: 4	1323					
Prep Date:	3/13/2017	Analysis Da	ate: <b>3/</b>	13/2017	S	SeqNo: 1	294854	Units: mg/k	<b>K</b> g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
_	Organics (DRO)	ND	10									
Motor Oil Rang Surr: DNOP	ge Organics (MRO)	ND 10	50	10.00		101	70	130				
Juli. DNOF		10		10.00		101	70	130				
Sample ID	1703589-001AMS	SampTy	/pe: <b>MS</b>	3	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID:	TSP-111	Batch	ID: <b>30</b>	650	R	RunNo: <b>41324</b>						
Prep Date:	3/13/2017	Analysis Da	ate: 3/	13/2017	S	SeqNo: 1	294968	Units: mg/h	<b>〈</b> g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
=	Organics (DRO)	98	9.8	48.88	43.12	112	51.6	130				
Surr: DNOP		4.5		4.888		93.0	70	130				
Sample ID	1703589-001AMS	<b>D</b> SampTy	/pe: <b>MS</b>	SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID:	TSP-111	Batch	ID: <b>30</b>	650	R	tunNo: 4	1324					
Prep Date:	3/13/2017	Analysis Da	ate: <b>3/</b>	13/2017	S	SeqNo: 1	294972	Units: mg/k	<b>K</b> g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
=	Organics (DRO)	67	9.9	49.31	43.12	48.7	51.6	130	37.0	20	RS	
Surr: DNOP		4.5		4.931		90.3	70	130	0	0		
Sample ID	LCS-30637	SampTy	/pe: <b>LC</b>	s	Tes	Code: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID:	LCSS	Batch	ID: <b>30</b>	637	R	tunNo: 4	1324					
Prep Date:	3/10/2017	Analysis Da	ate: 3/	13/2017	S	SeqNo: 1	295865	Units: %Re	С			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP		4.3		5.000		86.1	70	130				
Sample ID	MB-30637	SampTy	/pe: <b>ME</b>	BLK	Tes	Code: E	PA Method	8015M/D: Di	esel Rang	e Organics		
Client ID:	PBS	Batch	ID: <b>30</b>	637	R	tunNo: 4	1324					
Prep Date:	3/10/2017	Analysis Da	ate: <b>3/</b>	13/2017	S	SeqNo: 1	295866	Units: %Re	С			
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

Е Value above quantitation range

J

Analyte detected below quantitation limits

Page 6 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#: **1703589** 

14-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30637 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 30637 RunNo: 41324

Prep Date: 3/10/2017 Analysis Date: 3/13/2017 SeqNo: 1295866 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

Page 7 of 9

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703589** 

14-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30631 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 30631 RunNo: 41331

Prep Date: 3/10/2017 Analysis Date: 3/13/2017 SeqNo: 1295376 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 800 1000 79.9 54 150

Sample ID LCS-30631 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 30631 RunNo: 41331

1000

Prep Date: 3/10/2017 Analysis Date: 3/13/2017 SeqNo: 1295377 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 25.00 105 76.4 125

103

54

150

#### 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
- 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.

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WO#: **1703589** 

14-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Surr: 4-Bromofluorobenzene

Sample ID MB-30631 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 30631 RunNo: 41331 3/10/2017 Prep Date: Analysis Date: 3/13/2017 SeqNo: 1295395 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

88.9

66.6

132

Sample ID LCS-30631	TestCode: EPA Method 8021B: Volatiles										
Client ID: LCSS	Batcl	h ID: <b>30</b>	631	F	RunNo: 4	1331					
Prep Date: 3/10/2017	Analysis D	Date: 3/	13/2017	S	SeqNo: 1	295396	Units: mg/Kg				
Analyte Res		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.97	0.025	1.000	0	96.7	80	120				
Toluene	0.99	0.050	1.000	0	98.9	80	120				
Ethylbenzene	1.0	0.050	1.000	0	100	80	120				
Xylenes, Total 3.1 0.10 3.000			0	103	80	120					
Surr: 4-Bromofluorobenzene	0.92		1.000		92.5	66.6	132				

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 9 of 9



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquergue, NM 87109

TEL 305-345-3975 FAX 505-345-4107 Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name:	BLAGG	Work Order Number	17035	89		RoptNo:	1
Received by/date	1	03/11/17					
Logged By:	Lindsay Mangin	3/11/2017 8:00:00 AM			of the stage		
Completed By Reviewed By:	Lindsay Mangin	3/11/2017 8:17:38 AM			July Hogo		
Chain of Cust	rody						
Total service constitution	s intact on sample bottle	es?	Yes		No 🗆	Not Present 🗹	
The service control man	ustody complete?		Yes	~	No 🗆	Not Present	
3. How was the	sample delivered?		Coun	er			
Log In							
	mpt made to cool the sai	mples?	Yes	~	No 🗆	NA 🗆	
5. Were all sam	ples received at a tempo	erature of >0° C to 6.0°C	Yes	<b>v</b>	No 🗆	NA 🗆	
6 Sample(s) in	proper container(s)?		Yes	<b>v</b>	No 🗌		
7. Sufficient san	nple volume for indicate	d test(s)?	Yes	~	No 🗆		
8. Are samples	(except VOA and ONG)	properly preserved?	Yes	<b>v</b>	No 🗌		
9. Was preserva	ative added to bottles?		Yes		No 🗸	NA 🗆	
10. VOA vials hav	ve zero headspace?		Yes		No 🗆	No VOA Vials 🗹	
11. Were any sa	mple containers receive	d broken?	Yes		No 🗹	to demonstrate the second	
V0007-1-1-2, 9.2.1.1.1	ork match bottle labels?		Yes	V	No 🗆	# of preserved bottles checked for pH. (<2 or	>12 unless noted)
	correctly identified on Cl	300	Yes	1	No 🗆	Adjusted?	
	at analyses were request		Yes	~	No 🗆		
	ing times able to be met customer for authorizatio		Yes	<b>V</b>	No 🗆	Checked by:	
Special Handi	ing (if applicable)						
	otified of all discrepancie	s with this order?	Yes		No 🗆	NA 🗸	
Person	Notified	Date:	-	=			
By Who	om:	Via: [	eMa	il [	Phone Fax	In Person	
Regard	ing						
Client Ir	nstructions:						
17. Additional rer	marks:						
18 Cooler Infor	mation						
Cooler No.	Temp °C   Conditio	n   Seal Intact   Seal No   3	Seal Da	te I	Signed By		

Client	hain	of-Ci	Chain-of-Custody Record	Tum-Around Time:	Time:	SAME	ı.	-	-	A	H	2	IR	S	ME	HALL ENVIRONMENTAL	-1
DI		AMERICA	-	☐ Standard	XRush	- 11			٩	N	7	STS	IA	B	ORA	ANALYSIS LABORATORY	3
Mailing	Mailing Address:	Budge Engineering	ony Inc.	Project Name.	20 3	J 16A	in .	4901	www.hall	www.	nallen	ironn	www.hallenvironmental.com	COU	environmental.com		
				Project #:				Tel.	Tel. 505-345-3975	5-397		Fax 5	505-345-4107	5-41	07		
Phone #:		(505/320)	320-1(83	TREATED	Soll	PLEI					Anal	ysis F	Analysis Request	St			
emailo	email or Fax#:			Project Manag	ger.		-	10		V		(*0		H			
QA/QC Packa	QA/QC Packager X Standard		☐ Level 4 (Full Validation)	4	2. NOL					10111	(SINIS	PO, SC	bce,e				00-0-
Accreditation D NELAP	itation	□ Other	Le	Sampler 2	BALL	2					20/79	NO <sup>5</sup>	2808	Į.	- 1		(N
DG9 □	□ EDD (Type)			Sample Temperature:	perature: 2	100	_		Of the			ON	_	_		-	10 Y)
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX + AUT	BTEX + MTI 82108 H9T	orheM) H9T	EDB (Metho	PAH's (8310	Anions (F,Cl	iotiza9 1808	AOV) 808S8 -ime2) 07S8	CHERTE		PeldubB 1iA
3/0/2017	1325	Soll	TSP-111	40341	Cest	-B	×	×							×		
н	1328	- 44	738-112	3.9	п	-005	×	×							×		
97	1330	ж	738-113	36	J.	-2003	>	×						-	×		
=	1334	*	736-114	,ii	11	-00-H	×	*							×		
																	ĦĦĦ
100 K	Time:  53   Time:  757	Relinquished by Relinquished by Mutth	Time: Relinquished by:    Salar   Math.   Salar   Sala	Received by: Received by:	L Walk	Date Time  Modern 1531  Date Time  11/17 08/00  Serves as notice of the serves	Remi	Nemarks: 5 <sub>1</sub> 4. VID: V WBS: 1	第二十	VHIXONEVEN LA L1-WONSK Tarestal L	25	100 th	H &	7. Stev D-E:1 H2O2	TI'R	THY ENEVER OF 15 STONE MORKAL 11-100/18/4 OF 16 D-E: FLRNCGCJUA trrested with H202	3.10



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

March 16, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703655

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 13 sample(s) on 3/14/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order **1703655**

Date Reported: 3/16/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-115

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 1:30:00 PM

 Lab ID:
 1703655-001
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 11:48:31 AM	30689
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst	TOM
Diesel Range Organics (DRO)	160	9.5	mg/Kg	1	3/14/2017 9:57:00 AM	30672
Motor Oil Range Organics (MRO)	61	47	mg/Kg	1	3/14/2017 9:57:00 AM	30672
Surr: DNOP	109	70-130	%Rec	1	3/14/2017 9:57:00 AM	30672
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/14/2017 8:59:42 AM	G41365
Surr: BFB	97.1	54-150	%Rec	5	3/14/2017 8:59:42 AM	G41365
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.087	mg/Kg	5	3/14/2017 8:59:42 AM	B41365
Toluene	ND	0.17	mg/Kg	5	3/14/2017 8:59:42 AM	B41365
Ethylbenzene	ND	0.17	mg/Kg	5	3/14/2017 8:59:42 AM	B41365
Xylenes, Total	ND	0.35	mg/Kg	5	3/14/2017 8:59:42 AM	B41365
Surr: 4-Bromofluorobenzene	116	66.6-132	%Rec	5	3/14/2017 8:59:42 AM	B41365

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

#### Lab Order **1703655**

Date Reported: 3/16/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-116

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 1:35:00 PM

 Lab ID:
 1703655-002
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 12:00:55 PM	30689
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst:	ТОМ
Diesel Range Organics (DRO)	29	9.7	mg/Kg	1	3/14/2017 10:18:50 AM	30672
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/14/2017 10:18:50 AM	30672
Surr: DNOP	108	70-130	%Rec	1	3/14/2017 10:18:50 AM	30672
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/14/2017 9:23:13 AM	G41365
Surr: BFB	92.4	54-150	%Rec	5	3/14/2017 9:23:13 AM	G41365
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.091	mg/Kg	5	3/14/2017 9:23:13 AM	B41365
Toluene	ND	0.18	mg/Kg	5	3/14/2017 9:23:13 AM	B41365
Ethylbenzene	ND	0.18	mg/Kg	5	3/14/2017 9:23:13 AM	B41365
Xylenes, Total	ND	0.36	mg/Kg	5	3/14/2017 9:23:13 AM	B41365
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	5	3/14/2017 9:23:13 AM	B41365

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 22
	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

#### Lab Order **1703655**

Date Reported: 3/16/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-117

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 1:38:00 PM

 Lab ID:
 1703655-003
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst:	LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 12:13:20 PM	30689
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	s			Analyst	ТОМ
Diesel Range Organics (DRO)	51	10	mg/Kg	1	3/14/2017 10:40:31 AM	30672
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	3/14/2017 10:40:31 AM	30672
Surr: DNOP	108	70-130	%Rec	1	3/14/2017 10:40:31 AM	30672
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/14/2017 9:46:40 AM	G41365
Surr: BFB	93.5	54-150	%Rec	5	3/14/2017 9:46:40 AM	G41365
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.088	mg/Kg	5	3/14/2017 9:46:40 AM	B41365
Toluene	ND	0.18	mg/Kg	5	3/14/2017 9:46:40 AM	B41365
Ethylbenzene	ND	0.18	mg/Kg	5	3/14/2017 9:46:40 AM	B41365
Xylenes, Total	ND	0.35	mg/Kg	5	3/14/2017 9:46:40 AM	B41365
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	5	3/14/2017 9:46:40 AM	B41365

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 22
	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

#### Lab Order 1703655

Date Reported: 3/16/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-118

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 1:41:00 PM

 Lab ID:
 1703655-004
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	3/14/2017 12:25:45 PM	A 30689
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	120	9.6	mg/Kg	1	3/14/2017 11:02:29 AM	A 30672
Motor Oil Range Organics (MRO)	49	48	mg/Kg	1	3/14/2017 11:02:29 AM	Л 30672
Surr: DNOP	109	70-130	%Rec	1	3/14/2017 11:02:29 AM	A 30672
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/14/2017 10:10:19 AM	/I G41365
Surr: BFB	96.9	54-150	%Rec	5	3/14/2017 10:10:19 AM	/I G41365
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.089	mg/Kg	5	3/14/2017 10:10:19 AM	И B41365
Toluene	ND	0.18	mg/Kg	5	3/14/2017 10:10:19 AM	Л B41365
Ethylbenzene	ND	0.18	mg/Kg	5	3/14/2017 10:10:19 AM	/I B41365
Xylenes, Total	ND	0.36	mg/Kg	5	3/14/2017 10:10:19 AM	/I B41365
Surr: 4-Bromofluorobenzene	116	66.6-132	%Rec	5	3/14/2017 10:10:19 AM	/I B41365

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 22 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

#### Lab Order **1703655**

Date Reported: 3/16/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-119

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 1:43:00 PM

 Lab ID:
 1703655-005
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	3/14/2017 12:38:09 PM	И 30689
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	68	9.7	mg/Kg	1	3/14/2017 11:24:31 AM	Л 30672
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/14/2017 11:24:31 AM	И 30672
Surr: DNOP	108	70-130	%Rec	1	3/14/2017 11:24:31 AM	И 30672
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/14/2017 10:33:54 AM	/ G41365
Surr: BFB	95.7	54-150	%Rec	5	3/14/2017 10:33:54 AM	M G41365
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.086	mg/Kg	5	3/14/2017 10:33:54 AM	И B41365
Toluene	ND	0.17	mg/Kg	5	3/14/2017 10:33:54 AM	M B41365
Ethylbenzene	ND	0.17	mg/Kg	5	3/14/2017 10:33:54 AM	M B41365
Xylenes, Total	ND	0.34	mg/Kg	5	3/14/2017 10:33:54 AM	M B41365
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	5	3/14/2017 10:33:54 AM	M B41365

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 22
	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

#### Lab Order 1703655

Date Reported: 3/16/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-120

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 1:45:00 PM

 Lab ID:
 1703655-006
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst:	LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 12:50:33 PM	30689
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst:	TOM
Diesel Range Organics (DRO)	22	9.7	mg/Kg	1	3/14/2017 11:46:22 AM	30672
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/14/2017 11:46:22 AM	30672
Surr: DNOP	108	70-130	%Rec	1	3/14/2017 11:46:22 AM	30672
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/14/2017 10:57:35 AM	G41365
Surr: BFB	96.0	54-150	%Rec	5	3/14/2017 10:57:35 AM	G41365
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.085	mg/Kg	5	3/14/2017 10:57:35 AM	B41365
Toluene	ND	0.17	mg/Kg	5	3/14/2017 10:57:35 AM	B41365
Ethylbenzene	ND	0.17	mg/Kg	5	3/14/2017 10:57:35 AM	B41365
Xylenes, Total	ND	0.34	mg/Kg	5	3/14/2017 10:57:35 AM	B41365
Surr: 4-Bromofluorobenzene	117	66.6-132	%Rec	5	3/14/2017 10:57:35 AM	B41365

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

#### Qualifiers: \* Value

- \* 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 22
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### Lab Order **1703655**

Date Reported: 3/16/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-121

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 1:48:00 PM

 Lab ID:
 1703655-007
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 1:02:58 PM	30689
EPA METHOD 8015M/D: DIESEL RANGI	E ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	49	9.9	mg/Kg	1	3/14/2017 12:08:04 PN	1 30672
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/14/2017 12:08:04 PN	1 30672
Surr: DNOP	110	70-130	%Rec	1	3/14/2017 12:08:04 PN	1 30672
EPA METHOD 8015D: GASOLINE RANG	iΕ				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/14/2017 11:21:08 AN	1 G41365
Surr: BFB	91.5	54-150	%Rec	5	3/14/2017 11:21:08 AN	1 G41365
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.092	mg/Kg	5	3/14/2017 11:21:08 AN	1 B41365
Toluene	ND	0.18	mg/Kg	5	3/14/2017 11:21:08 AN	1 B41365
Ethylbenzene	ND	0.18	mg/Kg	5	3/14/2017 11:21:08 AN	1 B41365
Xylenes, Total	ND	0.37	mg/Kg	5	3/14/2017 11:21:08 AN	1 B41365
Surr: 4-Bromofluorobenzene	116	66.6-132	%Rec	5	3/14/2017 11:21:08 AM	1 B41365

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 22
	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

#### Lab Order **1703655**

Date Reported: 3/16/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-122

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 1:50:00 PM

 Lab ID:
 1703655-008
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 1:15:23 PM	30689
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	:: TOM
Diesel Range Organics (DRO)	33	9.9	mg/Kg	1	3/14/2017 12:29:55 PM	1 30672
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/14/2017 12:29:55 PM	1 30672
Surr: DNOP	108	70-130	%Rec	1	3/14/2017 12:29:55 PM	30672
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	:: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/14/2017 11:44:38 AM	G41365
Surr: BFB	92.9	54-150	%Rec	5	3/14/2017 11:44:38 AM	G41365
EPA METHOD 8021B: VOLATILES					Analys	:: NSB
Benzene	ND	0.086	mg/Kg	5	3/14/2017 11:44:38 AM	B41365
Toluene	ND	0.17	mg/Kg	5	3/14/2017 11:44:38 AM	B41365
Ethylbenzene	ND	0.17	mg/Kg	5	3/14/2017 11:44:38 AM	B41365
Xylenes, Total	ND	0.34	mg/Kg	5	3/14/2017 11:44:38 AM	B41365
Surr: 4-Bromofluorobenzene	116	66.6-132	%Rec	5	3/14/2017 11:44:38 AM	B41365

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 22
	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

#### Lab Order **1703655**

Date Reported: 3/16/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-123

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 1:53:00 PM

 Lab ID:
 1703655-009
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 1:52:38 PM	30689
EPA METHOD 8015M/D: DIESEL RANGE	E ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	66	9.5	mg/Kg	1	3/14/2017 12:51:57 PM	1 30672
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/14/2017 12:51:57 PM	1 30672
Surr: DNOP	111	70-130	%Rec	1	3/14/2017 12:51:57 PM	1 30672
EPA METHOD 8015D: GASOLINE RANG	iΕ				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	3/14/2017 12:08:10 PM	1 G41365
Surr: BFB	91.3	54-150	%Rec	5	3/14/2017 12:08:10 PM	1 G41365
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.094	mg/Kg	5	3/14/2017 12:08:10 PM	1 B41365
Toluene	ND	0.19	mg/Kg	5	3/14/2017 12:08:10 PM	1 B41365
Ethylbenzene	ND	0.19	mg/Kg	5	3/14/2017 12:08:10 PM	1 B41365
Xylenes, Total	ND	0.37	mg/Kg	5	3/14/2017 12:08:10 PM	1 B41365
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	5	3/14/2017 12:08:10 PM	1 B41365

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 22
	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

#### Lab Order **1703655**

Date Reported: 3/16/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-124

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 1:56:00 PM

 Lab ID:
 1703655-010
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 2:05:02 PM	30689
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	32	9.3	mg/Kg	1	3/14/2017 1:14:02 PM	30672
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/14/2017 1:14:02 PM	30672
Surr: DNOP	111	70-130	%Rec	1	3/14/2017 1:14:02 PM	30672
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/14/2017 12:31:41 PM	G41365
Surr: BFB	95.6	54-150	%Rec	5	3/14/2017 12:31:41 PM	G41365
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.092	mg/Kg	5	3/14/2017 12:31:41 PM	B41365
Toluene	ND	0.18	mg/Kg	5	3/14/2017 12:31:41 PM	B41365
Ethylbenzene	ND	0.18	mg/Kg	5	3/14/2017 12:31:41 PM	B41365
Xylenes, Total	ND	0.37	mg/Kg	5	3/14/2017 12:31:41 PM	B41365
Surr: 4-Bromofluorobenzene	117	66.6-132	%Rec	5	3/14/2017 12:31:41 PM	B41365

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

#### Lab Order **1703655**

Date Reported: 3/16/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-125

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 1:58:00 PM

 Lab ID:
 1703655-011
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	3/14/2017 2:17:26 PM	30689
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	78	10	mg/Kg	1	3/14/2017 1:36:00 PM	30672
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	3/14/2017 1:36:00 PM	30672
Surr: DNOP	112	70-130	%Rec	1	3/14/2017 1:36:00 PM	30672
EPA METHOD 8015D: GASOLINE RANG	E				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/14/2017 12:05:11 PN	A 30654
Surr: BFB	103	54-150	%Rec	5	3/14/2017 12:05:11 PN	A 30654
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.091	mg/Kg	5	3/14/2017 12:05:11 PN	A 30654
Toluene	ND	0.18	mg/Kg	5	3/14/2017 12:05:11 PN	A 30654
Ethylbenzene	ND	0.18	mg/Kg	5	3/14/2017 12:05:11 PN	A 30654
Xylenes, Total	ND	0.36	mg/Kg	5	3/14/2017 12:05:11 PN	A 30654
Surr: 4-Bromofluorobenzene	105	66.6-132	%Rec	5	3/14/2017 12:05:11 PM	A 30654

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 limit Page 11 of 22
	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

#### Lab Order **1703655**

Date Reported: 3/16/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-126

 Project:
 Florance GC J 16A
 Collection Date: 3/13/2017 2:00:00 PM

 Lab ID:
 1703655-012
 Matrix: MEOH (SOIL)
 Received Date: 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 2:29:51 PM	30689
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	32	10	mg/Kg	1	3/14/2017 1:58:06 PM	30672
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/14/2017 1:58:06 PM	30672
Surr: DNOP	113	70-130	%Rec	1	3/14/2017 1:58:06 PM	30672
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/14/2017 12:31:23 PM	1 30654
Surr: BFB	101	54-150	%Rec	5	3/14/2017 12:31:23 PM	1 30654
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.086	mg/Kg	5	3/14/2017 12:31:23 PM	1 30654
Toluene	ND	0.17	mg/Kg	5	3/14/2017 12:31:23 PM	1 30654
Ethylbenzene	ND	0.17	mg/Kg	5	3/14/2017 12:31:23 PM	1 30654
Xylenes, Total	ND	0.34	mg/Kg	5	3/14/2017 12:31:23 PM	1 30654
Surr: 4-Bromofluorobenzene	99.7	66.6-132	%Rec	5	3/14/2017 12:31:23 PM	1 30654

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 12 of 22
	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

### Lab Order 1703655

Hall Environmental Analysis Laboratory, Inc. Date Reported: 3/16/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-127

**Project:** Florance GC J 16A **Collection Date:** 3/13/2017 2:03:00 PM Lab ID: 1703655-013 Matrix: MEOH (SOIL) **Received Date:** 3/14/2017 7:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	3/14/2017 2:42:16 PM	30689
EPA METHOD 8015D MOD: GASOLIN	IE RANGE				Analyst	DJF
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/14/2017 11:37:58 AM	G41358
Surr: BFB	81.4	70-130	%Rec	5	3/14/2017 11:37:58 AM	G41358
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	3			Analyst	ТОМ
Diesel Range Organics (DRO)	55	9.5	mg/Kg	1	3/14/2017 2:20:12 PM	30672
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/14/2017 2:20:12 PM	30672
Surr: DNOP	105	70-130	%Rec	1	3/14/2017 2:20:12 PM	30672
EPA METHOD 8260B: VOLATILES SH	ORT LIST				Analyst	DJF
Benzene	ND	0.083	mg/Kg	5	3/14/2017 11:37:58 AM	30631
Toluene	ND	0.17	mg/Kg	5	3/14/2017 11:37:58 AM	30631
Ethylbenzene	ND	0.17	mg/Kg	5	3/14/2017 11:37:58 AM	30631
Xylenes, Total	ND	0.33	mg/Kg	5	3/14/2017 11:37:58 AM	30631
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	5	3/14/2017 11:37:58 AM	30631
Surr: 4-Bromofluorobenzene	82.2	70-130	%Rec	5	3/14/2017 11:37:58 AM	30631
Surr: Dibromofluoromethane	108	70-130	%Rec	5	3/14/2017 11:37:58 AM	30631
Surr: Toluene-d8	100	70-130	%Rec	5	3/14/2017 11:37:58 AM	30631

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 13 of 22 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.

WO#: **1703655** 

16-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30689 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30689 RunNo: 41366

Prep Date: 3/14/2017 Analysis Date: 3/14/2017 SeqNo: 1297264 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30689 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30689 RunNo: 41366

Prep Date: 3/14/2017 Analysis Date: 3/14/2017 SeqNo: 1297265 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 93.8 90 110

#### 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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**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: **1703655** 

16-Mar-17

Project: Florance	GC J 16A							
Sample ID LCS-30672	SampType:	LCS	Tes	tCode: <b>EPA M</b>	ethod 8015M/D: Di	esel Range	e Organics	
Client ID: LCSS	Batch ID:	30672	F	RunNo: <b>41352</b>				
Prep Date: 3/14/2017	Analysis Date:	3/14/2017	9	SeqNo: <b>12958</b> 8	80 Units: mg/k	<b>(</b> g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC Low	vLimit HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51 ´	10 50.00	0	102	63.8 116			
Surr: DNOP	5.1	5.000		103	70 130			
Sample ID MB-30672	SampType:	MBLK	Tes	tCode: EPA M	ethod 8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch ID:	30672	F	RunNo: <b>41352</b>				
Prep Date: 3/14/2017	Analysis Date:	3/14/2017	5	SeqNo: <b>12958</b> 8	81 Units: mg/k	(g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC Low	vLimit HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		10						
Motor Oil Range Organics (MRO) Surr: DNOP		10.00		105	70 120			
Suil: DIVOP	10	10.00		105	70 130			
Sample ID LCS-30671	SampType:	LCS	Tes	tCode: <b>EPA M</b>	ethod 8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch ID:	30671	F	RunNo: <b>41353</b>				
Prep Date: 3/14/2017	Analysis Date:	3/14/2017	9	SeqNo: <b>12958</b> 9	99 Units: %Re	С		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC Low	vLimit HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5	5.000		90.1	70 130			
Sample ID MB-30671	SampType:	MBLK	Tes	tCode: <b>EPA M</b>	ethod 8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch ID:	30671	F	RunNo: <b>41353</b>				
Prep Date: 3/14/2017	Analysis Date:	3/14/2017	9	SeqNo: <b>12959</b> 0	00 Units: %Re	С		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC Low	vLimit HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5	10.00		95.2	70 130			
Sample ID 1703655-001AMS	SampType:	MS	Tes	tCode: <b>EPA M</b>	ethod 8015M/D: Di	esel Rang	e Organics	
Client ID: TSP-115	Batch ID:	30672	F	RunNo: <b>41353</b>				
Prep Date: 3/14/2017	Analysis Date:	3/14/2017	9	SeqNo: <b>12963</b> 9	93 Units: mg/k	(g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC Low	vLimit HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	88	10 50.20	155.4	-133	51.6 130			S
Surr: DNOP	4.4	5.020		86.8	70 130			
Sample ID 1703655-001AMS	<b>D</b> SampType:	MSD	Tes	tCode: <b>EPA M</b>	ethod 8015M/D: Di	esel Rang	e Organics	
Client ID: TSP-115	Batch ID:	30672	F	RunNo: <b>41353</b>				
Prep Date: 3/14/2017	Analysis Date:	3/14/2017	9	SeqNo: <b>12964</b> 0	04 Units: mg/k	(g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC Low	vLimit HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	110 9	.7 48.54	155.4	-94.0	51.6 130	21.5	20	RS

#### 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#: **1703655** 

16-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID 1703655-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **TSP-115** Batch ID: **30672** RunNo: **41353** 

Prep Date: 3/14/2017 Analysis Date: 3/14/2017 SeqNo: 1296404 Units: mg/Kg

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

Surr: DNOP 4.3 4.854 88.4 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 16 of 22

**Blagg Engineering** 

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703655** 

16-Mar-17

Project:	22	GC J 16A										
Sample ID	MB-30631	BLK	TestCode: EPA Method 8015D: Gasoline Range									
Client ID:	PBS	Batch	ID: <b>30</b>	631	RunNo: <b>41331</b>							
Prep Date:	3/10/2017	Analysis Date: 3/13/2017			SeqNo: <b>1295376</b>			Units: %Rec				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB		800		1000		79.9	54	150				
Sample ID	LCS-30631	SampT	ype: <b>LC</b>	s	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e		
Client ID:	LCSS	Batch ID: 30631			RunNo: <b>41331</b>							
Prep Date:	3/10/2017	Analysis D	ate: 3/	13/2017	S	SeqNo: 1	295377	Units: %Re	С			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB		1000		1000		103	54	150				
Sample ID	RB	SampT	уре: М	BLK	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e		
Client ID:	PBS	Batch	ID: G4	11365	F	RunNo: 4	1365					
Prep Date:		Analysis Date: 3/14/2017			5	SeqNo: 1	296609	Units: mg/Kg				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
ū	e Organics (GRO)	ND	5.0									
Surr: BFB		860		1000		86.2	54	150				
Sample ID	2.5UG GRO LCS	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8015D: Gasoline Range							
Client ID:	LCSS	Batch ID: <b>G41365</b>			RunNo: <b>41365</b>							
Prep Date:		Analysis D	ate: 3/	14/2017	S	SeqNo: 1	296610	Units: mg/k	(g			
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
_	e Organics (GRO)	130	25	125.0	0	103	76.4	125				
Surr: BFB		4800		5000		95.5	54	150				
Sample ID	<b>1703655-001AMS</b> SampType: <b>MS</b>				TestCode: EPA Method 8015D: Gasoline Range							
Client ID:	TSP-115				RunNo: <b>41365</b>							
Prep Date:		Analysis D	ate: 3/	14/2017	S	SeqNo: 1	296611	Units: mg/K	<b>(</b> g			
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Rang	e Organics (GRO)	95 2700	17	86.69	0	109	61.3	150 150				
		3700		3468		106	54	150				
Surr: BFB												
Surr: BFB	1703655-001AMSI	<b>D</b> SampT	уре: <b>М</b> \$	SD	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e		
Surr: BFB			ype: <b>M</b> \$			tCode: <b>E</b> RunNo: <b>4</b>		8015D: Gaso	oline Rang	e		
Surr: BFB Sample ID			ID: <b>G</b> 4	11365	F		1365	Units: mg/K		e		
Surr: BFB  Sample ID Client ID: Prep Date: Analyte		Batch	ID: <b>G</b> 4	11365 114/2017	F	RunNo: 4	1365			RPDLimit 20	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

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### Hall Environmental Analysis Laboratory, Inc.

WO#: 1703655

16-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30654 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 30654 RunNo: 41364

Prep Date: 3/13/2017 Analysis Date: 3/14/2017 SeqNo: 1296623 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 750 1000 74.8 54 150

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-30654 SampType: LCS

Client ID: LCSS Batch ID: 30654 RunNo: 41364

Prep Date: 3/13/2017 Analysis Date: 3/14/2017 SeqNo: 1296624 Units: mg/Kg

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

Gasoline Range Organics (GRO) 25 5.0 25.00 100 76.4 125 980 98.1 Surr: BFB 1000 54 150

#### 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

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703655** 

16-Mar-17

Client: Project:	Blagg Eng Florance	_									
Sample ID	MB-30631	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batch ID: 30631			F	RunNo: <b>41331</b>					
Prep Date:	3/10/2017	Analysis Date: 3/13/2017			SeqNo: <b>1295395</b> Units: <b>%Rec</b>						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	nofluorobenzene	0.89		1.000		88.9	66.6	132			
Sample ID	LCS-30631	SampType: LCS			Tes	tCode: El					
Client ID:	LCSS	Batch ID: 30631			F	RunNo: 4					
Prep Date:	3/10/2017	Analysis Date: 3/13/2017		SeqNo: <b>1295396</b>			Units: %Rec				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	nofluorobenzene	0.92		1.000		92.5	66.6	132			
Sample ID	RB	SampType: MBLK			Tes	tCode: El					
Client ID:	PBS	Batch ID: <b>B41365</b>			F	RunNo: 4	1365				
Prep Date:		Analysis Date: 3/14/2017		SeqNo: <b>1296615</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-Brom	nofluorobenzene	1.1		1.000		108	66.6	132			
Sample ID	100NG BTEX LCS	SampType: LCS			Tes	tCode: El					
Client ID:	LCSS	Batch ID: <b>B41365</b>			RunNo: 41365						
Prep Date:		Analysis Date: 3/14/2017			5	296616	Units: mg/k	Jnits: 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	80	120			
Toluene		1.0	0.050	1.000	0	104	80	120			
Ethylbenzene		1.1	0.050	1.000	0	109	80	120			
Xylenes, Total		3.3	0.10	3.000	0	111	80	120			
Surr: 4-Brom	nofluorobenzene	1.2		1.000		116	66.6	132			
Sample ID	1703655-002AMS	SampT	ype: <b>M</b> \$	3	Tes						
Client ID:	TSP-116	Batch ID: <b>B41365</b>			RunNo: 41365						
Prep Date:		Analysis Date: 3/14/2017			5	SeqNo: 1	296617	Units: mg/Kg			
Analyte		Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		4.0	0.091	3.636	0	109	61.5	138			
Toluene		4.0	0.18	3.636	0	110	71.4	127			
Ethylbenzene		4.1	0.18	3.636	0	113	70.9	132			
Xylenes, Total		13	0.36	10.91	0	116	76.2	123			
Qualifiers:											

#### 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- -II N---1- D-----

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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#: **1703655** 

16-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID 1703655-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: **TSP-116** Batch ID: **B41365** RunNo: **41365** 

Prep Date: Analysis Date: 3/14/2017 SeqNo: 1296617 Units: mg/Kg

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

Surr: 4-Bromofluorobenzene 4.4 3.636 120 66.6 132

Sample ID 1703655-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Client ID: TSP-116 Batch ID: **B41365** RunNo: 41365 Prep Date: Analysis Date: 3/14/2017 SeqNo: 1296618 Units: mg/Kg SPK value SPK Ref Val %REC **RPDLimit** Analyte Result **PQL** LowLimit HighLimit %RPD Qual Benzene 3.8 0.091 3.636 0 105 61.5 138 4.04 20 Toluene 4.0 0.18 3.636 0 109 71.4 127 0.917 20 0 70.9 20 Ethylbenzene 0.18 3.636 112 132 4.1 1.15 Xylenes, Total 13 0.36 10.91 0 115 76.2 123 0.170 20 3.636 66.6 0 Surr: 4-Bromofluorobenzene 4.4 120 132

Sample ID MB-30654 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 30654 RunNo: 41364

Prep Date: 3/13/2017 Analysis Date: 3/14/2017 SeqNo: 1296641 Units: mg/Kg

PQL SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result HighLimit Qual Benzene ND 0.025 Toluene ND 0.050 ND 0.050 Ethylbenzene Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene 0.83 1.000 83.0 66.6 132

Sample ID LCS-30654 TestCode: EPA Method 8021B: Volatiles SampType: LCS Client ID: LCSS Batch ID: 30654 RunNo: 41364 Prep Date: 3/13/2017 Analysis Date: 3/14/2017 SeqNo: 1296642 Units: mg/Kg %RPD PQL SPK value SPK Ref Val %REC HighLimit **RPDLimit** Analyte Result LowLimit Qual Benzene 0.97 0.025 1.000 0 97.1 80 120 Toluene 0.98 0.050 1.000 0 98.5 80 120 Ethylbenzene 0.99 0.050 1.000 0 99.0 80 120 Xylenes, Total 3.0 0.10 3.000 0 101 80 120 Surr: 4-Bromofluorobenzene 1.000 83.7 66.6 0.84 132

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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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#: **1703655** 

16-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID mb-30631	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: PBS	Batcl	h ID: <b>30</b>	631	F	RunNo: 4	1358				
Prep Date: 3/10/2017	Analysis D	Date: 3/	14/2017	S	SeqNo: 1	296851	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: 1,2-Dichloroethane-d4	0.53		0.5000		106	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.5000		83.3	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		109	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID Ics-30631	Samp1	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: LCSS	Batcl	n ID: 30	631	R	RunNo: 4	1358				
Prep Date: 3/10/2017	Analysis D	oate: 3/	14/2017	S	SeqNo: 1	296852	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	119	70	130			
Toluene	1.0	0.050	1.000	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	0.56		0.5000		112	70	130			
Surr: 4-Bromofluorobenzene	0.41		0.5000		81.8	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.49		0.5000		98.9	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

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### Hall Environmental Analysis Laboratory, Inc.

WO#: 1703655

16-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

Client ID: **PBS** Batch ID: **G41358** RunNo: 41358

Prep Date: Analysis Date: 3/14/2017 SeqNo: 1296869 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 410 500.0 82.2 70 130

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

Client ID: LCSS RunNo: 41358 Batch ID: **G41358** 

Prep Date: Analysis Date: 3/14/2017 SeqNo: 1296870 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 5.0 25.00 102 70 130 430 500.0 86.7 70 Surr: BFB 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
- W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

Sample Log-In Check List

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

Client Name:	BLAGG		Work C	Order Number:	1703655			Rcpt	No: '	I
Received by/dat	е:	- L	ensu	l'of						
Logged By:	Lindsay Ma	angin	3/14/2017	7 7:35:00 AM		July 1	Hlago			:
Completed By:	Lindsay Ma	ingin	3/14/2017	7 7:59:03 AM		July	Hlego			
Reviewed By:	AT	03/14	1/7				Ť			
Chain of Cus	, ,	🗸								
1. Custody sea		mple bottles?			Yes 🗌	No		Not Present	<b>✓</b>	
2. Is Chain of C					Yes 🗹	) No		Not Present		
3. How was the	e sample delive	ered?			Courier					
<u>Log In</u>										
4. Was an atte	mpt made to o	cool the samp	les?		Yes 🗸	<sup>2</sup> No	. 🗆	NA		
5. Were all san	nples received	l at a tempera	ture of >0° C	to 6.0°C	Yes 🗹	No		NA [		
6. Sample(s) ir	n proper contai	iner(s)?			Yes 🗸	. No				
7. Sufficient sa	mple volume f	or indicated te	est(s)?		Yes 🗸	No				
8. Are samples	(except VOA	and ONG) pro	perly preserve	ed?	Yes 🗹	No				
9. Was preserv	ative added to	bottles?			Yes 🗌	No	<b>✓</b>	NA [		
10.VOA vials ha	ave zero heads	space?			Yes 🗌	No		No VOA Vials	<b>✓</b>	
11. Were any sa	ample containe	ers received b	roken?		Yes	No.		# of preserved		
12. Does paperw (Note discrep	vork match bot pancies on cha		)		Yes 🗸	No		for pH:		>12 unless noted)
13. Are matrices	correctly iden	tified on Chai	n of Custody?		Yes 🗸	No		Adjusted <sup>2</sup>	?	
14. Is it clear wh			?		Yes 🗹	No				
15. Were all hold (If no, notify	ding times able customer for a				Yes 🗸	No		Checked b	ру:	<u></u>
Special Hand	ling (if app	licable)								
16. Was client no	otified of all dis	screpancies w	ith this order?		Yes 🗌	No		NA [	<b>~</b>	
Person	Notified:			Date						
By Wh	om:		***************************************	Via:	eMail	Phone	Fax	☐ In Person		
Regard	ling:			••••••••••••••••••••••••••••••••••••••				······································	-	
Client I	Instructions:		***************************************	een inn maandalad ka ka ka ka ka ka ka ka ka ka ka ka ka			***********	idiski in mana miseri kali in miseri kali in miseri kali in miseri kali in miseri kali in miseri kali in miseri		
17. Additional re	emarks:									
18. <u>Cooler Info</u>	rmation									
Cooler No	Temp ºC	Condition	Seal Intact	Seal No S	eal Date	Signed I	Ву			
1	1.8	Good	Yes							
<u> </u>			<del></del> · .	<u></u>			<del></del>			<del></del>

PP AWERCA		Chain	-of-C	Chain-of-Custody Record	Turn-Around Time:	Time:	学家			Š	i					
Substitute   Container   Project Name   Project N	Client	38	WERC	4	□ Standard				V	AN	- E	N S	2 3	2 8	MENT	AL
## 505 - 320 - 1183	Mailin	BAGG g Address	S. EUG.	JEFRAGE	Project Name	100	11		1 00	Www.		ronme	antal.c	mos Za Wi	<b>5</b> 9	Ž.
# 505 - 320 - 1183   Refritto   Sout fluids   Project Manager:  Frank   Project Manager:    Frank   Project Manager:   Frank   Frank   Project Manager:   Frank   Frank   Project Manager:   Frank   Frank   Project Manager:   Frank   Frank   Project Manager:   Frank   Frank   Frank   Project Manager:   Frank   Frank					Project #:		ı		Tel 505	-345-39		ax 50	5.345	410	60.	
Floats   Project Manager:   Pr	Phone		1		である		fues				Analy		sanba			
Container   Cont	email	or Fax#			Project Mana	iger:		_	_				L			
Table   Container   Containe	OAVOC XSta	2 Package.	6	☐ Level 4 (Full Validation)							(SWI		2007			
Time   Maint   Sample Request ID   Type and # Type   TACA Co.   TSP   Ilb   TSP	Accre	ditation	4				5		HQ/	_	S 0/	-	700			(1
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1318   715P - 117   -002   1343   75P - 118   -000   1345   75P - 120   -000   1345   75P - 120   -000   1350   75P - 122   -000   1351   75P - 124   -000   1352   75P - 124   -000   1353   75P - 124   -000   1353   75P - 124   -000   1354   75P - 124   -000   1355   75P - 124   -000   1356   75P - 126   -000   1357   75P - 126   -000   1358   75P - 126   -000   1359   75P - 126   -000   1350   75P - 126	-			73P-116	-		200-									
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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

March 17, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703852

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 9 sample(s) on 3/16/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order 1703852

Date Reported: 3/17/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-128

 Project:
 Florance GC J 16A
 Collection Date: 3/15/2017 1:45:00 PM

 Lab ID:
 1703852-001
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	: MRA
Chloride	ND	30	mg/Kg	20	3/16/2017 10:11:28 AM	1 30730
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	66	10	mg/Kg	1	3/16/2017 9:48:17 AM	30722
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/16/2017 9:48:17 AM	30722
Surr: DNOP	108	70-130	%Rec	1	3/16/2017 9:48:17 AM	30722
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	3/16/2017 8:57:18 AM	30712
Surr: BFB	111	54-150	%Rec	5	3/16/2017 8:57:18 AM	30712
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.080	mg/Kg	5	3/16/2017 8:57:18 AM	30712
Toluene	ND	0.16	mg/Kg	5	3/16/2017 8:57:18 AM	30712
Ethylbenzene	ND	0.16	mg/Kg	5	3/16/2017 8:57:18 AM	30712
Xylenes, Total	ND	0.32	mg/Kg	5	3/16/2017 8:57:18 AM	30712
Surr: 4-Bromofluorobenzene	110	66.6-132	%Rec	5	3/16/2017 8:57:18 AM	30712

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

- The state of the s
- 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

#### Lab Order 1703852

Date Reported: 3/17/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-129

 Project:
 Florance GC J 16A
 Collection Date: 3/15/2017 1:50:00 PM

 Lab ID:
 1703852-002
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/16/2017 10:23:53 AM	30730
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	S			Analyst	: TOM
Diesel Range Organics (DRO)	63	9.3	mg/Kg	1	3/16/2017 10:09:52 AM	30722
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	3/16/2017 10:09:52 AM	30722
Surr: DNOP	107	70-130	%Rec	1	3/16/2017 10:09:52 AM	30722
EPA METHOD 8015D: GASOLINE RANG	SE .				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/16/2017 9:23:37 AM	30712
Surr: BFB	116	54-150	%Rec	5	3/16/2017 9:23:37 AM	30712
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.090	mg/Kg	5	3/16/2017 9:23:37 AM	30712
Toluene	ND	0.18	mg/Kg	5	3/16/2017 9:23:37 AM	30712
Ethylbenzene	ND	0.18	mg/Kg	5	3/16/2017 9:23:37 AM	30712
Xylenes, Total	ND	0.36	mg/Kg	5	3/16/2017 9:23:37 AM	30712
Surr: 4-Bromofluorobenzene	111	66.6-132	%Rec	5	3/16/2017 9:23:37 AM	30712

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

#### Lab Order 1703852

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/17/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-130

 Project:
 Florance GC J 16A
 Collection Date: 3/15/2017 1:55:00 PM

 Lab ID:
 1703852-003
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/16/2017 10:36:17 AM	1 30730
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	91	9.6	mg/Kg	1	3/16/2017 10:31:32 AM	1 30722
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/16/2017 10:31:32 AM	1 30722
Surr: DNOP	108	70-130	%Rec	1	3/16/2017 10:31:32 AM	1 30722
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/16/2017 9:49:58 AM	30712
Surr: BFB	110	54-150	%Rec	5	3/16/2017 9:49:58 AM	30712
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.088	mg/Kg	5	3/16/2017 9:49:58 AM	30712
Toluene	ND	0.18	mg/Kg	5	3/16/2017 9:49:58 AM	30712
Ethylbenzene	ND	0.18	mg/Kg	5	3/16/2017 9:49:58 AM	30712
Xylenes, Total	ND	0.35	mg/Kg	5	3/16/2017 9:49:58 AM	30712
Surr: 4-Bromofluorobenzene	107	66.6-132	%Rec	5	3/16/2017 9:49:58 AM	30712

llue exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
mple Diluted Due to Matrix	E	Value above quantitation range
olding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 13
ot Detected at the Reporting Limit	P	Sample pH Not In Range
PD 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
	mple Diluted Due to Matrix Iding times for preparation or analysis exceeded t Detected at the Reporting Limit D outside accepted recovery limits	mple Diluted Due to Matrix  E Iding times for preparation or analysis exceeded  J t Detected at the Reporting Limit  P D outside accepted recovery limits  RL

#### Lab Order 1703852

Date Reported: 3/17/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-131

 Project:
 Florance GC J 16A
 Collection Date: 3/15/2017 2:00:00 PM

 Lab ID:
 1703852-004
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/16/2017 10:48:42 AM	1 30730
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	S			Analys	t: TOM
Diesel Range Organics (DRO)	120	9.9	mg/Kg	1	3/16/2017 10:53:08 AM	1 30722
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/16/2017 10:53:08 AM	1 30722
Surr: DNOP	109	70-130	%Rec	1	3/16/2017 10:53:08 AM	1 30722
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/16/2017 10:16:23 AM	1 30712
Surr: BFB	109	54-150	%Rec	5	3/16/2017 10:16:23 AM	1 30712
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.087	mg/Kg	5	3/16/2017 10:16:23 AM	1 30712
Toluene	ND	0.17	mg/Kg	5	3/16/2017 10:16:23 AM	1 30712
Ethylbenzene	ND	0.17	mg/Kg	5	3/16/2017 10:16:23 AM	1 30712
Xylenes, Total	ND	0.35	mg/Kg	5	3/16/2017 10:16:23 AM	1 30712
Surr: 4-Bromofluorobenzene	102	66.6-132	%Rec	5	3/16/2017 10:16:23 AM	1 30712

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

#### Lab Order 1703852

Date Reported: 3/17/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-132

 Project:
 Florance GC J 16A
 Collection Date: 3/15/2017 2:05:00 PM

 Lab ID:
 1703852-005
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analys	st: MRA
Chloride	ND	30	mg/Kg	20	3/16/2017 11:01:06 Al	M 30730
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	st: TOM
Diesel Range Organics (DRO)	100	9.7	mg/Kg	1	3/16/2017 11:14:55 Al	M 30722
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/16/2017 11:14:55 Al	M 30722
Surr: DNOP	109	70-130	%Rec	1	3/16/2017 11:14:55 Al	M 30722
EPA METHOD 8015D: GASOLINE RAM	IGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/16/2017 10:42:39 Al	M 30712
Surr: BFB	131	54-150	%Rec	5	3/16/2017 10:42:39 Af	M 30712
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.083	mg/Kg	5	3/16/2017 10:42:39 Al	M 30712
Toluene	ND	0.17	mg/Kg	5	3/16/2017 10:42:39 Al	M 30712
Ethylbenzene	ND	0.17	mg/Kg	5	3/16/2017 10:42:39 Al	M 30712
Xylenes, Total	ND	0.33	mg/Kg	5	3/16/2017 10:42:39 Al	M 30712
Surr: 4-Bromofluorobenzene	105	66.6-132	%Rec	5	3/16/2017 10:42:39 Al	M 30712

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

# Lab Order **1703852**Date Reported: **3/17/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-133

 Project:
 Florance GC J 16A
 Collection Date: 3/14/2017 2:10:00 PM

 Lab ID:
 1703852-006
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: MRA
Chloride	ND	30	mg/Kg	20	3/16/2017 11:13:30 A	M 30730
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	st: TOM
Diesel Range Organics (DRO)	120	10	mg/Kg	1	3/16/2017 11:36:42 AM	M 30722
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/16/2017 11:36:42 Al	M 30722
Surr: DNOP	109	70-130	%Rec	1	3/16/2017 11:36:42 Al	M 30722
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	3/16/2017 11:09:01 Al	M 30712
Surr: BFB	118	54-150	%Rec	5	3/16/2017 11:09:01 Af	M 30712
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.093	mg/Kg	5	3/16/2017 11:09:01 Al	M 30712
Toluene	ND	0.19	mg/Kg	5	3/16/2017 11:09:01 Al	M 30712
Ethylbenzene	ND	0.19	mg/Kg	5	3/16/2017 11:09:01 Af	M 30712
Xylenes, Total	ND	0.37	mg/Kg	5	3/16/2017 11:09:01 Af	M 30712
Surr: 4-Bromofluorobenzene	109	66.6-132	%Rec	5	3/16/2017 11:09:01 Af	M 30712

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

#### Lab Order 1703852

Date Reported: 3/17/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-134

 Project:
 Florance GC J 16A
 Collection Date: 3/15/2017 2:15:00 PM

 Lab ID:
 1703852-007
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/16/2017 11:25:55 AM	A 30730
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	85	9.9	mg/Kg	1	3/16/2017 11:58:31 AM	A 30722
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/16/2017 11:58:31 AM	A 30722
Surr: DNOP	109	70-130	%Rec	1	3/16/2017 11:58:31 AM	A 30722
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/16/2017 11:35:22 AM	A 30712
Surr: BFB	107	54-150	%Rec	5	3/16/2017 11:35:22 AM	A 30712
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.092	mg/Kg	5	3/16/2017 11:35:22 AM	A 30712
Toluene	ND	0.18	mg/Kg	5	3/16/2017 11:35:22 AM	A 30712
Ethylbenzene	ND	0.18	mg/Kg	5	3/16/2017 11:35:22 AM	<i>I</i> 30712
Xylenes, Total	ND	0.37	mg/Kg	5	3/16/2017 11:35:22 AM	A 30712
Surr: 4-Bromofluorobenzene	106	66.6-132	%Rec	5	3/16/2017 11:35:22 AM	A 30712

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

# Lab Order **1703852**Date Reported: **3/17/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: TSP-115R

 Project:
 Florance GC J 16A
 Collection Date: 3/15/2017 2:30:00 PM

 Lab ID:
 1703852-008
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/16/2017 11:38:19 AM	1 30730
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	S			Analyst	:: TOM
Diesel Range Organics (DRO)	97	9.6	mg/Kg	1	3/16/2017 12:20:16 PM	1 30722
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/16/2017 12:20:16 PM	30722
Surr: DNOP	112	70-130	%Rec	1	3/16/2017 12:20:16 PM	1 30722
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/16/2017 12:01:36 PM	1 30712
Surr: BFB	120	54-150	%Rec	5	3/16/2017 12:01:36 PM	1 30712
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.087	mg/Kg	5	3/16/2017 12:01:36 PM	1 30712
Toluene	ND	0.17	mg/Kg	5	3/16/2017 12:01:36 PM	1 30712
Ethylbenzene	ND	0.17	mg/Kg	5	3/16/2017 12:01:36 PM	1 30712
Xylenes, Total	ND	0.35	mg/Kg	5	3/16/2017 12:01:36 PM	1 30712
Surr: 4-Bromofluorobenzene	107	66.6-132	%Rec	5	3/16/2017 12:01:36 PM	1 30712

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

#### Lab Order **1703852**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/17/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-118R

 Project:
 Florance GC J 16A
 Collection Date: 3/15/2017 2:38:00 PM

 Lab ID:
 1703852-009
 Matrix: MEOH (SOIL)
 Received Date: 3/16/2017 7:09:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/16/2017 12:15:33 PM	1 30730
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	63	9.2	mg/Kg	1	3/16/2017 12:42:27 PM	1 30722
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	3/16/2017 12:42:27 PM	1 30722
Surr: DNOP	110	70-130	%Rec	1	3/16/2017 12:42:27 PM	1 30722
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/16/2017 12:27:46 PM	1 30712
Surr: BFB	121	54-150	%Rec	5	3/16/2017 12:27:46 PM	1 30712
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.084	mg/Kg	5	3/16/2017 12:27:46 PM	1 30712
Toluene	ND	0.17	mg/Kg	5	3/16/2017 12:27:46 PM	1 30712
Ethylbenzene	ND	0.17	mg/Kg	5	3/16/2017 12:27:46 PM	1 30712
Xylenes, Total	ND	0.33	mg/Kg	5	3/16/2017 12:27:46 PM	1 30712
Surr: 4-Bromofluorobenzene	110	66.6-132	%Rec	5	3/16/2017 12:27:46 PM	1 30712

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#: 1703852

17-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30730 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30730 RunNo: 41429

Prep Date: 3/16/2017 Analysis Date: 3/16/2017 SeqNo: 1299397 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30730 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30730 RunNo: 41429

Prep Date: 3/16/2017 Analysis Date: 3/16/2017 SeqNo: 1299398 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.9 90 110

#### 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.

Result

10

WO#: 1703852

17-Mar-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID MB-30722	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 30722	RunNo: 41403	
Prep Date: 3/16/2017	Analysis Date: 3/16/2017	SeqNo: 1297887	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 10.00	104 70	130
Sample ID LCS-30722	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 30722	RunNo: 41403	
Prep Date: 3/16/2017	Analysis Date: 3/16/2017	SeqNo: <b>1298115</b>	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	48 10 50.00	0 96.9 63.8	116
Surr: DNOP	4.9 5.000	98.8 70	130
Sample ID LCS-30698	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 30698	RunNo: 41403	
Prep Date: 3/15/2017	Analysis Date: 3/16/2017	SeqNo: 1299328	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	5.1 5.000	102 70	130
Sample ID MB-30698	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 30698	RunNo: 41403	
Prep Date: 3/15/2017	Analysis Date: 3/16/2017	SeqNo: <b>1299329</b>	Units: %Rec

SPK value SPK Ref Val %REC

10.00

#### Qualifiers:

Analyte

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
- J
- 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

LowLimit

101

70

HighLimit

130

E Value above quantitation range

Analyte detected below quantitation limits Page 11 of 13

%RPD

**RPDLimit** 

Qual

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1703852

17-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30712 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 30712 RunNo: 41422

Prep Date: 3/15/2017 Analysis Date: 3/16/2017 SeqNo: 1299218 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 730 1000 72.6 54 150

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-30712 SampType: LCS

Client ID: LCSS Batch ID: 30712 RunNo: 41422

Prep Date: 3/15/2017 Analysis Date: 3/16/2017 SeqNo: 1299221 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 29 5.0 25.00 115 76.4 125 810 81.3 Surr: BFB 1000 54 150

#### 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.

0.79

WO#: **1703852** 

17-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Surr: 4-Bromofluorobenzene

Sample ID MB-30712 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: 30712 RunNo: 41422 Prep Date: 3/15/2017 Analysis Date: 3/16/2017 SeqNo: 1299243 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 ND 0.050 Toluene 0.050 Ethylbenzene ND Xylenes, Total ND 0.10

79.2

66.6

132

1.000

Sample ID LCS-30712 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 30712 RunNo: 41422 Prep Date: Analysis Date: 3/16/2017 SeqNo: 1299244 3/15/2017 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.97 0.025 1.000 0 97.2 80 120 Benzene Toluene 0.99 0.050 1.000 0 98.6 80 120 Ethylbenzene 0.050 1.000 0 100 80 120 1.0 102 Xylenes, Total 3.1 0.10 3.000 0 80 120 84.5 Surr: 4-Bromofluorobenzene 0.85 1.000 66.6 132

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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 FAY: 505-345-4107

Sample Log-In Check List

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

Client Name:	BLAGG	Work Order Numbe	r: 1703852		RcptNo:	1
Received by/date	e:	192/11/17				
Logged By:	Lindsay Mangin	3/16/2017 7:09:00 AN	1	JudyHlago		
Completed By:	Lindsay Mangin	3/16/2017 7:29:52 AN	Λ	Juney Hayes		
Reviewed By:	as	03/16/17				
Chain of Cus	tody					
1. Custody sea	ils intact on sample bottle	es?	Yes 🗔	No 🗆	Not Present 🗹	
2. Is Chain of C	Custody complete?		Yes 🗸	No 🗌	Not Present	
3. How was the	e sample delivered?		Courier			
<u>Log In</u>						
4. Was an atte	empt made to cool the sa	mples?	Yes 🔽	No 🗌	NA $\square$	
5. Were all san	nples received at a temp	erature of >0° C to 6.0°C	Yes 🗹	No 🗆	NA $\square$	
6. Sample(s) in	n proper container(s)?		Yes 🔽	No 🗌		
7. Sufficient sai	mple volume for indicate	d test(s)?	Yes 🗹	No 🗌		
8. Are samples	(except VOA and ONG)	properly preserved?	Yes 🗹	No 🗆		
9. Was preserv	vative added to bottles?		Yes $\square$	No 🗹	NA $\square$	
10.VOA vials ha	ave zero headspace?		Yes 🗹	No 🗆	No VOA Vials	
11, Were any sa	ample containers receive	d broken?	Yes	No 🗹	# of preserved	<del></del>
12.Does paperw	vork match bottle labels?		Yes 🗹	No 🗆	bottles checked for pH:	
	pancies on chain of custo					r >12 unless noted)
13. Are matrices	correctly identified on C	hain of Custody?	Yes 🗹	No 🗌	Adjusted? _	
	at analyses were reques		Yes 🗹	No 📙		
	ding times able to be met customer for authorization		Yes 🗹	No ∐ -	Checked by:	
Special Hand	ling (if applicable)					
	otified of all discrepancie	s with this order?	Yes	No 🗌	NA 🗹	
Person	Notified:	Date				
By Wh	om:	Via:	eMail 🗌	Phone  Fax	☐ In Person	•
Regard	1					•
_	Instructions:				ikokisida da da katana inda isahin di kisi melenim indak	
17. Additional re	emarks:					-
18. Cooler Info	<u>rmation</u>					
Cooler No			Seal Date	Signed By		
[1	2.6 Good	Yes		I		

Project Name:	Clert	30	RP AMERICA	E RP AMERICA	Standard	X	À			Ĭ:	#	EN	VIR	ō.	M	HALL ENVIRONMENTAL	AL
Florests   Florests & C. T   DA		BLAS	S ENG	SERWE	Project Name	1				3	A W. hall	TO I	U Tuent	0	Š.	2	Y
Fox#:   Fox#	Mailing	Address	7.5		FLOREN	3	- 16A	4	901 Ha	wkins	u Z	Albug	lerane	N	8710	G	
Fawer   Fawer   Fame			7		Project #:				Tel. 508	-345-	3975	Fax	505-3	45-4	107	v.	
Fazet:   Project Manager:   T. B.A.Le.   Project Manager:   T. B.A.Le.   Project Manager:   T. B.A.Le.   Project Manager:   T. B.A.Le.   P.A.Le.	Phone	¥ 500	1 4	5-1183	TREA		- PLES				Ā	alysis	Requ	est			
Sampler   Container   Contai	emailo	Fax#:			Project Mana	ger:		-		-		(100		F			
Sample Temperature   Supple   Time   Matrix   Sample Request   Dince:   Yes   Dince	A Stan	Package: dard		☐ Level 4 (Full Validation)	H	346					(SMIS	DS, <sub>k</sub> O9					
Type   Continue   Type    Accredi	tation			12	B1466		_		_	-	'cOh	-	_	-			
Type   Natrix   Sample Request ID   Type and # Type   TOSES   TSP - 129   Tool   Type   TOSES   TSP - 129   TSP - 129   TSP - 129   TSP - 132   TSP	ONEL	AP	□ Othe	er .	On Ice:	Z Yes	□ No					_			_		
Time Matrix Sample Request ID Container Preservative HEAL No. 1799   1703552   1779   1799   1703552   1779   1799   1703   1799	□ EDD	(Type)			Sample Temp	Serature: 2	و			_		_	səpi	_		7.4.4	· vu
1350 73P - 129 4 02 x J COL - CO2 1  1350 73P - 129002 1  1405 73P - 131004  1405 73P - 132004  1410 73P - 132004  1410 73P - 132009  1410 73P - 134009  1430 73P - 118R009  1440 73P - 118R009  1440 73P - 118R009  1440 73P - 118R009  1440 73P - 118R009  1440 73P - 118R009  1440 73P - 118R009  1440 73P - 118R009  1440 73P - 118R009  1440 73P - 118R009  1440 73P - 118R009  1440 73P - 118R009  1440 73P - 118R009  1440 73P - 118R00	Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	一			200000000000000000000000000000000000000		A (A)	odas Pestic	7.7.	8270 (Semi	a local tec	Air Bubbles
1355 739 1-129 1-002 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1/2/2m			758-128	4 03 x 1	COOL	100-	×	×						×		
1405 75P - 131 -0003 -0004 -0004 -0004 -0004 -0004 -0004 -0004 -0004 -0004 -0004 -0004 -0004 -0004 -0004 -0004 -0004 -0004 -0008 -0004 -00		1350		139-129			-005	7	-			H					
1405   739 - 131   -004   -005   -006   -006   -006   -007   -0		1355		73/ 130			-003					-					
1405   75P - 132   -005   -007		1400		1			-004										
1410   75P - 133		504/	3	1			-020						İ				
1430 739 - 134 - 003 1430 739 - 115R - 003 1438 739 - 118R - 003 1703 M Skinguished by: Received by: Date Time Remarks Buz & Co. 1703 15/0 15/0 15/0 15/0 15/0 15/0 15/0 15/0		1410		1			- (DC		1		-1						
1430 759 - (15R   -008     1759 - (15R     -008       1759 - (15R		1414		1			-007					Ä					
1438   173,9 - 618	/	1430				1	-008							1		H	
Time: Relinquished by:  Received by:  Received by:  Received by:  Received by:  Received by:  Date Time  Date Time  WBS ELEVANT:  L1-00 103-	-	1438	1	1		1	-000	-							~		
Time: Reinquished by:  Received by:  Received by:  Received by:  Date Time Remarks But BP Co.  VD: VHIXONEVR.										-		4					
Time Refinduished by: ( Received by: ) Date Time WBS EXEMANT: L1-00 167-	South 1		Relinquish	200	Received by:	(Joseph		Remar	ks 75/2	200	N SX	EVR	19	B	12	Steven	Moska
1857 Character Deerse Y CB 10/17 (1709 Note: SAMPles Tristed w	7	Time   1857	Refinguish.	3	Received by:	7	# (†	Note	17.	AND O	24	di 00	1 3	7 7	H-OZ	E: FLRNCGCJIBA / H202	16A



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

March 21, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703983

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/18/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order **1703983**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/21/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-131R-W

 Project:
 Florance GC J 16A
 Collection Date: 3/17/2017 10:10:00 AM

 Lab ID:
 1703983-001
 Matrix: MEOH (SOIL)
 Received Date: 3/18/2017 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/20/2017 11:26:16 AM	1 30796
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	65	9.3	mg/Kg	1	3/20/2017 9:34:40 AM	30779
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/20/2017 9:34:40 AM	30779
Surr: DNOP	124	70-130	%Rec	1	3/20/2017 9:34:40 AM	30779
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/20/2017 8:56:58 AM	30752
Surr: BFB	113	54-150	%Rec	5	3/20/2017 8:56:58 AM	30752
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.084	mg/Kg	5	3/20/2017 8:56:58 AM	30752
Toluene	ND	0.17	mg/Kg	5	3/20/2017 8:56:58 AM	30752
Ethylbenzene	ND	0.17	mg/Kg	5	3/20/2017 8:56:58 AM	30752
Xylenes, Total	ND	0.34	mg/Kg	5	3/20/2017 8:56:58 AM	30752
Surr: 4-Bromofluorobenzene	111	66.6-132	%Rec	5	3/20/2017 8:56:58 AM	30752

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#### Lab Order **1703983**

Date Reported: 3/21/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: TSP-133R-W

 Project:
 Florance GC J 16A
 Collection Date: 3/17/2017 10:14:00 AM

 Lab ID:
 1703983-002
 Matrix: MEOH (SOIL)
 Received Date: 3/18/2017 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/20/2017 11:38:41 AM	30796
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	68	9.7	mg/Kg	1	3/20/2017 9:56:37 AM	30779
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/20/2017 9:56:37 AM	30779
Surr: DNOP	125	70-130	%Rec	1	3/20/2017 9:56:37 AM	30779
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	3/20/2017 9:23:21 AM	30752
Surr: BFB	105	54-150	%Rec	5	3/20/2017 9:23:21 AM	30752
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.082	mg/Kg	5	3/20/2017 9:23:21 AM	30752
Toluene	ND	0.16	mg/Kg	5	3/20/2017 9:23:21 AM	30752
Ethylbenzene	ND	0.16	mg/Kg	5	3/20/2017 9:23:21 AM	30752
Xylenes, Total	ND	0.33	mg/Kg	5	3/20/2017 9:23:21 AM	30752
Surr: 4-Bromofluorobenzene	111	66.6-132	%Rec	5	3/20/2017 9:23:21 AM	30752

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#### Lab Order 1703983

Date Reported: 3/21/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-133R-E

 Project:
 Florance GC J 16A
 Collection Date: 3/17/2017 10:17:00 AM

 Lab ID:
 1703983-003
 Matrix: MEOH (SOIL)
 Received Date: 3/18/2017 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/20/2017 11:51:06 AM	30796
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	24	9.4	mg/Kg	1	3/20/2017 10:18:48 AM	30779
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/20/2017 10:18:48 AM	30779
Surr: DNOP	127	70-130	%Rec	1	3/20/2017 10:18:48 AM	30779
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	3/20/2017 9:49:52 AM	30752
Surr: BFB	103	54-150	%Rec	5	3/20/2017 9:49:52 AM	30752
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.078	mg/Kg	5	3/20/2017 9:49:52 AM	30752
Toluene	ND	0.16	mg/Kg	5	3/20/2017 9:49:52 AM	30752
Ethylbenzene	ND	0.16	mg/Kg	5	3/20/2017 9:49:52 AM	30752
Xylenes, Total	ND	0.31	mg/Kg	5	3/20/2017 9:49:52 AM	30752
Surr: 4-Bromofluorobenzene	110	66.6-132	%Rec	5	3/20/2017 9:49:52 AM	30752

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

#### Lab Order **1703983**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/21/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-131R-E

 Project:
 Florance GC J 16A
 Collection Date: 3/17/2017 10:06:00 AM

 Lab ID:
 1703983-004
 Matrix: MEOH (SOIL)
 Received Date: 3/18/2017 8:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/20/2017 12:03:30 PM	1 30796
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	44	9.7	mg/Kg	1	3/20/2017 10:41:03 AN	1 30779
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/20/2017 10:41:03 AN	1 30779
Surr: DNOP	128	70-130	%Rec	1	3/20/2017 10:41:03 AN	1 30779
EPA METHOD 8015D: GASOLINE RANG	iΕ				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	3/20/2017 10:16:16 AM	1 30752
Surr: BFB	106	54-150	%Rec	5	3/20/2017 10:16:16 AM	1 30752
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.079	mg/Kg	5	3/20/2017 10:16:16 AM	1 30752
Toluene	ND	0.16	mg/Kg	5	3/20/2017 10:16:16 AN	1 30752
Ethylbenzene	ND	0.16	mg/Kg	5	3/20/2017 10:16:16 AM	1 30752
Xylenes, Total	ND	0.32	mg/Kg	5	3/20/2017 10:16:16 AM	1 30752
Surr: 4-Bromofluorobenzene	110	66.6-132	%Rec	5	3/20/2017 10:16:16 AM	1 30752

*	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

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703983** 

21-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30796 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 30796 RunNo: 41508

Prep Date: 3/20/2017 Analysis Date: 3/20/2017 SeqNo: 1302226 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30796 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30796 RunNo: 41508

Prep Date: 3/20/2017 Analysis Date: 3/20/2017 SeqNo: 1302227 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 92.0 90 110

#### 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 8

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

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Blagg Engineering

WO#: **1703983** 

21-Mar-17

**Project:** Florance GC J 16A Sample ID LCS-30779 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 30779 RunNo: 41496 Prep Date: Analysis Date: 3/20/2017 3/20/2017 SeqNo: 1301282 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 48 10 0 95.5 63.8 50.00 116 Surr: DNOP 4.9 5.000 97.8 70 130 Sample ID MB-30779 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 30779 RunNo: 41496 Analysis Date: 3/20/2017 Prep Date: 3/20/2017 SeqNo: 1301283 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 12 10.00 119 70 130 Sample ID 1703983-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: TSP-131R-W Batch ID: 30779 RunNo: 41496 Prep Date: 3/20/2017 Analysis Date: 3/20/2017 SeqNo: 1301464 Units: mg/Kg Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 120 9.6 47.76 65.37 120 51.6 130

Sample ID 1703	983-001AMSD	SampTy	/pe: <b>MS</b>	SD	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: TSP-	131R-W	Batch	ID: <b>30</b>	779	R	RunNo: 4	1496					
Prep Date: 3/20	0/2017	Analysis Da	ate: 3/	20/2017	S	SeqNo: 1	301465	Units: mg/K	ίg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organic	s (DRO)	130	9.3	46.30	65.37	145	51.6	130	7.67	20	S	
Surr: DNOP		5.2		4.630		113	70	130	0	0		

113

70

130

4.776

#### Qualifiers:

Surr: DNOP

\* 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

Page 6 of 8

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#: **1703983** 

21-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30752 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 30752 RunNo: 41507

Prep Date: 3/17/2017 Analysis Date: 3/20/2017 SeqNo: 1301576 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 700 1000 69.7 54 150

Sample ID LCS-30752 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 30752 RunNo: 41507

830

Prep Date: 3/17/2017 Analysis Date: 3/20/2017 SeqNo: 1301577 Units: mg/Kg

1000

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 29 5.0 25.00 115 76.4 125

82.6

54

150

#### 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

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#: **1703983** 

21-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30752 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 30752 RunNo: 41507

Prep Date: 3/17/2017 Analysis Date: 3/20/2017 SeqNo: 1301599 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

Surr: 4-Bromofluorobenzene 0.76 1.000 76.3 66.6 132

1.000

Sample ID LCS-30752	Samp	Гуре: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles										
Client ID: LCSS	Batc	h ID: <b>30</b>	752	RunNo: 41507										
Prep Date: 3/17/2017	Analysis [	Date: <b>3/</b>	20/2017	S	SeqNo: 1	301600	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	80	120							
Toluene	1.0	0.050	1.000	0	99.9	80	120							
Ethylbenzene	1.0	0.050	1.000	0	100	80	120							
Xylenes, Total	3.1	0.10	3.000	0	103	80	120							

85.4

66.6

132

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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 Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: B	LAGG	Work Order Number:	1703983		RcptNo:	1
Received by/date:	7	03/18/17				
Logged By: L	Lindsay Mangin	3/18/2017 8:15:00 AM		July Hago		
Completed By:	Lindsay Mangin	3/18/2017 9:10:57 AM		July Happ		
Reviewed By:	as	03/20/17				
Chain of Custo	dy					
1. Custody seals i	intact on sample bottles?		Yes 🗌	No 🗆	Not Present 🗹	
2. Is Chain of Cus	stody complete?		Yes 🗸	No 🗌	Not Present	
3. How was the sa	ample delivered?		Courier			
Log In						
4. Was an attemp	ot made to cool the sample	es?	Yes 🗸	No 🗆	NA $\square$	
5. Were all sampl	les received at a temperati	ure of >0° C to 6.0°C	Yes 🗸	No 🗆	NA 🗌	
6. Sample(s) in p	roper container(s)?		Yes 🗹	No 🗌		
7. Sufficient samp	ole volume for indicated tes	st(s)?	Yes 🗸	No 🗆		
8. Are samples (e	xcept VOA and ONG) prop	perly preserved?	Yes 🗸	No 🗌		
9. Was preservati	ve added to bottles?		Yes	No 🗹	NA 🗌	
10.VOA vials have	zero headspace?		Yes 🗌	No 🗌	No VOA Vials 🗹	
11. Were any sam	ple containers received bre	oken?	Yes	No 🗹	# of preserved	
					bottles checked	
	k match bottle labels? noies on chain of custody)		Yes 🗹	No ∐	for pH:	or >12 unless noted)
	prrectly identified on Chain	of Custody?	Yes 🗹	No 🗆	Adjusted?	·
	analyses were requested?		Yes 🗹	No 🗆		
	g times able to be met? stomer for authorization.)		Yes 🗸	No 🗌	Checked by:	·
(II No, Nothly Cus	storner for authorization.)					
Special Handlin	ng (if applicable)					
16. Was client notif	fied of all discrepancies wit	th this order?	Yes 🗌	No 🗆	NA 🗹	
Person N	otified:	Date:				
By Whom	1:	Via:	eMail	Phone  Fax	☐ In Person	
Regardin	g:					
Client Ins	tructions:					
17. Additional rema	arks:					
18. Cooler Inform		1 !		1		
Cooler No	Temp °C Condition 4.1 Good	Seal Intact   Seal No   S	Seal Date	Signed By		
[']	5554		i			

2 6 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Tum-Around Time: SAME	□ Standard X Rush	Project Name.	FLORANCE GC J 16A 4901 Hawkin	Co., P. E. Tel. 505-345-3975	-1193   KESTED 201 1125	(%) (O)	(802) (802) (802) (802)	Sampler: 7. C. 48	7 Yes 1 □ No 1 + T + O 4: S 1 + S 1	Temperature. 4. (GI by book as	Sample Request ID Container Preservative HEAL No. HEAL No. Type and # Type  Type and # Type  Type and # Type  Type And # Type  Type And # Type  Type And # Type  Type And # Type  Type And # Type  Type And # Type  Type And # Type  Type And # Type  Type And # Type  Type And # Type  Type And # Type  Type And # Type	1 1 X X X X X X X X X X X X X X X X X X	139-133R-W 1 1 1-002 11 11 11 11	38-133R-E -003 1	39-131R-E 1 -004 11			Skill Prince Received by:  Skill Prince Remarks: Blu Bp  Skill Pri	Received by: / Date Time
Sold Sold Sold Sold Sold Sold Sold Sold	Chain-of-Custody Record Tum-Arte	AMERICA D Stand	Proje		Project	1183	Project M	☐ Level 4 (Full Validation)		□ Other		Sample Request ID	TSP-131R-W 400	TSP-133R-W 1	TSP-133R-E	P-131R			Relinquisher by: Stage Style Prints Received b	Relifiquation by:
1ain tion the state of the stat	ਹ	Client:		Mailing Address:		Phone #:	email or Fax#:	OA/OC Package  X Standard	Accreditation	I NELAP	□ EDD (Type	Date	Ny17 1010	4101 11	1101 1	9001 11	1		Time: Time:	Date. Time:



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

March 23, 2017

Jeff Blagg Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413 TEL: (505) 632-1199 FAX (505) 632-3903

RE: FLORANCE GC J 16A OrderNo.: 1703A90

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/22/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 1703A90

Date Reported: 3/23/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-135

 Project:
 FLORANCE GC J 16A
 Collection Date: 3/21/2017 1:33:00 PM

 Lab ID:
 1703A90-001
 Matrix: SOIL
 Received Date: 3/22/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	3/22/2017 10:36:43 AM	30843
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	1				Analyst	TOM
Diesel Range Organics (DRO)	87	9.6		mg/Kg	1	3/22/2017 9:48:09 AM	30836
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/22/2017 9:48:09 AM	30836
Surr: DNOP	105	70-130		%Rec	1	3/22/2017 9:48:09 AM	30836
EPA METHOD 8015D: GASOLINE RANG	GE					Analyst	NSB
Gasoline Range Organics (GRO)	8.7	3.2		mg/Kg	1	3/22/2017 9:00:31 AM	G41577
Surr: BFB	204	54-150	S	%Rec	1	3/22/2017 9:00:31 AM	G41577
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.016		mg/Kg	1	3/22/2017 9:00:31 AM	B41577
Toluene	ND	0.032		mg/Kg	1	3/22/2017 9:00:31 AM	B41577
Ethylbenzene	ND	0.032		mg/Kg	1	3/22/2017 9:00:31 AM	B41577
Xylenes, Total	ND	0.064		mg/Kg	1	3/22/2017 9:00:31 AM	B41577
Surr: 4-Bromofluorobenzene	112	66.6-132		%Rec	1	3/22/2017 9:00:31 AM	B41577

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	lding times for preparation or analysis exceeded J Analyte detected below		Analyte detected below quantitation limits Page 1 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

W Sample container temperature is out of limit as specified

% Recovery outside of range due to dilution or matrix

## Analytical Report Lab Order 1703A90

### Date Reported: 3/23/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-136

 Project:
 FLORANCE GC J 16A
 Collection Date: 3/21/2017 1:42:00 PM

 Lab ID:
 1703A90-002
 Matrix: SOIL
 Received Date: 3/22/2017 7:30:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	3/22/2017 10:49:08 AM	30843
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANIC	S				Analyst	: ТОМ
Diesel Range Organics (DRO)	98	9.6		mg/Kg	1	3/22/2017 10:10:18 AM	30836
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/22/2017 10:10:18 AM	30836
Surr: DNOP	108	70-130		%Rec	1	3/22/2017 10:10:18 AM	30836
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst	: NSB
Gasoline Range Organics (GRO)	9.6	3.1		mg/Kg	1	3/22/2017 9:24:07 AM	G41577
Surr: BFB	212	54-150	S	%Rec	1	3/22/2017 9:24:07 AM	G41577
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.015		mg/Kg	1	3/22/2017 9:24:07 AM	B41577
Toluene	ND	0.031		mg/Kg	1	3/22/2017 9:24:07 AM	B41577
Ethylbenzene	ND	0.031		mg/Kg	1	3/22/2017 9:24:07 AM	B41577
Xylenes, Total	ND	0.062		mg/Kg	1	3/22/2017 9:24:07 AM	B41577
Surr: 4-Bromofluorobenzene	113	66.6-132		%Rec	1	3/22/2017 9:24:07 AM	B41577

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

## Analytical Report Lab Order 1703A90

#### Date Reported: 3/23/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-137

 Project:
 FLORANCE GC J 16A
 Collection Date: 3/21/2017 1:50:00 PM

 Lab ID:
 1703A90-003
 Matrix: SOIL
 Received Date: 3/22/2017 7:30:00 AM

Analyses	Result	PQL (	Qual 1	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: MRA
Chloride	ND	30		mg/Kg	20	3/22/2017 11:01:32 AM	30843
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS					Analyst	: TOM
Diesel Range Organics (DRO)	44	9.9		mg/Kg	1	3/22/2017 10:32:17 AM	30836
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/22/2017 10:32:17 AM	30836
Surr: DNOP	108	70-130		%Rec	1	3/22/2017 10:32:17 AM	30836
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst	: NSB
Gasoline Range Organics (GRO)	6.7	3.0		mg/Kg	1	3/22/2017 9:47:38 AM	G41577
Surr: BFB	191	54-150	S	%Rec	1	3/22/2017 9:47:38 AM	G41577
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.015		mg/Kg	1	3/22/2017 9:47:38 AM	B41577
Toluene	ND	0.030		mg/Kg	1	3/22/2017 9:47:38 AM	B41577
Ethylbenzene	ND	0.030		mg/Kg	1	3/22/2017 9:47:38 AM	B41577
Xylenes, Total	ND	0.059		mg/Kg	1	3/22/2017 9:47:38 AM	B41577
Surr: 4-Bromofluorobenzene	113	66.6-132		%Rec	1	3/22/2017 9:47:38 AM	B41577

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 7 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#: 1703A90

23-Mar-17

**Client:** Blagg Engineering **Project:** FLORANCE GC J 16A

Sample ID MB-30843 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 30843 RunNo: 41580

Prep Date: 3/22/2017 Analysis Date: 3/22/2017 SeqNo: 1304961 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30843 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30843 RunNo: 41580

Prep Date: 3/22/2017 Analysis Date: 3/22/2017 SeqNo: 1304962 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.7 110

#### 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 4 of 7

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703A90** 

23-Mar-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

Sample ID LCS-30836 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS Batch ID: 30836 RunNo: 41566

Prep Date: 3/22/2017 Analysis Date: 3/22/2017 SeqNo: 1303563 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 48 50.00 0 96.8 63.8 116

Surr: DNOP 4.9 5.000 97.7 70 130

Sample ID MB-30836 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 30836 RunNo: 41566

Prep Date: 3/22/2017 Analysis Date: 3/22/2017 SeqNo: 1303564 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 10.00 101 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#: 1703A90

23-Mar-17

**Client: Blagg Engineering Project:** FLORANCE GC J 16A

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

Client ID: **PBS** Batch ID: **G41577** RunNo: 41577

Prep Date: Analysis Date: 3/22/2017 SeqNo: 1304575 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 910 1000 90.8 54 150

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

Client ID: LCSS Batch ID: **G41577** RunNo: 41577

960

Prep Date: Analysis Date: 3/22/2017 SeqNo: 1304576 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 96.4 76.4 125

96.4

54

150

#### 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

Page 6 of 7

#### Hall Environmental Analysis Laboratory, Inc.

1.1

WO#: **1703A90** 

23-Mar-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

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

Client ID: PBS Batch ID: B41577 RunNo: 41577

Prep Date: Analysis Date: 3/22/2017 SeqNo: 1304581 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

Surr: 4-Bromofluorobenzene 1.1 1.000 106 66.6 132

1.000

Sample ID 100NG BTEX LCS	SampT	ype: <b>LC</b>	S	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: <b>B41577</b> RunNo: <b>41577</b>									
Prep Date: Analysis Date: 3/22/201				S	SeqNo: 1	304582	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	92.8	80	120			
Toluene	0.95	0.050	1.000	0	94.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			

108

66.6

132

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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

Clien	t Name:	BLAGG		Work 0	Order Number	: 1703 <i>A</i>	<b>\90</b>			Rcpt	:No:	1
Recei	ived by/date	e:	1-03/	22/17								
Logge	ed By:	Anne Thor	ne	3/22/201	7 7:30:00 AM			ane )	A	_		
Comp	leted By:	Anne Thor	ne	3/22/201	7 7:44:52 AM			Anne J Anne J	11			
Revie	wed By:	as		03/2	2/17			Care )	<i>/ i</i>			
Chair	n of Cus	tody										
1, C	ustody sea	ls intact on sa	ample bottles?			Yes		No		Not Present	<b>Y</b>	
2. Is	Chain of C	ustody comp	lete?			Yes	¥	No		Not Present		
3. H	ow was the	sample deliv	ered?			Cour	<u>er</u>					
<u>Log</u>	<u>In</u>											
4. w	Vas an atte	mpt made to	cool the samp	les?		Yes	<b>V</b>	No		NA		
5. W	/ere all sam	nples received	d at a tempera	ture of >0° C	to 6.0°C	Yes	<b>✓</b>	No (		NA [		
6. s	ample(s) in	proper conta	iner(s)?			Yes	<b>✓</b>	No				
7. Si	ufficient sar	mple volume	for indicated to	est(s)?	•	Yes	✓	No				
8. Ar	re samples	(except VOA	and ONG) pro	operly preserve	ed?	Yes	<b>V</b>	No				
9. W	as preserv	ative added to	o bottles?	·		Yes		No	<b>✓</b>	NA		
40.4			•					N. 1	$\Box$	N. MOANGE	. 🔊	
		ve zero head	•			Yes		No l No		No VOA Vials		
77. W	vere any sa	impie contain	ers received b	roken?		Yes		NO		# of preserved		
12. Do	oes paperw	ork match bo	ittle labels?			Yes	<b>V</b>	No		bottles checked for pH:	j	
			ain of custody	)					_			>12 unless noted)
		-		n of Custody?		Yes		No		Adjusted <sup>*</sup>	· —	
			ere requested	?		Yes		No l		Charlend I		
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Speci	ial Handi	ling (if app	olicable)									
				vith this order?		Yes		No		NA I	✓	
	Person	Notified:			Date							
	By Who	om:			Via:	eMa	il 🔲	Phone 🔲	Fax	In Person		
	Regard	ling:									an.	
	Client I	nstructions:					#-100-C1000				ma,	
17. A	dditional re	marks:										
18. <u>c</u>	ooler Info								_			
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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

March 24, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1703B60

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/23/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1703B60**Date Reported: **3/24/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-138

 Project:
 Florance GC J 16A
 Collection Date: 3/22/2017 1:10:00 PM

 Lab ID:
 1703B60-001
 Matrix: MEOH (SOIL)
 Received Date: 3/23/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	3/23/2017 1:05:41 PM	30864
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	;			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	29	9.3	mg/Kg	1	3/23/2017 12:05:43 PM	1 30857
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/23/2017 12:05:43 PM	1 30857
Surr: DNOP	107	70-130	%Rec	1	3/23/2017 12:05:43 PM	1 30857
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	3/23/2017 9:52:06 AM	30837
Surr: BFB	121	54-150	%Rec	5	3/23/2017 9:52:06 AM	30837
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.082	mg/Kg	5	3/23/2017 9:52:06 AM	30837
Toluene	ND	0.16	mg/Kg	5	3/23/2017 9:52:06 AM	30837
Ethylbenzene	ND	0.16	mg/Kg	5	3/23/2017 9:52:06 AM	30837
Xylenes, Total	ND	0.33	mg/Kg	5	3/23/2017 9:52:06 AM	30837
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	5	3/23/2017 9:52:06 AM	30837

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 11
	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

## Lab Order **1703B60**Date Reported: **3/24/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-139

 Project:
 Florance GC J 16A
 Collection Date: 3/22/2017 1:15:00 PM

 Lab ID:
 1703B60-002
 Matrix: MEOH (SOIL)
 Received Date: 3/23/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	3/23/2017 1:18:06 PM	30864
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	86	9.4	mg/Kg	1	3/23/2017 12:28:08 PM	1 30857
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/23/2017 12:28:08 PM	1 30857
Surr: DNOP	111	70-130	%Rec	1	3/23/2017 12:28:08 PM	1 30857
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/23/2017 10:18:36 AM	1 30837
Surr: BFB	132	54-150	%Rec	5	3/23/2017 10:18:36 AM	1 30837
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.086	mg/Kg	5	3/23/2017 10:18:36 AM	1 30837
Toluene	ND	0.17	mg/Kg	5	3/23/2017 10:18:36 AM	1 30837
Ethylbenzene	ND	0.17	mg/Kg	5	3/23/2017 10:18:36 AM	1 30837
Xylenes, Total	ND	0.34	mg/Kg	5	3/23/2017 10:18:36 AM	1 30837
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	5	3/23/2017 10:18:36 AM	1 30837

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

# Lab Order **1703B60**Date Reported: **3/24/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-140

 Project:
 Florance GC J 16A
 Collection Date: 3/22/2017 1:20:00 PM

 Lab ID:
 1703B60-003
 Matrix: MEOH (SOIL)
 Received Date: 3/23/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	: LGT
Chloride	ND	30	mg/Kg	20	3/23/2017 1:30:30 PM	30864
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	t: TOM
Diesel Range Organics (DRO)	62	9.9	mg/Kg	1	3/23/2017 12:50:25 PM	1 30857
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/23/2017 12:50:25 PM	1 30857
Surr: DNOP	110	70-130	%Rec	1	3/23/2017 12:50:25 PM	1 30857
EPA METHOD 8015D: GASOLINE RANG	<b>GE</b>				Analyst	t: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/23/2017 10:45:02 AM	1 30837
Surr: BFB	128	54-150	%Rec	5	3/23/2017 10:45:02 AM	1 30837
EPA METHOD 8021B: VOLATILES					Analyst	t: NSB
Benzene	ND	0.090	mg/Kg	5	3/23/2017 10:45:02 AM	1 30837
Toluene	ND	0.18	mg/Kg	5	3/23/2017 10:45:02 AM	1 30837
Ethylbenzene	ND	0.18	mg/Kg	5	3/23/2017 10:45:02 AM	1 30837
Xylenes, Total	ND	0.36	mg/Kg	5	3/23/2017 10:45:02 AM	1 30837
Surr: 4-Bromofluorobenzene	115	66.6-132	%Rec	5	3/23/2017 10:45:02 AM	1 30837

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 11
	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 1703B60

#### Hall Environmental Analysis Laboratory, Inc. Date Reported: 3/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-141

**Project:** Florance GC J 16A
 Collection Date: 3/22/2017 1:25:00 PM

 **Lab ID:** 1703B60-004
 Matrix: MEOH (SOIL)
 Received Date: 3/23/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	3/23/2017 1:42:55 PM	30864
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	<b>;</b>			Analys	st: TOM
Diesel Range Organics (DRO)	35	9.4	mg/Kg	1	3/23/2017 1:12:52 PM	30857
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/23/2017 1:12:52 PM	30857
Surr: DNOP	110	70-130	%Rec	1	3/23/2017 1:12:52 PM	30857
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/23/2017 11:11:15 AM	√ 30837
Surr: BFB	120	54-150	%Rec	5	3/23/2017 11:11:15 AM	M 30837
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.087	mg/Kg	5	3/23/2017 11:11:15 AM	√ 30837
Toluene	ND	0.17	mg/Kg	5	3/23/2017 11:11:15 AM	√ 30837
Ethylbenzene	ND	0.17	mg/Kg	5	3/23/2017 11:11:15 AM	M 30837
Xylenes, Total	ND	0.35	mg/Kg	5	3/23/2017 11:11:15 AM	M 30837
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	5	3/23/2017 11:11:15 AM	M 30837

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 4 of 11
	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 1703B60

### Date Reported: 3/24/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-142

 Project:
 Florance GC J 16A
 Collection Date: 3/22/2017 1:30:00 PM

 Lab ID:
 1703B60-005
 Matrix: MEOH (SOIL)
 Received Date: 3/23/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	: LGT
Chloride	ND	30	mg/Kg	20	3/23/2017 1:55:19 PM	30864
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	: MAB
Diesel Range Organics (DRO)	92	9.4	mg/Kg	1	3/23/2017 12:11:53 PM	30857
Motor Oil Range Organics (MRO)	68	47	mg/Kg	1	3/23/2017 12:11:53 PM	30857
Surr: DNOP	85.3	70-130	%Rec	1	3/23/2017 12:11:53 PM	30857
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	3/23/2017 11:37:31 AM	30837
Surr: BFB	130	54-150	%Rec	5	3/23/2017 11:37:31 AM	30837
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.080	mg/Kg	5	3/23/2017 11:37:31 AM	30837
Toluene	ND	0.16	mg/Kg	5	3/23/2017 11:37:31 AM	30837
Ethylbenzene	ND	0.16	mg/Kg	5	3/23/2017 11:37:31 AM	30837
Xylenes, Total	ND	0.32	mg/Kg	5	3/23/2017 11:37:31 AM	30837
Surr: 4-Bromofluorobenzene	120	66.6-132	%Rec	5	3/23/2017 11:37:31 AM	30837

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 11
	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

## Lab Order **1703B60**Date Reported: **3/24/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-136R-N

 Project:
 Florance GC J 16A
 Collection Date: 3/22/2017 2:50:00 PM

 Lab ID:
 1703B60-006
 Matrix: MEOH (SOIL)
 Received Date: 3/23/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/23/2017 2:07:44 PM	30864
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	S			Analyst	:: ТОМ
Diesel Range Organics (DRO)	73	9.8	mg/Kg	1	3/23/2017 1:34:55 PM	30857
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/23/2017 1:34:55 PM	30857
Surr: DNOP	112	70-130	%Rec	1	3/23/2017 1:34:55 PM	30857
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/23/2017 12:03:42 PM	30837
Surr: BFB	114	54-150	%Rec	5	3/23/2017 12:03:42 PM	30837
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.092	mg/Kg	5	3/23/2017 12:03:42 PM	30837
Toluene	ND	0.18	mg/Kg	5	3/23/2017 12:03:42 PM	30837
Ethylbenzene	ND	0.18	mg/Kg	5	3/23/2017 12:03:42 PM	30837
Xylenes, Total	ND	0.37	mg/Kg	5	3/23/2017 12:03:42 PM	30837
Surr: 4-Bromofluorobenzene	115	66.6-132	%Rec	5	3/23/2017 12:03:42 PM	30837

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

# Lab Order **1703B60**Date Reported: **3/24/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-136R-S

 Project:
 Florance GC J 16A
 Collection Date: 3/22/2017 2:55:00 PM

 Lab ID:
 1703B60-007
 Matrix: MEOH (SOIL)
 Received Date: 3/23/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	3/23/2017 2:20:09 PM	30864
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analys	t: MAB
Diesel Range Organics (DRO)	120	9.9	mg/Kg	1	3/23/2017 12:40:06 PM	1 30857
Motor Oil Range Organics (MRO)	55	49	mg/Kg	1	3/23/2017 12:40:06 PM	1 30857
Surr: DNOP	85.3	70-130	%Rec	1	3/23/2017 12:40:06 PM	1 30857
EPA METHOD 8015D: GASOLINE RANG	E				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	3/23/2017 9:25:35 AM	30837
Surr: BFB	125	54-150	%Rec	5	3/23/2017 9:25:35 AM	30837
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.093	mg/Kg	5	3/23/2017 9:25:35 AM	30837
Toluene	ND	0.19	mg/Kg	5	3/23/2017 9:25:35 AM	30837
Ethylbenzene	ND	0.19	mg/Kg	5	3/23/2017 9:25:35 AM	30837
Xylenes, Total	ND	0.37	mg/Kg	5	3/23/2017 9:25:35 AM	30837
Surr: 4-Bromofluorobenzene	116	66.6-132	%Rec	5	3/23/2017 9:25:35 AM	30837

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 7 of 11
	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#: 1703B60

24-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30864 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 30864 RunNo: 41611

Prep Date: 3/23/2017 Analysis Date: 3/23/2017 SeqNo: 1305782 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30864 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30864 RunNo: 41611

Prep Date: 3/23/2017 Analysis Date: 3/23/2017 SeqNo: 1305783 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.3 110

#### 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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**Client:** 

#### Hall Environmental Analysis Laboratory, Inc.

11

10.00

**Blagg Engineering** 

WO#: 1703B60

24-Mar-17

Project: Florance	ee GC J 16A							
Sample ID MB-30857	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 30857	RunNo: 41593						
Prep Date: 3/23/2017	Analysis Date: 3/23/2017	SeqNo: 1304737 Units: mg/Kg						
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu	ual					
Diesel Range Organics (DRO)	ND 10							
Motor Oil Range Organics (MRO)	ND 50							
Surr: DNOP	11 10.00	107 70 130						
Sample ID LCS-30857	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 30857	RunNo: 41593						
Prep Date: 3/23/2017	Analysis Date: 3/23/2017	SeqNo: <b>1304744</b> Units: <b>mg/Kg</b>						
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu	ual					
Diesel Range Organics (DRO)	50 10 50.00	0 100 63.8 116						
Surr: DNOP	5.2 5.000	104 70 130						
Sample ID LCS-30846	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 30846	RunNo: 41593						
Prep Date: 3/22/2017	Analysis Date: 3/23/2017	SeqNo: 1305627 Units: %Rec						
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu	ual					
Surr: DNOP	5.2 5.000	103 70 130						
Sample ID MB-30846	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 30846	RunNo: 41593						
Prep Date: 3/22/2017	Analysis Date: 3/23/2017	SeqNo: <b>1305628</b> Units: <b>%Rec</b>						
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qu	ual					

#### 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

70

105

130

- 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

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1703B60

24-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30837 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 30837 RunNo: 41605

SeqNo: 1305591 Prep Date: 3/22/2017 Analysis Date: 3/23/2017 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 980 1000 97.8 54 150

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-30837 SampType: LCS

Client ID: LCSS Batch ID: 30837 RunNo: 41605

Prep Date: Analysis Date: 3/23/2017 SeqNo: 1305592 3/22/2017 Units: mg/Kg

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

Gasoline Range Organics (GRO) 30 5.0 25.00 119 76.4 125 1200 54 Surr: BFB 1000 116 150

#### 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

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### Hall Environmental Analysis Laboratory, Inc.

1.1

WO#: **1703B60** 

24-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Surr: 4-Bromofluorobenzene

Sample ID MB-30837 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 30837 RunNo: 41605 SeqNo: 1305611 Prep Date: 3/22/2017 Analysis Date: 3/23/2017 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

108

66.6

132

1.000

Sample ID LCS-30837	SampT	Гуре: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batcl	h ID: 30	837	R	RunNo: 4							
Prep Date: 3/22/2017	Analysis D	Date: 3/	23/2017	S	SeqNo: 1	305612	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	96.5	80	120					
Toluene	1.0	0.050	1.000	0	100	80	120					
Ethylbenzene	1.0	0.050	1.000	0	104	80	120					
Xylenes, Total	3.3	0.10	3.000	0	108	80	120					
Surr: 4-Bromofluorobenzene	1.1		1.000		111	66.6	132					

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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 NF.
Albuquerque, NSt 87109
TEL 505-345-3975 FAX: 505-345-4107
Website! www.hallenvironmental.com

## Sample Log-In Check List

Client Name: BLAGG	Work Order Number:	17031	360		ReptNo 1
Received by/date.	03 23 17				
Logged By: Lindsay Mangin 3/	23/2017 7:20:00 AM			J-4Hgo	
Completed By: Lindsay Mangin 3/	23/2017 8:38:47 AM			ANUHLOD	
STATE OF THE PROPERTY OF THE P	3/23/17			000	
Chain of Custody					
1, Custody seals intact on sample bottles?		Yes		No 🗆	Not Present 🗹
2. Is Chain of Custody complete?		Yes	<b>v</b>	No 🗌	Not Present
3. How was the sample delivered?		Cour	ier		
Log In					
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	V	No 🗆	NA 🗆
6. Sample(s) in proper container(s)?		Yes	V	No 🗆	
7. Sufficient sample volume for indicated test(s)?		Yes	<b>~</b>	No 🗆	
8. Are samples (except VOA and ONG) properly p	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? (Note discrepancies on chain of custody)		Yes	•	No 🗆	for pH. (<2 or >12 unless noted
13 Are matrices correctly identified on Chain of Cu	istody?	Yes	1	No _	Adjusted?
14 Is it clear what analyses were requested?		Yes	V	No.	
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes	V	No 🗔	Checked by:
Special Handling (if applicable)					
16. Was client notified of all discrepancies with this	order?	Yes		No 🗹	NA 🗆
Person Notified:	Date				
By Whom:	Via:	eMa	ii 🖂	Phone   Fax	In Person
Regarding:					
Client Instructions:					
17. Additional remarks:					
18. Cooler Information					
The second secon	Intact   Seal No   Se	eal Da	ter	Signed By	
1 1.7 Good Yes			Ŷ		

8 4 8 8 8 9 9 1 1 2 2 2 2 2 3 3 9 9 9 9 9 9 9 9 9 9 9 9 9	## Sold   1983   1985   1983   1984   1983   1984	ord tum-Around time: SAME DAY	X Rush	FLORGANCE GC J 16A	Project #: TREMTED SOIL PLES	(AR	(Gas or	НЧТ - НД / О: (1.8	Terriperature: (,7	uest ID Container Preservative HEAL No. X X 88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	4 02 × 1 COC OO! × ×	" -022 X X	" -033 x x	" -OOG × ×	" - COS X X	1 × × × × ×	X X X X X X X X X X X X X X X X X X X	Received by:    Alze   1542   1542   1542   1544   1544   1545   1544
Sample Sample TSP - 12 TSP - 12 TSP - 13 TSP - 13 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 14 TSP - 15 TSP - 14 TSP - 15 TSP - 15 TSP - 14 TSP - 15 TSP - 14 TSP - 15 TSP - 1		Chain-of-Custody Record	Α	INEERING INC.	20-1183		☐ Level 4 (Full Validation)	e		Sample Request ID	TSP- 138	TSP-139	75.9-140	T3P-141	TSP-142	TSP-136R-N	75P-136R-5	Page by:



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

March 27, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703C51

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/24/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1703C51**Date Reported: **3/27/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-143

 Project:
 Florance GC J 16A
 Collection Date: 3/23/2017 1:01:00 PM

 Lab ID:
 1703C51-001
 Matrix: MEOH (SOIL)
 Received Date: 3/24/2017 7:32:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: LGT
Chloride	ND	30		mg/Kg	20	3/24/2017 11:53:14 AM	30888
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	1				Analyst	MAB
Diesel Range Organics (DRO)	78	9.4		mg/Kg	1	3/24/2017 9:08:47 AM	30879
Motor Oil Range Organics (MRO)	48	47		mg/Kg	1	3/24/2017 9:08:47 AM	30879
Surr: DNOP	87.8	70-130		%Rec	1	3/24/2017 9:08:47 AM	30879
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst	: NSB
Gasoline Range Organics (GRO)	4.2	3.4		mg/Kg	1	3/24/2017 8:45:25 AM	G41636
Surr: BFB	191	54-150	S	%Rec	1	3/24/2017 8:45:25 AM	G41636
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.017		mg/Kg	1	3/24/2017 8:45:25 AM	B41636
Toluene	ND	0.034		mg/Kg	1	3/24/2017 8:45:25 AM	B41636
Ethylbenzene	ND	0.034		mg/Kg	1	3/24/2017 8:45:25 AM	B41636
Xylenes, Total	ND	0.068		mg/Kg	1	3/24/2017 8:45:25 AM	B41636
Surr: 4-Bromofluorobenzene	92.2	66.6-132		%Rec	1	3/24/2017 8:45:25 AM	B41636

1 of 8
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## Lab Order **1703C51**Date Reported: **3/27/2017**

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-144

 Project:
 Florance GC J 16A
 Collection Date: 3/23/2017 1:05:00 PM

 Lab ID:
 1703C51-002
 Matrix: MEOH (SOIL)
 Received Date: 3/24/2017 7:32:00 AM

Analyses	Result	PQL (	Qual Un	its	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	LGT
Chloride	ND	30	mg	g/Kg	20	3/24/2017 12:05:38 PM	30888
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S				Analyst	MAB
Diesel Range Organics (DRO)	87	9.6	mg	g/Kg	1	3/24/2017 9:36:02 AM	30879
Motor Oil Range Organics (MRO)	ND	48	mg	g/Kg	1	3/24/2017 9:36:02 AM	30879
Surr: DNOP	87.3	70-130	%F	Rec	1	3/24/2017 9:36:02 AM	30879
EPA METHOD 8015D: GASOLINE RANG	E					Analyst	NSB
Gasoline Range Organics (GRO)	5.5	3.4	mg	g/Kg	1	3/24/2017 9:11:54 AM	G41636
Surr: BFB	207	54-150	S %F	Rec	1	3/24/2017 9:11:54 AM	G41636
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.017	mg	g/Kg	1	3/24/2017 9:11:54 AM	B41636
Toluene	ND	0.034	mg	g/Kg	1	3/24/2017 9:11:54 AM	B41636
Ethylbenzene	ND	0.034	mg	g/Kg	1	3/24/2017 9:11:54 AM	B41636
Xylenes, Total	ND	0.068	mg	g/Kg	1	3/24/2017 9:11:54 AM	B41636
Surr: 4-Bromofluorobenzene	90.2	66.6-132	%F	Rec	1	3/24/2017 9:11:54 AM	B41636

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

# Lab Order **1703C51**Date Reported: **3/27/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-145

 Project:
 Florance GC J 16A
 Collection Date: 3/23/2017 1:11:00 PM

 Lab ID:
 1703C51-003
 Matrix: MEOH (SOIL)
 Received Date: 3/24/2017 7:32:00 AM

Analyses	Result	PQL (	Qual Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Analy	st: <b>LGT</b>
Chloride	ND	30	mg/Kg	20 3/24/2017 12:18:03 F	PM 30888
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S		Analy	st: MAB
Diesel Range Organics (DRO)	73	9.4	mg/Kg	1 3/24/2017 10:02:57 A	M 30879
Motor Oil Range Organics (MRO)	56	47	mg/Kg	1 3/24/2017 10:02:57 A	M 30879
Surr: DNOP	88.9	70-130	%Rec	1 3/24/2017 10:02:57 A	M 30879
EPA METHOD 8015D: GASOLINE RANG	E			Analy	st: NSB
Gasoline Range Organics (GRO)	6.6	3.3	mg/Kg	1 3/24/2017 9:38:27 Al	M G41636
Surr: BFB	222	54-150	S %Rec	1 3/24/2017 9:38:27 Al	M G41636
EPA METHOD 8021B: VOLATILES				Analy	st: NSB
Benzene	ND	0.016	mg/Kg	1 3/24/2017 9:38:27 Al	M B41636
Toluene	ND	0.033	mg/Kg	1 3/24/2017 9:38:27 Al	M B41636
Ethylbenzene	ND	0.033	mg/Kg	1 3/24/2017 9:38:27 Al	M B41636
Xylenes, Total	ND	0.066	mg/Kg	1 3/24/2017 9:38:27 Al	M B41636
Surr: 4-Bromofluorobenzene	90.1	66.6-132	%Rec	1 3/24/2017 9:38:27 Al	M B41636

*	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 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

# Lab Order **1703C51**Date Reported: **3/27/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-146

 Project:
 Florance GC J 16A
 Collection Date: 3/23/2017 1:16:00 PM

 Lab ID:
 1703C51-004
 Matrix: MEOH (SOIL)
 Received Date: 3/24/2017 7:32:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/24/2017 12:30:28 PM	30888
EPA METHOD 8015M/D: DIESEL RANGE	E ORGANIC	S			Analyst	MAB
Diesel Range Organics (DRO)	39	9.2	mg/Kg	1	3/24/2017 10:30:00 AM	30879
Motor Oil Range Organics (MRO)	63	46	mg/Kg	1	3/24/2017 10:30:00 AM	30879
Surr: DNOP	88.7	70-130	%Rec	1	3/24/2017 10:30:00 AM	30879
EPA METHOD 8015D: GASOLINE RANG	iΕ				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.2	mg/Kg	1	3/24/2017 10:04:54 AM	G41636
Surr: BFB	146	54-150	%Rec	1	3/24/2017 10:04:54 AM	G41636
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.016	mg/Kg	1	3/24/2017 10:04:54 AM	B41636
Toluene	ND	0.032	mg/Kg	1	3/24/2017 10:04:54 AM	B41636
Ethylbenzene	ND	0.032	mg/Kg	1	3/24/2017 10:04:54 AM	B41636
Xylenes, Total	ND	0.065	mg/Kg	1	3/24/2017 10:04:54 AM	B41636
Surr: 4-Bromofluorobenzene	92.4	66.6-132	%Rec	1	3/24/2017 10:04:54 AM	B41636

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 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

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703C51** 

27-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30888 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **30888** RunNo: **41638** 

Prep Date: 3/24/2017 Analysis Date: 3/24/2017 SeqNo: 1306997 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30888 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30888 RunNo: 41638

Prep Date: 3/24/2017 Analysis Date: 3/24/2017 SeqNo: 1306998 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.5 90 110

#### 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 8

**Client:** 

**Project:** 

Surr: DNOP

#### Hall Environmental Analysis Laboratory, Inc.

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**Blagg Engineering** 

Florance GC J 16A

WO#: 1703C51

27-Mar-17

Sample ID MB-30879	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: PBS	Batch	ID: <b>30</b>	879	F	RunNo: 4	1619				
Prep Date: 3/24/2017	Analysis D	ate: 3/	24/2017	8	SeqNo: 1	305772	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	10		10.00		103	70	130			
Sample ID LCS-30879	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch	ID: 30	879	F	RunNo: 4	1619				
Prep Date: 3/24/2017	Analysis D	ate: 3/	24/2017	8	SeqNo: 1	305773	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.8	63.8	116			

Sample ID MB-30	<b>0871</b> SampType	: MBLK	Test	Code: El	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch ID	: 30871	R	unNo: 4	1626				
Prep Date: 3/23	2017 Analysis Date	3/24/2017	S	eqNo: 1	306244	Units: %Rec	:		
Analyte	Result F	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.1	10.00		81.3	70	130			

98.4

70

130

5.000

Sample ID LCS-30871	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 30871	RunNo: 41626
Prep Date: 3/23/2017	Analysis Date: 3/24/2017	SeqNo: <b>1306288</b> Units: <b>%Rec</b>
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DMOD	4.5 5.000	89.5 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

% 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

Page 6 of 8

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#: 1703C51

27-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: G41636 RunNo: 41636

Prep Date: Analysis Date: 3/24/2017 SeqNo: 1306599 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
 900
 1000
 89.5
 54
 150

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

Client ID: LCSS Batch ID: G41636 RunNo: 41636

Prep Date: Analysis Date: 3/24/2017 SeqNo: 1306600 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
 105
 76.4
 125

 Surr: BFB
 1000
 1000
 102
 54
 150

Sample ID 1703C51-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: **TSP-143** Batch ID: **G41636** RunNo: **41636** 

Prep Date: Analysis Date: 3/24/2017 SeqNo: 1306601 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual Gasoline Range Organics (GRO) 24 3.4 16.98 4.171 119 61.3 150

 Gasoline Range Organics (GR0)
 24
 3.4
 16.98
 4.171
 119
 61.3
 150

 Surr: BFB
 1400
 679.3
 200
 54
 150
 S

Sample ID 1703C51-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: **TSP-143** Batch ID: **G41636** RunNo: **41636** 

Prep Date: Analysis Date: 3/24/2017 SeqNo: 1306602 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 24 16.98 4.171 114 61.3 150 3.65 20 3.4 Surr: BFB 1300 679.3 194 54 150 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 7 of 8

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1703C51** 

27-Mar-17

Client:	Blagg Engineering
Project:	Florance GC J 16A

Sample ID RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: **B41636** RunNo: 41636 Analysis Date: 3/24/2017 SeqNo: 1306606 Prep Date: 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 66.6 132

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: **B41636** RunNo: 41636 Prep Date: Analysis Date: 3/24/2017 SeqNo: 1306607 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result LowLimit Qual 1.1 0.025 1.000 O 107 80 120 Benzene Toluene 1.1 0.050 1.000 0 111 80 120 Ethylbenzene 0.050 0 80 120 1.1 1.000 114 Xylenes, Total 3.6 0.10 3.000 0 120 80 120 Surr: 4-Bromofluorobenzene 1.1 1.000 108 66.6 132

Sample ID 1703C51-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles TSP-144 Client ID: Batch ID: **B41636** RunNo: 41636 Analysis Date: 3/24/2017 SeaNo: 1306608 Prep Date: Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.67 0.017 0.6798 98.3 61.5 138 Toluene 0.68 0.034 0.6798 0.005914 99.7 71.4 127 0.68 0.034 0.6798 97.5 70.9 132 Ethylbenzene 0.02169 Xylenes, Total 2.0 0.068 2.039 0.02352 97.9 76.2 123 Surr: 4-Bromofluorobenzene 81.4 0.55 0.6798 66.6 132

Sample ID 1703C51-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Client ID: TSP-144 Batch ID: **B41636** RunNo: 41636 Prep Date: Analysis Date: 3/24/2017 SeqNo: 1306609 Units: mg/Kg %REC %RPD **RPDLimit** Analyte Result **PQL** SPK value SPK Ref Val LowLimit HighLimit Qual 0.65 0.017 0.6798 96.2 61.5 138 2.12 20 Benzene Toluene 0.67 0.034 0.6798 0.005914 98.1 71.4 127 1.60 20 Ethylbenzene 0.67 0.034 0.6798 0.02169 95.0 70.9 132 2.53 20 Xylenes, Total 2.0 0.068 2.039 0.02352 95.7 76.2 123 2.24 20 Surr: 4-Bromofluorobenzene 0.54 0.6798 78.8 66.6 132 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 8



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: BLAGG Work Order	Number: 1703C51		RcptNo: 1
Received by/date:			
Logged By: Lindsay Mangin 3/24/2017 7:32	2:00 AM	Andy Hago	
Completed By: Lindsay Mangin 3/24/2017 7:52		Studentham	:
Reviewed By: ENIM 03/24/17 @ 08K		() J'' O	
Chain of Custody	<u> </u>		·····
Custody seals intact on sample bottles?	Yes 🗌	No 🗆	Not Present 🗸
Is Chain of Custody complete?	Yes <b>⊻</b>	No 🗆	Not Present
3. How was the sample delivered?	Courier		THE THE SERVICE OF TH
<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 $\square$
6. Sample(s) in proper container(s)?	Yes 🗸	No 🗆	
7. Sufficient sample volume for indicated test(s)?	Yes 🔽	No 🗆	
8. Are samples (except VOA and ONG) properly preserved?	Yes 🗸	No 🗌	
9. Was preservative added to bottles?	Yes 🗌	No 🗹	NA 🗆
10.VOA vials have zero headspace?	Yes 🗌	No 🗆 N	lo VOA Vials 🗹
11. Were any sample containers received broken?	Yes 🗌		of preserved
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹		(<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes 🗸	No 🗌	Adjusted?
14. Is it clear what analyses were requested?	Yes 🗹	No 🗌	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗍 :	Checked by:
Special Handling (if applicable)			
16. Was client notified of all discrepancies with this order?	Yes 🗀	No 🗆	NA 🗹
Person Notified:	Date	contrate the community of the community	
By Whom:	Via: eMail P	none 🗌 Fax 📗	In Person
Regarding:			MANAGA MA
Client Instructions:			
17. Additional remarks:			
18. Cooler Information			
Cooler No Temp °C Condition Seal Intact Seal	No Seal Date	Signed By	
1 1.5 Good Yes	<u> </u>		

### ANALYSIS LABORATORY  #### ANALYSIS LABORATORY  ###################################
ATOR ATOR



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

March 29, 2017

Jeff Blagg Blagg Engineering P. O. Box 87

Bloomfield, NM 87413 TEL: (505) 632-1199 FAX (505) 632-3903

RE: Florance GC J 16A OrderNo.: 1703D45

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 15 sample(s) on 3/28/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 1703D45

#### Date Reported: 3/29/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-136R2-S

 Project:
 Florance GC J 16A
 Collection Date: 3/27/2017 1:09:00 PM

 Lab ID:
 1703D45-001
 Matrix: SOIL
 Received Date: 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 10:38:14 AM	30936
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	88	9.6	mg/Kg	1	3/28/2017 9:38:28 AM	30930
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/28/2017 9:38:28 AM	30930
Surr: DNOP	115	70-130	%Rec	1	3/28/2017 9:38:28 AM	30930
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/28/2017 9:05:03 AM	30918
Surr: BFB	99.6	54-150	%Rec	5	3/28/2017 9:05:03 AM	30918
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.090	mg/Kg	5	3/28/2017 9:05:03 AM	30918
Toluene	ND	0.18	mg/Kg	5	3/28/2017 9:05:03 AM	30918
Ethylbenzene	ND	0.18	mg/Kg	5	3/28/2017 9:05:03 AM	30918
Xylenes, Total	ND	0.36	mg/Kg	5	3/28/2017 9:05:03 AM	30918
Surr: 4-Bromofluorobenzene	101	66.6-132	%Rec	5	3/28/2017 9:05:03 AM	30918

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 21
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RI.	Reporting Detection Limit

W Sample container temperature is out of limit as specified

S % Recovery outside of range due to dilution or matrix

## Analytical Report Lab Order 1703D45

#### Date Reported: 3/29/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-142R-S

 Project:
 Florance GC J 16A
 Collection Date: 3/27/2017 1:13:00 PM

 Lab ID:
 1703D45-002
 Matrix: SOIL
 Received Date: 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analys	: MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 10:50:39 AM	1 30936
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analys	: TOM
Diesel Range Organics (DRO)	69	9.9	mg/Kg	1	3/28/2017 10:00:34 AM	1 30930
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/28/2017 10:00:34 AM	1 30930
Surr: DNOP	113	70-130	%Rec	1	3/28/2017 10:00:34 AM	1 30930
EPA METHOD 8015D: GASOLINE RAM	NGE				Analys	:: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/28/2017 9:31:24 AM	30918
Surr: BFB	108	54-150	%Rec	5	3/28/2017 9:31:24 AM	30918
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.088	mg/Kg	5	3/28/2017 9:31:24 AM	30918
Toluene	ND	0.18	mg/Kg	5	3/28/2017 9:31:24 AM	30918
Ethylbenzene	ND	0.18	mg/Kg	5	3/28/2017 9:31:24 AM	30918
Xylenes, Total	ND	0.35	mg/Kg	5	3/28/2017 9:31:24 AM	30918
Surr: 4-Bromofluorobenzene	104	66.6-132	%Rec	5	3/28/2017 9:31:24 AM	30918

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

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
  - % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 21
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

#### **Analytical Report** Lab Order 1703D45

#### Date Reported: 3/29/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-142R-N

**Project:** Florance GC J 16A **Collection Date:** 3/27/2017 1:18:00 PM 1703D45-003 Lab ID: Matrix: SOIL Received Date: 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analys	: MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 11:03:03 AM	1 30936
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analys	: TOM
Diesel Range Organics (DRO)	60	9.5	mg/Kg	1	3/28/2017 10:22:30 AM	1 30930
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/28/2017 10:22:30 AM	1 30930
Surr: DNOP	113	70-130	%Rec	1	3/28/2017 10:22:30 AM	1 30930
EPA METHOD 8015D: GASOLINE RANGE					Analys	: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/28/2017 9:57:53 AM	30918
Surr: BFB	110	54-150	%Rec	5	3/28/2017 9:57:53 AM	30918
EPA METHOD 8021B: VOLATILES					Analys	:: NSB
Benzene	ND	0.084	mg/Kg	5	3/28/2017 9:57:53 AM	30918
Toluene	ND	0.17	mg/Kg	5	3/28/2017 9:57:53 AM	30918
Ethylbenzene	ND	0.17	mg/Kg	5	3/28/2017 9:57:53 AM	30918
Xylenes, Total	ND	0.34	mg/Kg	5	3/28/2017 9:57:53 AM	30918
Surr: 4-Bromofluorobenzene	106	66.6-132	%Rec	5	3/28/2017 9:57:53 AM	30918

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 3 of 21 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

# Date Reported: 3/29/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-143R-N

**Project:** Florance GC J 16A **Collection Date:** 3/27/2017 1:23:00 PM 1703D45-004 Lab ID: Matrix: SOIL Received Date: 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed Ba	tch
EPA METHOD 300.0: ANIONS					Analyst: MF	RA
Chloride	ND	30	mg/Kg	20	3/28/2017 11:15:28 AM 309	936
EPA METHOD 8015M/D: DIESEL RAN	3			Analyst: TO	MC	
Diesel Range Organics (DRO)	73	9.9	mg/Kg	1	3/28/2017 10:44:34 AM 309	930
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/28/2017 10:44:34 AM 309	930
Surr: DNOP	109	70-130	%Rec	1	3/28/2017 10:44:34 AM 309	930
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst: NS	3B
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/28/2017 10:24:22 AM 309	918
Surr: BFB	110	54-150	%Rec	5	3/28/2017 10:24:22 AM 309	918
EPA METHOD 8021B: VOLATILES					Analyst: NS	3B
Benzene	ND	0.087	mg/Kg	5	3/28/2017 10:24:22 AM 309	918
Toluene	ND	0.17	mg/Kg	5	3/28/2017 10:24:22 AM 309	918
Ethylbenzene	ND	0.17	mg/Kg	5	3/28/2017 10:24:22 AM 309	918
Xylenes, Total	ND	0.35	mg/Kg	5	3/28/2017 10:24:22 AM 309	918
Surr: 4-Bromofluorobenzene	110	66.6-132	%Rec	5	3/28/2017 10:24:22 AM 309	918

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

**Qualifiers:** 

# Date Reported: 3/29/2017

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-143R-S

 Project:
 Florance GC J 16A
 Collection Date: 3/27/2017 1:29:00 PM

 Lab ID:
 1703D45-005
 Matrix: SOIL
 Received Date: 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 11:27:52 AM	1 30936
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	47	9.9	mg/Kg	1	3/28/2017 11:06:33 AM	1 30930
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/28/2017 11:06:33 AM	1 30930
Surr: DNOP	110	70-130	%Rec	1	3/28/2017 11:06:33 AM	1 30930
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	3/28/2017 10:50:40 AM	1 30918
Surr: BFB	102	54-150	%Rec	5	3/28/2017 10:50:40 AM	1 30918
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.082	mg/Kg	5	3/28/2017 10:50:40 AM	1 30918
Toluene	ND	0.16	mg/Kg	5	3/28/2017 10:50:40 AM	1 30918
Ethylbenzene	ND	0.16	mg/Kg	5	3/28/2017 10:50:40 AM	1 30918
Xylenes, Total	ND	0.33	mg/Kg	5	3/28/2017 10:50:40 AM	1 30918
Surr: 4-Bromofluorobenzene	103	66.6-132	%Rec	5	3/28/2017 10:50:40 AM	1 30918

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 21
	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

Sample container temperature is out of limit as specified

# Date Reported: 3/29/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-145R-N

 Project:
 Florance GC J 16A
 Collection Date: 3/27/2017 1:33:00 PM

 Lab ID:
 1703D45-006
 Matrix: SOIL
 Received Date: 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 11:40:17 AN	A 30936
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	;			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	48	9.4	mg/Kg	1	3/28/2017 11:28:40 AN	A 30930
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/28/2017 11:28:40 AM	A 30930
Surr: DNOP	110	70-130	%Rec	1	3/28/2017 11:28:40 AN	A 30930
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	3/28/2017 11:17:07 AN	<i>I</i> 30918
Surr: BFB	108	54-150	%Rec	5	3/28/2017 11:17:07 AN	<i>I</i> 30918
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.088	mg/Kg	5	3/28/2017 11:17:07 AN	<i>I</i> 30918
Toluene	ND	0.18	mg/Kg	5	3/28/2017 11:17:07 AN	A 30918
Ethylbenzene	ND	0.18	mg/Kg	5	3/28/2017 11:17:07 AM	<i>I</i> 30918
Xylenes, Total	ND	0.35	mg/Kg	5	3/28/2017 11:17:07 AN	<i>I</i> 30918
Surr: 4-Bromofluorobenzene	106	66.6-132	%Rec	5	3/28/2017 11:17:07 AM	<i>I</i> 30918

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 21 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: 3/29/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-145R-S

 Project:
 Florance GC J 16A
 Collection Date: 3/27/2017 1:36:00 PM

 Lab ID:
 1703D45-007
 Matrix: SOIL
 Received Date: 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 11:52:41 AM	30936
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst	:: TOM
Diesel Range Organics (DRO)	63	9.7	mg/Kg	1	3/28/2017 11:50:37 AM	30930
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/28/2017 11:50:37 AM	30930
Surr: DNOP	112	70-130	%Rec	1	3/28/2017 11:50:37 AM	30930
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/28/2017 11:43:33 AM	30918
Surr: BFB	105	54-150	%Rec	5	3/28/2017 11:43:33 AM	30918
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.084	mg/Kg	5	3/28/2017 11:43:33 AM	30918
Toluene	ND	0.17	mg/Kg	5	3/28/2017 11:43:33 AM	30918
Ethylbenzene	ND	0.17	mg/Kg	5	3/28/2017 11:43:33 AM	30918
Xylenes, Total	ND	0.33	mg/Kg	5	3/28/2017 11:43:33 AM	30918
Surr: 4-Bromofluorobenzene	104	66.6-132	%Rec	5	3/28/2017 11:43:33 AM	30918

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 21 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: 3/29/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-146R-N

**Project:** Florance GC J 16A **Collection Date:** 3/27/2017 1:40:00 PM Lab ID: 1703D45-008 Matrix: SOIL Received Date: 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 12:05:05 PM	1 30936
EPA METHOD 8015M/D: DIESEL RANG			Analys	t: TOM		
Diesel Range Organics (DRO)	62	10	mg/Kg	1	3/28/2017 12:12:55 PM	1 30930
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	3/28/2017 12:12:55 PM	1 30930
Surr: DNOP	110	70-130	%Rec	1	3/28/2017 12:12:55 PM	1 30930
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/28/2017 12:09:57 PM	1 30918
Surr: BFB	102	54-150	%Rec	5	3/28/2017 12:09:57 PM	1 30918
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.085	mg/Kg	5	3/28/2017 12:09:57 PM	1 30918
Toluene	ND	0.17	mg/Kg	5	3/28/2017 12:09:57 PM	1 30918
Ethylbenzene	ND	0.17	mg/Kg	5	3/28/2017 12:09:57 PM	1 30918
Xylenes, Total	ND	0.34	mg/Kg	5	3/28/2017 12:09:57 PM	1 30918
Surr: 4-Bromofluorobenzene	105	66.6-132	%Rec	5	3/28/2017 12:09:57 PM	1 30918

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 8 of 21 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Sample container temperature is out of limit as specified

# Date Reported: 3/29/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-146R-S

 Project:
 Florance GC J 16A
 Collection Date: 3/27/2017 1:45:00 PM

 Lab ID:
 1703D45-009
 Matrix: SOIL
 Received Date: 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 12:42:19 PM	1 30936
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	52	9.6	mg/Kg	1	3/28/2017 12:34:50 PM	1 30930
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/28/2017 12:34:50 PM	1 30930
Surr: DNOP	113	70-130	%Rec	1	3/28/2017 12:34:50 PM	1 30930
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/28/2017 12:58:10 PM	1 30918
Surr: BFB	96.2	54-150	%Rec	5	3/28/2017 12:58:10 PM	1 30918
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.086	mg/Kg	5	3/28/2017 12:58:10 PM	1 30918
Toluene	ND	0.17	mg/Kg	5	3/28/2017 12:58:10 PM	1 30918
Ethylbenzene	ND	0.17	mg/Kg	5	3/28/2017 12:58:10 PM	1 30918
Xylenes, Total	ND	0.34	mg/Kg	5	3/28/2017 12:58:10 PM	1 30918
Surr: 4-Bromofluorobenzene	104	66.6-132	%Rec	5	3/28/2017 12:58:10 PM	1 30918

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 21 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: 3/29/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-147

 Project:
 Florance GC J 16A
 Collection Date: 3/27/2017 1:51:00 PM

 Lab ID:
 1703D45-010
 Matrix: SOIL
 Received Date: 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 12:54:44 PM	1 30936
EPA METHOD 8015M/D: DIESEL RAN	S			Analys	t: <b>TOM</b>	
Diesel Range Organics (DRO)	49	9.3	mg/Kg	1	3/28/2017 1:43:01 PM	30930
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	3/28/2017 1:43:01 PM	30930
Surr: DNOP	94.8	70-130	%Rec	1	3/28/2017 1:43:01 PM	30930
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/28/2017 1:24:29 PM	30918
Surr: BFB	99.3	54-150	%Rec	5	3/28/2017 1:24:29 PM	30918
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.086	mg/Kg	5	3/28/2017 1:24:29 PM	30918
Toluene	ND	0.17	mg/Kg	5	3/28/2017 1:24:29 PM	30918
Ethylbenzene	ND	0.17	mg/Kg	5	3/28/2017 1:24:29 PM	30918
Xylenes, Total	ND	0.35	mg/Kg	5	3/28/2017 1:24:29 PM	30918
Surr: 4-Bromofluorobenzene	106	66.6-132	%Rec	5	3/28/2017 1:24:29 PM	30918

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

# Qualifiers: \* Value exceeds Maximum Contaminant Level. B Analyte de D Sample Diluted Due to Matrix E Value above

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 21

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: 3/29/2017

**CLIENT:** Blagg Engineering **Client Sample ID:** TSP-148

**Project:** Florance GC J 16A **Collection Date:** 3/27/2017 1:58:00 PM Lab ID: 1703D45-011 Matrix: SOIL **Received Date:** 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 1:07:08 PM	30936
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	3/28/2017 10:49:10 AM	A41708
Surr: BFB	96.0	70-130	%Rec	5	3/28/2017 10:49:10 AM	A41708
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS	;			Analyst	: ТОМ
Diesel Range Organics (DRO)	48	9.3	mg/Kg	1	3/28/2017 1:18:37 PM	30930
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/28/2017 1:18:37 PM	30930
Surr: DNOP	93.9	70-130	%Rec	1	3/28/2017 1:18:37 PM	30930
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: AG
Benzene	ND	0.081	mg/Kg	5	3/28/2017 10:49:10 AM	C41708
Toluene	ND	0.16	mg/Kg	5	3/28/2017 10:49:10 AM	C41708
Ethylbenzene	ND	0.16	mg/Kg	5	3/28/2017 10:49:10 AM	C41708
Xylenes, Total	ND	0.32	mg/Kg	5	3/28/2017 10:49:10 AM	C41708
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	5	3/28/2017 10:49:10 AM	C41708
Surr: 4-Bromofluorobenzene	107	70-130	%Rec	5	3/28/2017 10:49:10 AM	C41708
Surr: Dibromofluoromethane	107	70-130	%Rec	5	3/28/2017 10:49:10 AM	C41708
Surr: Toluene-d8	99.2	70-130	%Rec	5	3/28/2017 10:49:10 AM	C41708

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 11 of 21 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/29/2017

**CLIENT:** Blagg Engineering **Client Sample ID:** TSP-149

**Project:** Florance GC J 16A **Collection Date:** 3/27/2017 2:02:00 PM Lab ID: 1703D45-012 Matrix: SOIL **Received Date:** 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 1:19:33 PM	30936
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: AG
Gasoline Range Organics (GRO)	ND	16	mg/Kg	5	3/28/2017 11:18:39 AM	A41708
Surr: BFB	95.3	70-130	%Rec	5	3/28/2017 11:18:39 AM	A41708
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analyst	TOM
Diesel Range Organics (DRO)	49	10	mg/Kg	1	3/28/2017 12:54:06 PM	30930
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/28/2017 12:54:06 PM	30930
Surr: DNOP	96.7	70-130	%Rec	1	3/28/2017 12:54:06 PM	30930
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: AG
Benzene	ND	0.079	mg/Kg	5	3/28/2017 11:18:39 AM	C41708
Toluene	ND	0.16	mg/Kg	5	3/28/2017 11:18:39 AM	C41708
Ethylbenzene	ND	0.16	mg/Kg	5	3/28/2017 11:18:39 AM	C41708
Xylenes, Total	ND	0.32	mg/Kg	5	3/28/2017 11:18:39 AM	C41708
Surr: 1,2-Dichloroethane-d4	99.8	70-130	%Rec	5	3/28/2017 11:18:39 AM	C41708
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	5	3/28/2017 11:18:39 AM	C41708
Surr: Dibromofluoromethane	99.0	70-130	%Rec	5	3/28/2017 11:18:39 AM	C41708
Surr: Toluene-d8	97.5	70-130	%Rec	5	3/28/2017 11:18:39 AM	C41708

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 12 of 21 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Date Reported: 3/29/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-150

 Project:
 Florance GC J 16A
 Collection Date: 3/27/2017 2:07:00 PM

 Lab ID:
 1703D45-013
 Matrix: SOIL
 Received Date: 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 1:31:57 PM	30936
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: AG
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/28/2017 11:48:13 AM	A41708
Surr: BFB	98.7	70-130	%Rec	5	3/28/2017 11:48:13 AM	A41708
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	}			Analyst	: TOM
Diesel Range Organics (DRO)	84	10	mg/Kg	1	3/28/2017 12:29:43 PM	30930
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	3/28/2017 12:29:43 PM	30930
Surr: DNOP	94.9	70-130	%Rec	1	3/28/2017 12:29:43 PM	30930
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst	: AG
Benzene	ND	0.084	mg/Kg	5	3/28/2017 11:48:13 AM	C41708
Toluene	ND	0.17	mg/Kg	5	3/28/2017 11:48:13 AM	C41708
Ethylbenzene	ND	0.17	mg/Kg	5	3/28/2017 11:48:13 AM	C41708
Xylenes, Total	ND	0.34	mg/Kg	5	3/28/2017 11:48:13 AM	C41708
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	5	3/28/2017 11:48:13 AM	C41708
Surr: 4-Bromofluorobenzene	106	70-130	%Rec	5	3/28/2017 11:48:13 AM	C41708
Surr: Dibromofluoromethane	102	70-130	%Rec	5	3/28/2017 11:48:13 AM	C41708
Surr: Toluene-d8	98.9	70-130	%Rec	5	3/28/2017 11:48:13 AM	C41708

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 13 of 21
- 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: 3/29/2017

**CLIENT:** Blagg Engineering **Client Sample ID:** TSP-151

**Project:** Florance GC J 16A **Collection Date:** 3/27/2017 2:12:00 PM 1703D45-014 Matrix: SOIL Lab ID: **Received Date:** 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 1:44:21 PM	30936
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	25	16	mg/Kg	5	3/28/2017 12:17:26 PM	A41708
Surr: BFB	98.3	70-130	%Rec	5	3/28/2017 12:17:26 PM	A41708
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	70	9.4	mg/Kg	1	3/28/2017 12:05:08 PM	30930
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/28/2017 12:05:08 PM	30930
Surr: DNOP	96.6	70-130	%Rec	1	3/28/2017 12:05:08 PM	30930
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	: AG
Benzene	ND	0.082	mg/Kg	5	3/28/2017 12:17:26 PM	C41708
Toluene	ND	0.16	mg/Kg	5	3/28/2017 12:17:26 PM	C41708
Ethylbenzene	ND	0.16	mg/Kg	5	3/28/2017 12:17:26 PM	C41708
Xylenes, Total	ND	0.33	mg/Kg	5	3/28/2017 12:17:26 PM	C41708
Surr: 1,2-Dichloroethane-d4	99.1	70-130	%Rec	5	3/28/2017 12:17:26 PM	C41708
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	5	3/28/2017 12:17:26 PM	C41708
Surr: Dibromofluoromethane	102	70-130	%Rec	5	3/28/2017 12:17:26 PM	C41708
Surr: Toluene-d8	98.8	70-130	%Rec	5	3/28/2017 12:17:26 PM	C41708

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
- % 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 14 of 21 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/29/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-152

**Project:** Florance GC J 16A **Collection Date:** 3/27/2017 2:17:00 PM Lab ID: 1703D45-015 Matrix: SOIL **Received Date:** 3/28/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	3/28/2017 1:56:45 PM	30936
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	3/28/2017 12:46:41 PM	A41708
Surr: BFB	94.6	70-130	%Rec	5	3/28/2017 12:46:41 PM	A41708
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	;			Analyst	: TOM
Diesel Range Organics (DRO)	52	9.9	mg/Kg	1	3/28/2017 11:40:46 AM	30930
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/28/2017 11:40:46 AM	30930
Surr: DNOP	92.0	70-130	%Rec	1	3/28/2017 11:40:46 AM	30930
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	: AG
Benzene	ND	0.083	mg/Kg	5	3/28/2017 12:46:41 PM	C41708
Toluene	ND	0.17	mg/Kg	5	3/28/2017 12:46:41 PM	C41708
Ethylbenzene	ND	0.17	mg/Kg	5	3/28/2017 12:46:41 PM	C41708
Xylenes, Total	ND	0.33	mg/Kg	5	3/28/2017 12:46:41 PM	C41708
Surr: 1,2-Dichloroethane-d4	97.4	70-130	%Rec	5	3/28/2017 12:46:41 PM	C41708
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	5	3/28/2017 12:46:41 PM	C41708
Surr: Dibromofluoromethane	101	70-130	%Rec	5	3/28/2017 12:46:41 PM	C41708
Surr: Toluene-d8	97.5	70-130	%Rec	5	3/28/2017 12:46:41 PM	C41708

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 15 of 21 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1703D45

29-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30936 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 30936 RunNo: 41707

Prep Date: 3/28/2017 Analysis Date: 3/28/2017 SeqNo: 1309826 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-30936 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 30936 RunNo: 41707

Prep Date: 3/28/2017 Analysis Date: 3/28/2017 SeqNo: 1309827 Units: mg/Kg

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

Chloride 15 1.5 15.00 0 96.9 110

#### 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#: **1703D45** 

29-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID LCS-30930 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics LCSS Client ID: Batch ID: 30930 RunNo: 41688 SeqNo: 1307965 Prep Date: 3/28/2017 Analysis Date: 3/28/2017 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 10 0

 Diesel Range Organics (DRO)
 51
 10
 50.00
 0
 101
 63.8
 116

 Surr: DNOP
 4.9
 5.000
 97.3
 70
 130

Sample ID MB-30930 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 30930 RunNo: 41688

Prep Date: 3/28/2017 Analysis Date: 3/28/2017 SeqNo: 1307966 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 11 10.00 109 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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## Hall Environmental Analysis Laboratory, Inc.

WO#: 1703D45

29-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30918 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 30918 RunNo: 41706

SeqNo: 1309059 Prep Date: 3/27/2017 Analysis Date: 3/28/2017 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 109 54 150

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-30918 SampType: LCS

Client ID: LCSS Batch ID: 30918 RunNo: 41706

960

Prep Date: 3/27/2017 Analysis Date: 3/28/2017 SeqNo: 1309060 Units: mg/Kg

1000

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 28 5.0 25.00 114 76.4 125

95.9

54

150

#### 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.

0.93

WO#: **1703D45** 

29-Mar-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-30918 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 30918 RunNo: 41706

Prep Date: 3/27/2017 Analysis Date: 3/28/2017 SeqNo: 1309081 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

Surr: 4-Bromofluorobenzene 1.2 1.000 124 66.6 132

1.000

Sample ID LCS-30918	SampT	SampType: <b>LCS</b>				TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch	n ID: 30	918	R	RunNo: 4	1706						
Prep Date: 3/27/2017	Analysis D	ate: 3/	28/2017	S	SeqNo: 1	309082	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	98.5	80	120					
Toluene	1.0	0.050	1.000	0	102	80	120					
Ethylbenzene	1.1	0.050	1.000	0	106	80	120					
Xylenes, Total	3.3	0.10	3.000	0	109	80	120					

93.2

66.6

132

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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#: 1703D45

29-Mar-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID rb	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: PBS	Batch	n ID: <b>C4</b>	1708	F	RunNo: 4	1708				
Prep Date:	Analysis D	oate: 3/	28/2017	8	SeqNo: 1	309242	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: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.49		0.5000		97.9	70	130			

Sample ID 100ng Ics	Samp	Гуре: <b>LC</b>	:S	TestCode: EPA Method 8260B: Volatiles Shor					List	
Client ID: LCSS	Batc	h ID: <b>C4</b>	1708	F	RunNo: 4	1708				
Prep Date:	Analysis [	Date: 3/	28/2017	S	SeqNo: 1	309243	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			
Toluene	0.95	0.050	1.000	0	95.4	70	130			
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.48		0.5000		96.8	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

% 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 Page 20 of 21

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1703D45

29-Mar-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

Client ID: **PBS** Batch ID: A41708 RunNo: 41708

SeqNo: 1309108 Prep Date: Analysis Date: 3/28/2017 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

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

Client ID: LCSS RunNo: 41708 Batch ID: A41708

500

Prep Date: Analysis Date: 3/28/2017 SeqNo: 1309109 Units: mg/Kg

500.0

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 26 5.0 25.00 103 70 130

100

70

130

#### 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
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: BLAGG	Work Order Numb	er: 1703D45		RcptNo:	1
Received by/date:	03/28/17				
Logged By: Anne Thorne	3/28/2017 7:15:00 A	M	an Am		
Completed By: Anne Thogae	_ 3/28/2017 7:25:32 A	M	Anne Stran		
Reviewed By: /	NO 12 KIZENIN		Care Am		
Chain of Custody	W14/11			·	
Custody seals intact on sample	le bottles?	Yes 🗌	No 🗔	Not Present <b>✓</b>	
2. Is Chain of Custody complete		Yes 🔽	No 🗌	Not Present	
3. How was the sample delivered		Courier		ı	
<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	?(a)?	Yes 🗹	No 🗌		
7. Sufficient sample volume for in	ndicated test(s)?	Yes 🗹	No 🗌		
8. Are samples (except VOA and	ONG) properly preserved?	Yes 🗸	No 🗌		
9. Was preservative added to bo	ttles?	Yes	No 🗹	NA 🗌	
10.VOA vials have zero headspace	ce?	Yes 🗌	No 🗆	No VOA Vials 🗹	
11. Were any sample containers		Yes	No 🗹		
				# of preserved bottles checked	
12. Does paperwork match bottle		Yes 🗹	No 🗀	for pH:	>12 unless noted)
(Note discrepancies on chain of 13. Are matrices correctly identified		Yes 🗹	No 🗆	Adjusted?	> 12 dilless floted)
14, is it clear what analyses were	· · · · · · · · · · · · · · · · · · ·	Yes 🗹	No 🗆	_	
15. Were all holding times able to (If no, notify customer for auth		Yes 🗸	No 🗆	Checked by:	<del> </del>
(ii no, notily dustomer for gutt	onzadon.)				
Special Handling (if applic	able)				
16. Was client notified of all discre	epancies with this order?	Yes	No 🗌	NA 🗹	
Person Notified:	Date				
By Whom:	Via:	eMail F	Phone 🗌 Fax	☐ In Person	
Regarding:					
Client Instructions:				- married and a series of the series and a series of the s	
17. Additional remarks:					
18. Cooler Information	and the second of the second o	010 ( 1	Stone d D		
Cooler No Temp °C C	ondition Seal Intact Seal No od Yes	Seal Date	Signed By		
I					

	<u>ا</u> کے کے	¥							(N 1	o Y)	Air Bubbles													12			
	HALL ENVIRONMENTAL	LABORALORY	60	)		-				-	CHLOCAS	×											-	Mosta	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	さん こうしょうしょう	6
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Time:	X Rush		FLORANCE GC	!   	TREATED SOIL +	ger:	x Ale	72. 12.	, Yes	erature: (17	ative	Care				Million of the Control of the Contro		Principal co							مله		197
Turn-Around Time:	□ Standard	Project Name:	FLORA	Project #:		Project Manager:	L. B	Sampler 7	On Ice:	Sample Temperature:	K 0313/7 Container Type and #	403×(			21t			- valido a		and any second department				Received by:	1 July 100	Received by:	H
Chain-of-Custody Record		Tue					/ / / / / / / / / / / / / / / / / / /	(Luli Validation)	3		Sample Request ID	TSP-136R2-S	142R-S	TX-142R-N	TSP-143R-N	TSP-143R-S	78-145R-N	TSP-145R-S	139-146R-N	146R-S	147	148	149	•	N		1924 Mouth Design A 1978/17 0715 Note: Scycle Trooped with Halve
stody	-	Know gover			320-1183			Lave			Samp	TSP-1	128-1	1-87	7-45-1	138-11	759-1	75P-1	138-1	TSP - 1	TSP- 1	759-1	-4	d by:	2		Matul
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hain	30	12.4%	Mailing Address:		# (505)	r Fax#:	QA/QC Package:	itation	AP	(Type)	Time	1309	1313	138	1323	1329	(333	1336	01.6.7	1345	(35T	1358	20 <i>h</i> J	Time:	1704	Time:	1424
J	Client:		Mailing		Phone #:	email or Fax#	QA/QC Packs	Accreditation	□ NELAP	□ EDD (Type)	Date	2/12	-			المورانة شور	,,. <u></u>							Date:	11/11	Date:	1/24/17 1924

	ANALYSTS I ARORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	 Analysis	(Þ()	(Gas or	HqT (1.8 (1.4) (1.4) (1.4) (2.0) (2.0) (3.0) (4.2)	(GR d 41) (GR d 50) (GR d 50) (GR d 50) (MO) (MO) (MO) (MO) (MO) (MO) (MO) (MO	BTEX + MTH BTEX + MTH TPH 8015B TPH (Metho PPH's (8310 PCRA 8 Me RCRA 8 Me ROB1 Pestici 8081 Pestici 8081 Pestici 8081 Pestici Anions (F,Cl 8081 Pestici	× ×	Freedo	700-100						Ren	PAGE 2 OF 2	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.
Turn-Around Time:	□ Standard X Rush		FLORANCE GC I PEA	Treated Soil Tiles	Project Manager:	J. Birthe	Sampler: Zr Buth	Temperature.	Ac3/2%/7 Preservative HEAL No. Type and # Type 17.6.3 D4.5	402×1 (coc 33		212			,			Received by: F27/7 1704	Received by: Date Time O3 78/17 0715	ontracted to other accredited laboratoriles. This serves as notice of this
Chain-of-Custody Record	Client: BO Amenico	Bless Euglingery Inc.		Phone #: (505) 320 - 1(83	email or Fax#:	QA/QC Package:  X Standard □ Level 4 (Full Validation)	Accreditation	ype)	Date Time Matrix Sample Request ID	11/17 1407 SOIL 759-150	1 1412 1 750-151	1417 1 79-152	`					<u>,7.</u>	Date: Time: Relinquished by: ' / P.   P.   Must. L. D. e. L. &.	1



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

April 03, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1703F36

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/31/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1703F36**Date Reported: **4/3/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-153

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 1:24:00 PM

 Lab ID:
 1703F36-001
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/31/2017 10:19:27 AM	31010
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	4.3	3.9	mg/Kg	1	3/31/2017 11:06:49 AM	GS41801
Surr: BFB	96.9	70-130	%Rec	1	3/31/2017 11:06:49 AM	GS41801
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS				Analyst	TOM
Diesel Range Organics (DRO)	62	9.8	mg/Kg	1	3/31/2017 9:16:18 AM	31008
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/31/2017 9:16:18 AM	31008
Surr: DNOP	110	70-130	%Rec	1	3/31/2017 9:16:18 AM	31008
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	DJF
Benzene	ND	0.020	mg/Kg	1	3/31/2017 11:06:49 AM	SL41801
Toluene	ND	0.039	mg/Kg	1	3/31/2017 11:06:49 AM	SL41801
Ethylbenzene	ND	0.039	mg/Kg	1	3/31/2017 11:06:49 AM	SL41801
Xylenes, Total	ND	0.079	mg/Kg	1	3/31/2017 11:06:49 AM	SL41801
Surr: 1,2-Dichloroethane-d4	111	70-130	%Rec	1	3/31/2017 11:06:49 AM	SL41801
Surr: 4-Bromofluorobenzene	95.3	70-130	%Rec	1	3/31/2017 11:06:49 AM	SL41801
Surr: Dibromofluoromethane	108	70-130	%Rec	1	3/31/2017 11:06:49 AM	SL41801
Surr: Toluene-d8	104	70-130	%Rec	1	3/31/2017 11:06:49 AM	SL41801

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

# Lab Order **1703F36**Date Reported: **4/3/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-154

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 1:32:00 PM

 Lab ID:
 1703F36-002
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	3/31/2017 10:31:51 AM	31010
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: DJF
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	3/31/2017 11:35:49 AM	GS41801
Surr: BFB	98.7	70-130	%Rec	1	3/31/2017 11:35:49 AM	GS41801
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	27	9.5	mg/Kg	1	3/31/2017 9:38:25 AM	31008
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/31/2017 9:38:25 AM	31008
Surr: DNOP	115	70-130	%Rec	1	3/31/2017 9:38:25 AM	31008
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	DJF
Benzene	ND	0.017	mg/Kg	1	3/31/2017 11:35:49 AM	SL41801
Toluene	ND	0.035	mg/Kg	1	3/31/2017 11:35:49 AM	SL41801
Ethylbenzene	ND	0.035	mg/Kg	1	3/31/2017 11:35:49 AM	SL41801
Xylenes, Total	ND	0.069	mg/Kg	1	3/31/2017 11:35:49 AM	SL41801
Surr: 1,2-Dichloroethane-d4	114	70-130	%Rec	1	3/31/2017 11:35:49 AM	SL41801
Surr: 4-Bromofluorobenzene	95.8	70-130	%Rec	1	3/31/2017 11:35:49 AM	SL41801
Surr: Dibromofluoromethane	110	70-130	%Rec	1	3/31/2017 11:35:49 AM	SL41801
Surr: Toluene-d8	101	70-130	%Rec	1	3/31/2017 11:35:49 AM	SL41801

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

# Lab Order **1703F36**Date Reported: **4/3/2017**

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-155

 Project:
 Florance GC J 16A
 Collection Date: 3/30/2017 1:37:00 PM

 Lab ID:
 1703F36-003
 Matrix: MEOH (SOIL)
 Received Date: 3/31/2017 6:56:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	3/31/2017 10:44:15 AM	31010
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst:	DJF
Gasoline Range Organics (GRO)	7.4	4.0	mg/Kg	1	3/31/2017 12:04:54 PM	GS41801
Surr: BFB	94.7	70-130	%Rec	1	3/31/2017 12:04:54 PM	GS41801
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS	;			Analyst:	TOM
Diesel Range Organics (DRO)	61	9.3	mg/Kg	1	3/31/2017 10:00:42 AM	31008
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/31/2017 10:00:42 AM	31008
Surr: DNOP	115	70-130	%Rec	1	3/31/2017 10:00:42 AM	31008
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst:	DJF
Benzene	ND	0.020	mg/Kg	1	3/31/2017 12:04:54 PM	SL41801
Toluene	ND	0.040	mg/Kg	1	3/31/2017 12:04:54 PM	SL41801
Ethylbenzene	ND	0.040	mg/Kg	1	3/31/2017 12:04:54 PM	SL41801
Xylenes, Total	ND	0.080	mg/Kg	1	3/31/2017 12:04:54 PM	SL41801
Surr: 1,2-Dichloroethane-d4	112	70-130	%Rec	1	3/31/2017 12:04:54 PM	SL41801
Surr: 4-Bromofluorobenzene	94.7	70-130	%Rec	1	3/31/2017 12:04:54 PM	SL41801
Surr: Dibromofluoromethane	112	70-130	%Rec	1	3/31/2017 12:04:54 PM	SL41801
Surr: Toluene-d8	105	70-130	%Rec	1	3/31/2017 12:04:54 PM	SL41801

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 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	% 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#: **1703F36** 

03-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31010 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 31010 RunNo: 41802

Prep Date: 3/31/2017 Analysis Date: 3/31/2017 SeqNo: 1313317 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31010 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31010 RunNo: 41802

Prep Date: 3/31/2017 Analysis Date: 3/31/2017 SeqNo: 1313318 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.7 90 110

#### 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 9

**Blagg Engineering** 

**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1703F36

03-Apr-17

	e GC J 16A			
Sample ID LCS-30969	SampType: LCS	TestCode: <b>EPA Method</b>	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 30969	RunNo: <b>41755</b>		
Prep Date: 3/29/2017	Analysis Date: 3/30/2017	SeqNo: 1311683	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	5.2 5.000	104 70	130	
Sample ID MB-30969	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: PBS	Batch ID: 30969	RunNo: 41755		
Prep Date: 3/29/2017	Analysis Date: 3/30/2017	SeqNo: 1311684	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	10 10.00	101 70	130	
Sample ID LCS-31008	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 31008	RunNo: 41755		_
Prep Date: 3/31/2017	Analysis Date: 3/31/2017	SeqNo: 1312226	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Diesel Range Organics (DRO)	50 10 50.00	0 99.7 63.8	116	
Surr: DNOP	4.9 5.000	98.7 70	130	
Sample ID MB-31008	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: PBS	Batch ID: 31008	RunNo: 41755		
Prep Date: 3/31/2017	Analysis Date: 3/31/2017	SeqNo: 1312227	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) Surr: DNOP	ND 50 11 10.00	106 70	130	
Sample ID 1703F36-001AMS			8015M/D: Diesel Range	Organics
Client ID: TSP-153	Batch ID: 31008	RunNo: 41755	11.5	
Prep Date: 3/31/2017	Analysis Date: 3/31/2017	SeqNo: <b>1312613</b>	Units: mg/Kg	
Analyte Diesel Range Organics (DRO)		SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	110 9.4 46.77 5.1 4.677	62.32 106 51.6 108 70	130 130	
Sample ID 1703F36-001AM\$			8015M/D: Diesel Range	Organics
Client ID: TSP-153	Batch ID: 31008	RunNo: 41755	Unito: mall/-	
Prep Date: 3/31/2017	Analysis Date: 3/31/2017	SeqNo: 1312614	Units: mg/Kg	
Analyte  Discal Panga Organics (DDO)		SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Diesel Range Organics (DRO)	100 9.4 46.99	62.32 90.0 51.6	130 6.65	20
Ouglifiara				

#### 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

### Hall Environmental Analysis Laboratory, Inc.

5.1

WO#: **1703F36** 

03-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Surr: DNOP

Sample ID 1703F36-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **TSP-153** Batch ID: **31008** RunNo: **41755** 

Prep Date: 3/31/2017 Analysis Date: 3/31/2017 SeqNo: 1312614 Units: mg/Kg

4.699

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

108

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 6 of 9

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1703F36** 

03-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID rb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: PBS	Batch	n ID: SL	41801	R	tunNo: 4	1801				
Prep Date:	Analysis D	Date: 3/	31/2017	S	eqNo: 1	312813	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: 1,2-Dichloroethane-d4	0.55		0.5000		111	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.0	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID 100ng Ics	Samp	Type: LC	S	les	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: LCSS	Batc	h ID: SL	41801	F	RunNo: 4	1801				
Prep Date:	Analysis [	Date: 3/	31/2017	8	SeqNo: 1	312814	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	119	70	130		<u>,                                      </u>	
Toluene	1.0	0.050	1.000	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	0.58		0.5000		115	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.0	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		111	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID 1703f36-001ams	SampT	ype: MS	3	Tes	tCode: El	PA Method	8260B: Volat	tiles Short	List	
Client ID: TSP-153	Batch	n ID: SL	41801	F	RunNo: 4	1801				
Prep Date:	Analysis D	oate: 3/	31/2017	8	SeqNo: 1	312815	Units: mg/K	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.020	0.7862	0	118	61.9	146			
Toluene	0.84	0.039	0.7862	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	0.44		0.3931		113	70	130			
Surr: 4-Bromofluorobenzene	0.39		0.3931		98.4	70	130			
Surr: Dibromofluoromethane	0.43		0.3931		110	70	130			
Surr: Toluene-d8	0.42		0.3931		107	70	130			

Sample ID	1703f36-001amsd	SampT	уре: МS	SD	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID:	TSP-153	Batch	ID: SL	41801	R	tunNo: 4	1801				
Prep Date:		Analysis D	ate: 3/	31/2017	S	eqNo: 1	312816	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.88	0.020	0.7862	0	112	61.9	146	5.03	20	
Toluene		0.80	0.039	0.7862	0	102	70	130	4.97	20	

#### 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.

0.40

WO#: 1703F36

03-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Surr: Toluene-d8

Sample ID 1703f36-001amsd SampType: MSD TestCode: EPA Method 8260B: Volatiles Short List Client ID: TSP-153 Batch ID: **SL41801** RunNo: 41801 SeqNo: 1312816 Prep Date: Analysis Date: 3/31/2017 Units: mg/Kg Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: 1,2-Dichloroethane-d4 0.43 0.3931 110 70 0 130 0 0.37 0.3931 94.4 70 0 Surr: 4-Bromofluorobenzene 130 0 Surr: Dibromofluoromethane 0.43 0.3931 109 70 0 130 0

0.3931

101

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 9

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1703F36** 

03-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: GS41801 RunNo: 41801

Prep Date: Analysis Date: 3/31/2017 SeqNo: 1313083 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 490 500.0 97.4 70 130

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

Client ID: LCSS Batch ID: GS41801 RunNo: 41801

Prep Date: Analysis Date: 3/31/2017 SeqNo: 1313084 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 28 5.0 25.00 111 70 130 480 500.0 95.6 70 Surr: BFB 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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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: **BLAGG** Work Order Number: 1703F36 RcptNo: 1 Received By: Lindsay Mangin 3/31/2017 6:56:00 AM 3/31/2017 7:27:35 AM Completed By: Lindsay Mangin 03/31/17 Reviewed By: Chain of Custody No 🗔 1 Custody seals intact on sample bottles? Yes 🗌 Not Present 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 🔽 NA 🗌 Sample(s) in proper container(s)? Yes 🗸 Yes 🔽 No 🗌 7. Sufficient sample volume for indicated test(s)? Yes 🗸 No 🗌 8. Are samples (except VOA and ONG) properly preserved? Yes No 🗸 NA  $\square$ 9. Was preservative added to bottles? No 🗌 No VOA Vials 10. VOA vials have zero headspace? Yes 🗀 Yes 🗆 Nο 11. Were any sample containers received broken? # of preserved bottles checked 12. Does paperwork match bottle labels? Yes 🗹 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? Yes 🗸 No 🗌 14. Is it clear what analyses were requested? Yes 🔽 Checked by: 15. Were all holding times able to be met? No 🗀 (If no, notify customer for authorization.) Special Handling (if applicable) Yes 🗌 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 Good Yes

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email or Fax#:		Project Manager.	ger		-				("(			-		-
QA/QC Package:	□ Level 4 (Full Validation)	7. 6	BiAGE			100		(SMI	DS.,O9	1-1-5				
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□ EDD (Type)		Sample Temperature:	Serature: / 🛨	18	_	(eb		_	_			_		
Time Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX + ME	82108 H9T	TPH (Metho	) t E8) s'HA9	PCRA 8 Me O.T) snoinA	oilsa9 1808	4OV) 806S8	-ima2) 07S8	2418145	
1324 Soil	TSP-153	402 ×1	Cour	100-	×	×						×		
1332 10	73P-154	3/6	96	-002	×	×						×		-
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Tima: Relinquished by:	Received by:  Re	Received by:	Week	354/7 717 Nemarks: Bul BP Contract: Stave Man NS-1717 NIS: VHIXDNEVRJU BAS Time WBS: L1-0018N-E: FLRNCGCJ SAWAW, treated with HEOR	Remarks	Soundary to	189 185: VHIX 185: L1	1-0 1-0	VHIXONEVRUM L1-0018N sorul with	Z-E:T	草耳五	FIRNCE	CHINOMEVRIA 11-0018N-E: FLRNCGCI IDA STAL WITH HEOR	Master CJ 164



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

April 05, 2017

Jeff Blagg

Blagg Engineering P. O. Box 87

Bloomfield, NM 87413 TEL: (505) 632-1199

FAX (505) 632-3903

RE: Florance GC J 16A OrderNo.: 1704057

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/4/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order **1704057**Date Reported: **4/5/2017** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-156

 Project:
 Florance GC J 16A
 Collection Date: 4/3/2017 11:37:00 AM

 Lab ID:
 1704057-001
 Matrix: SOIL
 Received Date: 4/4/2017 7:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/4/2017 10:50:56 AM	31062
EPA METHOD 8015M/D: DIESEL RANG	3			Analyst	: TOM	
Diesel Range Organics (DRO)	53	9.6	mg/Kg	1	4/4/2017 9:25:56 AM	31058
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/4/2017 9:25:56 AM	31058
Surr: DNOP	92.8	70-130	%Rec	1	4/4/2017 9:25:56 AM	31058
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	4/4/2017 10:04:52 AM	G41869
Surr: BFB	94.8	54-150	%Rec	5	4/4/2017 10:04:52 AM	G41869
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.091	mg/Kg	5	4/4/2017 10:04:52 AM	B41869
Toluene	ND	0.18	mg/Kg	5	4/4/2017 10:04:52 AM	B41869
Ethylbenzene	ND	0.18	mg/Kg	5	4/4/2017 10:04:52 AM	B41869
Xylenes, Total	ND	0.36	mg/Kg	5	4/4/2017 10:04:52 AM	B41869
Surr: 4-Bromofluorobenzene	96.9	66.6-132	%Rec	5	4/4/2017 10:04:52 AM	B41869

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

# Lab Order **1704057**Date Reported: **4/5/2017**

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-157

 Project:
 Florance GC J 16A
 Collection Date: 4/3/2017 11:42:00 AM

 Lab ID:
 1704057-002
 Matrix: SOIL
 Received Date: 4/4/2017 7:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/4/2017 11:03:20 AM	31062
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	48	9.3	mg/Kg	1	4/4/2017 9:50:18 AM	31058
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/4/2017 9:50:18 AM	31058
Surr: DNOP	92.5	70-130	%Rec	1	4/4/2017 9:50:18 AM	31058
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	4/4/2017 10:31:14 AM	G41869
Surr: BFB	94.2	54-150	%Rec	5	4/4/2017 10:31:14 AM	G41869
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.090	mg/Kg	5	4/4/2017 10:31:14 AM	B41869
Toluene	ND	0.18	mg/Kg	5	4/4/2017 10:31:14 AM	B41869
Ethylbenzene	ND	0.18	mg/Kg	5	4/4/2017 10:31:14 AM	B41869
Xylenes, Total	ND	0.36	mg/Kg	5	4/4/2017 10:31:14 AM	B41869
Surr: 4-Bromofluorobenzene	98.2	66.6-132	%Rec	5	4/4/2017 10:31:14 AM	B41869

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

# Lab Order **1704057**Date Reported: **4/5/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-158

 Project:
 Florance GC J 16A
 Collection Date: 4/3/2017 11:48:00 AM

 Lab ID:
 1704057-003
 Matrix: SOIL
 Received Date: 4/4/2017 7:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/4/2017 11:15:44 AM	31062
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	43	9.8	mg/Kg	1	4/4/2017 10:14:30 AM	31058
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/4/2017 10:14:30 AM	31058
Surr: DNOP	89.5	70-130	%Rec	1	4/4/2017 10:14:30 AM	31058
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	4/4/2017 10:57:39 AM	G41869
Surr: BFB	93.9	54-150	%Rec	5	4/4/2017 10:57:39 AM	G41869
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.084	mg/Kg	5	4/4/2017 10:57:39 AM	B41869
Toluene	ND	0.17	mg/Kg	5	4/4/2017 10:57:39 AM	B41869
Ethylbenzene	ND	0.17	mg/Kg	5	4/4/2017 10:57:39 AM	B41869
Xylenes, Total	ND	0.34	mg/Kg	5	4/4/2017 10:57:39 AM	B41869
Surr: 4-Bromofluorobenzene	97.9	66.6-132	%Rec	5	4/4/2017 10:57:39 AM	B41869

### **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
- 8 % 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

Lab Order **1704057**Date Reported: **4/5/2017** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-159

 Project:
 Florance GC J 16A
 Collection Date: 4/3/2017 11:54:00 AM

 Lab ID:
 1704057-004
 Matrix: SOIL
 Received Date: 4/4/2017 7:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/4/2017 11:28:08 AM	31062
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	64	9.8	mg/Kg	1	4/4/2017 10:38:55 AM	31058
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/4/2017 10:38:55 AM	31058
Surr: DNOP	93.6	70-130	%Rec	1	4/4/2017 10:38:55 AM	31058
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	19	mg/Kg	5	4/4/2017 11:24:01 AM	G41869
Surr: BFB	96.7	54-150	%Rec	5	4/4/2017 11:24:01 AM	G41869
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.093	mg/Kg	5	4/4/2017 11:24:01 AM	B41869
Toluene	ND	0.19	mg/Kg	5	4/4/2017 11:24:01 AM	B41869
Ethylbenzene	ND	0.19	mg/Kg	5	4/4/2017 11:24:01 AM	B41869
Xylenes, Total	ND	0.37	mg/Kg	5	4/4/2017 11:24:01 AM	B41869
Surr: 4-Bromofluorobenzene	94.2	66.6-132	%Rec	5	4/4/2017 11:24:01 AM	B41869

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

#### Qualifiers:

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

# Lab Order **1704057**Date Reported: **4/5/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-160

 Project:
 Florance GC J 16A
 Collection Date: 4/3/2017 11:59:00 AM

 Lab ID:
 1704057-005
 Matrix: SOIL
 Received Date: 4/4/2017 7:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/4/2017 11:40:32 AM	31062
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	67	10	mg/Kg	1	4/4/2017 11:03:12 AM	31058
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	4/4/2017 11:03:12 AM	31058
Surr: DNOP	92.6	70-130	%Rec	1	4/4/2017 11:03:12 AM	31058
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	4/4/2017 11:50:22 AM	G41869
Surr: BFB	100	54-150	%Rec	5	4/4/2017 11:50:22 AM	G41869
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.088	mg/Kg	5	4/4/2017 11:50:22 AM	B41869
Toluene	ND	0.18	mg/Kg	5	4/4/2017 11:50:22 AM	B41869
Ethylbenzene	ND	0.18	mg/Kg	5	4/4/2017 11:50:22 AM	B41869
Xylenes, Total	ND	0.35	mg/Kg	5	4/4/2017 11:50:22 AM	B41869
Surr: 4-Bromofluorobenzene	98.4	66.6-132	%Rec	5	4/4/2017 11:50:22 AM	B41869

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	% 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#: **1704057** 

05-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31062 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 31062 RunNo: 41868

Prep Date: 4/4/2017 Analysis Date: 4/4/2017 SeqNo: 1315672 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31062 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31062 RunNo: 41868

Prep Date: 4/4/2017 Analysis Date: 4/4/2017 SeqNo: 1315673 Units: mg/Kg

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

Chloride 15 1.5 15.00 0 96.9 90 110

#### 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#: **1704057** 

05-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID LCS-31058 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 31058 RunNo: 41862

Prep Date: 4/4/2017 Analysis Date: 4/4/2017 SeqNo: 1314500 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 40 50.00 0 80.0 63.8 116

Surr: DNOP 3.8 5.000 76.6 70 130

Sample ID MB-31058 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 31058 RunNo: 41862

Prep Date: 4/4/2017 Analysis Date: 4/4/2017 SeqNo: 1314501 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 8.2 10.00 82.1 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

ed in the associated Method Blank

Page 7 of 9

# Hall Environmental Analysis Laboratory, Inc.

810

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WO#: **1704057** 

05-Apr-17

Client:		gineering									
Project:	Florance	GC J 16A									
Sample ID F	RB	SampT	ype: <b>ME</b>	BLK	Tes	Code: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: F	PBS	Batch	ID: <b>G4</b>	1869	R	unNo: 4	1869				
Prep Date:		Analysis Da	ate: <b>4/</b>	4/2017	S	eqNo: 1	315300	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					J			
Surr: BFB		860		1000		85.8	54	150			
Sample ID 2	2.5UG GRO LCS	SampT	ype: <b>LC</b>	s	Tes	Code: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: L	_css	Batch	ID: <b>G4</b>	1869	R	unNo: 4	1869				
Prep Date:		Analysis Da	ate: <b>4/</b>	4/2017	S	eqNo: 1	315301	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	Organics (GRO)	29	5.0	25.00	0	116	76.4	125			
Surr: BFB		1000		1000		101	54	150			
Sample ID N	MB-31034	SampT	ype: <b>ME</b>	BLK	Tes	Code: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: F	PBS	Batch	ID: <b>31</b> 0	034	R	unNo: 4	1869				
Prep Date:	4/3/2017	Analysis Da	ate: <b>4/</b>	4/2017	S	eqNo: 1	315304	Units: %Re	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		690		1000		68.6	54	150			
Sample ID L	_CS-31034	SampT	ype: <b>LC</b>	s	Tes	Code: E	PA Method	8015D: Gasc	line Rang	e	
Client ID: L			/ ID: <b>31</b> 0			unNo: 4					
Prep Date:	4/3/2017	Analysis D	ate: <b>4/</b>	4/2017	S	eqNo: 1	315305	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

#### 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

54

80.9

150

- 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

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

Batch ID: 31034

Analysis Date: 4/4/2017

**PQL** 

Result

0.78

Blagg Engineering

WO#: 1704057

05-Apr-17

**Project:** Florance GC J 16A Sample ID RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: **B41869** RunNo: 41869 Prep Date: Analysis Date: 4/4/2017 SeqNo: 1315328 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 98.1 66.6 132 Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: **B41869** RunNo: 41869 Prep Date: Analysis Date: 4/4/2017 SeqNo: 1315329 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result LowLimit 80 0.98 0.025 1.000 0 98.3 120 Benzene Toluene 1.0 0.050 1.000 0 100 80 120 Ethylbenzene 0.050 0 104 80 120 1.0 1.000 Xylenes, Total 3.2 0.10 3.000 0 107 80 120 Surr: 4-Bromofluorobenzene 0.90 1.000 89.7 66.6 132 Sample ID MB-31034 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Sample ID LCS-31034	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	ID: <b>31</b>	034	R	tunNo: 4	1869				
Prep Date: 4/3/2017	Analysis D	ate: 4/	4/2017	S	SeqNo: 1	315333	Units: %Red	<b>:</b>		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.79		1.000		79.0	66.6	132			

SPK value SPK Ref Val

1.000

RunNo: 41869

%REC

77.6

SeqNo: 1315332

LowLimit

66.6

#### Qualifiers:

Client ID:

Prep Date:

PBS

Surr: 4-Bromofluorobenzene

4/3/2017

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

Page 9 of 9

Units: %Rec

132

%RPD

**RPDLimit** 

Qual

HighLimit

RLReporting Detection Limit

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: **BLAGG** Work Order Number: 1704057 RcptNo: 1 an Ilm 4/4/2017 7:10:00 AM Received By: Anne Thorne anne Sham 4/4/2017 7:19:06 AM Completed By: **Anne Thorne** 04/04/17 Reviewed By: Chain of Custody Yes 🗌 No 🗌 Not Present 🗹 1. Custody seals intact on sample bottles? No 🗌 Yes 🗸 2. Is Chain of Custody complete? Not Present 3. How was the sample delivered? Courier Log In No 🗌 NA 🗌 Yes 🗹 4. Was an attempt made to cool the samples? NA 🗆 Yes 🗹 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)? Yes 🗸 Yes 🗹 No 🗌 7. Sufficient sample volume for indicated test(s)? Yes 🗹 No 🗌 8. Are samples (except VOA and ONG) properly preserved? No 🗹 NA 🗌 9. Was preservative added to bottles? Yes Yes No 🗀 No VOA Vials 10. VOA vials have zero headspace? Yes  $\square$ No 🗸 11. Were any sample containers received broken? # of preserved bottles checked 12. Does paperwork match bottle labels? No 🗀 for pH: (Note discrepancies on chain of custody) (<2 or >12 unless noted) Adjusted? Yes 🗸 No  $\square$ 13. Are matrices correctly identified on Chain of Custody? No  $\square$ 14. Is it clear what analyses were requested? Yes 🗸 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: eMail Phone Fax In Person Via: 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	www.hallenvironmental.com	4901 Hawkins NE - Albuqueraue, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis	(O)	no se9) NO / MF NOS(,SMI)	+ H9T + OS / OS / DF   H9T + OS / OS / OS / OS / OS / OS / OS / OS	VOV, VOUS VOUS VOUS VOUS VOUS VOUS VOUS VOUS	HTEX + METEX +	×		8						E Remarks: BIL BP CONTACT: STEVE Maken	WBS EL	1778 Motherales ( Chu Loyloull 0210 Note: SAMVES TREMED WITH HILDE
Turn-Around Time: SAME	K Rush		FLORANCE GC J 16A	1	TREATED SOIL PILES	Project Manager:	I. But	Sampler: J. Buth	emper	Container Preservative Type and # Type	402 ×1 COOL 201	1   1	203	102	5/1 1				Date Tim	틸	Chim Loyloulit 2710
hain-of-Custody Record	Client: BP AMERICA	SERVIC INC			Phone #: (505) 320-1183	email or Fax#:	QA/QC Package:  X Standard  □ Level 4 (Full Validation)	T Other	□ EDD (Type)	Date Time Matrix Sample Request ID	4/3/17 1137 SOIL TSP-156	1 1142   TSP-157	11148   739 - 158	1154   75P - 159	·				Date: Time: Relinquished by:	Time: Refinquished by:	413/1 1728 / Mustacheller

45x



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

April 06, 2017

Jeff Blagg

Blagg Engineering P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 632-1199 FAX (505) 632-3903

RE: Florance GC J 16A OrderNo.: 1704117

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/5/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

Lab Order **1704117**Date Reported: **4/6/2017** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-161

 Project:
 Florance GC J 16A
 Collection Date: 4/4/2017 1:20:00 PM

 Lab ID:
 1704117-001
 Matrix: SOIL
 Received Date: 4/5/2017 6:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/5/2017 12:05:38 PM	31086
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analyst	: ТОМ
Diesel Range Organics (DRO)	16	10	mg/Kg	1	4/5/2017 9:02:42 AM	31083
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/5/2017 9:02:42 AM	31083
Surr: DNOP	84.8	70-130	%Rec	1	4/5/2017 9:02:42 AM	31083
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	6.8	mg/Kg	2	4/5/2017 12:20:26 PM	31074
Surr: BFB	100	54-150	%Rec	2	4/5/2017 12:20:26 PM	31074
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.034	mg/Kg	2	4/5/2017 12:20:26 PM	31074
Toluene	ND	0.068	mg/Kg	2	4/5/2017 12:20:26 PM	31074
Ethylbenzene	ND	0.068	mg/Kg	2	4/5/2017 12:20:26 PM	31074
Xylenes, Total	ND	0.14	mg/Kg	2	4/5/2017 12:20:26 PM	31074
Surr: 4-Bromofluorobenzene	98.2	66.6-132	%Rec	2	4/5/2017 12:20:26 PM	31074

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 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

# Lab Order **1704117**Date Reported: **4/6/2017**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-162

 Project:
 Florance GC J 16A
 Collection Date: 4/4/2017 1:24:00 PM

 Lab ID:
 1704117-002
 Matrix: SOIL
 Received Date: 4/5/2017 6:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/5/2017 12:18:02 PM	31086
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	:: ТОМ
Diesel Range Organics (DRO)	13	9.5	mg/Kg	1	4/5/2017 9:27:01 AM	31083
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/5/2017 9:27:01 AM	31083
Surr: DNOP	87.5	70-130	%Rec	1	4/5/2017 9:27:01 AM	31083
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	6.7	mg/Kg	2	4/5/2017 12:46:50 PM	31074
Surr: BFB	88.9	54-150	%Rec	2	4/5/2017 12:46:50 PM	31074
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.034	mg/Kg	2	4/5/2017 12:46:50 PM	31074
Toluene	ND	0.067	mg/Kg	2	4/5/2017 12:46:50 PM	31074
Ethylbenzene	ND	0.067	mg/Kg	2	4/5/2017 12:46:50 PM	31074
Xylenes, Total	ND	0.13	mg/Kg	2	4/5/2017 12:46:50 PM	31074
Surr: 4-Bromofluorobenzene	98.3	66.6-132	%Rec	2	4/5/2017 12:46:50 PM	31074

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 2 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

# Lab Order **1704117**Date Reported: **4/6/2017**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-163

 Project:
 Florance GC J 16A
 Collection Date: 4/4/2017 1:30:00 PM

 Lab ID:
 1704117-003
 Matrix: SOIL
 Received Date: 4/5/2017 6:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/5/2017 12:55:16 PM	31086
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	17	9.7	mg/Kg	1	4/5/2017 9:51:11 AM	31083
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2017 9:51:11 AM	31083
Surr: DNOP	84.6	70-130	%Rec	1	4/5/2017 9:51:11 AM	31083
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	7.2	mg/Kg	2	4/5/2017 1:13:09 PM	31074
Surr: BFB	85.7	54-150	%Rec	2	4/5/2017 1:13:09 PM	31074
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.036	mg/Kg	2	4/5/2017 1:13:09 PM	31074
Toluene	ND	0.072	mg/Kg	2	4/5/2017 1:13:09 PM	31074
Ethylbenzene	ND	0.072	mg/Kg	2	4/5/2017 1:13:09 PM	31074
Xylenes, Total	ND	0.14	mg/Kg	2	4/5/2017 1:13:09 PM	31074
Surr: 4-Bromofluorobenzene	91.5	66.6-132	%Rec	2	4/5/2017 1:13:09 PM	31074

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 3 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

# Lab Order **1704117**Date Reported: **4/6/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-164

 Project:
 Florance GC J 16A
 Collection Date: 4/4/2017 1:35:00 PM

 Lab ID:
 1704117-004
 Matrix: SOIL
 Received Date: 4/5/2017 6:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/5/2017 1:07:41 PM	31086
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	<b>;</b>			Analyst	:: TOM
Diesel Range Organics (DRO)	32	9.4	mg/Kg	1	4/5/2017 10:15:30 AM	31083
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/5/2017 10:15:30 AM	31083
Surr: DNOP	85.0	70-130	%Rec	1	4/5/2017 10:15:30 AM	31083
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	7.3	mg/Kg	2	4/5/2017 1:39:30 PM	31074
Surr: BFB	96.6	54-150	%Rec	2	4/5/2017 1:39:30 PM	31074
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.036	mg/Kg	2	4/5/2017 1:39:30 PM	31074
Toluene	ND	0.073	mg/Kg	2	4/5/2017 1:39:30 PM	31074
Ethylbenzene	ND	0.073	mg/Kg	2	4/5/2017 1:39:30 PM	31074
Xylenes, Total	ND	0.15	mg/Kg	2	4/5/2017 1:39:30 PM	31074
Surr: 4-Bromofluorobenzene	94.4	66.6-132	%Rec	2	4/5/2017 1:39:30 PM	31074

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 8
	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.

WO#: **1704117** 

06-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31086 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **31086** RunNo: **41906** 

Prep Date: 4/5/2017 Analysis Date: 4/5/2017 SeqNo: 1316637 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31086 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31086 RunNo: 41906

Prep Date: 4/5/2017 Analysis Date: 4/5/2017 SeqNo: 1316638 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.6 90 110

#### 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 8

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1704117** 

06-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31083 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: **PBS** Batch ID: 31083 RunNo: 41862 Prep Date: 4/5/2017 Analysis Date: 4/5/2017 SeqNo: 1315434 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 7.9 78.6 70 10.00 130

Sample ID LCS-31083 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 31083 RunNo: 41862 Prep Date: 4/5/2017 Analysis Date: 4/5/2017 SeqNo: 1315523 Units: mg/Kg Analyte SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 42 10 63.8 50.00 83.7 116 Surr: DNOP 3.9 5.000 78.4 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#: **1704117** 

06-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31074 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 31074 RunNo: 41907

Prep Date: 4/4/2017 Analysis Date: 4/5/2017 SeqNo: 1316562 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 620 1000 62.3 54 150

Sample ID LCS-31074 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 31074 RunNo: 41907

Prep Date: 4/4/2017 Analysis Date: 4/5/2017 SeqNo: 1316563 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 27 5.0 25.00 107 76.4 125 760 1000 76.0 Surr: BFB 54 150

#### 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.

WO#: **1704117** 

06-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31074 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 31074 RunNo: 41907

Prep Date: 4/4/2017 Analysis Date: 4/5/2017 SeqNo: 1316571 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 0.71 1.000 71.2 66.6 132

Sample ID LCS-31074	SampType: LCS TestCode: EPA Method 8021						8021B: Vola	021B: Volatiles				
Client ID: LCSS	Batch ID: <b>31074</b> RunNo: <b>41907</b>											
Prep Date: 4/4/2017	Analysis D	ate: 4/	5/2017	S	SeqNo: 1	316572	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	102	80	120					
Toluene	1.0	0.050	1.000	0	103	80	120					
Ethylbenzene	1.0	0.050	1.000	0	101	80	120					
Xylenes, Total	3.1	0.10	3.000	0	102	80	120					
Surr: 4-Bromofluorobenzene	0.69		1.000		68.6	66.6	132					

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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		
Client Name: BLAGG		Work Order Num	per: 1704117		RcptNo:	
Received By: Lindsa	y Mangin	4/5/2017 6:45:00 A	M	Jinaky Hengo		
Completed By: Lindsay	y Mangin	4/5/2017 7:03:09 A	M	January (Hagazo) January Hagazo		
Reviewed By:	ပ	1/5/17	1			
hain of Custody						
1. Custody seals intact o	n sample bottle:	s?	Yes [_]	No 🗔	Not Present	
2. Is Chain of Custody co	mplete?		Yes 🗹	No 🗌	Not Present	
3. How was the sample d	lelivered?		Courier			
Log In			·			
4. Was an attempt made	to cool the sam	nples?	Yes 🗸	No 🗆	NA 🗔	
5. Were all samples rece	ived at a tempe	rature of >0° C to 6.0°C	Yes 🗸	No 🗌	NA []	
6. Sample(s) in proper co	ontainer(s)?		Yes 🗸	No 🗌		
7. Sufficient sample volur	ne for indicated	test(s)?	Yes 🗸	No 🗌		
8. Are samples (except V	OA and ONG) p	properly preserved?	Yes 📝	No 🗔		
<ol><li>Was preservative adde</li></ol>	ed to bottles?		Yes 🗔	No 🗸	NA 📋	
10.VOA vials have zero he	eadspace?		Yes 🗌	No 🗌	No VOA Vials ✔	
1. Were any sample conf		broken?	Yes 🗔	No 🗹	# of preserved bottles checked	
<ol><li>Does paperwork match (Note discrepancies on</li></ol>		iy)	Yes 🗹	No 🗔	for pH:	>12 unless noted
3. Are matrices correctly i	identified on Cha	ain of Custody?	Yes 🗹	No 🗌	Adjusted?	
4. Is it clear what analyse	s were requeste	d?	Yes 🗸	No 🗀		
<ol><li>Were all holding times (If no, notify customer f</li></ol>			Yes 🗸	No 🗌	Checked by:	
pecial Handling (if a	opplicable)					
6. Was client notified of a		with this order?	Yes []	No 🗌	NA 🗹	
Person Notified:		Date	Selection of the transfer of the	Man screens - street street at the street		
By Whom:		Via:	eMail F	hone Fax	in Person	
Regarding:						
Client Instructions					FAST OF STREET, SOMEON OF THE PAST STREET, STR	
7. Additional remarks:						
8. <u>Cooler Information</u>						
Cooler No Temp	C   Condition	Seal Intact   Seal No	Seal Date	Signed By		
1 1.8	Good	Yes	The state of the s			

	ANAI YSTS I ABODATODY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis		)S <sup>(†</sup> Oc	(1) 28082 28082	.40 28 1, <sub>e</sub> C (A	or 5 bot 5 b	HTFH (Methoring Methoring) HTF (831) EPHYS (831) GPHYS (F,C) (A) Methoring (F,C) (Semi-CALOR) SPE (A) Methoring Methoring (A) HTF Bubbles	×									BP Consoct: Stave MosFa/	VANDUE VIOLE (1-00 (80 N-E: FLRUCECTIRA)	TREAMED WITH H202	This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
			4901 Hav	Tel. 505				N D R	OΣ	(Gi	BTEX + MT 1PH 8015B	×			_						1.73	1.53	Sidonbies	ty. Any sub-c
	」										BTEX + txt										Rema	25 283 - 283	18	possibili
SAME		i	Y 16.A		il Tiles	-	. 6		ON □		e HEAL No.	-001	-002	-003	-00H				,		Date Time	72017 1700 Date Time	1	,-
I Time:	Rush		twee GC	i	HE) 2017	ager:	. Bush	J. Bush	sə∡ <b>/</b>	emperature: 🏅	Preservative Type	Coc			<del></del>						,	5	$\downarrow$	credited laboratories.
Turn-Around Time:	☐ Standard	Project Name	FLORANCE TORANCE	Project #:	TREATED	Project Manager:	h	Sampler:	On Ice:	Sample Ten	Container Type and #	408x1									Received by:	Received fix		ontracted to other
tody Record	Client: BP AMECA	BUNG ENGLIPERING	A season		505)320-1183	) #	ige: □ Level 4 (Full Validation)	 	□ Other		ne Matrix Sample Request ID	20 SOIL TSP-161	24 1 758-162	30   139 - 163	130 - 124						Relinquished by:	a L	24/Mich Work	If necessary, samples submitted to Hall Environmental may be subcontracted to ot
Cha	Client: BP	Bu	Mailing Address:		Phone #:	email or Fax#:	QA/QC Package:	Accreditation	□ NELAP	☐ EDD (Type)	Date Time	4/4/1 1320	1324	1330	1335		-				Date: Time:	7.7217 1780 Date Time	4417 1826	if necess



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

April 11, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1704262

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/7/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 4/11/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-165

 Project:
 Florance GC J 16A
 Collection Date: 4/6/2017 1:29:00 PM

 Lab ID:
 1704262-001
 Matrix: MEOH (SOIL)
 Received Date: 4/7/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/7/2017 11:50:41 AM	31127
EPA METHOD 8015M/D: DIESEL RANGE	E ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	28	9.8	mg/Kg	1	4/7/2017 9:23:02 AM	31126
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/7/2017 9:23:02 AM	31126
Surr: DNOP	84.9	70-130	%Rec	1	4/7/2017 9:23:02 AM	31126
EPA METHOD 8015D: GASOLINE RANG	iΕ				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	4/7/2017 9:51:56 AM	G41966
Surr: BFB	109	54-150	%Rec	1	4/7/2017 9:51:56 AM	G41966
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.017	mg/Kg	1	4/7/2017 9:51:56 AM	B41966
Toluene	ND	0.034	mg/Kg	1	4/7/2017 9:51:56 AM	B41966
Ethylbenzene	ND	0.034	mg/Kg	1	4/7/2017 9:51:56 AM	B41966
Xylenes, Total	ND	0.068	mg/Kg	1	4/7/2017 9:51:56 AM	B41966
Surr: 4-Bromofluorobenzene	110	66.6-132	%Rec	1	4/7/2017 9:51:56 AM	B41966

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

# Lab Order **1704262**Date Reported: **4/11/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-166

 Project:
 Florance GC J 16A
 Collection Date: 4/6/2017 1:35:00 PM

 Lab ID:
 1704262-002
 Matrix: MEOH (SOIL)
 Received Date: 4/7/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/7/2017 12:03:05 PM	31127
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	30	9.5	mg/Kg	1	4/7/2017 9:47:24 AM	31126
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/7/2017 9:47:24 AM	31126
Surr: DNOP	89.9	70-130	%Rec	1	4/7/2017 9:47:24 AM	31126
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	4/7/2017 10:15:31 AM	G41966
Surr: BFB	119	54-150	%Rec	1	4/7/2017 10:15:31 AM	G41966
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.017	mg/Kg	1	4/7/2017 10:15:31 AM	B41966
Toluene	ND	0.035	mg/Kg	1	4/7/2017 10:15:31 AM	B41966
Ethylbenzene	ND	0.035	mg/Kg	1	4/7/2017 10:15:31 AM	B41966
Xylenes, Total	ND	0.069	mg/Kg	1	4/7/2017 10:15:31 AM	B41966
Surr: 4-Bromofluorobenzene	112	66.6-132	%Rec	1	4/7/2017 10:15:31 AM	B41966

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

# Date Reported: 4/11/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-167

 Project:
 Florance GC J 16A
 Collection Date: 4/6/2017 1:42:00 PM

 Lab ID:
 1704262-003
 Matrix: MEOH (SOIL)
 Received Date: 4/7/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/7/2017 12:15:30 PM	31127
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	34	9.3	mg/Kg	1	4/7/2017 10:11:38 AM	31126
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/7/2017 10:11:38 AM	31126
Surr: DNOP	86.6	70-130	%Rec	1	4/7/2017 10:11:38 AM	31126
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	4/7/2017 10:39:01 AM	G41966
Surr: BFB	113	54-150	%Rec	1	4/7/2017 10:39:01 AM	G41966
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.018	mg/Kg	1	4/7/2017 10:39:01 AM	B41966
Toluene	ND	0.035	mg/Kg	1	4/7/2017 10:39:01 AM	B41966
Ethylbenzene	ND	0.035	mg/Kg	1	4/7/2017 10:39:01 AM	B41966
Xylenes, Total	ND	0.070	mg/Kg	1	4/7/2017 10:39:01 AM	B41966
Surr: 4-Bromofluorobenzene	112	66.6-132	%Rec	1	4/7/2017 10:39:01 AM	B41966

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

# Date Reported: 4/11/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-168

 Project:
 Florance GC J 16A
 Collection Date: 4/6/2017 1:49:00 PM

 Lab ID:
 1704262-004
 Matrix: MEOH (SOIL)
 Received Date: 4/7/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/7/2017 12:27:55 PM	31127
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	TOM
Diesel Range Organics (DRO)	26	10	mg/Kg	1	4/7/2017 10:36:42 AM	31126
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/7/2017 10:36:42 AM	31126
Surr: DNOP	83.7	70-130	%Rec	1	4/7/2017 10:36:42 AM	31126
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.2	mg/Kg	1	4/7/2017 11:02:36 AM	G41966
Surr: BFB	122	54-150	%Rec	1	4/7/2017 11:02:36 AM	G41966
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.016	mg/Kg	1	4/7/2017 11:02:36 AM	B41966
Toluene	ND	0.032	mg/Kg	1	4/7/2017 11:02:36 AM	B41966
Ethylbenzene	ND	0.032	mg/Kg	1	4/7/2017 11:02:36 AM	B41966
Xylenes, Total	ND	0.064	mg/Kg	1	4/7/2017 11:02:36 AM	B41966
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	1	4/7/2017 11:02:36 AM	B41966

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

# Lab Order **1704262**Date Reported: **4/11/2017**

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-169

 Project:
 Florance GC J 16A
 Collection Date: 4/6/2017 1:58:00 PM

 Lab ID:
 1704262-005
 Matrix: MEOH (SOIL)
 Received Date: 4/7/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/7/2017 12:40:19 PM	31127
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	35	9.5	mg/Kg	1	4/7/2017 11:01:08 AM	31126
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/7/2017 11:01:08 AM	31126
Surr: DNOP	86.8	70-130	%Rec	1	4/7/2017 11:01:08 AM	31126
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	4/7/2017 11:26:10 AM	G41966
Surr: BFB	119	54-150	%Rec	1	4/7/2017 11:26:10 AM	G41966
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.018	mg/Kg	1	4/7/2017 11:26:10 AM	B41966
Toluene	ND	0.036	mg/Kg	1	4/7/2017 11:26:10 AM	B41966
Ethylbenzene	ND	0.036	mg/Kg	1	4/7/2017 11:26:10 AM	B41966
Xylenes, Total	ND	0.072	mg/Kg	1	4/7/2017 11:26:10 AM	B41966
Surr: 4-Bromofluorobenzene	115	66.6-132	%Rec	1	4/7/2017 11:26:10 AM	B41966

ds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
nted Due to Matrix	E	Value above quantitation range
es for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 5 of 9
d at the Reporting Limit	P	Sample pH Not In Range
e accepted recovery limits	RL	Reporting Detection Limit
outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified
l	eds Maximum Contaminant Level.  uted Due to Matrix  nes for preparation or analysis exceeded  ed at the Reporting Limit  le accepted recovery limits  y outside of range due to dilution or matrix	ted Due to Matrix  E hes for preparation or analysis exceeded  E d at the Reporting Limit  P de accepted recovery limits  RL

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1704262** 

11-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31127 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 31127 RunNo: 41969

Prep Date: 4/7/2017 Analysis Date: 4/7/2017 SeqNo: 1318741 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31127 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31127 RunNo: 41969

Prep Date: 4/7/2017 Analysis Date: 4/7/2017 SeqNo: 1318742 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 96.6 90 110

#### 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 9

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: **1704262** 

11-Apr-17

Project: Florance	GC J 16A									
Sample ID LCS-31126	SampT	ype: <b>LC</b>	cs	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch	ID: <b>31</b>	126	F	RunNo: 4	1951				
Prep Date: 4/7/2017	Analysis D	ate: 4	/7/2017	8	SeqNo: 1	317310	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.0	63.8	116			
Surr: DNOP	3.8		5.000		75.4	70	130			
Sample ID MB-31126	SampT	уре: МІ	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch	ID: <b>31</b>	126	F	RunNo: 4	1951				
Prep Date: 4/7/2017	Analysis D	ate: 4	/7/2017	5	SeqNo: 1	317311	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	8.4		10.00		84.3	70	130			
Sample ID 1704262-001AMS	SampT	уре: М	S	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: TSP-165	Batch	ID: <b>31</b>	126	F	RunNo: 4	1951				
Prep Date: 4/7/2017	Analysis D	ate: 4,	/7/2017	S	SeqNo: 1	317878	Units: mg/h	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	67	10	49.95	28.05	78.8	51.6	130			
Surr: DNOP	3.9		4.995		78.0	70	130			
Sample ID 1704262-001AMS	D SampT	ype: M	SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: TSP-165	Batch	ID: <b>31</b>	126	F	RunNo: 4	1951				
Prep Date: 4/7/2017	Analysis D	ate: 4/	/7/2017	5	SeqNo: 1	317879	Units: mg/k	<b>(</b> g		

SPK value SPK Ref Val %REC

28.05

47.17

4.717

### Qualifiers:

Analyte

Surr: DNOP

Diesel Range Organics (DRO)

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

Result

68

3.8

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

51.6

70

84.7

81.4

HighLimit

130

130

%RPD

0.839

0

**RPDLimit** 

20

0

Qual

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 9

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1704262** 

11-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: G41966 RunNo: 41966

Prep Date: Analysis Date: 4/7/2017 SeqNo: 1318317 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 89.0 54 150

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

Client ID: LCSS Batch ID: G41966 RunNo: 41966

Prep Date: Analysis Date: 4/7/2017 SeqNo: 1318318 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
 97.5
 76.4
 125

 Surr: BFB
 950
 1000
 94.8
 54
 150

Sample ID 1704262-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: **TSP-165** Batch ID: **G41966** RunNo: **42001** 

Prep Date: Analysis Date: 4/10/2017 SeqNo: 1319433 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual Gasoline Range Organics (GRO) 18 3.4 16.90 1.143 99.8 61.3 150

 Surr: BFB
 800
 676.1
 119
 54
 150

 Sample ID
 1704262-001AMSD
 SampType: MSD
 TestCode: EPA Method 8015D: Gasoline Range

Client ID: TSP-165 Batch ID: G41966 RunNo: 42001

Prep Date: Analysis Date: 4/10/2017 SeqNo: 1319434 Units: mg/Kg

%REC Analyte Result **PQL** SPK value SPK Ref Val LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 18 16.90 1.143 99.6 61.3 150 0.263 20 3.4 Surr: BFB 800 676.1 119 54 150 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

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.

3.0

1.1

0.10

WO#: **1704262** 

11-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: B41966 RunNo: 41966

Prep Date: Analysis Date: 4/7/2017 SeqNo: 1318342 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 1.000 112 66.6 132

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: **B41966** RunNo: 41966 Prep Date: Analysis Date: 4/7/2017 SeqNo: 1318343 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result LowLimit 80 1.1 0.025 1.000 0 114 120 Benzene Toluene 1.1 0.050 1.000 0 107 80 120 Ethylbenzene 0.050 0 106 80 1.1 1.000 120

0

98.9

113

80

66.6

120

132

Sample ID 1704262-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles
Client ID: TSP-166 Batch ID: B41966 RunNo: 42001

3.000

1.000

Prep Date:	Analysis [	Date: 4/	10/2017	S	SeqNo: 1	319452	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.017	0.6935	0	115	61.5	138			
Toluene	0.75	0.035	0.6935	0.007219	107	71.4	127			
Ethylbenzene	0.75	0.035	0.6935	0.01062	106	70.9	132			
Xylenes, Total	2.1	0.069	2.080	0.02402	98.8	76.2	123			
Surr: 4-Bromofluorobenzene	0.84		0 6935		121	66.6	132			

Sample ID 1704262-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles

Client ID: **TSP-166** Batch ID: **B41966** RunNo: **42001** 

Dato	110. <b>04</b>	1300	1,	turii 10	2001				
Analysis D	Date: 4/	10/2017	S	SeqNo: 1	319453	Units: mg/K	(g		
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
0.79	0.017	0.6935	0	113	61.5	138	1.06	20	
0.73	0.035	0.6935	0.007219	104	71.4	127	3.46	20	
0.73	0.035	0.6935	0.01062	103	70.9	132	2.85	20	
2.0	0.069	2.080	0.02402	95.2	76.2	123	3.68	20	
0.82		0.6935		118	66.6	132	0	0	
	Analysis E  Result  0.79  0.73  0.73  2.0	Analysis Date: 4/  Result PQL  0.79 0.017  0.73 0.035  0.73 0.035  2.0 0.069	Result         PQL         SPK value           0.79         0.017         0.6935           0.73         0.035         0.6935           0.73         0.035         0.6935           2.0         0.069         2.080	Result         PQL         SPK value         SPK Ref Val           0.79         0.017         0.6935         0           0.73         0.035         0.6935         0.007219           0.73         0.035         0.6935         0.01062           2.0         0.069         2.080         0.02402	Result         PQL         SPK value         SPK Ref Val         %REC           0.79         0.017         0.6935         0         113           0.73         0.035         0.6935         0.007219         104           0.73         0.035         0.6935         0.01062         103           2.0         0.069         2.080         0.02402         95.2	Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit           0.79         0.017         0.6935         0         113         61.5           0.73         0.035         0.6935         0.007219         104         71.4           0.73         0.035         0.6935         0.01062         103         70.9           2.0         0.069         2.080         0.02402         95.2         76.2	Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit           0.79         0.017         0.6935         0         113         61.5         138           0.73         0.035         0.6935         0.007219         104         71.4         127           0.73         0.035         0.6935         0.01062         103         70.9         132           2.0         0.069         2.080         0.02402         95.2         76.2         123	Analysis Date: 4/10/2017         SeqNo: 1319453         Units: mg/Kg           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD           0.79         0.017         0.6935         0         113         61.5         138         1.06           0.73         0.035         0.6935         0.007219         104         71.4         127         3.46           0.73         0.035         0.6935         0.01062         103         70.9         132         2.85           2.0         0.069         2.080         0.02402         95.2         76.2         123         3.68	Analysis Date: 4/10/2017         SeqNo: 1319453         Units: mg/Kg           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit           0.79         0.017         0.6935         0         113         61.5         138         1.06         20           0.73         0.035         0.6935         0.007219         104         71.4         127         3.46         20           0.73         0.035         0.6935         0.01062         103         70.9         132         2.85         20           2.0         0.069         2.080         0.02402         95.2         76.2         123         3.68         20

#### Qualifiers:

Xylenes, Total

Surr: 4-Bromofluorobenzene

\* 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: 505-345-3025 EAY: 505-345-4107

## Sample Log-In Check List

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

Client Name: **BLAGG** Work Order Number: 1704262 RcptNo: 1 Received By: Lindsay Mangin 4/7/2017 7:00:00 AM Completed By: Lindsay Mangin 4/7/2017 7:28:30 AM 04/07/17 Reviewed By: Chain of Custody 1. Custody seals intact on sample bottles? No Not Present V 2. Is Chain of Custody complete? Yes 🗸 No Not Present 3. How was the sample delivered? <u>Courier</u> <u>Log In</u> 4. Was an attempt made to cool the samples? Yes 🗸 No : : NA L 5. Were all samples received at a temperature of >0° C to 6.0°C No NA Yes 💉 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 i. 9. Was preservative added to bottles? Yes No 🗸 NA 10.VOA vials have zero headspace? Yes Νo No VOA Vials ✔ 11. Were any sample containers received broken? Yes No 🗹 # of preserved bottles checked 12. Does paperwork match bottle labels? Yes 🗸 for pH: No (Note discrepancies on chain of custody) (<2 or >12 unless noted) Adjusted? 13. Are matrices correctly identified on Chain of Custody? Νo Yes 14. Is it clear what analyses were requested? No Yes 15. Were all holding times able to be met? No Checked by: Yes (If no, notify customer for authorization.) Special Handling (if applicable) 16. Was client notified of all discrepancies with this order? Yes Nο 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 Signed By 1.6 Good Yes

Client	3	BP AMENTS	BP America	☐ Standard	K Rush				ANA	LE	N	2 2	2 S	HALL ENVIRONMENTAL ANALYSIS LABORATORY	K I
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Date	Ē	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	ат <del>м +</del> хэта атм + хэта	) 82108 H9T SorisM) H9T	EDB (Wetpoo	PAH's (8310 RCRA 8 Met	Anions (F.Cl.	8081 Pesticio 8260B (VOA)	/-imə2) 07S8	CHLOCIDE	) ir Bubbles (
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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

April 11, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1704319

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 8 sample(s) on 4/8/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 4/11/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-170

 Project:
 Florance GC J 16A
 Collection Date: 4/7/2017 11:33:00 AM

 Lab ID:
 1704319-001
 Matrix: MEOH (SOIL)
 Received Date: 4/8/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	: MRA
Chloride	ND	30	mg/Kg	20	4/10/2017 12:19:04 PM	1 31158
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	: JME
Diesel Range Organics (DRO)	31	9.4	mg/Kg	1	4/10/2017 10:23:52 AM	1 31151
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/10/2017 10:23:52 AM	1 31151
Surr: DNOP	87.2	70-130	%Rec	1	4/10/2017 10:23:52 AM	1 31151
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	4/10/2017 10:11:36 AM	1 31130
Surr: BFB	112	54-150	%Rec	1	4/10/2017 10:11:36 AM	1 31130
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.018	mg/Kg	1	4/10/2017 10:11:36 AM	1 31130
Toluene	ND	0.036	mg/Kg	1	4/10/2017 10:11:36 AM	1 31130
Ethylbenzene	ND	0.036	mg/Kg	1	4/10/2017 10:11:36 AM	1 31130
Xylenes, Total	ND	0.072	mg/Kg	1	4/10/2017 10:11:36 AM	1 31130
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	1	4/10/2017 10:11:36 AM	1 31130

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 12
	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: 4/11/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-171

 Project:
 Florance GC J 16A
 Collection Date: 4/7/2017 11:37:00 AM

 Lab ID:
 1704319-002
 Matrix: MEOH (SOIL)
 Received Date: 4/8/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	: MRA
Chloride	ND	30	mg/Kg	20	4/10/2017 12:31:28 PM	1 31158
EPA METHOD 8015M/D: DIESEL RANGE	E ORGANIC	S			Analyst	: JME
Diesel Range Organics (DRO)	32	9.8	mg/Kg	1	4/10/2017 10:51:32 AM	1 31151
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/10/2017 10:51:32 AM	1 31151
Surr: DNOP	87.2	70-130	%Rec	1	4/10/2017 10:51:32 AM	1 31151
EPA METHOD 8015D: GASOLINE RANG	iΕ				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	4/10/2017 10:35:07 AM	1 31130
Surr: BFB	115	54-150	%Rec	1	4/10/2017 10:35:07 AM	1 31130
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.018	mg/Kg	1	4/10/2017 10:35:07 AM	1 31130
Toluene	ND	0.035	mg/Kg	1	4/10/2017 10:35:07 AM	1 31130
Ethylbenzene	ND	0.035	mg/Kg	1	4/10/2017 10:35:07 AM	1 31130
Xylenes, Total	ND	0.071	mg/Kg	1	4/10/2017 10:35:07 AM	1 31130
Surr: 4-Bromofluorobenzene	116	66.6-132	%Rec	1	4/10/2017 10:35:07 AM	1 31130

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 12
	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: 4/11/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-172

 Project:
 Florance GC J 16A
 Collection Date: 4/7/2017 11:45:00 AM

 Lab ID:
 1704319-003
 Matrix: MEOH (SOIL)
 Received Date: 4/8/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/10/2017 12:43:52 PM	<i>I</i> 31158
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	t: <b>JME</b>
Diesel Range Organics (DRO)	41	9.7	mg/Kg	1	4/10/2017 11:19:02 AN	A 31151
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/10/2017 11:19:02 AM	A 31151
Surr: DNOP	89.9	70-130	%Rec	1	4/10/2017 11:19:02 AN	A 31151
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	4/10/2017 10:58:38 AN	<i>I</i> 31130
Surr: BFB	113	54-150	%Rec	1	4/10/2017 10:58:38 AN	<i>I</i> 31130
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	4/10/2017 10:58:38 AM	<i>I</i> 31130
Toluene	ND	0.037	mg/Kg	1	4/10/2017 10:58:38 AN	<i>I</i> 31130
Ethylbenzene	ND	0.037	mg/Kg	1	4/10/2017 10:58:38 AN	<i>I</i> 31130
Xylenes, Total	ND	0.075	mg/Kg	1	4/10/2017 10:58:38 AN	<i>I</i> 31130
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	1	4/10/2017 10:58:38 AN	<i>I</i> 31130

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 12
	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: 4/11/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-173

**Project:** Florance GC J 16A
 Collection Date: 4/7/2017 11:51:00 AM

 **Lab ID:** 1704319-004
 Matrix: MEOH (SOIL)
 Received Date: 4/8/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/10/2017 12:56:16 PM	1 31158
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: JME
Diesel Range Organics (DRO)	46	9.9	mg/Kg	1	4/10/2017 11:46:46 AM	1 31151
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/10/2017 11:46:46 AM	1 31151
Surr: DNOP	90.2	70-130	%Rec	1	4/10/2017 11:46:46 AM	1 31151
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	4/10/2017 11:22:04 AM	1 31130
Surr: BFB	114	54-150	%Rec	1	4/10/2017 11:22:04 AM	1 31130
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	4/10/2017 11:22:04 AM	1 31130
Toluene	ND	0.038	mg/Kg	1	4/10/2017 11:22:04 AM	1 31130
Ethylbenzene	ND	0.038	mg/Kg	1	4/10/2017 11:22:04 AM	1 31130
Xylenes, Total	ND	0.077	mg/Kg	1	4/10/2017 11:22:04 AM	1 31130
Surr: 4-Bromofluorobenzene	116	66.6-132	%Rec	1	4/10/2017 11:22:04 AM	1 31130

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 4 of 12
	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: 4/11/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-174

 Project:
 Florance GC J 16A
 Collection Date: 4/7/2017 12:00:00 PM

 Lab ID:
 1704319-005
 Matrix: MEOH (SOIL)
 Received Date: 4/8/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/10/2017 1:08:41 PM	31158
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: JME
Diesel Range Organics (DRO)	41	9.8	mg/Kg	1	4/10/2017 12:14:46 PM	1 31151
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/10/2017 12:14:46 PM	1 31151
Surr: DNOP	90.2	70-130	%Rec	1	4/10/2017 12:14:46 PM	1 31151
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	5.5	3.4	mg/Kg	1	4/10/2017 11:45:29 AM	1 31130
Surr: BFB	142	54-150	%Rec	1	4/10/2017 11:45:29 AM	1 31130
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.017	mg/Kg	1	4/10/2017 11:45:29 AM	1 31130
Toluene	ND	0.034	mg/Kg	1	4/10/2017 11:45:29 AM	1 31130
Ethylbenzene	ND	0.034	mg/Kg	1	4/10/2017 11:45:29 AM	1 31130
Xylenes, Total	ND	0.068	mg/Kg	1	4/10/2017 11:45:29 AM	1 31130
Surr: 4-Bromofluorobenzene	117	66.6-132	%Rec	1	4/10/2017 11:45:29 AM	1 31130

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 12 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 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: 4/11/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-175

 Project:
 Florance GC J 16A
 Collection Date: 4/7/2017 12:06:00 PM

 Lab ID:
 1704319-006
 Matrix: MEOH (SOIL)
 Received Date: 4/8/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	: MRA
Chloride	ND	30	mg/Kg	20	4/10/2017 1:21:06 PM	31158
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	: JME
Diesel Range Organics (DRO)	46	9.4	mg/Kg	1	4/10/2017 12:42:44 PM	31151
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/10/2017 12:42:44 PM	31151
Surr: DNOP	92.5	70-130	%Rec	1	4/10/2017 12:42:44 PM	31151
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	4/10/2017 12:08:52 PM	31130
Surr: BFB	126	54-150	%Rec	1	4/10/2017 12:08:52 PM	31130
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.018	mg/Kg	1	4/10/2017 12:08:52 PM	31130
Toluene	ND	0.036	mg/Kg	1	4/10/2017 12:08:52 PM	31130
Ethylbenzene	ND	0.036	mg/Kg	1	4/10/2017 12:08:52 PM	31130
Xylenes, Total	ND	0.073	mg/Kg	1	4/10/2017 12:08:52 PM	31130
Surr: 4-Bromofluorobenzene	112	66.6-132	%Rec	1	4/10/2017 12:08:52 PM	31130

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 12
	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: 4/11/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-176

 Project:
 Florance GC J 16A
 Collection Date: 4/7/2017 12:11:00 PM

 Lab ID:
 1704319-007
 Matrix: MEOH (SOIL)
 Received Date: 4/8/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/10/2017 1:33:30 PM	31158
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: JME
Diesel Range Organics (DRO)	38	9.8	mg/Kg	1	4/10/2017 1:10:34 PM	31151
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/10/2017 1:10:34 PM	31151
Surr: DNOP	91.2	70-130	%Rec	1	4/10/2017 1:10:34 PM	31151
EPA METHOD 8015D: GASOLINE RAM	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	4/10/2017 12:32:16 PM	1 31130
Surr: BFB	114	54-150	%Rec	1	4/10/2017 12:32:16 PM	1 31130
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	4/10/2017 12:32:16 PM	1 31130
Toluene	ND	0.037	mg/Kg	1	4/10/2017 12:32:16 PM	1 31130
Ethylbenzene	ND	0.037	mg/Kg	1	4/10/2017 12:32:16 PM	1 31130
Xylenes, Total	ND	0.075	mg/Kg	1	4/10/2017 12:32:16 PM	1 31130
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	1	4/10/2017 12:32:16 PM	1 31130

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 7 of 12
	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: 4/11/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-177

**Project:** Florance GC J 16A
 Collection Date: 4/7/2017 12:16:00 PM

 **Lab ID:** 1704319-008
 Matrix: MEOH (SOIL)
 Received Date: 4/8/2017 8:35:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: MRA
Chloride	ND	30	mg/Kg	20	4/10/2017 1:45:55 PM	31158
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	: JME
Diesel Range Organics (DRO)	27	9.2	mg/Kg	1	4/10/2017 1:38:24 PM	31151
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/10/2017 1:38:24 PM	31151
Surr: DNOP	92.4	70-130	%Rec	1	4/10/2017 1:38:24 PM	31151
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	4/10/2017 12:55:41 PM	1 31130
Surr: BFB	113	54-150	%Rec	1	4/10/2017 12:55:41 PM	1 31130
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.019	mg/Kg	1	4/10/2017 12:55:41 PM	1 31130
Toluene	ND	0.037	mg/Kg	1	4/10/2017 12:55:41 PM	1 31130
Ethylbenzene	ND	0.037	mg/Kg	1	4/10/2017 12:55:41 PM	1 31130
Xylenes, Total	ND	0.075	mg/Kg	1	4/10/2017 12:55:41 PM	1 31130
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	1	4/10/2017 12:55:41 PM	1 31130

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 12
	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#: **1704319** 

11-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31158 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **31158** RunNo: **42002** 

Prep Date: 4/10/2017 Analysis Date: 4/10/2017 SeqNo: 1319678 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31158 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31158 RunNo: 42002

Prep Date: 4/10/2017 Analysis Date: 4/10/2017 SeqNo: 1319679 Units: mg/Kg

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

Chloride 15 1.5 15.00 0 96.9 90 110

#### 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 12

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1704319

11-Apr-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-31128 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **PBS** Batch ID: 31128 RunNo: 41990

Prep Date: 4/7/2017 Analysis Date: 4/10/2017 SeqNo: 1318833 Units: %Rec

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

Surr: DNOP 70 11 10.00 110 130

Sample ID MB-31151 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 31151 RunNo: 41990

Prep Date: 4/10/2017 Analysis Date: 4/10/2017 SeqNo: 1318834 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit Analyte Result PQL HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10

Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 70 10 10.00 102 130

Sample ID LCS-31128 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 31128 RunNo: 41990

Prep Date: 4/7/2017 Analysis Date: 4/10/2017 SeqNo: 1318835 Units: %Rec

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

Surr: DNOP 5.000

Sample ID LCS-31151 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: LCS

Client ID: LCSS Batch ID: 31151 RunNo: 41990

Analysis Date: 4/10/2017 Prep Date: 4/10/2017 SeqNo: 1318836 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result Diesel Range Organics (DRO) 50 10 50.00 0 100 63.8 116 Surr: DNOP 5.000 97.1 70 4.9 130

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

RLReporting Detection Limit

Sample container temperature is out of limit as specified

Page 10 of 12

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1704319

11-Apr-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-31130 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 31130 RunNo: 42001

Prep Date: 4/7/2017 Analysis Date: 4/10/2017 SeqNo: 1319435 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 880 1000 88.2 54 150

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-31130 SampType: LCS

Client ID: LCSS Batch ID: 31130 RunNo: 42001

970

Prep Date: Analysis Date: 4/10/2017 SeqNo: 1319436 4/7/2017 Units: mg/Kg

1000

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 5.0 25.00 100 76.4 125

96.8

54

150

#### 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
- Ε 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 11 of 12

**Project:** 

## Hall Environmental Analysis Laboratory, Inc.

Florance GC J 16A

WO#: **1704319** 

11-Apr-17

Client: Blagg Engineering

Sample ID MB-31130 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: **PBS** Batch ID: **31130** RunNo: **42001** 

Prep Date: 4/7/2017 Analysis Date: 4/10/2017 SeqNo: 1319454 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 1.000 112 66.6 132

Sample ID LCS-31130	Samp1	ype: <b>LC</b>	s	Tes	TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batcl	h ID: <b>31</b>	130	F	RunNo: 4	2001				
Prep Date: 4/7/2017	Analysis D	Date: 4/	10/2017	S	SeqNo: <b>1319455</b>			Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	118	80	120			
Toluene	1.1	0.050	1.000	0	109	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.9	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		118	66.6	132			

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting 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: BLAGG Work Order Number: 1704319 RcptNo: 1 Received By: Lindsay Mangin 4/8/2017 8:35:00 AM Completed By: Lindsay Mangin 4/8/2017 9:18:30 AM 04/08/17 Reviewed By: Chain of Custody 1. Custody seals intact on sample bottles? Yes No [] Not Present ✓ No 🗌 2. Is Chain of Custody complete? Yes 🗸 Not Present 3. How was the sample delivered? Courier Log In No 🗌 4. Was an attempt made to cool the samples? Yes 🗸 NA 🗀 5. Were all samples received at a temperature of >0° C to 6.0°C No NA 🗌 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? Yes 🛂 No 9. Was preservative added to bottles? Yes 🗌 No 🗸 NA 🗀 10.VOA vials have zero headspace? No No VOA Vials Yes Yes 11. Were any sample containers received broken? 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) Adjusted? 13. Are matrices correctly identified on Chain of Custody? Yes 🗸 No 14. Is it clear what analyses were requested? No 🗔 15. Were all holding times able to be met? No 🗌 Checked by: Yes 🗸 (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: Additional remarks: 18. Cooler Information Cooler No Temp C Condition Seal Intact | Seal No | Seal Date Signed By Good Yes

Standard   Krush   Eugh caving   Project Name:   Fuok Auct 6	Standard   Krush   CA   CA   CA   CA   CA   CA   CA   C				
	Floor Name   Project Name   Project Name   Floor Ayuce & C   LeA   A   A   A   A   A   A   A   A   A	Standard	K Rush	<u> </u>	ZATORY
Project #:   Project #:   Project #:   Project #:   Project #:   Project #:   Project #:   Project #:   Project #:   Project #:   Project #:   Project #:   Project #:   Project #:   Project #:   Project Manager:   Projec	TREATED SOL PUES   Project #: TREATED SOL PUES   Project #: TREATED SOL PUES   TREATED SOL PUES   TREATED SOL PUES   Sample: J. Blog.   Metrix   Sample Request ID   Type and # Type   Type   Type and # Type   Ty	Proje	nce 6c J	allenvironment	
TREATED SOL FLUES	Fax#:   Fax#:   TREATED   Soft   TWE	Project #:		٠.,	80
Comparison   Project Manager:	Fax#:   Project Manager:   Project Manager:   Project Manager:   Profession   Project Manager:   Profession			Analysis	
172   172	Sampler   Samp	Project Mana	jer:	(O)	
1   13   13   13   13   13   13   13	137   139   200		Blagg	O / WE	
1779   1770	Time   Matrix   Sample Request ID   Container   Preservative   FEAL No   FEAL NO   F	Sampler: 7	Blogg	7 PPH (( 8.1) 4.1) 5270 SI 7.20N.2, 7.8082 I	(N
135   Selt   TSP - 170	135   Sell   TSP	Sample Temp		(GR + 3E + 41 (GR Sols Sols Sols Sols Sols Sols Sols Sols	
1137   175 - 171   402 × 1 (006   700)   X   X   X   X   X   X   X   X   X	1137 Soll TSP-170 4 ox ( low -001 x x x x   137	Container Type and #	ative	BTEX + MTE TPH 8015B ( TPH (Method EDB (Method RCRA 8 Met RCRA 8 Met RCRA 8 Met RCRA 8 Met RCRA 8 Met RCRA 8 Method RCRA 1 Pesticio	
11.57   7.59 - 1.71   7.00	1137   739-171   7002 1145   739-172   7003 1151   739-173   7004 1200   759-174   7005 1201   739-174   7005 1211   739-174   7005		(0)	×	
1145   739-772	130-0 132-1 132-1		1 -002		
1151   T3P - 173   -004	-757 -757 -757	22) - 051	500-		
120,   759 - 174	136-	139-173	700-		
1206   759 - 175   -004   -004	7.24-1	-	2005		
1216   759 - 176   -007	178-1	- 1	100		
1216		_	-00+		
Time: Relinquished by:    Photograph   Date Time   Remarks: But BP   Condect: Stave		177-127	) <del>(00)-</del>		
Time: Relinquished by:    Photograph   Moth   Math					
Time: Relinquished by:    1246   May   Math.					
Time: Relifiquished by:  [7] 1844   Mustur Was Low Low Low Low Low Low Low Low Low Low	Time: Relinquished by:  13-16  13-16  13-16  13-16  13-16  13-16  13-16	Josep )	Date 7	Bu BP Cortects (16: VHIXONEURM	_
	Time: Relifiquished by:  [7]   BYY   Mustur Wood to Soundles   Soundles   Soundles	by:  Lucuta	Date OH   DS   7	Souples Treshed With H.O.	+ 10+



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

April 24, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1704959

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/21/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 4/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-178

 Project:
 Florance GC J 16A
 Collection Date: 4/20/2017 1:20:00 PM

 Lab ID:
 1704959-001
 Matrix: MEOH (SOIL)
 Received Date: 4/21/2017 7:38:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/21/2017 10:59:56 AM	31367
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	17	9.5	mg/Kg	1	4/21/2017 9:15:49 AM	31359
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/21/2017 9:15:49 AM	31359
Surr: DNOP	112	70-130	%Rec	1	4/21/2017 9:15:49 AM	31359
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	4/21/2017 10:27:11 AM	SG42287
Surr: BFB	138	54-150	%Rec	1	4/21/2017 10:27:11 AM	SG42287
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.019	mg/Kg	1	4/21/2017 10:27:11 AM	B42287
Toluene	ND	0.037	mg/Kg	1	4/21/2017 10:27:11 AM	B42287
Ethylbenzene	ND	0.037	mg/Kg	1	4/21/2017 10:27:11 AM	B42287
Xylenes, Total	ND	0.075	mg/Kg	1	4/21/2017 10:27:11 AM	B42287
Surr: 4-Bromofluorobenzene	123	66.6-132	%Rec	1	4/21/2017 10:27:11 AM	B42287

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 6
	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: 4/24/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-179

 Project:
 Florance GC J 16A
 Collection Date: 4/20/2017 1:25:00 PM

 Lab ID:
 1704959-002
 Matrix: MEOH (SOIL)
 Received Date: 4/21/2017 7:38:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	:: MRA
Chloride	ND	30	mg/Kg	20	4/21/2017 11:12:20 AM	31367
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	:: TOM
Diesel Range Organics (DRO)	23	9.6	mg/Kg	1	4/21/2017 9:37:37 AM	31359
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/21/2017 9:37:37 AM	31359
Surr: DNOP	109	70-130	%Rec	1	4/21/2017 9:37:37 AM	31359
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	:: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	4/21/2017 10:51:18 AM	SG42287
Surr: BFB	114	54-150	%Rec	1	4/21/2017 10:51:18 AM	SG42287
EPA METHOD 8021B: VOLATILES					Analys	:: NSB
Benzene	ND	0.019	mg/Kg	1	4/21/2017 10:51:18 AM	B42287
Toluene	ND	0.038	mg/Kg	1	4/21/2017 10:51:18 AM	B42287
Ethylbenzene	ND	0.038	mg/Kg	1	4/21/2017 10:51:18 AM	B42287
Xylenes, Total	ND	0.076	mg/Kg	1	4/21/2017 10:51:18 AM	B42287
Surr: 4-Bromofluorobenzene	110	66.6-132	%Rec	1	4/21/2017 10:51:18 AM	B42287

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 6
	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#: **1704959** 

24-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31367 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 31367 RunNo: 42281

Prep Date: 4/21/2017 Analysis Date: 4/21/2017 SeqNo: 1329936 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31367 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31367 RunNo: 42281

Prep Date: 4/21/2017 Analysis Date: 4/21/2017 SeqNo: 1329937 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.0 90 110

#### 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 6

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

Blagg Engineering

WO#: 1704959

24-Apr-17

**Project:** Florance GC J 16A Sample ID LCS-31359 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 31359 RunNo: 42271

Prep Date: 4/21/2017 Analysis Date: 4/21/2017 SeqNo: 1328164 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 48 10 O 95.8 63.8 50.00 116

Diesel Range Organics (DRO) Surr: DNOP 4.7 5.000 93.5 70 130

Sample ID MB-31359 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 31359 RunNo: 42271

Analysis Date: 4/21/2017 Prep Date: 4/21/2017 SeqNo: 1328165 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 10.00 108 130 11

Sample ID MB-31360 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 31360 RunNo: 42274

Prep Date: 4/21/2017 Analysis Date: 4/21/2017 SeqNo: 1328407 Units: %Rec

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

Surr: DNOP 8.9 10.00 89.0 70 130

Sample ID LCS-31360 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 31360 RunNo: 42274

Prep Date: 4/21/2017 Analysis Date: 4/21/2017 SeqNo: 1328408 Units: %Rec

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

Surr: DNOP 4.5 5.000 89.6 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 4 of 6

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1704959** 

24-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

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

Client ID: PBS Batch ID: SG42287 RunNo: 42287

Prep Date: Analysis Date: 4/21/2017 SeqNo: 1329608 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 940 1000 93.9 54 150

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

Client ID: LCSS Batch ID: SG42287 RunNo: 42287

Prep Date: Analysis Date: 4/21/2017 SeqNo: 1329609 Units: mg/Kg

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

 Gasoline Range Organics (GRO)
 22
 5.0
 25.00
 0
 88.6
 76.4
 125

 Surr: BFB
 1100
 1000
 106
 54
 150

Sample ID 1704959-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: TSP-178 Batch ID: SG42287 RunNo: 42287

Prep Date: Analysis Date: 4/21/2017 SeqNo: 1329610 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual Gasoline Range Organics (GRO) 19 18.71 101 61.3 150 Surr: BFB 1100 748.5 151 54 150 S

Sample ID 1704959-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: TSP-178 Batch ID: SG42287 RunNo: 42287

Prep Date: Analysis Date: 4/21/2017 SeqNo: 1329611 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 18 18.71 98.5 61.3 150 2.25 20 37 Λ Surr: BFB 1100 748.5 151 54 150 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 5 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1704959

24-Apr-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

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

Client ID: **PBS** Batch ID: **B42287** RunNo: 42287

Prep Date: Analysis Date: 4/21/2017 SeqNo: 1329623 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 1.000 104 66.6 132

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Batch ID: **B42287** Client ID: **LCSS** RunNo: 42287 Prep Date: Analysis Date: 4/21/2017 SeqNo: 1329624 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result LowLimit 0.90 0.025 1.000 O 90.5 80 120 Benzene Toluene 0.92 0.050 1.000 0 91.6 80 120

Ethylbenzene 0.91 0.050 0 91.1 80 120 1.000 Xylenes, Total 2.8 0.10 3.000 0 93.3 80 120 Surr: 4-Bromofluorobenzene 1.1 1.000 109 66.6 132

Sample ID 1704959-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: TSP-179 Batch ID: **B42287** RunNo: 42287

Prep Date: Analysis Date: 4/21/2017 SeqNo: 1329625 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.70 0.019 0.7559 93.0 61.5 138 0 Toluene 0.72 0.038 0.7559 0 95.0 71.4 127 Ethylbenzene 0.72 0.038 0.7559 94.1 70.9 132 0.006501 Xylenes, Total 2.2 0.076 2.268 96.4 76.2 123 Surr: 4-Bromofluorobenzene 0.87 0.7559115 66.6 132

Sample ID 1704959-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles

Client ID: Batch ID: **B42287** TSP-179 RunNo: 42287

OHOIR 15. 101 110	Bato		LLUI		tuiii to. 4	LLUI					
Prep Date:	Analysis D	Date: 4/	21/2017	9	SeqNo: 1	329626	Units: mg/k	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.68	0.019	0.7559	0	89.7	61.5	138	3.58	20		
Toluene	0.69	0.038	0.7559	0	91.7	71.4	127	3.48	20		
Ethylbenzene	0.70	0.038	0.7559	0.006501	92.0	70.9	132	2.32	20		
Xylenes, Total	2.1	0.076	2.268	0	94.0	76.2	123	2.47	20		
Surr: 4-Bromofluorobenzene	0.80		0.7559		106	66.6	132	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 6 of 6



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

# Sample Log-In Check List

EABOI		Website: www.hc	allenvirc	nmen	tal.com		
Client Name:	BLAGG	Work Order Number	: 17049	959		RcptNo	): <b>1</b>
Received By:	Lindsay Mangin	4/21/2017 7:38:00 AM	i		Jimshy Hopigo		
Completed By:	Lindsay Mangin	4/21/2017 7:44:06 AM			Jimshuf Hafigt		
Reviewed By:	Zo	·d21/17					
Chain of Cus	<u>tody</u>						
1. Custody sea	ls intact on sample bottle	s?	Yes		No ·	Not Present ✔	
2. Is Chain of C	Custody complete?		Yes	<b>v</b>	No	Not Present	
3. How was the	sample delivered?		Cour	<u>ier</u>			
<u>Log In</u>							
4. Was an atte	mpt made to cool the sar	mples?	Yes	<b>√</b> ;	No	NA :	
5. Were all sam	nples received at a tempe	erature of >0° C to 6.0°C	Yes	<b>.</b>	No :	NA .	
6. Sample(s) in	proper container(s)?		Yes	~	No		
7. Sufficient sar	mple volume for indicated	i test(s)?	Yes	<b>v</b>	No		
8. Are samples	(except VOA and ONG)	properly preserved?	Yes	<b>V</b> .	No		
9. Was preserva	ative added to bottles?		Yes		No 🗸	NA ·	
10.VOA vials ha	ve zero headspace?		Yes		No .	No VOA Vials ✔	
11. Were any sa	mple containers received	l broken?	Yes		No 🗸	# of preserved bottles checked	
	ork match bottle labels? pancies on chain of custo	dv)	Yes		No .	for pH:	or >12 unless noted)
	correctly identified on Ch	• •	Yes		No .	Adjusted?	or the amount notice,
	at analyses were requeste		Yes		No		
	ing times able to be met? customer for authorization		Yes	<b>V</b>	No .	Checked by:	
Special Handl	ing (if applicable)						
16, Was client no	tified of all discrepancies	with this order?	Yes	: :	No :	NA 🗸	
Person	Notified:	Date:	essandara es	aman nige	N santah-acid kacamatan santan ng manang agar		
By Who		Via:	eMa	il	Phone Fax	In Person	
Regardi	PART A - EXPENSE OF A STATE AND A STATE AN	estational above estational collections collections and the collection of the collections and the collections are collections and the collections are collections as the collections are collections are collections as the collections are co	o albal ottato, to o	31.900au 46.11	n der er st er dete. Dittelle die konsensionele die gegen konsension en een een eer de eer eer de eer eer d Konsension die dit een een een een een dit dittelle die dit dit dit dit dit die die die dit dit die dit dit di	2 Miles (	
Client Ir	nstructions:						
18. <u>Cooler Information Cooler No</u>		Seal Intact   Seal No   S	Seal Da	te	Signed By		

Chain-of-Custody Record  Client BP Awezld  Client BP Awezld  Client BP Awezld  Client BP Awezld  Client BP Awezld  Client BP Awezld  Client BP Awezld  Client BP Awezld  Client BP Awezld  Client BP Awezld  Client BP Awezld  Client BP Awezld  Figer Name  Mailing Address:  Phone #: (Sos) 320 - 1/83  Phone #: (Sos) 320 -	John. Time: Reinquished by, Received by: The Land Remarks: 13 to 12 Co.
### HALL ENVIRON   Www.hallenvironmental.com   Www.hallenvironmental.com   Www.hallenvironmental.com   Www.hallenvironmental.com   Www.hallenvironmental.com   Www.hallenvironmental.com   Tel. 505.345.3975   Fax 505.345.407   Www.hallenvironmental.com   RCRA 8 Metals   RCRA 9 Metals   R	CONTACT STEVE MOSKAC



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

April 25, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: FLORANCE GC J 16A OrderNo.: 1704A20

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/22/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc. Date Reported: 4/25/2017

CLIENT: Blagg Engineering Client Sample ID: TSP-180

 Project:
 FLORANCE GC J 16A
 Collection Date: 4/21/2017 8:52:00 AM

 Lab ID:
 1704A20-001
 Matrix: MEOH (SOIL)
 Received Date: 4/22/2017 10:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/24/2017 11:04:58 AM	31386
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	: JME
Diesel Range Organics (DRO)	30	9.5	mg/Kg	1	4/24/2017 9:50:18 AM	31382
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/24/2017 9:50:18 AM	31382
Surr: DNOP	85.0	70-130	%Rec	1	4/24/2017 9:50:18 AM	31382
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	4/24/2017 12:15:01 PM	SG42322
Surr: BFB	111	54-150	%Rec	1	4/24/2017 12:15:01 PM	SG42322
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.017	mg/Kg	1	4/24/2017 12:15:01 PM	B42322
Toluene	ND	0.034	mg/Kg	1	4/24/2017 12:15:01 PM	B42322
Ethylbenzene	ND	0.034	mg/Kg	1	4/24/2017 12:15:01 PM	B42322
Xylenes, Total	ND	0.068	mg/Kg	1	4/24/2017 12:15:01 PM	B42322
Surr: 4-Bromofluorobenzene	107	66.6-132	%Rec	1	4/24/2017 12:15:01 PM	B42322

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		
	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: 4/25/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-181

 Project:
 FLORANCE GC J 16A
 Collection Date: 4/21/2017 9:01:00 AM

 Lab ID:
 1704A20-002
 Matrix: MEOH (SOIL)
 Received Date: 4/22/2017 10:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	4/24/2017 11:17:23 AM	31386
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analyst:	JME
Diesel Range Organics (DRO)	29	9.7	mg/Kg	1	4/24/2017 10:17:52 AM	31382
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/24/2017 10:17:52 AM	31382
Surr: DNOP	85.1	70-130	%Rec	1	4/24/2017 10:17:52 AM	31382
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	4/24/2017 12:39:03 PM	SG42322
Surr: BFB	111	54-150	%Rec	1	4/24/2017 12:39:03 PM	SG42322
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.019	mg/Kg	1	4/24/2017 12:39:03 PM	B42322
Toluene	ND	0.038	mg/Kg	1	4/24/2017 12:39:03 PM	B42322
Ethylbenzene	ND	0.038	mg/Kg	1	4/24/2017 12:39:03 PM	B42322
Xylenes, Total	ND	0.076	mg/Kg	1	4/24/2017 12:39:03 PM	B42322
Surr: 4-Bromofluorobenzene	104	66.6-132	%Rec	1	4/24/2017 12:39:03 PM	B42322

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 7
	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: 4/25/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-182

 Project:
 FLORANCE GC J 16A
 Collection Date: 4/21/2017 9:10:00 AM

 Lab ID:
 1704A20-003
 Matrix: MEOH (SOIL)
 Received Date: 4/22/2017 10:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/24/2017 11:29:48 AM	31386
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	: JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/24/2017 10:45:44 AM	31382
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/24/2017 10:45:44 AM	31382
Surr: DNOP	84.3	70-130	%Rec	1	4/24/2017 10:45:44 AM	31382
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	2.8	mg/Kg	1	4/24/2017 1:03:07 PM	SG42322
Surr: BFB	106	54-150	%Rec	1	4/24/2017 1:03:07 PM	SG42322
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.014	mg/Kg	1	4/24/2017 1:03:07 PM	B42322
Toluene	ND	0.028	mg/Kg	1	4/24/2017 1:03:07 PM	B42322
Ethylbenzene	ND	0.028	mg/Kg	1	4/24/2017 1:03:07 PM	B42322
Xylenes, Total	ND	0.056	mg/Kg	1	4/24/2017 1:03:07 PM	B42322
Surr: 4-Bromofluorobenzene	104	66.6-132	%Rec	1	4/24/2017 1:03:07 PM	B42322

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		
	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#: **1704A20** 

25-Apr-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

Sample ID MB-31386 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 31386 RunNo: 42317

Prep Date: 4/24/2017 Analysis Date: 4/24/2017 SeqNo: 1330756 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31386 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31386 RunNo: 42317

Prep Date: 4/24/2017 Analysis Date: 4/24/2017 SeqNo: 1330757 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 91.6 90 110

#### 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#: **1704A20** 

25-Apr-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

Sample ID LCS-31382 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 31382 RunNo: 42310 Prep Date: 4/24/2017 Analysis Date: 4/24/2017 SeqNo: 1329720 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

 Diesel Range Organics (DRO)
 49
 10
 50.00
 0
 97.9
 63.8
 116

 Surr: DNOP
 4.8
 5.000
 96.8
 70
 130

Sample ID MB-31382 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 31382 RunNo: 42310

Prep Date: 4/24/2017 Analysis Date: 4/24/2017 SeqNo: 1329721 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 10.00 101 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#: **1704A20** 

25-Apr-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

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

Client ID: PBS Batch ID: SG42322 RunNo: 42322

Prep Date: Analysis Date: 4/24/2017 SeqNo: 1330420 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 54 150

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

Client ID: LCSS Batch ID: SG42322 RunNo: 42322

Prep Date: Analysis Date: 4/24/2017 SeqNo: 1330421 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
 97.7
 76.4
 125

 Surr: BFB
 1100
 1000
 111
 54
 150

#### 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#: **1704A20** 

25-Apr-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

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

Client ID: PBS Batch ID: B42322 RunNo: 42322

Prep Date: Analysis Date: 4/24/2017 SeqNo: 1330439 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 1.000 113 66.6 132

Sample ID 100NG BTEX LC	S Samp	SampType: <b>LCS</b>			TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batc	Batch ID: <b>B42322</b> RunNo: <b>42322</b>				2322				
Prep Date:	Analysis [	Date: 4/	24/2017	S	SeqNo: 1	330440	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.7	80	120			
Toluene	0.94	0.050	1.000	0	93.7	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.2	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		114	66.6	132			

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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: BLA	.GG	Work Order Num	ber: 1704/	20		RcptNo	: 1
Received By: Lin	idsay Mangin	4/22/2017 10:00:00	AM		Jimshy Hopigo		
Completed By: Lin	idsay Mangin	4/22/2017 12:12:14	PM		Jimoby Hlafap Jimoby Hlafap		
Reviewed By:	A-04/2	4117					
Chain of Custody	4						
1. Custody seals into	act on sample bottle	es?	Yes		No ·	Not Present	
2. Is Chain of Custo	dy complete?		Yes	<b>V</b>	No :	Not Present	
3. How was the sam	ple delivered?		<u>Cour</u>	ier			
<u>Log In</u>							
4. Was an attempt r	made to cool the sa	mples?	Yes	<b>V</b>	No	NA .	
5. Were all samples	received at a temp	erature of >0° C to 6.0°C	Yes	V	No .	NA :	
6. Sample(s) in prop	per container(s)?		Yes	<b>V</b> ;	No .		
7. Sufficient sample	volume for indicate	ed test(s)?	Yes	<b>y</b>	No 🗓 :		
8. Are samples (exc	ept VOA and ONG)	properly preserved?	Yes	✓	No 11.2		
9. Was preservative	added to bottles?		Yes	1 ;	No 🗸	NA :	
10.VOA vials have ze	ero headspace?		Yes		No <sup>1</sup>	No VOA Vials 🗸	
11. Were any sample	e containers receive	ed broken?	Yes		No 🗸	# of preserved	
						bottles checked	
12.Does paperwork r	match bottle labels? ies on chain of cust		Yes	<b>V</b>	No	; for pH: (<2	or >12 unless noted)
13 Are matrices corre		• •	Yes	V	No .	Adjusted?	
14. Is it clear what an	*	· ·	Yes	<b>V</b>	No		
15. Were all holding t	imes able to be me omer for authorization		Yes	<b>✓</b> .	No	Checked by:	
Special Handling	(if applicable)						
	···•		V	, .	<b>5</b> 12 1 1	NO 10	
16. Was client notified	d of all discrepancie	es with this order?	Yes		No :	NA 🗸	
Person Noti	ified:	Date	e: [	Carranare	Principal School, 12 (Charleston), Early M. Charleston, American School, Schoo		
By Whom:	22 40 85 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 2	Via:	eMa		Phone Fax	In Person	
Regarding:	gia barbatanda undanabasand na milanda, Alanda	ann ead a gu t-1,000 de 1,000 de 1,000 de 1,000 de 1,000 de 1,000 de 1,000 de 1,000 de 1,000 de 1,000 de 1,000	D: 38011.11.612.148014.15.15.15.18018.	ustra erasen hau	rang nanggang sapang kanalag sa	THE CONTRACTOR STREET, SAME AND STREET, SAME AND STREET, SAME AND STREET, SAME AND S	
Client Instru	,						
17. Additional remark	ks:						
18. <u>Cooler Informat</u>	<u>ion</u> Γemp ºC │ Conditio	on   Seal Intact   Seal No	Seal D	ate	Signed By	I	
1 1.		Yes	Seal D		J Gighed by	-	



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

April 26, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1704A79

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/25/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc. Date Reported: 4/26/2017

**CLIENT:** Blagg Engineering Client Sample ID: TSP-183

 Project:
 Florance GC J 16A
 Collection Date: 4/24/2017 9:47:00 AM

 Lab ID:
 1704A79-001
 Matrix: MEOH (SOIL)
 Received Date: 4/25/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/25/2017 11:24:30 AM	1 31409
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	19	9.3	mg/Kg	1	4/25/2017 10:10:36 AM	1 31408
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/25/2017 10:10:36 AM	1 31408
Surr: DNOP	102	70-130	%Rec	1	4/25/2017 10:10:36 AM	1 31408
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	4/25/2017 10:52:44 AM	1 G42346
Surr: BFB	113	54-150	%Rec	1	4/25/2017 10:52:44 AM	1 G42346
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.017	mg/Kg	1	4/25/2017 10:52:44 AM	1 B42346
Toluene	ND	0.034	mg/Kg	1	4/25/2017 10:52:44 AM	1 B42346
Ethylbenzene	ND	0.034	mg/Kg	1	4/25/2017 10:52:44 AM	1 B42346
Xylenes, Total	ND	0.068	mg/Kg	1	4/25/2017 10:52:44 AM	M B42346
Surr: 4-Bromofluorobenzene	111	66.6-132	%Rec	1	4/25/2017 10:52:44 AM	M B42346

Qualifiers:	*	Value exceeds Maximum Contaminant Level.		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 6
	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: 4/26/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-184

 Project:
 Florance GC J 16A
 Collection Date: 4/24/2017 9:51:00 AM

 Lab ID:
 1704A79-002
 Matrix: MEOH (SOIL)
 Received Date: 4/25/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/25/2017 11:36:55 AM	31409
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	<b>;</b>			Analyst	: TOM
Diesel Range Organics (DRO)	18	9.5	mg/Kg	1	4/25/2017 10:32:30 AM	31408
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/25/2017 10:32:30 AM	31408
Surr: DNOP	102	70-130	%Rec	1	4/25/2017 10:32:30 AM	31408
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	4/25/2017 11:16:54 AM	G42346
Surr: BFB	111	54-150	%Rec	1	4/25/2017 11:16:54 AM	G42346
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.017	mg/Kg	1	4/25/2017 11:16:54 AM	B42346
Toluene	ND	0.035	mg/Kg	1	4/25/2017 11:16:54 AM	B42346
Ethylbenzene	ND	0.035	mg/Kg	1	4/25/2017 11:16:54 AM	B42346
Xylenes, Total	ND	0.069	mg/Kg	1	4/25/2017 11:16:54 AM	B42346
Surr: 4-Bromofluorobenzene	110	66.6-132	%Rec	1	4/25/2017 11:16:54 AM	B42346

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 2 of 6
	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#: **1704A79** 

26-Apr-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31409 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 31409 RunNo: 42344

Prep Date: 4/25/2017 Analysis Date: 4/25/2017 SeqNo: 1331679 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31409 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31409 RunNo: 42344

Prep Date: 4/25/2017 Analysis Date: 4/25/2017 SeqNo: 1331680 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.9 90 110

#### 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 6

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

11

10.00

**Blagg Engineering** 

WO#: 1704A79

26-Apr-17

Project: Florance	GC J 16A	
Sample ID LCS-31408	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 31408	RunNo: <b>42335</b>
Prep Date: 4/25/2017	Analysis Date: 4/25/2017	SeqNo: <b>1330932</b> Units: <b>mg/Kg</b>
Analyte	Result PQL SPK va	alue SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	47 10 50	0.00 0 93.3 63.8 116
Surr: DNOP	4.5 5.	000 89.4 70 130
Sample ID MB-31408	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 31408	RunNo: <b>42335</b>
Prep Date: 4/25/2017	Analysis Date: 4/25/2017	SeqNo: 1330933 Units: mg/Kg
Analyte	Result PQL SPK va	alue SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND 10	
Motor Oil Range Organics (MRO)	ND 50	
Surr: DNOP	11 10	0.00 108 70 130
Sample ID LCS-31395	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 31395	RunNo: <b>42335</b>
Prep Date: 4/24/2017	Analysis Date: 4/25/2017	SeqNo: <b>1331306</b> Units: <b>%Rec</b>
Analyte	Result PQL SPK va	alue SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.6 5.	000 92.8 70 130
Sample ID MB-31395	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 31395	RunNo: <b>42335</b>
Prep Date: 4/24/2017	Analysis Date: 4/25/2017	SeqNo: <b>1331307</b> Units: <b>%Rec</b>
Analyte	Result PQL SPK va	alue 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
- E Value above quantitation range

107

70

130

- 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.

1100

1000

WO#: **1704A79** 

26-Apr-17

Client: Blagg En	gineering								
Project: Florance	GC J 16A								
Sample ID RB	SampType: M	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch ID: G	12346	R	tunNo: 4	2346				
Prep Date:	Analysis Date: 4	/25/2017	S	SeqNo: 1	331528	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 5.0 1000	1000		99.7	54	150			
Sample ID 2.5UG GRO LCS	SampType: L0	s	Tes	Code: El	PA Method	8015D: Gasc	line Rang	e	
Client ID: LCSS	Batch ID: G	12346	R	tunNo: 4	2346				
Prep Date:	Analysis Date: 4	/25/2017	S	eqNo: 1	331529	Units: mg/K	(g		
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	76.4	125			
Surr: BFB	1100	1000		114	54	150			
Sample ID MB-31392	SampType: <b>M</b>	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch ID: 31	392	R	tunNo: 4	2346				
Prep Date: 4/24/2017	Analysis Date: 4	/25/2017	S	eqNo: 1	331541	Units: %Re	C		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000	1000		102	54	150			
Sample ID LCS-31392	SampType: L0	es	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch ID: 31	392	R	tunNo: 4	2346				
Prep Date: 4/24/2017	Analysis Date: 4	/25/2017	S	eqNo: 1	331542	Units: %Re	С		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

#### 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
- 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 6

**Client:** 

#### Hall Environmental Analysis Laboratory, Inc.

Batch ID: 31392

Analysis Date: 4/25/2017

Result

1.1

**Blagg Engineering** 

WO#: **1704A79** 

26-Apr-17

Project:	Florance (	GC J 16A									
Sample ID RE	3	SampTy	/pe: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PB	BS	Batch	ID: <b>B4</b>	2346	R	tunNo: 4	2346				
Prep Date:		Analysis Da	ate: <b>4/</b>	25/2017	S	SeqNo: 1	331563	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-Bromoflu	orobenzene	1.1		1.000		109	66.6	132			
Sample ID 10	ONG BTEX LCS	SampTy	/pe: <b>LC</b>	s	Tes	Code: El	PA Method	8021B: Volat	iles		
Client ID: LC	ss	Batch	ID: <b>B4</b>	2346	R	tunNo: 4	2346				
Prep Date:		Analysis Da	ate: <b>4/</b>	25/2017	S	SeqNo: 1	331564	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.91	0.025	1.000	0	90.7	80	120			
Toluene		0.93	0.050	1.000	0	92.8	80	120			
Ethylbenzene		0.93	0.050	1.000	0	92.8	80	120			
Xylenes, Total		2.8	0.10	3.000	0	94.8	80	120			
Surr: 4-Bromoflu	orobenzene	1.1		1.000		113	66.6	132			
Sample ID ME	3-31392	SampTy	/pe: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PB	BS	Batch	ID: <b>31</b>	392	R	tunNo: 4	2346				
Prep Date: 4	/24/2017	Analysis Da	ate: <b>4/</b>	25/2017	S	SeqNo: 1	331567	Units: %Red	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromoflu	orobenzene	1.1		1.000		111	66.6	132			
Sample ID LC	S-31392	SampTy	/pe: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Volat	iles	·	

#### Qualifiers:

Client ID: LCSS

Analyte

Prep Date: 4/24/2017

Surr: 4-Bromofluorobenzene

\* 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 / L D

RunNo: 42346

112

SPK value SPK Ref Val %REC LowLimit

1.000

SeqNo: 1331568

Units: %Rec

132

%RPD

**RPDLimit** 

Qual

HighLimit

66.6

Page 6 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109

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

## Sample Log-In Check List

		Work Order Numb	Der. 1704/	4/9		Rc	otNo: 1
Received By:	Lindsay Mangin	4/25/2017 7:15:00 A	/M		Jimshy Hayiy	0	
Completed By:	Lindsay Mangin	4/25/2017 7:34:32 A	\M		Jimesy Hapips Simaku Hlonis	0	
Reviewed By:	ENM	01/26/17			000		
Chain of Cus	stody						
1. Custody sea	als intact on sample bottles	?	Yes	[-]	No [	Not Present	<b>✓</b>
	Custody complete?		Yes		No [	Not Present	
3. How was the	e sample delivered?		Cour			No. 11000m	Second
<u>Log In</u>							
4. Was an atte	empt made to cool the sam	ples?	Yes	<b>V</b>	No 🗍	NA	
5. Were all san	nples received at a temper	ature of >0° C to 6.0°C	Yes	V	No 🗀	NA	
6. Sample(s) in	n proper container(s)?		Yes	V	No 🗌		
7, Sufficient sai	mple volume for indicated	test(s)?	Yes	V	No []		
8. Are samples	(except VOA and ONG) p	roperly preserved?	Yes	V	No 🗌		
9. Was preserve	rative added to bottles?		Yes		No 🗸	NA	
10.VOA vials ha	ive zero headspace?		Yes	[]	No [	No VOA Vials	
11. Were any sa	ample containers received l	broken?	Yes		No 🗸		
12 Dage papers	ork match bottle labels?			r=1	L	# of preserved bottles checked	t
	pancies on chain of custody	v)	Yes	<b>V</b>	No 🗔	for pH:	(<2 or >12 unless noted)
	correctly identified on Cha		Yes	V	No []	Adjusted	,
	at analyses were requested		Yes	V	No [		
	ling times able to be met? customer for authorization.	)	Yes	V	No 🗌	Checked I	oy:
	ling (if applicable) otified of all discrepancies v	officer to the second		1	(1		
	ÉTATA MARINA DA CARA	vith this order?	Yes	i	No .	NA	<b>⊻</b> ] 
	Notified:	Date:		00000000000000000000000000000000000000		÷	
By Who	A Salara Company Compa	Via:	☐ eMai	7200000	Phone 📋 Fax	In Person	i
Regardi	ing: nstructions:						**   **
				·			
17. Additional rer							
18. <u>Cooler Inform</u>	1	1					
Cooler No	Temp °C Condition  2.1 Good	Seal Intact Seal No Yes	Seal Dat	e	Signed By		

	HALL ENVIRONMENTAL	TAOLENOUS MANAGEMENT AND THE PROPERTY OF THE P	NM 87109	FOR 346 4107	45-410 <i>l</i>				¥O/^	8260B (VOV) 8260B (Semi-'- בארט (Semi-'-) ב באלגטףג⊅ב אוד Bubbles (in Bubbles) (in Bubbles)	×	×						CONTROL STEVE MOSKAL	NCGCJ 16A	محر on the analytical report.
	ENVIR	www hallenvironmental com	- Albuquerane NM 87109		n ax Analysis	(*(			ON'	RCRA 8 Met Anions (F,Cl 8081 Pesticio								Caus EVRM	18N-E: FLR	will be clearly notated on the
. !	HALL	ed www	4901 Hawkins NE	Tel 505-345-3975	765-545-595			(1.8 (1.4	1 t l	TPH 8015B F TPH (Method EDB (Method	×	×						BILL BP VID: VHIXONEVRM	24: L1-0	y sub-contracted data
	79		490	} <u> </u>	<u> </u>	ηλ)	Gas on	) НЧТ	+ ∃8	97EX + M <del>77</del> 8	×						_	Remarks:	ENTER TO	ossibility. Any sul
Turn-Around Time: SAME	DA! ✓ Rush		FLORANCE GC of 16A		TREATED SOIL PILES	Project Manager:	J. B. 466	iler: J. B.Ack	Température: 7,	Container Preservative HEAL No. Type Type	100- coor 1xto	11 11						That the Time	Date	iamples submitted to Hall Environmental may be subcontracted to other expedited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
Chain-of-Custody Record Turn-	S	INC. P	7+	Project #:	1183	Proje	□ Level 4 (Full Validation)	Sampler	Sample	Sample Request ID Con	TSP-183 40	75p - 184						Regelved by:		Hall Environmental may be subcontracted
-of-Cust	MERICA	ENGANEERWG	:6	:	320-			□ Other		Matrix S	501C T	7.				-	; ;	Kelinguished by:	Relinduished by:	
Chain	Client: BP AMERICA	BAGG	Mailing Address:		Phone #: (505)	email or Fax#:	QA/QC Package: XStandard	Accreditation □ NELAP	☐ EDD (Type)	Date Time	74/2017 10947	11 0951						MAY 1600	Date: Time:	If necessary,



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

April 28, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: FLORANCE GC J 16A OrderNo.: 1704B30

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/26/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 4/28/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-185

 Project:
 FLORANCE GC J 16A
 Collection Date: 4/25/2017 2:05:00 PM

 Lab ID:
 1704B30-001
 Matrix: MEOH (SOIL)
 Received Date: 4/26/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	30	mg/Kg	20	4/26/2017 10:42:11 AM	31436
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	:: TOM
Diesel Range Organics (DRO)	32	9.5	mg/Kg	1	4/26/2017 9:44:31 AM	31426
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/26/2017 9:44:31 AM	31426
Surr: DNOP	104	70-130	%Rec	1	4/26/2017 9:44:31 AM	31426
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	4/26/2017 12:24:01 PM	31417
Surr: BFB	103	54-150	%Rec	1	4/26/2017 12:24:01 PM	31417
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.018	mg/Kg	1	4/26/2017 12:24:01 PM	31417
Toluene	ND	0.036	mg/Kg	1	4/26/2017 12:24:01 PM	31417
Ethylbenzene	ND	0.036	mg/Kg	1	4/26/2017 12:24:01 PM	31417
Xylenes, Total	ND	0.073	mg/Kg	1	4/26/2017 12:24:01 PM	31417
Surr: 4-Bromofluorobenzene	104	66.6-132	%Rec	1	4/26/2017 12:24:01 PM	31417

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

#### Date Reported: 4/28/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-186

 Project:
 FLORANCE GC J 16A
 Collection Date: 4/25/2017 2:10:00 PM

 Lab ID:
 1704B30-002
 Matrix: MEOH (SOIL)
 Received Date: 4/26/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/26/2017 10:54:36 AN	1 31436
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	34	9.4	mg/Kg	1	4/26/2017 10:06:13 AM	1 31426
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/26/2017 10:06:13 AM	1 31426
Surr: DNOP	105	70-130	%Rec	1	4/26/2017 10:06:13 AN	1 31426
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	4/26/2017 10:49:21 AN	1 31417
Surr: BFB	132	54-150	%Rec	1	4/26/2017 10:49:21 AN	1 31417
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.017	mg/Kg	1	4/26/2017 10:49:21 AN	1 31417
Toluene	ND	0.034	mg/Kg	1	4/26/2017 10:49:21 AN	1 31417
Ethylbenzene	ND	0.034	mg/Kg	1	4/26/2017 10:49:21 AN	1 31417
Xylenes, Total	ND	0.068	mg/Kg	1	4/26/2017 10:49:21 AN	1 31417
Surr: 4-Bromofluorobenzene	106	66.6-132	%Rec	1	4/26/2017 10:49:21 AN	1 31417

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 2 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
	ND	Not Detected at the Reporting Limit RPD outside accepted recovery limits		Sample pH Not In Range Reporting Detection Limit

Date Reported: 4/28/2017

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: TSP-187

 Project:
 FLORANCE GC J 16A
 Collection Date: 4/25/2017 2:15:00 PM

 Lab ID:
 1704B30-003
 Matrix: MEOH (SOIL)
 Received Date: 4/26/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/26/2017 11:07:00 AN	1 31436
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	27	9.8	mg/Kg	1	4/26/2017 10:28:12 AN	1 31426
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/26/2017 10:28:12 AN	1 31426
Surr: DNOP	106	70-130	%Rec	1	4/26/2017 10:28:12 AN	1 31426
EPA METHOD 8015D: GASOLINE RAM	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	4/26/2017 11:13:02 AN	1 31417
Surr: BFB	109	54-150	%Rec	1	4/26/2017 11:13:02 AN	1 31417
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.017	mg/Kg	1	4/26/2017 11:13:02 AN	1 31417
Toluene	ND	0.035	mg/Kg	1	4/26/2017 11:13:02 AM	1 31417
Ethylbenzene	ND	0.035	mg/Kg	1	4/26/2017 11:13:02 AM	1 31417
Xylenes, Total	ND	0.070	mg/Kg	1	4/26/2017 11:13:02 AN	1 31417
Surr: 4-Bromofluorobenzene	105	66.6-132	%Rec	1	4/26/2017 11:13:02 AN	1 31417

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 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: 4/28/2017

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TSP-188

 Project:
 FLORANCE GC J 16A
 Collection Date: 4/25/2017 2:20:00 PM

 Lab ID:
 1704B30-004
 Matrix: MEOH (SOIL)
 Received Date: 4/26/2017 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/26/2017 11:19:25 AM	<i>I</i> 31436
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	23	9.2	mg/Kg	1	4/26/2017 10:50:09 AM	A 31426
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/26/2017 10:50:09 AM	Л 31426
Surr: DNOP	106	70-130	%Rec	1	4/26/2017 10:50:09 AM	<i>I</i> 31426
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	4/26/2017 11:36:44 AM	A 31417
Surr: BFB	104	54-150	%Rec	1	4/26/2017 11:36:44 AM	A 31417
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.017	mg/Kg	1	4/26/2017 11:36:44 AM	Л 31417
Toluene	ND	0.035	mg/Kg	1	4/26/2017 11:36:44 AM	Л 31417
Ethylbenzene	ND	0.035	mg/Kg	1	4/26/2017 11:36:44 AM	Л 31417
Xylenes, Total	ND	0.069	mg/Kg	1	4/26/2017 11:36:44 AM	A 31417
Surr: 4-Bromofluorobenzene	104	66.6-132	%Rec	1	4/26/2017 11:36:44 AM	A 31417

*	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
	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

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1704B30** 

28-Apr-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

Sample ID MB-31436 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 31436 RunNo: 42382

Prep Date: 4/26/2017 Analysis Date: 4/26/2017 SeqNo: 1332968 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31436 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31436 RunNo: 42382

Prep Date: 4/26/2017 Analysis Date: 4/26/2017 SeqNo: 1332969 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 92.9 90 110

#### 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 8

**Client:** 

#### Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: 1704B30

28-Apr-17

Project: FLORA	NCE GC J 16A	
Sample ID LCS-31426	SampType: <b>LCS</b>	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 31426	RunNo: <b>42362</b>
Prep Date: 4/26/2017	Analysis Date: 4/26/2017	SeqNo: 1331951 Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO) Surr: DNOP	48 10 50.00 4.7 5.000	0 95.8 63.8 116 93.5 70 130
Sample ID MB-31426	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 31426	RunNo: <b>42362</b>
Prep Date: 4/26/2017	Analysis Date: 4/26/2017	SeqNo: 1331952 Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP	ND 10 ND 50 9.8 10.00	98.2 70 130
Sample ID LCS-31439	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 31439	RunNo: <b>42363</b>
Prep Date: 4/26/2017	Analysis Date: 4/26/2017	SeqNo: 1332305 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.3 5.000	86.0 70 130
Sample ID MB-31439	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 31439	RunNo: <b>42363</b>
Prep Date: 4/26/2017	Analysis Date: 4/26/2017	SeqNo: 1332306 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	8.1 10.00	80.6 70 130
Sample ID LCS-31410	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 31410	RunNo: <b>42363</b>
Prep Date: 4/25/2017	Analysis Date: 4/26/2017	SeqNo: 1332922 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.5 5.000	89.5 70 130
Sample ID MB-31410	SampType: <b>MBLK</b>	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 31410	RunNo: 42363

#### Qualifiers:

Analyte

Surr: DNOP

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Prep Date: 4/25/2017

Η Holding times for preparation or analysis exceeded

Analysis Date: 4/26/2017

Result

8.2

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

LowLimit

70

Value above quantitation range

J Analyte detected below quantitation limits

SeqNo: 1332923

81.8

Page 6 of 8

Units: %Rec

130

HighLimit

%RPD

**RPDLimit** 

Qual

P Sample pH Not In Range

SPK value SPK Ref Val %REC

10.00

Reporting Detection Limit RL

Sample container temperature is out of limit as specified

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **1704B30** 

28-Apr-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

Sample ID MB-31417 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 31417 RunNo: 42378

Prep Date: 4/25/2017 Analysis Date: 4/26/2017 SeqNo: 1332745 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 920 1000 92.0 54 150

Sample ID LCS-31417 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 31417 RunNo: 42378

Prep Date: 4/25/2017 Analysis Date: 4/26/2017 SeqNo: 1332746 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
 97.2
 76.4
 125

 Surr: BFB
 1000
 1000
 100
 54
 150

#### 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.

WO#: 1704B30

28-Apr-17

Client: Blagg Engineering
Project: FLORANCE GC J 16A

Sample ID MB-31417 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 31417 RunNo: 42378 Prep Date: 4/25/2017 Analysis Date: 4/26/2017 SeqNo: 1332767 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 1.000 104 66.6 132

Sample ID LCS-31417	Samp	Гуре: LC	s	TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: <b>31417</b> Analysis Date: <b>4/26/2017</b>			F							
Prep Date: 4/25/2017				SeqNo: <b>1332768</b>			Units: mg/k	<b>(</b> g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.94	0.025	1.000	0	93.7	80	120				
Toluene	0.92	0.050	1.000	0	92.3	80	120				
Ethylbenzene	0.96	0.050	1.000	0	95.7	80	120				
Xylenes, Total	2.9	0.10	3.000	0	96.8	80	120				
Surr: 4-Bromofluorobenzene	1.1		1.000		105	66.6	132				

#### Qualifiers:

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

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

1. Custody seals intact on sample bottles?  2. Is Chain of Custody complete?  3. How was the sample delivered?  Courier  Log In  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 ✓  6. Sample(s) in proper container(s)?  Yes ✓  7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?	Jimshy Hosqot Jimshy Hosqot	>	
2. Is Chain of Custody complete?  3. How was the sample delivered?  Courier  Log In  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 ✓  6. Sample(s) in proper container(s)?  Yes ✓  7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?		<b>&gt;</b>	
2. Is Chain of Custody complete?  3. How was the sample delivered?  Courier  Log In  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 ✓  6. Sample(s) in proper container(s)?  Yes ✓  7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?			
3. How was the sample delivered?  Log In  4. Was an attempt made to cool the samples?  5. Were all samples received at a temperature of >0° C to 6.0°C  7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?	No 🗀	Not Present 🗹	
Log In  4. Was an attempt made to cool the samples?  5. Were all samples received at a temperature of >0° C to 6.0°C  7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?	No 🗌	Not Present	
4. Was an attempt made to cool the samples?  5. Were all samples received at a temperature of >0° C to 6.0°C  7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?			
5. Were all samples received at a temperature of >0° C to 6.0°C  Yes   6. Sample(s) in proper container(s)?  7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?  Yes   9. Yes   1. Yes   1. Yes   1. Yes   1. Yes  1.			
6. Sample(s) in proper container(s)?  7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?  Yes ☑  9. Was preservative added to bottles?	No 🗆	NA 🗌	
7. Sufficient sample volume for indicated test(s)?  8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?  Yes	No 🗆	NA 🗆	
8. Are samples (except VOA and ONG) properly preserved?  9. Was preservative added to bottles?  Yes	No □		
9. Was preservative added to bottles?	No 🗌		
	No $\square$		
	No 🗹	na 🗆	
10.VOA vials have zero headspace?	No 🗌	No VOA Vials 🗹	
11. Were any sample containers received broken? Yes $\square$	No 🗸	# of preserved	
12. Does paperwork match bottle labels?  (Note discrepancies on chain of custody)	No 🗔	bottles checked for pH:	r >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ✓	No 🗌	Adjusted?	
14. Is it clear what analyses were requested?	No 🗌		
15. Were all holding times able to be met? Yes (If no, notify customer for authorization.)	No 🗀	Checked by:	
Special Handling (if applicable)			
16. Was client notified of all discrepancies with this order?	No 🗀	NA 🗸	
Person Notified: Date:    By Whom: Via:   eMail    Regarding: Client Instructions:	Phone Fax	in Person  Conditions on a Charles Selected from an annual designation  Enterprise and an annual designation of the charles and an annual designation of the charles and an annual designation of the charles and annual desig	
17. Additional remarks:			ن
18. Cooler Information  Cooler No Temp °C Condition Seal Intact Seal No Seal Date  1 3.4 Good Yes			

HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	BTEX + MTBE + TPH (Gas only)  TPH 8015B (GRO \ DRO \ MRO)  TPH (Method 418.1)  EDB (Method 504.1)  PAH's (8310 or 8270 SIMS)  RCRA 8 Metals  Anions (F,CI,NO₃,NO₂,PO₄,SO₄)  8081 Pesticides \ 8082 PCB's  8250 (Semi-VOA)  8270 (Semi-VOA)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Turn-Around Time: SAME  □ Standard XRush  Project Name:  FLORANCE GC J 16A  Project #:  Project #:	Project Manager:  T. B. L. L. L. L. L. L. L. L. L. L. L. L. L.	1405   501L   75P - 18b
Chain-of-Custody Record  Client: BP AMERICA  BAND Engline IN C.  Mailing Address: Phone #: (505) 520 - (183	Package: Idard	# 1405 5016 739-185    1410   739-184    1415   739-184    1420   739-183    1420   739-183    1420   739-183    1420   739-183    1415   739-184    1415

## Appendix D

Temporary Use Area Vadose Zone Laboratory Analytical Data Reports



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

May 05, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1705070

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 7 sample(s) on 5/2/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order **1705070**Date Reported: **5/5/2017** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: VZ-1

 Project:
 Florance GC J 16A
 Collection Date: 5/1/2017 10:48:00 AM

 Lab ID:
 1705070-001
 Matrix: SOIL
 Received Date: 5/2/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	5/4/2017 1:44:02 PM	31565
EPA METHOD 8015M/D: DIESEL RAN	3			Analys	t: TOM	
Diesel Range Organics (DRO)	30	9.3	mg/Kg	1	5/3/2017 2:44:19 PM	31533
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/3/2017 2:44:19 PM	31533
Surr: DNOP	87.1	70-130	%Rec	1	5/3/2017 2:44:19 PM	31533
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/3/2017 8:14:23 PM	31527
Surr: BFB	100	54-150	%Rec	1	5/3/2017 8:14:23 PM	31527
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	5/3/2017 8:14:23 PM	31527
Toluene	ND	0.048	mg/Kg	1	5/3/2017 8:14:23 PM	31527
Ethylbenzene	ND	0.048	mg/Kg	1	5/3/2017 8:14:23 PM	31527
Xylenes, Total	ND	0.096	mg/Kg	1	5/3/2017 8:14:23 PM	31527
Surr: 4-Bromofluorobenzene	117	66.6-132	%Rec	1	5/3/2017 8:14:23 PM	31527

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 12
	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

Lab Order **1705070**Date Reported: **5/5/2017** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: VZ-2

 Project:
 Florance GC J 16A
 Collection Date: 5/1/2017 10:52:00 AM

 Lab ID:
 1705070-002
 Matrix: SOIL
 Received Date: 5/2/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	5/4/2017 2:21:15 PM	31565
EPA METHOD 8015M/D: DIESEL RAN	3			Analys	t: <b>TOM</b>	
Diesel Range Organics (DRO)	39	9.6	mg/Kg	1	5/3/2017 4:07:49 PM	31533
Motor Oil Range Organics (MRO)	50	48	mg/Kg	1	5/3/2017 4:07:49 PM	31533
Surr: DNOP	84.8	70-130	%Rec	1	5/3/2017 4:07:49 PM	31533
EPA METHOD 8015D: GASOLINE RAM	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/3/2017 8:38:13 PM	31527
Surr: BFB	98.2	54-150	%Rec	1	5/3/2017 8:38:13 PM	31527
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	5/3/2017 8:38:13 PM	31527
Toluene	ND	0.048	mg/Kg	1	5/3/2017 8:38:13 PM	31527
Ethylbenzene	ND	0.048	mg/Kg	1	5/3/2017 8:38:13 PM	31527
Xylenes, Total	ND	0.097	mg/Kg	1	5/3/2017 8:38:13 PM	31527
Surr: 4-Bromofluorobenzene	116	66.6-132	%Rec	1	5/3/2017 8:38:13 PM	31527

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 12
	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

## Lab Order **1705070**Date Reported: **5/5/2017**

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: VZ-3

 Project:
 Florance GC J 16A
 Collection Date: 5/1/2017 10:24:00 AM

 Lab ID:
 1705070-003
 Matrix: SOIL
 Received Date: 5/2/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	5/4/2017 2:33:40 PM	31565
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	62	9.6	mg/Kg	1	5/3/2017 4:35:54 PM	31533
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/3/2017 4:35:54 PM	31533
Surr: DNOP	96.1	70-130	%Rec	1	5/3/2017 4:35:54 PM	31533
EPA METHOD 8015D: GASOLINE RANG	E				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/3/2017 9:02:07 PM	31527
Surr: BFB	99.5	54-150	%Rec	1	5/3/2017 9:02:07 PM	31527
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.023	mg/Kg	1	5/3/2017 9:02:07 PM	31527
Toluene	ND	0.047	mg/Kg	1	5/3/2017 9:02:07 PM	31527
Ethylbenzene	ND	0.047	mg/Kg	1	5/3/2017 9:02:07 PM	31527
Xylenes, Total	ND	0.094	mg/Kg	1	5/3/2017 9:02:07 PM	31527
Surr: 4-Bromofluorobenzene	117	66.6-132	%Rec	1	5/3/2017 9:02:07 PM	31527

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 12
	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

Lab Order **1705070**Date Reported: **5/5/2017** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: VZ-4

 Project:
 Florance GC J 16A
 Collection Date: 5/1/2017 10:28:00 AM

 Lab ID:
 1705070-004
 Matrix: SOIL
 Received Date: 5/2/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	5/4/2017 2:46:04 PM	31565
EPA METHOD 8015M/D: DIESEL RAN	3			Analys	t: <b>TOM</b>	
Diesel Range Organics (DRO)	39	9.6	mg/Kg	1	5/3/2017 5:04:00 PM	31533
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/3/2017 5:04:00 PM	31533
Surr: DNOP	90.1	70-130	%Rec	1	5/3/2017 5:04:00 PM	31533
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/3/2017 9:26:03 PM	31527
Surr: BFB	99.8	54-150	%Rec	1	5/3/2017 9:26:03 PM	31527
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.025	mg/Kg	1	5/3/2017 9:26:03 PM	31527
Toluene	ND	0.050	mg/Kg	1	5/3/2017 9:26:03 PM	31527
Ethylbenzene	ND	0.050	mg/Kg	1	5/3/2017 9:26:03 PM	31527
Xylenes, Total	ND	0.10	mg/Kg	1	5/3/2017 9:26:03 PM	31527
Surr: 4-Bromofluorobenzene	118	66.6-132	%Rec	1	5/3/2017 9:26:03 PM	31527

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 12
	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

# Lab Order **1705070**Date Reported: **5/5/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: VZ-5

 Project:
 Florance GC J 16A
 Collection Date: 5/1/2017 10:32:00 AM

 Lab ID:
 1705070-005
 Matrix: SOIL
 Received Date: 5/2/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	5/4/2017 2:58:29 PM	31565
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	36	9.5	mg/Kg	1	5/3/2017 5:32:04 PM	31533
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/3/2017 5:32:04 PM	31533
Surr: DNOP	86.0	70-130	%Rec	1	5/3/2017 5:32:04 PM	31533
EPA METHOD 8015D: GASOLINE RAM	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/3/2017 9:49:56 PM	31527
Surr: BFB	103	54-150	%Rec	1	5/3/2017 9:49:56 PM	31527
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.025	mg/Kg	1	5/3/2017 9:49:56 PM	31527
Toluene	ND	0.049	mg/Kg	1	5/3/2017 9:49:56 PM	31527
Ethylbenzene	ND	0.049	mg/Kg	1	5/3/2017 9:49:56 PM	31527
Xylenes, Total	ND	0.099	mg/Kg	1	5/3/2017 9:49:56 PM	31527
Surr: 4-Bromofluorobenzene	111	66.6-132	%Rec	1	5/3/2017 9:49:56 PM	31527

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 12
	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

# Lab Order **1705070**Date Reported: **5/5/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: VZ-6

 Project:
 Florance GC J 16A
 Collection Date: 5/1/2017 10:36:00 AM

 Lab ID:
 1705070-006
 Matrix: SOIL
 Received Date: 5/2/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: LGT
Chloride	ND	30	mg/Kg	20	5/4/2017 3:35:42 PM	31565
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	t: TOM
Diesel Range Organics (DRO)	39	9.3	mg/Kg	1	5/3/2017 6:00:08 PM	31533
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/3/2017 6:00:08 PM	31533
Surr: DNOP	86.9	70-130	%Rec	1	5/3/2017 6:00:08 PM	31533
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	t: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/3/2017 10:13:53 PM	31527
Surr: BFB	99.2	54-150	%Rec	1	5/3/2017 10:13:53 PM	31527
EPA METHOD 8021B: VOLATILES					Analyst	t: NSB
Benzene	ND	0.023	mg/Kg	1	5/3/2017 10:13:53 PM	31527
Toluene	ND	0.046	mg/Kg	1	5/3/2017 10:13:53 PM	31527
Ethylbenzene	ND	0.046	mg/Kg	1	5/3/2017 10:13:53 PM	31527
Xylenes, Total	ND	0.093	mg/Kg	1	5/3/2017 10:13:53 PM	31527
Surr: 4-Bromofluorobenzene	114	66.6-132	%Rec	1	5/3/2017 10:13:53 PM	31527

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 12
	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

Lab Order **1705070**Date Reported: **5/5/2017** 

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: VZ-7

 Project:
 Florance GC J 16A
 Collection Date: 5/1/2017 10:40:00 AM

 Lab ID:
 1705070-007
 Matrix: SOIL
 Received Date: 5/2/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	5/4/2017 3:48:06 PM	31565
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	:: TOM
Diesel Range Organics (DRO)	57	10	mg/Kg	1	5/3/2017 6:28:24 PM	31533
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	5/3/2017 6:28:24 PM	31533
Surr: DNOP	86.6	70-130	%Rec	1	5/3/2017 6:28:24 PM	31533
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/3/2017 10:37:58 PM	31527
Surr: BFB	98.2	54-150	%Rec	1	5/3/2017 10:37:58 PM	31527
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.023	mg/Kg	1	5/3/2017 10:37:58 PM	31527
Toluene	ND	0.047	mg/Kg	1	5/3/2017 10:37:58 PM	31527
Ethylbenzene	ND	0.047	mg/Kg	1	5/3/2017 10:37:58 PM	31527
Xylenes, Total	ND	0.094	mg/Kg	1	5/3/2017 10:37:58 PM	31527
Surr: 4-Bromofluorobenzene	112	66.6-132	%Rec	1	5/3/2017 10:37:58 PM	31527

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 12
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RI.	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.

WO#: 1705070

05-May-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-31565 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 31565 RunNo: 42548

Prep Date: 5/4/2017 Analysis Date: 5/4/2017 SeqNo: 1339022 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-31565 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 31565 RunNo: 42548

Prep Date: 5/4/2017 Analysis Date: 5/4/2017 SeqNo: 1339023 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 96.1 90 110

#### 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#: 1705070

05-May-17

Client: Project:	Blagg En Florance	gineering GC J 16A									
Sample ID	LCS-31533	SampTyp	e: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch I	D: <b>31</b>	533	F	RunNo: 4	2506				
Prep Date:	5/2/2017	Analysis Dat	:e: <b>5</b> /	/3/2017	5	SeqNo: 1	337177	Units: mg/k	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	49	10	50.00	0	97.3	63.8	116			
Surr: DNOP		4.8		5.000		95.8	70	130			
Sample ID	MB-31533	SampTyp	oe: MI	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch I	D: <b>31</b>	533	F	RunNo: 4	2506			-	
Prep Date:	5/2/2017	Analysis Dat	e: <b>5</b> /	/3/2017	9	SeqNo: 1	337178	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 Rang	je Organics (MRO)	ND	50								
Surr: DNOP		10		10.00		104	70	130			
Sample ID	1705070-001AMS	SampTyp	e: MS	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	VZ-1	Batch I	D: <b>31</b>	533	F	RunNo: 4	2507				
Prep Date:	5/2/2017	Analysis Dat	e: <b>5</b> /	/3/2017	5	SeqNo: 1	337181	Units: mg/k	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	81	9.3	46.47	29.80	111	51.6	130			
Surr: DNOP		4.4		4.647		94.1	70	130			
Sample ID	1705070-001AMSI	<b>D</b> SampTyp	e: MS	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	VZ-1	Batch I	D: <b>31</b>	533	F	RunNo: 4	2507				
Prep Date:	5/2/2017	Analysis Dat	e: <b>5</b> /	/3/2017	5	SeqNo: 1	337182	Units: mg/k	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	72	9.6	47.76	29.80	88.1	51.6	130	12.2	20	

#### Qualifiers:

Surr: DNOP

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Η Holding times for preparation or analysis exceeded

4.8

4.776

- 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

99.6

70

130

0

0

- 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#:

1705070

05-May-17

Surr.BFB	Client: Project:	Blagg En Florance	gineering GC J 16A									
Prep Date: 5/2/2017	Sample ID	MB-31528	SampT	уре: М	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Analyte	Client ID:	PBS	Batch	ID: <b>31</b>	528	R	RunNo: 4	2521				
Surr.BFB	Prep Date:	5/2/2017	Analysis Da	ate: <b>5/</b>	/3/2017	S	SeqNo: 1	337213	Units: %Re	С		
Sample ID   LCS-31528   SampType: LCS   TestCode: EPA Method 8015D: Gasoline Range	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Client ID: LCSS	Surr: BFB		980		1000		98.0	54	150			
Prep Date: 5/2/2017	Sample ID	LCS-31528	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Analyste	Client ID:	LCSS	Batch	ID: <b>31</b>	528	R	RunNo: 4	2521				
Surr.BFB	Prep Date:	5/2/2017	Analysis Da	ate: 5/	/3/2017	S	SeqNo: 1	337214	Units: %Re	С		
Sample ID   MB-31527   SampType:   MBLK   TestCode:   EPA   Method   8015D: Gasoline   Range	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Client ID: PBS   Batch ID: 31527   RunNo: 42521   Prep Date: 5/2/2017   Analysis Date: 5/3/2017   SeqNo: 1337221   Units: mg/Kg	Surr: BFB		1100		1000		110	54	150			
Prep Date:         5/2/2017         Analysis Date:         5/3/2017         SeqNo:         1337221         Units:         mg/kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Quad Gasoline Range Organics (GRO)           Surr. BFB         970         1000         96.8         54         150           Sample ID LCS-31527         SampType: LCS         TestCode: EPA Method 8015D: Gasoline Range           Client ID:         LCSS         Batch ID:         31527         RunNo: 42521           Prep Date:         5/2/2017         Analysis Date:         5/3/2017         SeqNo: 1337222         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Quades	Sample ID	MB-31527	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Analyte	Client ID:	PBS	Batch	ID: <b>31</b>	527	R	RunNo: 4	2521		_		
Sample ID   LCS-31527   SampType: LCS   TestCode: EPA Method 8015D: Gasoline Range	Prep Date:	5/2/2017	Analysis D	ate: <b>5/</b>	/3/2017	S	SeqNo: 1	337221	Units: mg/k	<b>(</b> g		
Surr: BFB	Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID   LCS-31527   SampType: LCS   TestCode: EPA Method 8015D: Gasoline Range	•	ge Organics (GRO)		5.0					-			
Client ID:	Surr: BFB		970		1000		96.8	54	150			
Prep Date:         5/2/2017         Analysis Date:         5/3/2017         SeqNo:         1337222         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Quades of the policy												
Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Quadratic           Gasoline Range Organics (GRO)         24         5.0         25.00         0         94.1         76.4         125         76.4         125         76.4         125         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4         150         76.4	Sample ID	LCS-31527	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Gasoline Range Organics (GRO)         24         5.0         25.00         0         94.1         76.4         125           Surr: BFB         1000         1000         1000         103         54         150           Sample ID 1705070-002AMS         SampType: MS         TestCode: EPA Method 8015D: Gasoline Range           Client ID: VZ-2         Batch ID: 31527         RunNo: 42521           Prep Date: 5/2/2017         Analysis Date: 5/3/2017         SeqNo: 1337225         Units: mg/Kg           Analyte         Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Quality           Gasoline Range Organics (GRO)         26         4.8         24.11         0         107         61.3         150           Surr: BFB         1100         964.3         TestCode: EPA Method 8015D: Gasoline Range           Client ID: VZ-2         Batch ID: 31527         RunNo: 42521           Prep Date: 5/2/2017         Analysis Date: 5/3/2017         SeqNo: 1337226         Units: mg/Kg           Analyte         Result PQL SPK value SP									8015D: Gaso	oline Rang	е	
Surr: BFB         1000         1000         103         54         150           Sample ID         1705070-002AMS         SampType: MS         TestCode: EPA Method 8015D: Gasoline Range           Client ID:         VZ-2         Batch ID: 31527         RunNo: 42521           Prep Date:         5/2/2017         Analysis Date: 5/3/2017         SeqNo: 1337225         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qua           Gasoline Range Organics (GRO)         26         4.8         24.11         0         107         61.3         150           Surr: BFB         1100         964.3         109         54         150           Sample ID         1705070-002AMSD         SampType: MSD         TestCode: EPA Method 8015D: Gasoline Range           Client ID:         VZ-2         Batch ID: 31527         RunNo: 42521           Prep Date:         5/2/2017         Analysis Date: 5/3/2017         SeqNo: 1337226         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qua	Client ID:	LCSS	Batch	ID: <b>31</b>	527	R	RunNo: 4	2521		J	е	
Sample ID 1705070-002AMS         SampType: MS         TestCode: EPA Method 8015D: Gasoline Range           Client ID:         VZ-2         Batch ID:         31527         RunNo:         42521           Prep Date:         5/2/2017         Analysis Date:         5/3/2017         SeqNo:         1337225         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qua           Gasoline Range Organics (GRO)         26         4.8         24.11         0         107         61.3         150           Surr: BFB         1100         964.3         109         54         150           Sample ID 1705070-002AMSD         SampType:         MSD         TestCode:         EPA Method 8015D:         Gasoline Range           Client ID:         VZ-2         Batch ID:         31527         RunNo:         42521           Prep Date:         5/2/2017         Analysis Date:         5/3/2017         SeqNo:         1337226         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighL	Client ID: Prep Date:	LCSS	Batch Analysis D	ID: <b>31</b> ate: <b>5</b> /	527 /3/2017	R S	RunNo: 43 SeqNo: 13	2521 337222	Units: mg/h	(g		Qual
Client ID: VZ-2 Batch ID: 31527 RunNo: 42521  Prep Date: 5/2/2017 Analysis Date: 5/3/2017 SeqNo: 1337225 Units: mg/Kg  Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Gasoline Range Organics (GRO) 26 4.8 24.11 0 107 61.3 150 Surr: BFB 1100 964.3 109 54 150  Sample ID 1705070-002AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range Client ID: VZ-2 Batch ID: 31527 RunNo: 42521  Prep Date: 5/2/2017 Analysis Date: 5/3/2017 SeqNo: 1337226 Units: mg/Kg  Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Client ID: Prep Date: Analyte Gasoline Rang	LCSS 5/2/2017	Batch Analysis Da Result 24	ID: <b>31</b> ate: <b>5</b> /	527 /3/2017 SPK value 25.00	R S SPK Ref Val	RunNo: <b>4</b> SeqNo: <b>1</b> : %REC 94.1	2521 337222 LowLimit 76.4	Units: mg/F HighLimit 125	(g		Qual
Prep Date:         5/2/2017         Analysis Date:         5/3/2017         SeqNo:         1337225         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Quadratic           Gasoline Range Organics (GRO)         26         4.8         24.11         0         107         61.3         150           Surr: BFB         1100         964.3         109         54         150           Sample ID 1705070-002AMSD         SampType:         MSD         TestCode:         EPA Method 8015D:         Gasoline Range           Client ID:         VZ-2         Batch ID:         31527         RunNo:         42521           Prep Date:         5/2/2017         Analysis Date:         5/3/2017         SeqNo:         1337226         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Quadratic	Client ID: Prep Date: Analyte Gasoline Rang	LCSS 5/2/2017	Batch Analysis Da Result 24	ID: <b>31</b> ate: <b>5</b> /	527 /3/2017 SPK value 25.00	R S SPK Ref Val	RunNo: <b>4</b> SeqNo: <b>1</b> : %REC 94.1	2521 337222 LowLimit 76.4	Units: mg/F HighLimit 125	(g		Qual
Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Quadratic           Gasoline Range Organics (GRO)         26         4.8         24.11         0         107         61.3         150           Surr: BFB         1100         964.3         109         54         150           Sample ID 1705070-002AMSD         SampType:         MSD         TestCode:         EPA Method 8015D:         Gasoline Range           Client ID:         VZ-2         Batch ID:         31527         RunNo:         42521           Prep Date:         5/2/2017         Analysis Date:         5/3/2017         SeqNo:         1337226         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Quadratic	Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB	LCSS 5/2/2017 ge Organics (GRO)	Batch Analysis Da Result 24 1000	ID: <b>31</b> ate: <b>5/</b> PQL 5.0	527 /3/2017 SPK value 25.00 1000	SPK Ref Val	RunNo: 4: SeqNo: 1: %REC 94.1 103	2521 337222 LowLimit 76.4 54	Units: mg/F HighLimit 125 150	<b>(g</b> %RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)         26         4.8         24.11         0         107         61.3         150           Surr: BFB         1100         964.3         109         54         150           Sample ID 1705070-002AMSD         SampType: MSD         TestCode: EPA Method 8015D: Gasoline Range           Client ID:         VZ-2         Batch ID: 31527         RunNo: 42521           Prep Date:         5/2/2017         Analysis Date: 5/3/2017         SeqNo: 1337226         Units: mg/Kg           Analyte         Result         PQL         SPK Ref Val         %REC         LowLimit         HighLimit         %RPDLimit         Quantity	Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID	LCSS 5/2/2017 ge Organics (GRO) 1705070-002AMS	Batch Analysis Da Result 24 1000 SampTy	ID: <b>31</b> ate: <b>5</b> / PQL 5.0	527 /3/2017 SPK value 25.00 1000	SPK Ref Val 0	RunNo: 4: SeqNo: 1: %REC 94.1 103 tCode: El	2521 337222 LowLimit 76.4 54	Units: mg/F HighLimit 125 150	<b>(g</b> %RPD	RPDLimit	Qual
Surr: BFB         1100         964.3         109         54         150           Sample ID 1705070-002AMSD SampType: MSD         TestCode: EPA Method 8015D: Gasoline Range           Client ID: VZ-2         Batch ID: 31527         RunNo: 42521           Prep Date: 5/2/2017         Analysis Date: 5/3/2017         SeqNo: 1337226         Units: mg/Kg           Analyte         Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Quark	Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID:	LCSS 5/2/2017 ge Organics (GRO) 1705070-002AMS VZ-2	Batch Analysis Da Result 24 1000  SampTy Batch	PQL 5.0 ype: MS	527 /3/2017 SPK value 25.00 1000	SPK Ref Val 0	RunNo: 4: SeqNo: 1: %REC 94.1 103 tCode: El	2521 337222 LowLimit 76.4 54 PA Method 2521	Units: mg/k HighLimit 125 150 8015D: Gaso	%RPD	RPDLimit	Qual
Sample ID 1705070-002AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range Client ID: VZ-2 Batch ID: 31527 RunNo: 42521 Prep Date: 5/2/2017 Analysis Date: 5/3/2017 SeqNo: 1337226 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua	Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date:	LCSS 5/2/2017 ge Organics (GRO) 1705070-002AMS VZ-2	Batch Analysis Da Result 24 1000  SampTy Batch Analysis Da	PQL 5.0 5.0 1D: 31 ate: 5/	527 /3/2017 SPK value 25.00 1000 S 527 /3/2017	SPK Ref Val 0 Tes:	RunNo: 4: SeqNo: 1:  %REC 94.1 103  tCode: EI RunNo: 4: SeqNo: 1:	2521 337222 LowLimit 76.4 54 PA Method 2521 337225	Units: mg/k HighLimit 125 150  8015D: Gasc Units: mg/k	%RPD  Oline Rang	RPDLimit e	Qual
Client ID: VZ-2 Batch ID: 31527 RunNo: 42521  Prep Date: 5/2/2017 Analysis Date: 5/3/2017 SeqNo: 1337226 Units: mg/Kg  Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua	Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB  Sample ID Client ID: Prep Date: Analyte Gasoline Rang	LCSS 5/2/2017 ge Organics (GRO) 1705070-002AMS VZ-2 5/2/2017	Batch Analysis Da Result 24 1000  SampTy Batch Analysis Da Result 26	PQL 5.0  ype: M3  IID: 31  PQL 5.0  PQL 5.0	527 /3/2017 SPK value 25.00 1000 S 527 /3/2017 SPK value 24.11	SPK Ref Val  0  Tes  F  SPK Ref Val	RunNo: 4: SeqNo: 1:  %REC 94.1 103  tCode: El RunNo: 4: SeqNo: 1:  %REC 107	2521 337222 LowLimit 76.4 54 PA Method 2521 337225 LowLimit 61.3	Units: mg/k HighLimit 125 150  8015D: Gaso Units: mg/k HighLimit 150	%RPD  Oline Rang	RPDLimit e	
Prep Date: 5/2/2017 Analysis Date: 5/3/2017 SeqNo: 1337226 Units: mg/Kg  Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua	Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB  Sample ID Client ID: Prep Date: Analyte Gasoline Rang	LCSS 5/2/2017 ge Organics (GRO) 1705070-002AMS VZ-2 5/2/2017	Batch Analysis Da Result 24 1000  SampTy Batch Analysis Da Result 26	PQL 5.0  ype: M3  IID: 31  PQL 5.0  PQL 5.0	527 /3/2017 SPK value 25.00 1000 S 527 /3/2017 SPK value 24.11	SPK Ref Val  0  Tes  F  SPK Ref Val	RunNo: 4: SeqNo: 1:  %REC 94.1 103  tCode: El RunNo: 4: SeqNo: 1:  %REC 107	2521 337222 LowLimit 76.4 54 PA Method 2521 337225 LowLimit 61.3	Units: mg/k HighLimit 125 150  8015D: Gaso Units: mg/k HighLimit 150	%RPD  Oline Rang	RPDLimit e	
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua	Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB  Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB	LCSS 5/2/2017  ge Organics (GRO)  1705070-002AMS VZ-2 5/2/2017  ge Organics (GRO)	Batch Analysis Da Result 24 1000  SampTy Batch Analysis Da Result 26 1100	PQL 5.0  ype: M3  i ID: 31  tilde 5.0  ype: M3  i ID: 31  ate: 5,  PQL 4.8	527 /3/2017 SPK value 25.00 1000 S 527 /3/2017 SPK value 24.11 964.3	SPK Ref Val 0 Tes: R SPK Ref Val 0	RunNo: 4: SeqNo: 1:  %REC 94.1 103  tCode: El RunNo: 4: SeqNo: 1:  %REC 107 109	2521 337222 LowLimit 76.4 54 PA Method 2521 337225 LowLimit 61.3 54	Units: mg/k HighLimit 125 150  8015D: Gaso Units: mg/k HighLimit 150 150	%RPD  Dline Rang  (g  %RPD	RPDLimit  e  RPDLimit	
·	Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB  Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB  Sample ID	LCSS 5/2/2017  ge Organics (GRO)  1705070-002AMS VZ-2 5/2/2017  ge Organics (GRO)  1705070-002AMSI	Batch Analysis Da Result 24 1000  SampTy Batch Analysis Da Result 26 1100  SampTy	PQL 5.0  ype: MS  PQL 5.0  PQL 4.8	527 /3/2017 SPK value 25.00 1000 6 527 /3/2017 SPK value 24.11 964.3	SPK Ref Val 0 Tes SPK Ref Val 0	RunNo: 4:  ReqNo: 1:  %REC  94.1  103  tCode: EI  %REC  107  109  tCode: EI	2521 337222  LowLimit 76.4 54  PA Method 2521 337225  LowLimit 61.3 54  PA Method	Units: mg/k HighLimit 125 150  8015D: Gaso Units: mg/k HighLimit 150 150	%RPD  Dline Rang  (g  %RPD	RPDLimit  e  RPDLimit	
Gasoline Range Organics (GRO) 25 4.7 23.74 0 105 61.3 150 3.76 20	Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB  Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB  Sample ID Client ID:	LCSS 5/2/2017  ge Organics (GRO)  1705070-002AMS VZ-2 5/2/2017  ge Organics (GRO)  1705070-002AMSI VZ-2	Batch Analysis Da Result 24 1000 SampTy Batch Analysis Da Result 26 1100 SampTy Batch	PQL 5.0  PQL 5.0  Ype: M3  HD: 31  Ate: 5/  PQL 4.8  PQL 4.8	527 /3/2017 SPK value 25.00 1000 S 527 /3/2017 SPK value 24.11 964.3 SD 527	SPK Ref Val  0  Tes  SPK Ref Val  0  Tes  F  SPK Ref Val  0	RunNo: 4: SeqNo: 1: %REC 94.1 103 tCode: EI RunNo: 4: SeqNo: 1: %REC 107 109 tCode: EI	2521 337222  LowLimit 76.4 54  PA Method 2521 337225  LowLimit 61.3 54  PA Method 2521	Units: mg/k HighLimit 125 150  8015D: Gaso Units: mg/k HighLimit 150 150  8015D: Gaso	%RPD  bline Rang  %RPD  bline Rang	RPDLimit  e  RPDLimit	
· · · · ·	Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Analyte Analyte	LCSS 5/2/2017  ge Organics (GRO)  1705070-002AMS VZ-2 5/2/2017  ge Organics (GRO)  1705070-002AMSI VZ-2 5/2/2017	Batch Analysis Da Result 24 1000  SampTy Batch Analysis Da Result 26 1100  SampTy Batch Analysis Da	PQL 5.0  PQL 5.0  PQL 4.8  PQL 4.8  PQL 4.8	527 /3/2017 SPK value 25.00 1000 S 527 /3/2017 SPK value 24.11 964.3 SD 527 /3/2017	SPK Ref Val  0  Tes:  SPK Ref Val  0  Tes:  FR  SPK Ref Val  0	RunNo: 4: SeqNo: 1:  %REC 94.1 103  tCode: EI RunNo: 4: SeqNo: 1:  %REC 107 109  tCode: EI RunNo: 4: SeqNo: 1:	2521 337222  LowLimit 76.4 54  PA Method 2521 337225  LowLimit 61.3 54  PA Method 2521 337226	Units: mg/k HighLimit 125 150  8015D: Gaso Units: mg/k HighLimit 150 150  8015D: Gaso Units: mg/k	%RPD  oline Rang  %RPD  oline Rang	RPDLimit  e  RPDLimit	
Surr: BFB 1100 949.7 112 54 150 0 0	Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB  Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB  Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB	LCSS 5/2/2017  ge Organics (GRO)  1705070-002AMS VZ-2 5/2/2017  ge Organics (GRO)  1705070-002AMSI VZ-2 5/2/2017	Batch Analysis Da Result 24 1000  SampTy Batch Analysis Da Result 26 1100  D SampTy Batch Analysis Da Result 26 1100  C SampTy Batch Analysis Da Result Analysis Da Result Analysis Da	PQL 5.0  PQL 5.0  ype: M3  IID: 31  ate: 5/  PQL 4.8  ype: M3  IID: 31  ARB  PQL 4.8  PQL 4.8	527 /3/2017 SPK value 25.00 1000 S 527 /3/2017 SPK value 24.11 964.3 SD 527 /3/2017 SPK value 23.74	SPK Ref Val  0  Tes  SPK Ref Val  0  Tes  SPK Ref Val  0  SPK Ref Val  SPK Ref Val	RunNo: 4: SeqNo: 1:  %REC 94.1 103  tCode: EI RunNo: 4: SeqNo: 1:  %REC 107 109  tCode: EI RunNo: 4:  %REC 107 109	2521 337222  LowLimit 76.4 54  PA Method 2521 337225  LowLimit 61.3 54  PA Method 2521 337226  LowLimit 61.3	Units: mg/k HighLimit 125 150  8015D: Gasc Units: mg/k HighLimit 150 150  8015D: Gasc Units: mg/k HighLimit 150	%RPD  bline Rang  %RPD  bline Rang  %RPD  3.76	RPDLimit  e  RPDLimit  20	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

Е Value above quantitation range

J Analyte detected below quantitation limits

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P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1705070

05-May-17

Client: Project:	Blagg En Florance	gineering GC J 16A									
Sample ID	MB-31528	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batch	ID: <b>31</b>	528	F	unNo: 4	2521				
Prep Date:	5/2/2017	Analysis D	ate: <b>5/</b>	/3/2017	8	SeqNo: 1	337245	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	nofluorobenzene	1.2		1.000		117	66.6	132			
Sample ID	LCS-31528	SampT	ype: <b>LC</b>	s	Tes	tCode: E	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batch	ID: <b>31</b>	528	F	tunNo: 4	2521				
Prep Date:	5/2/2017	Analysis D	ate: <b>5/</b>	/3/2017	8	SeqNo: 1	337246	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	nofluorobenzene	1.2		1.000		121	66.6	132			
Sample ID	MB-31527	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batch	ID: 31	527	F	tunNo: 4	2521				
Prep Date:	5/2/2017	Analysis D	ate: <b>5/</b>	/3/2017	S	SeqNo: 1	337252	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	nofluorobenzene	ND	0.10	1 000		111	66.6	122			
Sull: 4-Bloll	lolluorobenzene	1.1		1.000		114	66.6	132			
Sample ID	LCS-31527	SampT	ype: <b>LC</b>	S	Tes	tCode: E	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batch	ID: <b>31</b>	527	F	tunNo: 4	2521				
Prep Date:	5/2/2017	Analysis D	ate: 5/	/3/2017	8	SeqNo: 1	337253	Units: mg/K	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.95	0.025	1.000	0	95.1	80	120			
Toluene		0.96	0.050	1.000	0	96.4	80	120			
Ethylbenzene		0.98	0.050	1.000	0	98.0	80	120			
Xylenes, Total		3.0	0.10	3.000	0	101	80	120			
Surr: 4-Brom	nofluorobenzene	1.1		1.000		111	66.6	132			
Sample ID	1705070-001AMS	SampT	ype: <b>M</b> \$	8	Tes	Code: E	PA Method	8021B: Volat	tiles		
Client ID:	VZ-1	Batch	ID: <b>31</b>	527	F	tunNo: 4	2521				
Prep Date:	5/2/2017	Analysis D	ate: <b>5/</b>	/3/2017	S	SeqNo: 1	337255	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.0	0.024	0.9785	0	107	61.5	138			
Toluene		1.1	0.049	0.9785	0.008341	107	71.4	127			
Ethylbenzene		1.1	0.049	0.9785	0	111	70.9	132			
Xylenes, Total		3.3	0.098	2.935	0	112	76.2	123			

#### 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. Complemental Not to Donos

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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.

1.1

WO#: **1705070** 

05-May-17

Client: Blagg Engineering
Project: Florance GC J 16A

Surr: 4-Bromofluorobenzene

Sample ID 1705070-001AMS SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: **VZ-1** Batch ID: **31527** RunNo: **42521** 

Prep Date: 5/2/2017 Analysis Date: 5/3/2017 SeqNo: 1337255 Units: mg/Kg

0.9862

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

Surr: 4-Bromofluorobenzene 1.1 0.9785 111 66.6 132

Sample ID 1705070-001AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Client ID: VZ-1 Batch ID: 31527 RunNo: 42521 Prep Date: 5/2/2017 Analysis Date: 5/3/2017 SeqNo: 1337256 Units: mg/Kg SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result PQL LowLimit Qual Benzene 1.1 0.025 0.9862 0 108 61.5 138 2.06 20 Toluene 1.1 0.049 0.9862 0.008341 109 71.4 127 2.42 20 Ethylbenzene 112 70.9 20 0.049 0.9862 0 132 2.37 1.1 Xylenes, Total 3.4 0.099 2.959 114 76.2 123 2.72 20

111

66.6

132

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 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	BLAGG		Work Order Nu	mber: 1705	070		RcptNo	: 1
Received By	: Sophia Cam	puzano	5/2/2017 8:00:00	AM		Josephia Songer	ma yar	
Completed B	y: Andy Janss	on	5/2/2017 8:59:44	АМ		Was		
Reviewed By	ENM		05/02/1	7		Sel Der		
Chain of C	ustody							
1. Custody	seals intact on sar	nple bottles?		Yes		No 🗆	Not Present 🗹	
2. Is Chain	of Custody comple	ete?		Yes	<b>✓</b>	No 🗌	Not Present	
3. How was	the sample delive	red?		Cou	<u>rier</u>			
Log In								
4. Was an a	attempt made to c	ool the samples?		Yes	✓	No 🗆	NA 🗀	
5. Were all	samples received	at a temperature	of >0° C to 6.0°C	Yes	<b>V</b>	No 🗌	na 🗆	
6. Sample(s	s) in proper contai	ner(s)?		Yes	V	No 🗆		
7, Sufficient	sample volume fo	or indicated test(s	s)?	Yes	<b>V</b>	No 🗆		
8. Are samp	les (except VOA	and ONG) proper	ly preserved?	Yes	<b>✓</b>	No $\square$		
9. Was pres	ervative added to	bottles?		Yes		No 🗹	NA $\square$	
10.VOA vials	s have zero heads	pace?		Yes		No 🗆	No VOA Vials 🗹	
11, Were any	y sample containe	rs received broke	en?	Yes		No 🗹	# of preserved	
40 p						v. 🗆	bottles checked	
	erwork match bott crepancies on cha			Yes	Y	No 🗀	for pH: (<2	or >12 unless noted)
<u>.</u>	ces correctly ident	•	Custody?	Yes	<b>✓</b>	No 🗆	Adjusted?	
14. Is it clear	what analyses we	re requested?		Yes	<b>~</b>	No 🗌		
	nolding times able ify customer for a			Yes	✓	No 🗌	Checked by:	<del></del>
		·						
	ndling (if appl	_ <del>_</del>					_	
16. Was clien	it notified of all dis	crepancies with t	his order?	Yes		No 🗀	NA 🗹	<del></del>
Per	son Notified:		Da	ate	<del>~~~~</del>	***************************************		!
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D EDI	□ EDD (Type)			Sample Temp	4	3			_			_	_	1			o A)
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### **Drilling Investigation**

Florance GC J 16A (P) Sec 6 – T30N – R9W API: 30-045-21790 San Juan County, New Mexico

Prepared for: BP America Production Co. Farmington, New Mexico

Prepared by:
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, New Mexico 87413
(505)632-1199

#### DRILLING INVESTIGATION FLORANCE GC J 16A

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#### DRILLING INVESTIGATION FLORANCE GC J 16A

#### **INTRODUCTION**

Blagg Engineering Inc. (BEI) has been retained by BP America Production Co. (BP) to conduct an environmental drilling investigation at the Florance GC J 16A, located in rural San Juan County, New Mexico at (P) Sec. 6 – T30N – R9W (Figure 1). The purpose of the investigation was to further delineate hydrocarbon impacts known to exist at the site. A shallow soil investigation conducted by BP on March 30, 2016 using a backhoe determined that site impacts appeared to have several source areas, including the Williams operated dehy pit on the south end of the well pad and the BP operated separator/compressor area. On October 24, 2016 during removal of the BP operated 95 barrel steel below grade drain tank (BGT) on the northwest edge of the well pad additional soil impacts were discovered at the BGT. Additionally, on this same date the BP operated 3-inch welded steel sales line that began at the BP separator at the northeast extent of the location and ended at the Williams operated dehy unit on the southwest extent of the location was removed. The sales line was documented to have no integrity issues and no soil impacts were found to exist immediately above or below the line.

Five groundwater monitor wells previously installed by BP in May and June, 2015 were at the site prior to beginning this investigation. Measurements on these wells determined that a suspected perched water table was present at approximately 36 feet below surface grade and the groundwater gradient was in a south to south east direction. The lithology was consistent at the site, with a thick layer of dense sandstone beginning near the ground surface and extending to a depth of 36' – 40', where a blue shalestone was encountered. The perched water table appeared to be confined on this shalestone.

Sampling of the pre-existing monitoring wells determined that hydrocarbon impacts to groundwater were present in the vicinity of the Williams dehy unit on the southern end of the well pad, but not in the area of the BP surface soil impacts on the northern end of the well pad. In summary, monitor wells MW-1 and MW-4 located immediately down-gradient of BP operated surface equipment were tested to be non-detect for all hydrocarbons. The monitor wells immediately up-gradient of the Williams operated dehy facilities (MW-2 and MW-5) demonstrated hydrocarbon impacts exceeding NMOCD standards, and the monitor well immediately down-gradient of the Williams dehy unit (MW-3) was found to have 2.38 feet of LNAPL (apparent condensate).

#### **INVESTIGATION ACTIVITIES**

During this investigation conducted on November 10 - 12, 2016, a total of six borings were advanced to the perched water table. Approximate drilling locations had been pre-determined and well permits had been approved by the New Mexico Office of the State Engineer. Five of the borings were completed as groundwater monitor wells and one boring (BH-A) was abandoned. It should be noted that on-site remediation by excavation was on-going prior to and during the drilling activities and the surface elevation of the borings was in some cases significantly altered

from (lower than) the original native ground surface. The ongoing remediation also restricted access to prospective drilling locations.

#### INVESTIGATIVE PROCEDURES

Beginning on January 10, 2017 drilling operations were commenced by Yellow Jacket Drilling using a CME-85 hollow stem auger rig equipped with a 5-foot long x 4-inch diameter continuous core sampler. The boring for monitor well MW-8 was completed on January 10, the borings for monitor wells MW-7 and MW-9 were completed on January 11 and the borings for MW-6, MW-10 and bore hole BH-A were completed on January 12.

Continuous soil and bedrock samples were collected in five foot intervals while drilling at each bore hole. The bore holes were advanced until the sandstone section had been fully penetrated and the shalestone section had been encountered. The continuous core samples were described and photographed, then a representative portion was placed into a gallon sized Ziploc® baggie for field headspace analysis of organic vapors with a calibrated IonScience Tiger model photo-ionization detector (PID) containing a 11.2 eV lamp. Split samples were placed into a 4-ounce laboratory supplied jar with Teflon® lid, labeled and placed on ice in an ice chest for further laboratory testing. The jarred samples were hand delivered to a representative of Hall Environmental Analytical Laboratories for analysis via U.S. EPA Method 8021B (volatile organics limited to benzene, toluene, ethyl benzene and total xylenes) and U.S. EPA Method 8015 (gasoline range (GRO), diesel range (DRO) and motor oil range (MRO) organics). A chain-of-custody followed the samples.

Five of the borings were completed as groundwater monitor wells, as mentioned above. These completions consisted of either a 5-foot or 10-foot long slotted screened section with riser extending to about 3 feet above grade. The piping used for completion of the wells was a schedule 40 PVC with threaded connections. The annulus of the screened section was sand packed with washed graded silica 10/20 mesh from boring total depth (TD) to approximately 2 feet above the top screen slot. A 1 foot section of washed 60 mesh sand was placed above the 10/20 graded silica sand, followed by a cement/bentonite grout mix installed in the annulus from immediately above the 60 mesh sand to the ground surface. The well tops were secured with a steel, lockable well protector cemented into place.

Borehole BH-A was abandoned immediately after drilling by filling the borehole with a cement/bentonite grout mix from boring TD to the ground surface.

The completed monitor wells were inspected for water accumulation daily following installation. Monitor wells MW-6, MW-7, MW-8 and MW-10 all accumulated water, but on January 16, 2017 monitor well MW-9 remained dry. The wells with water were developed on January 16, 2017 by hand bailing water from each until stable parameters (pH, Conductivity and Temperature) were achieved. A new, unopened, dedicated disposable bailer was used for development of each well. The wells were sampled (again by hand bailing using a new, dedicated disposable bailer until stable parameters were achieved) on January 17, 2017 with NMOCD and BLM representatives

present to witness. Samples were placed into laboratory supplied containers with appropriate preservatives, labeled, placed on ice in an ice chest, then hand delivered to a Hall Laboratories representative with chain-of-custody documentation. Laboratory samples were analyzed via U.S EPA Method 8260 for volatile organics and cation/anion balance.

Groundwater was observed to be present in monitor well MW-9 on February 10, 2017. The monitor well was developed on February 13, 2017 using the same process as previously described for the other wells, and sampled with NMOCD/BLM witnessing on February 16, 2017. The sampling procedures and analytical parameters were the same as the other wells.

On March 3, 2017 the monitor well elevation tops were surveyed by Souder, Miller and Associates. On this same day, the static depth to water was measured in each well.

#### **INVESTIGATION FINDINGS**

Laboratory analytical data from the soils collected during drilling are summarized below in Tables 1-6. Laboratory reports are included in Appendix B. Boring logs are included as Figures 2-7. Monitor well elevation tops are included as Figure 8.

TABLE 1 MW#6 Soil Analytical Results January 11- 12, 2017

	Field	TPH	TPH	TPH	TPH		Total
Sample	OVM	(GRO)	(DRO)	(MRO)	Total	Benzene	BTEX
Depth	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
8'-9'	575	520	1,600	160	2,280	ND	13
9'-14'	384	980	2,400	330	3,710	ND	30
14'-19'	620	1,300	2,700	360	4,360	ND	37.8
19'-24'	959	1,500	3,300	380	5,180	ND	45.3
24'-29'	617	460	1,200	140	1,800	ND	11.1
29'-34'	725	430	1,100	140	1,670	ND	11.2
34'-38'	0.2	ND	ND	ND	ND	ND	ND

TABLE 2 MW#7 Soil Analytical Results January 11, 2017

			0 0011 07001	<i>j</i> ,,			
	Field	TPH	TPH	TPH	TPH		Total
Sample	OVM	(GRO)	(DRO)	(MRO)	Total	Benzene	BTEX
Depth	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
3.5'-8.5'	2.5	ND	ND	ND	ND	ND	ND
8.5'-13.5'	9.1	ND	62	ND	62	ND	ND
13.5'-18.5'	0.7	ND	ND	ND	ND	ND	ND
18.5'-23.5'	2.5	ND	9.7	ND	9.7	ND	ND
23.5'-28.5'	0.0	ND	ND	ND	ND	ND	ND
28.5'-33.5'	4.6	ND	24	ND	24	ND	ND
33.5'-38.5'	0.4	ND	ND	ND	ND	ND	ND
38.5'-40'	0.3	ND	ND	ND	ND	ND	ND

TABLE 3 MW#8 Soil Analytical Results January 10, 2017

	Field	TPH	TPH	TPH	TPH		Total
Sample	OVM	(GRO)	(DRO)	(MRO)	Total	Benzene	BTEX
Depth	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
5'-9'	1,067	87	20	ND	107	ND	0.30
9'-14'	22	ND	ND	ND	ND	ND	ND
14'-19'	2,128	23	78	ND	101	ND	0.27
19'-24'	118	ND	ND	ND	ND	ND	ND
24'-29'	26	ND	ND	ND	ND	ND	ND
29'-34'	62.6	ND	ND	ND	ND	ND	ND
38'	34	ND	ND	ND	ND	ND	0.53
38.5'	3.3	ND	ND	ND	ND	ND	ND
39'	39	ND	ND	ND	ND	ND	ND

TABLE 4 MW#9 Soil Analytical Results January 11, 2017

	Field	TPH	TPH	TPH	TPH		Total
Sample	OVM	(GRO)	(DRO)	(MRO)	Total	Benzene	BTEX
Depth	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
3.5'-8.5'	0.0	ND	ND	ND	ND	ND	ND
8.5'-13.5'	0.3	ND	ND	ND	ND	ND	ND
13.5'-18.5'	0.1	ND	ND	ND	ND	ND	ND
18.5'-23.5'	0.1	ND	ND	ND	ND	ND	ND
23.5'-28.5'	0.0	ND	ND	ND	ND	ND	ND
28.5'-33.5'	0.2	ND	ND	ND	ND	ND	ND
33.5'-38.5'	0.0	ND	ND	ND	ND	ND	ND
38.5'-43'	0.0	ND	ND	ND	ND	ND	ND
			-		_		

TABLE 5 MW#10 Soil Analytical Results January 12, 2017

	Field	TPH	TPH	TPH	TPH		Total
Sample	OVM	(GRO)	(DRO)	(MRO)	Total	Benzene	BTEX
Depth	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
4'-9'	906	530	810	ND	1,340	ND	4.4
9'-14'	1,188	560	640	ND	1,200	ND	7.9
14'-19'	1,450	110	240	ND	350	ND	1.87
19'-24'	96	ND	12	ND	12	ND	ND
27'	27.8	ND	ND	ND	ND	ND	ND
29'-31'	5.3	20	42	ND	62	ND	0.20

TABLE 6 BH-A Soil Analytical Results January 12, 2017

				<i>j</i> ,			
	Field	TPH	TPH	TPH	TPH		Total
Sample	OVM	(GRO)	(DRO)	(MRO)	Total	Benzene	BTEX
Depth	(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
4'-8.5'	0.0	ND	ND	ND	ND	ND	ND
8.5'-13.5'	0.1	ND	ND	ND	ND	ND	ND
13.5'-18.5'	0.9	ND	ND	ND	ND	ND	ND
18.5'-23.5'	2.5	ND	ND	ND	ND	ND	ND
23.5'-28.5'	0.7	ND	ND	ND	ND	ND	ND

5

Laboratory analytical data from groundwater sampling the monitor wells is summarized below in Table 7. Analytical data reports are included in Appendix B.

TABLE 7
Groundwater Analytical Summary Results

				Ethyl-	Total	
Monitor	Sample	Benzene	Toluene	Benzene	Xylenes	TDS
Well	Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)
MW-6	Jan 17, 2017	8.4	1.6	23	260	370
MW-7	Jan 17, 2017	ND	ND	ND	2.2	300
MW-8	Jan 17, 2017	12	26	10	43	465
MW-10	Jan 17, 2017	10,000	12,000	550	5,500	725
MW-9	Feb 16, 2017	ND	ND	ND	ND	670

TABLE 8 Monitor Well Elevation Tops and Groundwater Elevation March 3, 2017

Monitor	Elevation	Measured	Groundwater
Well	Casing Top	Depth to Water	Elevation
MW-6	6503.04	33.58	6469.46
MW-7	6502.82	33.10	6469.72
MW-8	6507.155	37.70	6469.455
MW-9	6505.28	36.52	6468.76
MW-10	6492.41	24.91	6467.50

The concentrations of total BTEX (benzene, toluene, ethyl-benzene and total xylenes) reported from the January 17 – February 16, 2017 sample event of the 5 monitor wells (MW-6 through MW-10) is depicted on Figure 9, Iso-Concentration Map. A second Iso-Concentration Map, Figure 10, includes data from this sample event with additional data from the most recent sample events on monitor wells MW-1 through MW-5.

### Appendix A – Figures

Figure 1: Site Map

Figure 2: MW-6 Boring Log

Figure 3: MW-7 Boring Log

Figure 4: MW-8 Boring Log

Figure 5: MW-9 Boring Log

Figure 6: MW-10 Boring Log

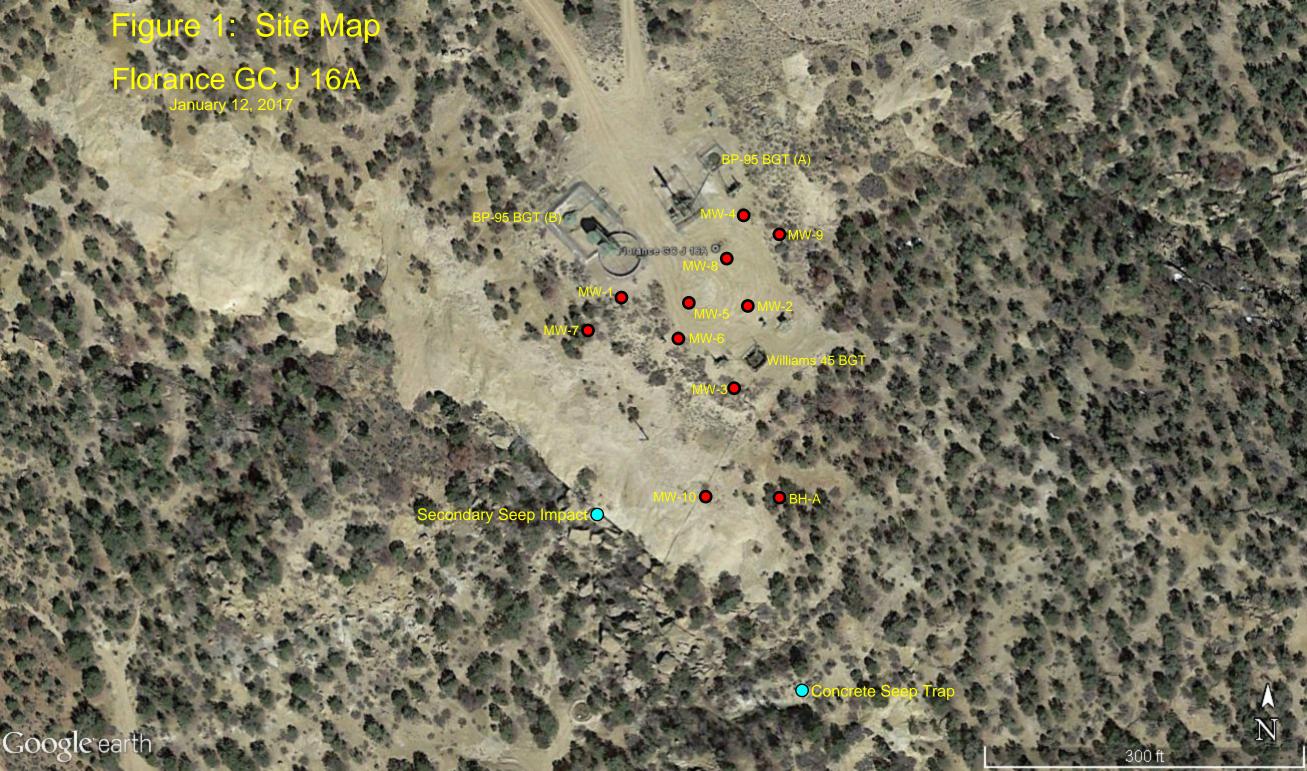
Figure 7: BH-A Boring Log

Figure 8: Souder, Miller and Associates Well Top Survey

Figure 9: Groundwater Gradient Map – March 3, 2017

Figure 10: BTEX Iso-Concentration Map – Monitor Wells MW-6 through MW-10

Figure 11: BTEX Iso-Concentration Map – Historical Including all Monitor Wells



P.O. BOX 87 BLOOMFIELD, NM 87413 Figure 2 MW #6

(505) 632-1199

## BORE / TEST HOLE REPORT

CLIENT:

48

52

54

56

58

50

LOCATION NAME: CONTRACTOR:

**EQUIPMENT USED:** 

**BORING LOCATION:** 

BP AMERICA PRODUCTION CO.

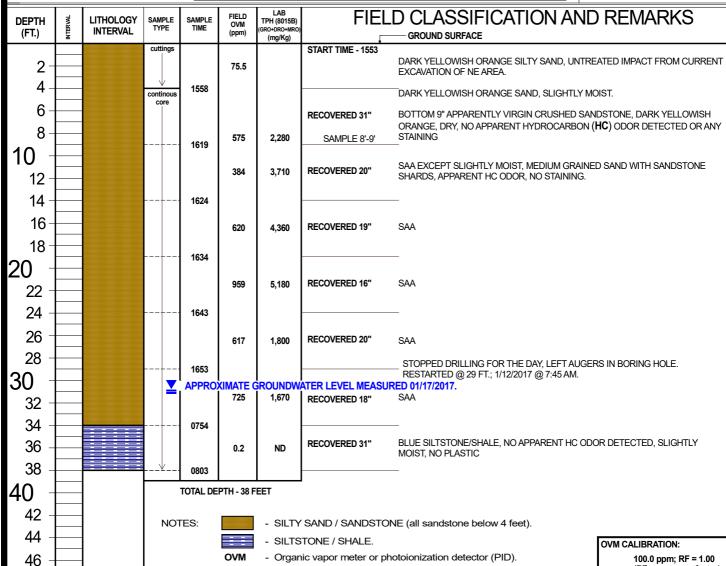
FLORANCE GC J # 16A API#: 3004521790 UNIT P, SEC. 6, T30N, R9W

**BLAGG ENGINEERING, INC. / YELLOWJACKET DRILLING** 

MOBILE DRILL RIG (CME 85) - HOLLOW STEM AUGER

36.83521 N x 107.81635 W

BORING #..... \_\_\_ BH - 4 MW #.....\_ PAGE #..... DATE STARTED 01/11/2017 DATE FINISHED 01/12/2017 OPERATOR...... LOGGED BY..... **JCB** 



OVM

ppm

- Organic vapor meter or photoionization detector (PID). - parts per million or milligram per kilogram (mg/Kg).

ND - Not detected at laboratory reporting limit.

SAA - Same as above

TPH

- Total Petroleum Hydrocarbons.

GRO - Gasoline Range Organics; DRO - Diesel Range Organics;

MRO - Motor Oil Range Organics.

100.0 ppm; RF = 1.00 (RF = response factor). 100 ppm calibration gas - isobutylene.

Date - 01/11/2017. Time - 1440.

Date - 01/12/2017. Time - 0815.

Monitor well consist of 2 inch PVC piping - casing from 3.00 ft. above grade to 32.50 ft. below grade (bg), 0.010 slotted screen between 32.50 to 37.50 ft. bg, 10/20 sand packed annular to 31.0 ft. bg, 60 sand packed annular to 30.0 ft. bg, bentonite chips between 28.0 to 30.0 ft. bg, hydrated with 5 gallons of water, grout remaining annular to grade. Secured casing top with steel protector, locking cap, and padlock.

DRAWING: FLORANCE GC J 16A Boring 2017-01-11 (MW 6), SKF | DATE: 01/29/17

DRAFTED BY: NJV

P.O. BOX 87 BLOOMFIELD, NM 87413 (505) 632-1199

Figure 3 MW #7

BORE / TEST HOLE REPORT

CLIENT:

LOCATION NAME: CONTRACTOR:

**EQUIPMENT USED:** 

BP AMERICA PRODUCTION CO.

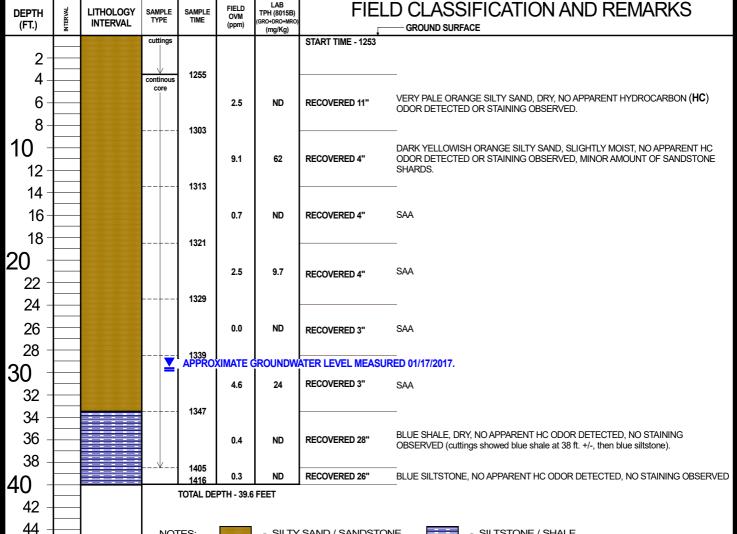
FLORANCE GC J # 16A API#: 3004521790 UNIT P, SEC. 6, T30N, R9W

**BLAGG ENGINEERING, INC. / YELLOWJACKET DRILLING** 

MOBILE DRILL RIG (CME 85) - HOLLOW STEM AUGER

36.83523 N x 107.81663 W **BORING LOCATION:** 

BORING #..... \_\_\_ BH - 3 MW #..... \_\_\_ PAGE #..... DATE STARTED 01/11/2017 DATE FINISHED 01/11/2017 OPERATOR..... LOGGED BY..... **JCB** 



NOTES:

46

48

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OVM

SILTY SAND / SANDSTONE.



- SILTSTONE / SHALE.

ppm

- Organic vapor meter or photoionization detector (PID).

- parts per million or milligram per kilogram (mg/Kg).

ND - Not detected at laboratory reporting limit.

SAA - Same as above

TPH

- Total Petroleum Hydrocarbons.

GRO - Gasoline Range Organics; DRO - Diesel Range Organics;

MRO - Motor Oil Range Organics.

OVM CALIBRATION:

100.0 ppm; RF = 1.00 (RF = response factor). 100 ppm calibration gas - isobutylene. Date - 01/11/2017.

Monitor well consist of 2 inch PVC piping - casing from 3.00 ft. above grade to 29.60 ft. below grade (bg), 0.010 slotted screen between 29.60 to 39.60 ft. bg, 10/20 sand packed annular to 28.0 ft. bg, 60 sand packed annular to 27.0 ft. bg, bentonite chips between 25.0 to 27.0 ft. bg, hydrated with 5 gallons of water, grout remaining annular to grade. Secured casing top with steel protector, locking cap, and padlock.

DRAWING: FLORANCE GC J 16A Boring 2017-01-11 (MW 7), SKF | DATE: 01/29/17

DRAFTED BY: NJV

P.O. BOX 87 BLOOMFIELD, NM 87413 Figure 4 MW #8

(505) 632-1199

## BORE / TEST HOLE REPORT

CLIENT:

56

58

LOCATION NAME:

CONTRACTOR: EQUIPMENT USED:

BORING LOCATION:

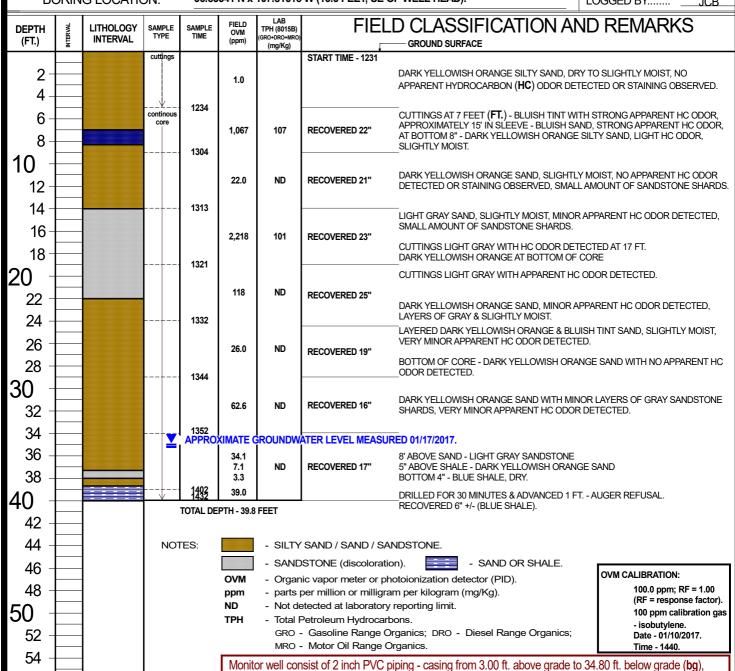
BP AMERICA PRODUCTION CO.

FLORANCE GC J # 16A API #: 3004521790 UNIT P, SEC. 6, T30N, R9W

BLAGG ENGINEERING, INC. / YELLOWJACKET DRILLING

MOBILE DRILL RIG (CME 85) - HOLLOW STEM AUGER

36.83541 N x 107.81618 W (16.5 FEET, SE OF WELL HEAD).



0.010 slotted screen between 34.80 to 39.80 ft. bg, 10/20 sand packed annular to 33.6 ft. bg, 60 sand packed

remaining annular to grade on 01/11/2017. Secured casing top with steel protector, locking cap, and padlock.

DRAWING: FLORANCE GC J 16A Boring 2017-01-10 (MW 8). SKF | DATE: 01/29/17

annular to 32.5 ft. bg, bentonite chips between 30.0 to 32.5 ft. bg, hydrated with 5 gallons of water, grout

P.O. BOX 87 BLOOMFIELD, NM 87413 (505) 632-1199

Figure 5 MW #9

## BORE / TEST HOLE REPORT

CLIENT:

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LOCATION NAME: CONTRACTOR:

**EQUIPMENT USED: BORING LOCATION:**  BP AMERICA PRODUCTION CO.

FLORANCE GC J # 16A API #: 3004521790 UNIT P, SEC. 6, T30N, R9W

**BLAGG ENGINEERING, INC. / YELLOWJACKET DRILLING** 

MOBILE DRILL RIG (CME 85) - HOLLOW STEM AUGER

36.83548 N x 107.81601 W

ppm

SAA

TPH

ND

BORING #..... \_\_\_ BH - 2 MW #.....\_ PAGE #..... DATE STARTED 01/11/2017 DATE FINISHED 01/11/2017 OPERATOR.....

100.0 ppm; RF = 1.00

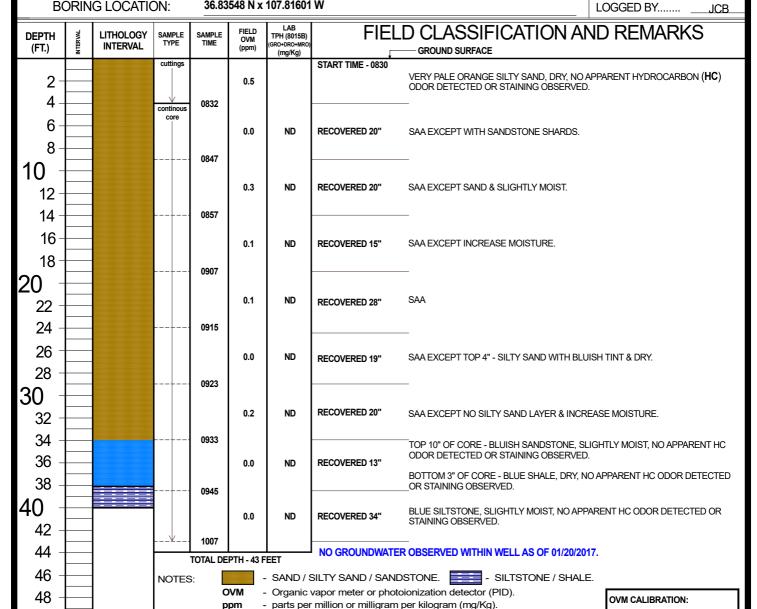
isobutylene.

Time - 1440.

Date - 01/11/2017

(RF = response factor).

100 ppm calibration gas



- Not detected at laboratory reporting limit.

- Total Petroleum Hydrocarbons.

MRO - Motor Oil Range Organics.

- Same as above

Monitor well consist of 2 inch PVC piping - casing from 3.00 ft. above grade to 43.00 ft. below grade (bg), 0.010 slotted screen between 33.00 to 43.00 ft. bg, 10/20 sand packed annular to 32.0 ft. bg, 60 sand packed annular to 31.0 ft. bg, bentonite chips between 29.0 to 31.0 ft. bg, hydrated with 5 gallons of water, grout remaining annular to grade. Secured casing top with steel protector, locking cap, and padlock

DRAWING: FLORANCE GC J 16A Boring 2017-01-11 (MW 9), SKF | DATE: 01/31/17

GRO - Gasoline Range Organics; DRO - Diesel Range Organics;

P.O. BOX 87 BLOOMFIELD, NM 87413 (505) 632-1199

Figure 6 MW #10

## BORE / TEST HOLE REPORT

CLIENT:

LOCATION NAME: CONTRACTOR:

**EQUIPMENT USED: BORING LOCATION:**  BP AMERICA PRODUCTION CO

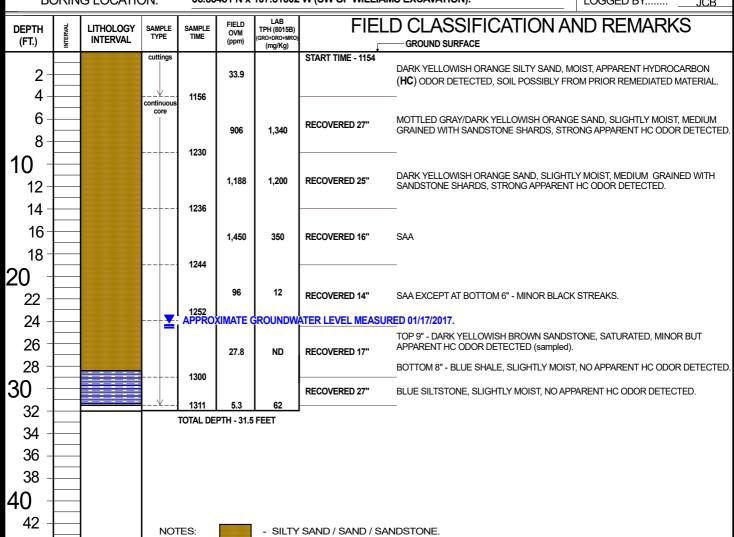
FLORANCE GC J # 16A API#: 3004521790 UNIT P, SEC. 6, T30N, R9W

BLAGG ENGINEERING, INC. / YELLOWJACKET DRILLING

MOBILE DRILL RIG (CME 85) - HOLLOW STEM AUGER

36.83481 N x 107.81602 W (SW OF WILLIAMS EXCAVATION).

BORING #..... BH - 5 MW #..... \_\_\_ PAGE #.....\_ DATE STARTED 01/12/2017 DATE FINISHED 01/12/2017 OPERATOR..... SI LOGGED BY..... **JCB** 



44

46

48

52

54

56

58

50

OVM

SILTSTONE OR SHALE.

ppm

- Organic vapor meter or photoionization detector (PID).
- parts per million or milligram per kilogram (mg/Kg).
- ND - Not detected at laboratory reporting limit.

SAA - Same as above

TPH

- Total Petroleum Hydrocarbons.
  - GRO Gasoline Range Organics; DRO Diesel Range Organics;
  - MRO Motor Oil Range Organics.

OVM CALIBRATION:

100.0 ppm; RF = 1.00 (RF = response factor). 100 ppm calibration gas - isobutylene. Date - 01/12/2017. Time - 1115.

DRAFTED BY: NJV

Monitor well consist of 2 inch PVC piping - casing from 3.00 ft. above grade to 26.50 ft. below grade (bg), 0.010 slotted screen between 26.50 to 31.50 ft. bg, 10/20 sand packed annular to 25.0 ft. bg, 60 sand packed annular to 24.0 ft. bg, bentonite chips between 22.0 to 24.0 ft. bg, hydrated with 5 gallons of water, grout remaining annular to grade. Secured casing top with steel protector, locking cap, and padlock.

DRAWING: FLORANCE GC J 16A Boring 2017-01-12 (MW 10), SKF | DATE: 01/31/17

P.O. BOX 87 BLOOMFIELD, NM 87413 (505) 632-1199

Figure 7 BH - A

## BORE / TEST HOLE REPORT

CLIENT:

44

46

48

52

54

56

58

50

LOCATION NAME: CONTRACTOR:

**EQUIPMENT USED:** 

BP AMERICA PRODUCTION CO.

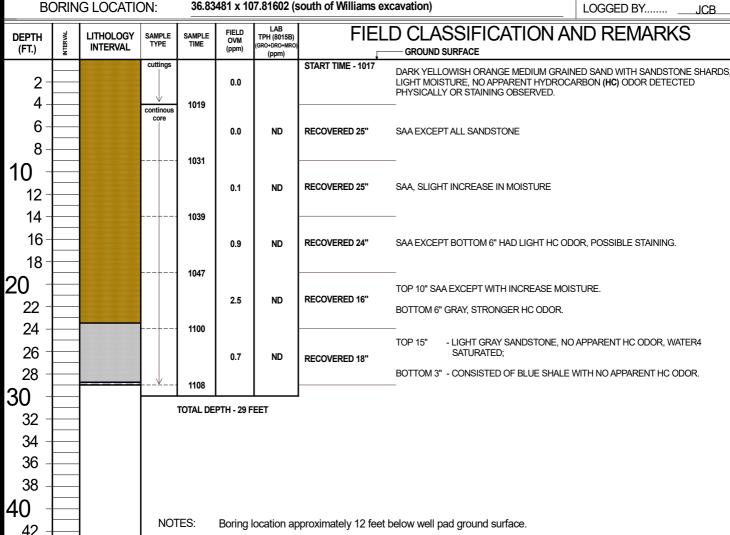
FLORANCE GC J # 16A API #: 3004521790 UNIT P, SEC. 6, T30N, R9W

**BLAGG ENGINEERING, INC. / YELLOWJACKET DRILLING** 

MOBILE DRILL RIG (CME 85) - HOLLOW STEM AUGER

36.83481 x 107.81602 (south of Williams excavation)

BORING #..... <u>BH - 6</u> MW #..... \_\_ NA PAGE #..... DATE STARTED 01/12/2017 DATE FINISHED 01/12/2017 OPERATOR..... LOGGED BY.....



- SAND / SANDSTONE (all sandstone below 4 feet).

- SANDSTONE (discoloration).

- Organic vapor meter or photoionization detector (PID).

OVM ppm

- parts per million or milligram per kilogram (mg/Kg).

ND

- Not detected at laboratory reporting limit.

SAA

- Same as above.

- SHALE.

**TPH** 

- Total Petroleum Hydrocarbons.

GRO - Gasoline Range Organics; DRO - Diesel Range Organics.

MRO - Motor Oil Range Organics.

OVM CALIBRATION:

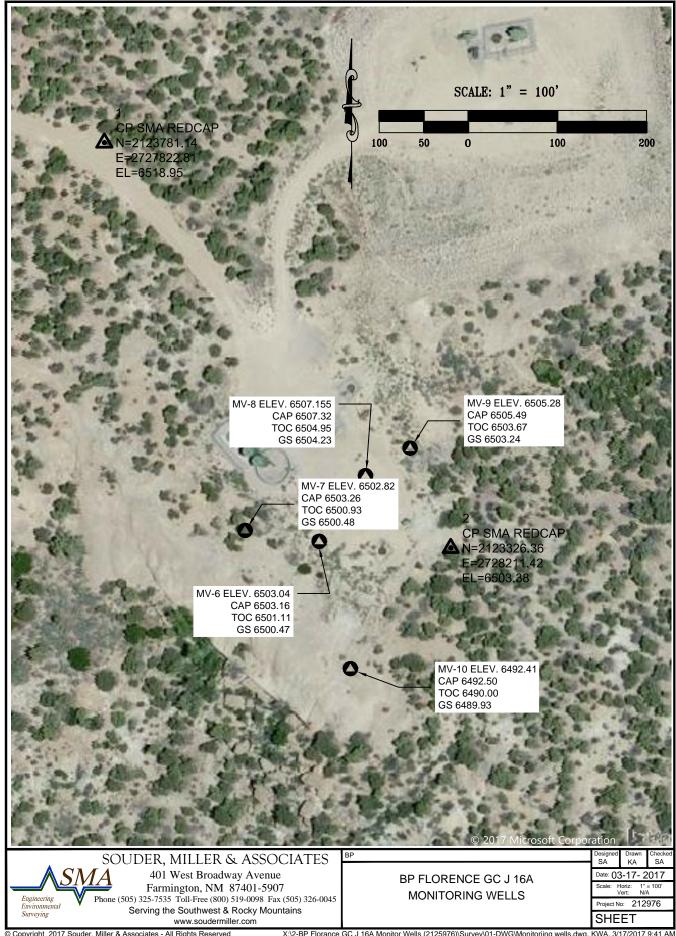
100.0 ppm; RF = 1.00 (RF = response factor). 100 ppm calibration gas

- isobutylene. Date - 01/12/2017. Time - 1115.

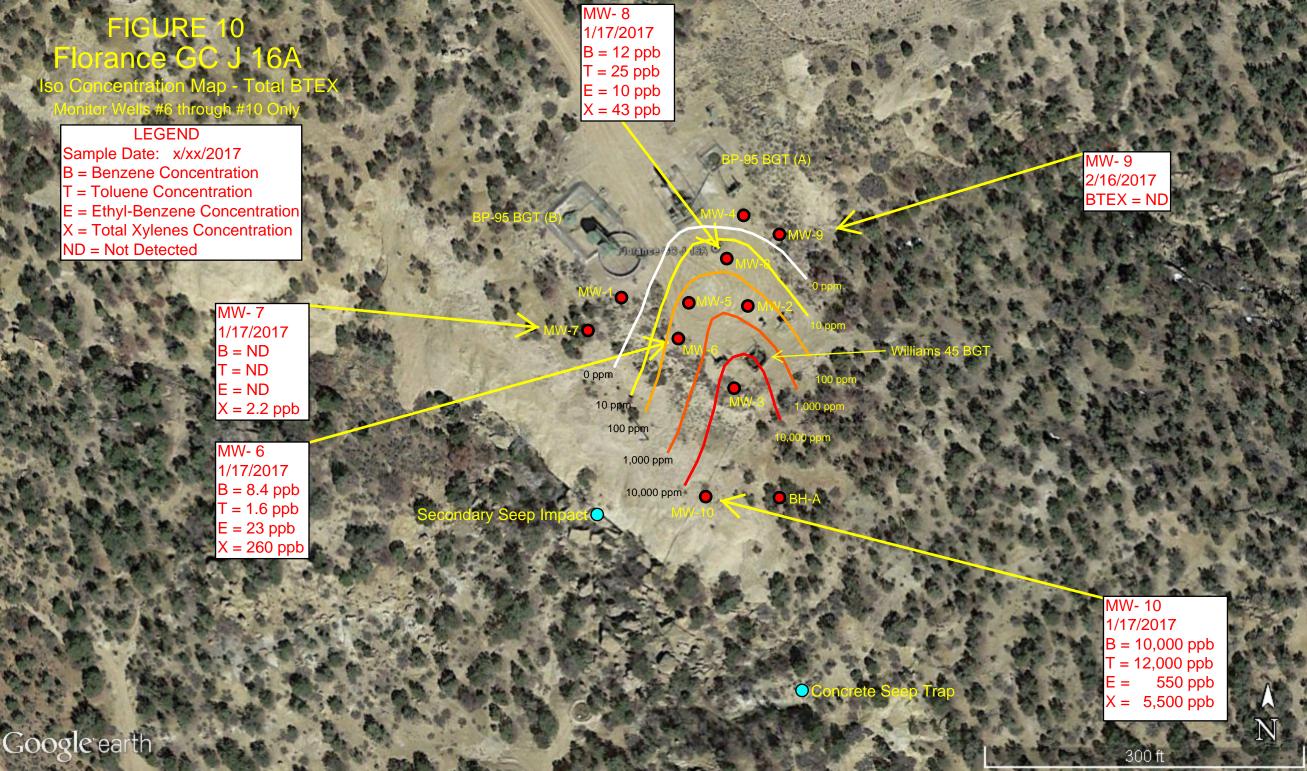
DRAWING: FLORANCE GC J 16A Boring5 2017-01-12 (BH-A), SKF | DATE: 01/29/17

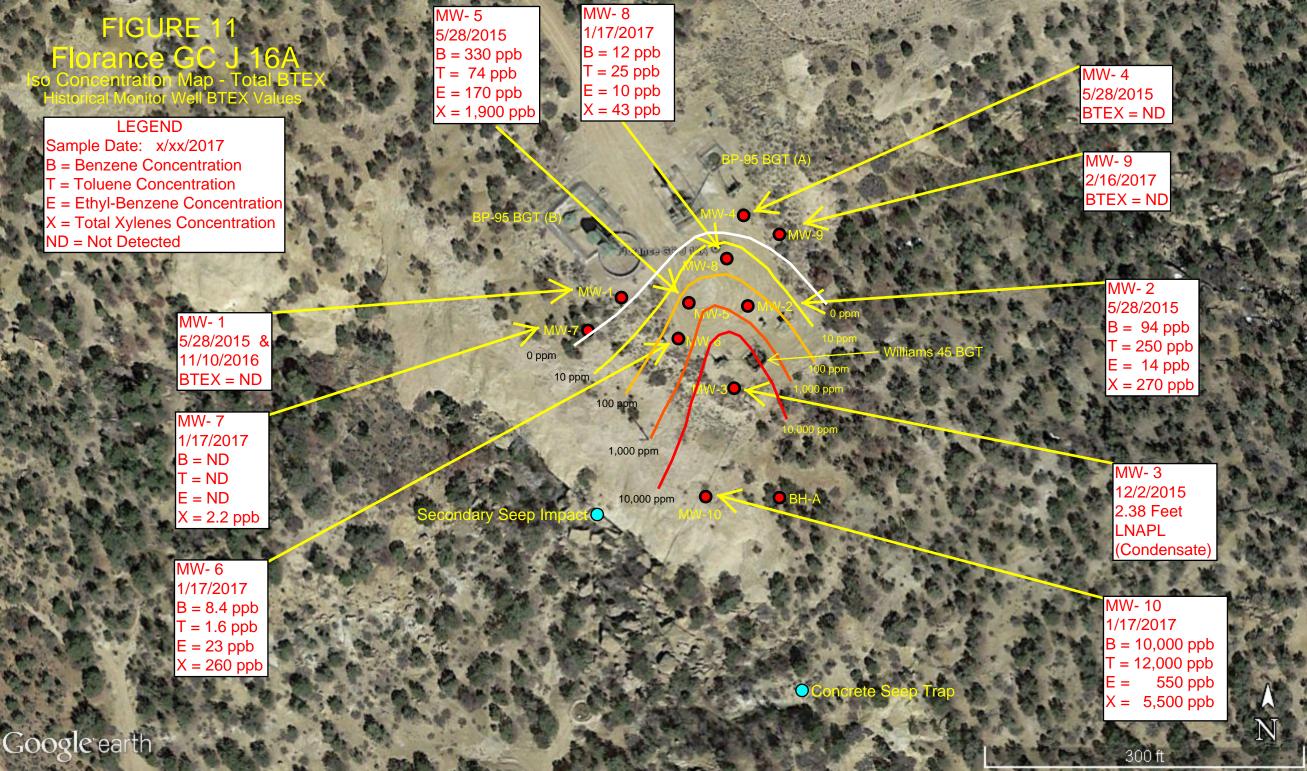
DRAFTED BY: NJV

### FIGURE 8









# Appendix B Laboratory Analytical Data Reports



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

January 17, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florence GC J 16A OrderNo.: 1701522

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 7 sample(s) on 1/13/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc. Date Reported: 1/17/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-6 (8'-9')

 Project:
 Florence GC J 16A
 Collection Date: 1/11/2017 4:19:00 PM

 Lab ID:
 1701522-001
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL (	Qual (	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	st: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	1/16/2017 1:04:23 PM	29704
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	S				Analys	st: TOM
Diesel Range Organics (DRO)	1600	20		mg/Kg	2	1/16/2017 5:08:58 PM	29675
Motor Oil Range Organics (MRO)	160	98		mg/Kg	2	1/16/2017 5:08:58 PM	29675
Surr: DNOP	108	70-130		%Rec	2	1/16/2017 5:08:58 PM	29675
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	520	47		mg/Kg	10	1/14/2017 11:04:11 AM	M 29678
Surr: BFB	318	68.3-144	S	%Rec	10	1/14/2017 11:04:11 AM	M 29678
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.24		mg/Kg	10	1/14/2017 11:04:11 AM	M 29678
Toluene	ND	0.47		mg/Kg	10	1/14/2017 11:04:11 AM	M 29678
Ethylbenzene	ND	0.47		mg/Kg	10	1/14/2017 11:04:11 AM	M 29678
Xylenes, Total	13	0.94		mg/Kg	10	1/14/2017 11:04:11 AM	M 29678
Surr: 4-Bromofluorobenzene	115	80-120		%Rec	10	1/14/2017 11:04:11 AM	M 29678

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 12
	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: 1/17/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-6 (9-'14')

 Project:
 Florence GC J 16A
 Collection Date: 1/11/2017 4:24:00 PM

 Lab ID:
 1701522-002
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	1/16/2017 1:41:37 PM	29704
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S				Analys	t: TOM
Diesel Range Organics (DRO)	2400	37		mg/Kg	4	1/16/2017 5:32:34 PM	29675
Motor Oil Range Organics (MRO)	330	190		mg/Kg	4	1/16/2017 5:32:34 PM	29675
Surr: DNOP	111	70-130		%Rec	4	1/16/2017 5:32:34 PM	29675
EPA METHOD 8015D: GASOLINE RAI	NGE					Analys	t: NSB
Gasoline Range Organics (GRO)	980	50		mg/Kg	10	1/14/2017 12:38:36 PM	A 29678
Surr: BFB	452	68.3-144	S	%Rec	10	1/14/2017 12:38:36 PM	<i>I</i> 29678
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.25		mg/Kg	10	1/14/2017 12:38:36 PM	A 29678
Toluene	ND	0.50		mg/Kg	10	1/14/2017 12:38:36 PM	A 29678
Ethylbenzene	ND	0.50		mg/Kg	10	1/14/2017 12:38:36 PM	A 29678
Xylenes, Total	30	0.99		mg/Kg	10	1/14/2017 12:38:36 PM	<i>I</i> 29678
Surr: 4-Bromofluorobenzene	126	80-120	S	%Rec	10	1/14/2017 12:38:36 PM	A 29678

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 12
	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: 1/17/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-6 (14'-19')

 Project:
 Florence GC J 16A
 Collection Date: 1/11/2017 4:34:00 PM

 Lab ID:
 1701522-003
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	: LGT
Chloride	ND	30		mg/Kg	20	1/16/2017 1:54:01 PM	29704
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	s				Analys	t: TOM
Diesel Range Organics (DRO)	2700	40		mg/Kg	4	1/16/2017 5:55:54 PM	29675
Motor Oil Range Organics (MRO)	360	200		mg/Kg	4	1/16/2017 5:55:54 PM	29675
Surr: DNOP	118	70-130		%Rec	4	1/16/2017 5:55:54 PM	29675
EPA METHOD 8015D: GASOLINE RAM	NGE					Analys	t: NSB
Gasoline Range Organics (GRO)	1300	49		mg/Kg	10	1/14/2017 1:02:06 PM	29678
Surr: BFB	556	68.3-144	S	%Rec	10	1/14/2017 1:02:06 PM	29678
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.25		mg/Kg	10	1/14/2017 1:02:06 PM	29678
Toluene	ND	0.49		mg/Kg	10	1/14/2017 1:02:06 PM	29678
Ethylbenzene	2.8	0.49		mg/Kg	10	1/14/2017 1:02:06 PM	29678
Xylenes, Total	35	0.99		mg/Kg	10	1/14/2017 1:02:06 PM	29678
Surr: 4-Bromofluorobenzene	133	80-120	S	%Rec	10	1/14/2017 1:02:06 PM	29678

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 12
	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: 1/17/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-6 (19'-24')

 Project:
 Florence GC J 16A
 Collection Date: 1/11/2017 4:43:00 PM

 Lab ID:
 1701522-004
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: LGT
Chloride	ND	30		mg/Kg	20	1/16/2017 2:06:25 PM	29704
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S				Analyst	: TOM
Diesel Range Organics (DRO)	3300	39		mg/Kg	4	1/16/2017 6:19:20 PM	29675
Motor Oil Range Organics (MRO)	380	200		mg/Kg	4	1/16/2017 6:19:20 PM	29675
Surr: DNOP	112	70-130		%Rec	4	1/16/2017 6:19:20 PM	29675
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst	:: NSB
Gasoline Range Organics (GRO)	1500	96		mg/Kg	20	1/14/2017 1:25:45 PM	29678
Surr: BFB	351	68.3-144	S	%Rec	20	1/14/2017 1:25:45 PM	29678
EPA METHOD 8021B: VOLATILES						Analyst	:: NSB
Benzene	ND	0.48		mg/Kg	20	1/14/2017 1:25:45 PM	29678
Toluene	ND	0.96		mg/Kg	20	1/14/2017 1:25:45 PM	29678
Ethylbenzene	3.3	0.96		mg/Kg	20	1/14/2017 1:25:45 PM	29678
Xylenes, Total	42	1.9		mg/Kg	20	1/14/2017 1:25:45 PM	29678
Surr: 4-Bromofluorobenzene	121	80-120	S	%Rec	20	1/14/2017 1:25:45 PM	29678

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 12
	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: 1/17/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-6 (24'-29')

 Project:
 Florence GC J 16A
 Collection Date: 1/11/2017 4:53:00 PM

 Lab ID:
 1701522-005
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	: LGT
Chloride	ND	30		mg/Kg	20	1/16/2017 2:18:50 PM	29704
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S				Analys	t: TOM
Diesel Range Organics (DRO)	1200	19		mg/Kg	2	1/16/2017 6:42:45 PM	29680
Motor Oil Range Organics (MRO)	140	95		mg/Kg	2	1/16/2017 6:42:45 PM	29680
Surr: DNOP	101	70-130		%Rec	2	1/16/2017 6:42:45 PM	29680
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	460	24		mg/Kg	5	1/14/2017 1:49:16 PM	29678
Surr: BFB	500	68.3-144	S	%Rec	5	1/14/2017 1:49:16 PM	29678
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.12		mg/Kg	5	1/14/2017 1:49:16 PM	29678
Toluene	ND	0.24		mg/Kg	5	1/14/2017 1:49:16 PM	29678
Ethylbenzene	1.1	0.24		mg/Kg	5	1/14/2017 1:49:16 PM	29678
Xylenes, Total	10	0.49		mg/Kg	5	1/14/2017 1:49:16 PM	29678
Surr: 4-Bromofluorobenzene	131	80-120	S	%Rec	5	1/14/2017 1:49:16 PM	29678

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 12 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: 1/17/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-6 (29'-34')

 Project:
 Florence GC J 16A
 Collection Date: 1/12/2017 7:54:00 AM

 Lab ID:
 1701522-006
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	: LGT
Chloride	ND	30		mg/Kg	20	1/16/2017 2:31:14 PM	29704
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	s				Analys	t: TOM
Diesel Range Organics (DRO)	1100	20		mg/Kg	2	1/16/2017 7:06:14 PM	29680
Motor Oil Range Organics (MRO)	140	99		mg/Kg	2	1/16/2017 7:06:14 PM	29680
Surr: DNOP	103	70-130		%Rec	2	1/16/2017 7:06:14 PM	29680
EPA METHOD 8015D: GASOLINE RAM	NGE					Analys	t: NSB
Gasoline Range Organics (GRO)	430	24		mg/Kg	5	1/14/2017 2:12:47 PM	29678
Surr: BFB	460	68.3-144	S	%Rec	5	1/14/2017 2:12:47 PM	29678
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.12		mg/Kg	5	1/14/2017 2:12:47 PM	29678
Toluene	ND	0.24		mg/Kg	5	1/14/2017 2:12:47 PM	29678
Ethylbenzene	1.2	0.24		mg/Kg	5	1/14/2017 2:12:47 PM	29678
Xylenes, Total	10	0.49		mg/Kg	5	1/14/2017 2:12:47 PM	29678
Surr: 4-Bromofluorobenzene	128	80-120	S	%Rec	5	1/14/2017 2:12:47 PM	29678

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 6 of 12
	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: 1/17/2017

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-6 (34'-38')

 Project:
 Florence GC J 16A
 Collection Date: 1/12/2017 8:03:00 AM

 Lab ID:
 1701522-007
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	1/16/2017 2:43:39 PM	29704
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	1/16/2017 7:29:32 PM	29680
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/16/2017 7:29:32 PM	29680
Surr: DNOP	100	70-130	%Rec	1	1/16/2017 7:29:32 PM	29680
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	1/14/2017 2:36:15 PM	29678
Surr: BFB	100	68.3-144	%Rec	1	1/14/2017 2:36:15 PM	29678
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.023	mg/Kg	1	1/14/2017 2:36:15 PM	29678
Toluene	ND	0.046	mg/Kg	1	1/14/2017 2:36:15 PM	29678
Ethylbenzene	ND	0.046	mg/Kg	1	1/14/2017 2:36:15 PM	29678
Xylenes, Total	ND	0.093	mg/Kg	1	1/14/2017 2:36:15 PM	29678
Surr: 4-Bromofluorobenzene	99.6	80-120	%Rec	1	1/14/2017 2:36:15 PM	29678

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 7 of 12
	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#: **1701522** 

17-Jan-17

Client: Blagg Engineering
Project: Florence GC J 16A

Sample ID MB-29704 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 29704 RunNo: 40057

Prep Date: 1/16/2017 Analysis Date: 1/16/2017 SeqNo: 1255351 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29704 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29704 RunNo: 40057

Prep Date: 1/16/2017 Analysis Date: 1/16/2017 SeqNo: 1255352 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.3 90 110

#### 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 12

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: 1701522

17-Jan-17

Project: Florence	e GC J 16A		
Sample ID LCS-29675	SampType: LCS	TestCode: EPA Method 8	015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 29675	RunNo: 40029	
Prep Date: 1/13/2017	Analysis Date: 1/16/2017	SeqNo: <b>1254698</b>	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO) Surr: DNOP	43 10 50.00 4.6 5.000	0 86.4 63.8 92.8 70	116 130
Sample ID MB-29675	SampType: MBLK	TestCode: EPA Method 8	015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 29675	RunNo: 40029	
Prep Date: 1/13/2017	Analysis Date: 1/16/2017	SeqNo: <b>1254699</b>	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP	ND 10 ND 50 9.9 10.00	98.6 70	130
Sample ID MB-29674	SampType: MBLK	TestCode: EPA Method 8	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 29674	RunNo: 40030	
Prep Date: 1/13/2017	Analysis Date: 1/16/2017	SeqNo: <b>1254788</b>	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	10 10.00	105 70	130
Sample ID LCS-29680	SampType: LCS	TestCode: EPA Method 8	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 29680	RunNo: 40029	
Prep Date: 1/13/2017	Analysis Date: 1/16/2017	SeqNo: <b>1254791</b>	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	45 10 50.00	0 90.6 63.8	116
Surr: DNOP	4.8 5.000	95.1 70	130
Sample ID MB-29680	SampType: MBLK	TestCode: EPA Method 8	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 29680	RunNo: 40029	
Prep Date: 1/13/2017	Analysis Date: 1/16/2017	SeqNo: <b>1254792</b>	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) Surr: DNOP	ND 50 9.6 10.00	95.9 70	130
Juli. DINUP	9.0 10.00	95.9 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

% 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 Page 9 of 12

RLReporting Detection Limit

Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1701522** 

17-Jan-17

Client: Blagg Engineering
Project: Florence GC J 16A

Sample ID LCS-29674 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 29674 RunNo: 40030

Prep Date: 1/13/2017 Analysis Date: 1/16/2017 SeqNo: 1254824 Units: %Rec

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

Surr: DNOP 5.5 5.000 109 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 10 of 12

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1701522

17-Jan-17

**Client:** Blagg Engineering **Project:** Florence GC J 16A

Sample ID MB-29678 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 29678 RunNo: 40009

Prep Date: 1/13/2017 Analysis Date: 1/14/2017 SeqNo: 1253705 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 86.2 68.3 144

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-29678 SampType: LCS

Client ID: LCSS Batch ID: 29678 RunNo: 40009

Prep Date: Analysis Date: 1/14/2017 SeqNo: 1253706 1/13/2017 Units: mg/Kg

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

Gasoline Range Organics (GRO) 27 5.0 25.00 109 74.6 123 950 95.3 68.3 144 Surr: BFB 1000

#### 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 11 of 12

### Hall Environmental Analysis Laboratory, Inc.

ND

18

12

0.98

2.953

9.843

WO#: 1701522

17-Jan-17

Client: Blagg Engineering
Project: Florence GC J 16A

Xylenes, Total

 Sample ID
 MB-29678
 SampType:
 MBLK
 TestCode:
 EPA Method 8021B:
 Volatiles

 Client ID:
 PBS
 Batch ID:
 29678
 RunNo:
 40009

 Prep Date:
 1/13/2017
 Analysis Date:
 1/14/2017
 SeqNo:
 1253745
 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

Surr: 4-Bromofluorobenzene 0.93 1.000 93.1 80 120

0.10

Sample ID LCS-29678 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: 29678 RunNo: 40009 Prep Date: 1/13/2017 Analysis Date: 1/14/2017 SeqNo: 1253746 Units: mg/Kg **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result Qual 1.1 0.025 1.000 O 109 75.2 115 Benzene Toluene 0.97 0.050 1.000 0 96.8 80.7 112 Ethylbenzene 0.92 0.050 0 92.3 78.9 1.000 117 Xylenes, Total 2.8 0.10 3.000 0 92.6 79.2 115 99.6 Surr: 4-Bromofluorobenzene 1.0 1.000 80 120

Sample ID 1701522-001AMS SampType: MS TestCode: EPA Method 8021B: Volatiles RunNo: 40009 Client ID: MW-6 (8'-9') Batch ID: 29678 1/13/2017 Analysis Date: 1/14/2017 SeqNo: 1253750 Prep Date: Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.97 0.25 0.9843 0.09915 88.8 61.5 138 Toluene 0.49 0.9843 112 71.4 127 1.1 0 70.9 0.49 0.9843 0 152 132 S Ethylbenzene 1.5

13.17

154

119

76.2

80

123

120

Sample ID 1701522-001AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Client ID: Batch ID: 29678 RunNo: 40009 MW-6 (8'-9') Prep Date: 1/13/2017 Analysis Date: 1/14/2017 SeqNo: 1253751 Units: mg/Kg SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual 0.09915 1.1 0.24 0.9524 105 61.5 138 12.6 20 Benzene Toluene 1.1 0.48 0.9524 0 119 71.4 127 3.01 20 Ethylbenzene 1.5 0.48 0.9524 0 157 70.9 132 0.146 20 S Xylenes, Total 18 0.95 2.857 13.17 152 76.2 123 1.19 20 S Surr: 4-Bromofluorobenzene 9.524 117 80 120 0 11 0

#### Qualifiers:

Xylenes, Total

Surr: 4-Bromofluorobenzene

\* 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 12 of 12

S



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: BLAGG	Work Order N	umber: 1701	522		Rcpt	No: 1
Received by/date:	× 01/13/17	1				
Logged By: Lindsay Ma	ngin 1/13/2017 7:20:0	00 AM		Jimsky Hlenje	Ò	
Completed By: Lindsay Ma	ngin 1/13/2017 8:20:5	59 AM		Strucker Allofon	מל	
	3/17			00		
Chain of Custody	2[17]					
Custody seals intact on sar	mpie hottles?	Yes	1 1	No 🗔	Not Present	<b>√</b> ∱
Is Chain of Custody complete		Yes		No 🗔	Not Present	
3. How was the sample delive		Cour		110	TTO CT TO SOME (	!
<b>0</b>		<u> </u>	<u>161</u>			
<u>Log In</u>						
4. Was an attempt made to c	ool the samples?	Yes		No 🗀	NA	T]
E Man all assesses assessed	-t-1		L21	(***		
5. vvere all samples received	at a temperature of >0° C to 6.0°C	C Yes	✓	No 📋	NA [	
6. Sample(s) in proper contai	ner(s)?	Yes	V	No []		
7. Sufficient sample volume for	or indicated test(s)?	Yes	<b>~</b>	No 📋		
8. Are samples (except VOA	and ONG) properly preserved?	Yes	<b>y</b>	No 🗍		
9. Was preservative added to	bottles?	Yes	[]	No 🗸	NA [	.1
10.VOA vials have zero heads	pace?	Yes		No 🗔	No VOA Vials	
11. Were any sample containe		Yes		No 🗸		
					# of preserved bottles checked	
12.Does paperwork match both		Yes	~	No 🗌	for pH:	.a. 000.46 (.0.00.1 (
(Note discrepancies on cha 13. Are matrices correctly ident	- · ·	Yes	<b>V</b>	No 🗔	Adjusted?	<2 or >12 unless noted)
14. Is it clear what analyses we	•			No []		
15. Were all holding times able	•	Yes		No []	Checked b	y:
(If no, notify customer for a	uthorization.)				J	
Cassial Handling /if anal	inable)					
Special Handling (if appl 16. Was client notified of all dis		Yes	f=7	No 🗀	NA D	7
		***************************************		NO L		
Person Notified:  By Whom:	THE PROPERTY OF THE PROPERTY O	ate:   ia:           eMa	:ı (	Dhana ("  Fav	[T] In Dans	
Regarding:		ia. <sub>  ]</sub> Civia	II   ;	Phone [   Fax	In Person	·
Client Instructions:		·				
17. Additional remarks:				··· <del>··</del>		
18. Cooler Information  Cooler No   Temp °C	Condition   Seal Intact   Seal N	o   Seal Da	te I	Signed By	l	
	Good Yes		erenta.			

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FNVIRONMENTA	ANALYSIS LABORATORY		7109	7							CHION	$\times$	×	×	×	$\overline{\lambda}$	$\sim$	×					1		analytical report.
Z	B	moc	Albuquerque, NM 87109	505-345-4107	ts.				(A(		imə2) 0728												Nostan	ı	on the
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Sy interior	12)		でな						No see a		HEAL NO. 170  <i>52</i>	100-	ZW-	-003	+00-	-005	-000-	too-	•				M	Date Time	edited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
Time:	KRush		6C J			ger:	S. Asie	T. Prites	⊏ 	berature: $2$ $\sim$ $ $	Preservative Type	Carl	h.	1	11	11	11	11					18	A only	
Turn-Around T	□ Standard	Project Name:	FLORAVIE	Project #:		Project Manager:	F. 82	Sampler:	On Ice:	Sample Temperature:	Container Type and #	12504	, 11	h l	11	¥	:	А					Received by:	Received by	contracted to other a
Chain-of-Custody Record	lient: BP Amery Ca	Barto's Engineering	1		hone #: 505-320-1183	nail or Fax#:	A/QC Package:  Standard  □ Level 4 (Full Validation)	on	I NELAP □ Other □	EDD (Type)	Date Time Matrix Sample Request ID	17 1619 SOIL NOW-10(8:9')		(bi=hi)9-mil 11 hz91 11	11 243	1 1653 11 MM-6(24-29")	717 0785 " MW-6(29-34")	1/ 2080 -		TAE: 0754 ACS			ate: Time: Relinquished by:	ate: Time: Relinduished by: $I_{17} I_{2} I_{2} I_{3} I_{3} I_{4}$	If necessary, samples, submitted to Hall Environmental may be subcontracted to other acceptance.



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

January 20, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1701529

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 8 sample(s) on 1/13/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

### Date Reported: 1/20/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-7 (3 1/2-8 1/2)

 Project:
 Florance GC J 16A
 Collection Date: 1/11/2017 1:03:00 PM

 Lab ID:
 1701529-001
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	1/18/2017 12:57:35 PM	A 29774
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	1/16/2017 7:52:57 PM	29680
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/16/2017 7:52:57 PM	29680
Surr: DNOP	92.2	70-130	%Rec	1	1/16/2017 7:52:57 PM	29680
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	1/15/2017 8:22:00 PM	29679
Surr: BFB	90.1	68.3-144	%Rec	1	1/15/2017 8:22:00 PM	29679
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	1/15/2017 8:22:00 PM	29679
Toluene	ND	0.047	mg/Kg	1	1/15/2017 8:22:00 PM	29679
Ethylbenzene	ND	0.047	mg/Kg	1	1/15/2017 8:22:00 PM	29679
Xylenes, Total	ND	0.095	mg/Kg	1	1/15/2017 8:22:00 PM	29679
Surr: 4-Bromofluorobenzene	93.7	80-120	%Rec	1	1/15/2017 8:22:00 PM	29679

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 12 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

**Client Sample ID:** MW-7 (8 1/2-13 1/2)

### Date Reported: 1/20/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Florance GC J 16A

1701529-002

Lab ID:

Collection Date: 1/11/2017 1:13:00 PM

Matrix: SOIL

Received Date: 1/13/2017 7:20:00 AM

Analyses Result **PQL Qual Units DF** Date Analyzed Batch Analyst: LGT **EPA METHOD 300.0: ANIONS** Chloride ND 30 mg/Kg 20 1/18/2017 1:34:49 PM 29774 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) 62 9.7 mg/Kg 1/16/2017 8:16:14 PM 29680 Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 1/16/2017 8:16:14 PM 29680 Surr: DNOP 97.0 70-130 %Rec 1/16/2017 8:16:14 PM 29680 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: **NSB** Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1/15/2017 8:45:17 PM 29679 Surr: BFB 119 %Rec 1/15/2017 8:45:17 PM 29679 68.3-144 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 1 1/15/2017 8:45:17 PM 29679 Toluene ND 0.049 mg/Kg 1/15/2017 8:45:17 PM 29679 1 Ethylbenzene ND 0.049 mg/Kg 1 1/15/2017 8:45:17 PM 29679 Xylenes, Total ND 0.099 mg/Kg 1/15/2017 8:45:17 PM 29679 Surr: 4-Bromofluorobenzene 92.7 80-120 %Rec 1/15/2017 8:45:17 PM 29679

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 12
	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: 1/20/2017

CLIENT: Blagg Engineering

Client Sample ID: MW-7 (13 1/2-18 1/2)

Project: Florance GC J 16A

Collection Date: 1/11/2017 1:21:00 PM

**Lab ID:** 1701529-003 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	1/18/2017 1:47:13 PM	29774
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	1/16/2017 8:39:33 PM	29680
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	1/16/2017 8:39:33 PM	29680
Surr: DNOP	98.6	70-130	%Rec	1	1/16/2017 8:39:33 PM	29680
EPA METHOD 8015D: GASOLINE RANG	E				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	1/15/2017 9:08:34 PM	29679
Surr: BFB	86.9	68.3-144	%Rec	1	1/15/2017 9:08:34 PM	29679
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	1/15/2017 9:08:34 PM	29679
Toluene	ND	0.048	mg/Kg	1	1/15/2017 9:08:34 PM	29679
Ethylbenzene	ND	0.048	mg/Kg	1	1/15/2017 9:08:34 PM	29679
Xylenes, Total	ND	0.095	mg/Kg	1	1/15/2017 9:08:34 PM	29679
Surr: 4-Bromofluorobenzene	92.3	80-120	%Rec	1	1/15/2017 9:08:34 PM	29679

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 12
	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: 1/20/2017

CLIENT: Blagg Engineering

Client Sample ID: MW-7 (18 1/2-23 1/2)

Project: Florance GC J 16A

Collection Date: 1/11/2017 1:29:00 PM

**Lab ID:** 1701529-004 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	: LGT
Chloride	ND	30	mg/Kg	20	1/18/2017 1:59:38 PM	29774
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	9.7	9.4	mg/Kg	1	1/16/2017 9:02:43 PM	29680
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	1/16/2017 9:02:43 PM	29680
Surr: DNOP	96.6	70-130	%Rec	1	1/16/2017 9:02:43 PM	29680
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/15/2017 9:31:52 PM	29679
Surr: BFB	84.6	68.3-144	%Rec	1	1/15/2017 9:31:52 PM	29679
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	1/15/2017 9:31:52 PM	29679
Toluene	ND	0.049	mg/Kg	1	1/15/2017 9:31:52 PM	29679
Ethylbenzene	ND	0.049	mg/Kg	1	1/15/2017 9:31:52 PM	29679
Xylenes, Total	ND	0.098	mg/Kg	1	1/15/2017 9:31:52 PM	29679
Surr: 4-Bromofluorobenzene	88.6	80-120	%Rec	1	1/15/2017 9:31:52 PM	29679

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 12
	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: 1/20/2017

CLIENT: Blagg Engineering

Client Sample ID: MW-7 (23 1/2-28 1/2)

Project: Florance GC J 16A

Collection Date: 1/11/2017 1:39:00 PM

**Lab ID:** 1701529-005 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	: LGT
Chloride	ND	30	mg/Kg	20	1/18/2017 2:12:03 PM	29774
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	1/16/2017 9:26:08 PM	29680
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	1/16/2017 9:26:08 PM	29680
Surr: DNOP	96.6	70-130	%Rec	1	1/16/2017 9:26:08 PM	29680
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/15/2017 9:55:06 PM	29679
Surr: BFB	82.5	68.3-144	%Rec	1	1/15/2017 9:55:06 PM	29679
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.025	mg/Kg	1	1/15/2017 9:55:06 PM	29679
Toluene	ND	0.050	mg/Kg	1	1/15/2017 9:55:06 PM	29679
Ethylbenzene	ND	0.050	mg/Kg	1	1/15/2017 9:55:06 PM	29679
Xylenes, Total	ND	0.10	mg/Kg	1	1/15/2017 9:55:06 PM	29679
Surr: 4-Bromofluorobenzene	86.9	80-120	%Rec	1	1/15/2017 9:55:06 PM	29679

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 12
	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: 1/20/2017

CLIENT: Blagg Engineering

Client Sample ID: MW-7 (28 1/2-33 1/2)

Project: Florance GC J 16A

Collection Date: 1/11/2017 1:47:00 PM

**Lab ID:** 1701529-006 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	1/18/2017 2:24:28 PM	29774
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	24	9.5	mg/Kg	1	1/16/2017 9:49:28 PM	29680
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/16/2017 9:49:28 PM	29680
Surr: DNOP	96.8	70-130	%Rec	1	1/16/2017 9:49:28 PM	29680
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	1/15/2017 10:18:18 PM	A 29679
Surr: BFB	105	68.3-144	%Rec	1	1/15/2017 10:18:18 PM	<i>I</i> 29679
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.023	mg/Kg	1	1/15/2017 10:18:18 PM	A 29679
Toluene	ND	0.046	mg/Kg	1	1/15/2017 10:18:18 PM	A 29679
Ethylbenzene	ND	0.046	mg/Kg	1	1/15/2017 10:18:18 PM	A 29679
Xylenes, Total	ND	0.092	mg/Kg	1	1/15/2017 10:18:18 PM	<i>I</i> 29679
Surr: 4-Bromofluorobenzene	90.3	80-120	%Rec	1	1/15/2017 10:18:18 PM	A 29679

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 12
	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: 1/20/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering **Project:** Florance GC J 16A

**Client Sample ID:** MW-7 (33 1/2-38 1/2) **Collection Date:** 1/11/2017 2:05:00 PM

Sample container temperature is out of limit as specified

**Lab ID:** 1701529-007 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	:: LGT
Chloride	ND	30	mg/Kg	20	1/18/2017 2:36:53 PM	29774
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	1/16/2017 10:12:52 PM	1 29680
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/16/2017 10:12:52 PM	1 29680
Surr: DNOP	92.5	70-130	%Rec	1	1/16/2017 10:12:52 PM	1 29680
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	1/15/2017 10:41:27 PM	1 29679
Surr: BFB	84.0	68.3-144	%Rec	1	1/15/2017 10:41:27 PM	1 29679
EPA METHOD 8021B: VOLATILES					Analys	:: NSB
Benzene	ND	0.024	mg/Kg	1	1/15/2017 10:41:27 PM	1 29679
Toluene	ND	0.048	mg/Kg	1	1/15/2017 10:41:27 PM	1 29679
Ethylbenzene	ND	0.048	mg/Kg	1	1/15/2017 10:41:27 PM	1 29679
Xylenes, Total	ND	0.096	mg/Kg	1	1/15/2017 10:41:27 PM	1 29679
Surr: 4-Bromofluorobenzene	88.5	80-120	%Rec	1	1/15/2017 10:41:27 PM	1 29679

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 12 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: 1/20/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-7 (38 1/2-40)

 Project:
 Florance GC J 16A
 Collection Date: 1/11/2017 2:16:00 PM

 Lab ID:
 1701529-008
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	1/18/2017 2:49:18 PM	29774
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	1/16/2017 10:36:03 PN	A 29680
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/16/2017 10:36:03 PM	A 29680
Surr: DNOP	99.9	70-130	%Rec	1	1/16/2017 10:36:03 PN	A 29680
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	1/15/2017 11:04:40 PN	A 29679
Surr: BFB	82.9	68.3-144	%Rec	1	1/15/2017 11:04:40 PN	<i>I</i> 29679
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	1/15/2017 11:04:40 PN	A 29679
Toluene	ND	0.048	mg/Kg	1	1/15/2017 11:04:40 PM	A 29679
Ethylbenzene	ND	0.048	mg/Kg	1	1/15/2017 11:04:40 PM	<i>I</i> 29679
Xylenes, Total	ND	0.096	mg/Kg	1	1/15/2017 11:04:40 PN	A 29679
Surr: 4-Bromofluorobenzene	87.5	80-120	%Rec	1	1/15/2017 11:04:40 PM	A 29679

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 12
	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#: **1701529** 

20-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29774 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 29774 RunNo: 40130

Prep Date: 1/18/2017 Analysis Date: 1/18/2017 SeqNo: 1257870 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29774 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29774 RunNo: 40130

Prep Date: 1/18/2017 Analysis Date: 1/18/2017 SeqNo: 1257871 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 93.5 90 110

### 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 12

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

9.6

Result

5.5

SampType: LCS

Batch ID: 29674

Analysis Date: 1/16/2017

10.00

5.000

SPK value SPK Ref Val %REC

**Blagg Engineering** 

WO#: 1701529

20-Jan-17

Project: Florance	e GC J 16A			
Sample ID MB-29674	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: PBS	Batch ID: 29674	RunNo: 40030		
Prep Date: 1/13/2017	Analysis Date: 1/16/2017	SeqNo: <b>1254788</b>	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	10 10.00	105 70	130	
Sample ID LCS-29680	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 29680	RunNo: 40029		
Prep Date: 1/13/2017	Analysis Date: 1/16/2017	SeqNo: 1254791	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Diesel Range Organics (DRO)	45 10 50.00	0 90.6 63.8	116	
Surr: DNOP	4.8 5.000	95.1 70	130	
Sample ID MB-29680	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: PBS	Batch ID: 29680	RunNo: 40029		
Prep Date: 1/13/2017	Analysis Date: 1/16/2017	SeqNo: <b>1254792</b>	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			

95.9

RunNo: 40030

109

SeqNo: 1254824

70

LowLimit

70

130

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

Units: %Rec

130

HighLimit

%RPD

**RPDLimit** 

Page 10 of 12

Qual

Qualifiers:

Surr: DNOP

Analyte

Surr: DNOP

Sample ID LCS-29674

Prep Date: 1/13/2017

Client ID: LCSS

- 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
- Sample container temperature is out of limit as specified

Reporting Detection Limit RL

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1701529** 

20-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29679 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 29679 RunNo: 40013

Prep Date: 1/13/2017 Analysis Date: 1/15/2017 SeqNo: 1253875 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 85.0 68.3 144

Sample ID LCS-29679 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 29679 RunNo: 40013

Prep Date: 1/13/2017 Analysis Date: 1/15/2017 SeqNo: 1253876 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 5.0 25.00 105 74.6 123

Surr: BFB 940 1000 94.4 68.3 144

Sample ID 1701529-002AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-7 (8 1/2-13 1/2) Batch ID: 29679 RunNo: 40013

Prep Date: 1/13/2017 Analysis Date: 1/15/2017 SeqNo: 1253879 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 26 23.36 4.733 91.8 61.3 150 Surr: BFB 1100 934.6 68.3 115 144

Sample ID 1701529-002AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-7 (8 1/2-13 1/2) Batch ID: 29679 RunNo: 40013

Prep Date: 1/13/2017 Analysis Date: 1/15/2017 SeqNo: 1253880 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 26 4.8 23.99 4.733 88.4 61.3 150 0.945 20 Surr: BFB 1000 959.7 108 68.3 144 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 11 of 12

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1701529** 

20-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29679 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: 29679 RunNo: 40013 Prep Date: 1/13/2017 Analysis Date: 1/15/2017 SeqNo: 1253918 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 93.1 80 120

Sample ID LCS-29679 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSS** Batch ID: 29679 RunNo: 40013 Prep Date: 1/13/2017 Analysis Date: 1/15/2017 SeqNo: 1253919 Units: mg/Kg **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual 1.0 0.025 1.000 O 103 75.2 115 Benzene Toluene 0.93 0.050 1.000 0 93.1 80.7 112 Ethylbenzene 0.91 0.050 0 90.9 78.9 1.000 117 Xylenes, Total 2.7 0.10 3.000 0 90.0 79.2 115 Surr: 4-Bromofluorobenzene 0.95 1.000 94.6 80 120

Sample ID 1701529-001AMS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: MW-7 (3 1/2-8 1/2) Batch ID: 29679 RunNo: 40013 1/13/2017 Analysis Date: 1/15/2017 SeqNo: 1253921 Prep Date: Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.99 0.024 0.9470 105 61.5 138 Λ Toluene 0.89 0.047 0.9470 0 93.7 71.4 127 70.9 0.87 0.9470 0 91.5 132 Ethylbenzene 0.047 0.02292 Xylenes, Total 2.6 0.095 2.841 90.8 76.2 123

0.9470

Sample ID 1701529-001AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Batch ID: 29679 RunNo: 40013 Client ID: MW-7 (3 1/2-8 1/2) Prep Date: 1/13/2017 Analysis Date: 1/15/2017 SeqNo: 1253922 Units: mg/Kg %REC %RPD **RPDLimit** Analyte Result **PQL** SPK value SPK Ref Val LowLimit HighLimit Qual 1.0 0.024 0.9662 0 105 61.5 138 2.17 20 Benzene Toluene 0.92 0.048 0.9662 0 95.6 71.4 127 4.03 20 Ethylbenzene 0.90 0.048 0.9662 0 93.0 70.9 132 3.62 20 Xylenes, Total 2.7 0.097 2.899 0.02292 93.2 76.2 123 4.59 20 Surr: 4-Bromofluorobenzene 0.93 0.9662 96.7 80 120 0 0

#### Qualifiers:

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

Surr: 4-Bromofluorobenzene

H Holding times for preparation or analysis exceeded

0.92

- 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

96.9

80

120

- 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 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: BL	_AGG		Work (	Order Numbe	er: 1701	529		•	Rcp	tNo: 1	
Received by/date:	1	X	Oilia	3/17							]
Logged By: L	indsay Ma	ngin	1/13/201	7 7:20:00 A	М		Jimaky	Albage	)		
Completed By: L	indsay Ma	րցլո	1/13/201	7 8:42:37 AI	М		dinahu	Hlenne.	<b>)</b>		
Reviewed By:	Al	10	m l	3/17			00	773			
Chain of Custod	dy V	P									
1. Custody seals in	ntact on sa	mple bottles?			Yes		No		Not Present	<b>Y</b>	
2. Is Chain of Cust	tody comple	ete?			Yes	~	No		Not Present	[]	
3. How was the sa	mple delive	ered?			Cour	<u>ier</u>					
<u>Log In</u>										•	
4. Was an attempt	t made to o	ool the samp	les?		Yes	<b>Y</b>	No	[]	NA		
5. Were all sample	es received	at a tempera	ture of >0° C	to 6.0°C	Yes	<b>Y</b>	No		NA		
6. Sample(s) in pro	oper contai	ner(s)?			Yes	Y	No				
7. Sufficient sample	le volume fo	or indicated to	est(s)?		Yes		No				
8. Are samples (ex	cept VOA	and ONG) pro	perly preserv	ed?	Yes	<b>y</b>	No				
9. Was preservativ	e added to	bottles?			Yes		No	✓	NA		
10.VOA vials have:	zero heads	pace?			Yes		No		No VOA Vials	<b>Y</b>	
11. Were any samp	ole containe	rs received b	roken?		Yes		No	<b>Y</b>	[		
									# of preserved bottles checked	ď	
12.Does paperwork (Note discrepand			`		Yes	<b>Y</b>	No	[]	for pH:	(-2 05)	>12 unless noted)
13. Are matrices cor		•	•		Yes	<b>V</b>	No	[]	Adjusted		712 uniess noteo)
14. Is it clear what a			_		Yes	<b>V</b>	No		_		
15. Were all holding						<b>Y</b>			Checked	by:	
(If no, notify cust	tomer for a	uthorization.)									
Special Handling	a (if ann	liooblo)									
16. Was client notifie						Γ-1		[-]		r. 🍙	
		ciepancies w	iui triis order?	,	Yes		No		NA	<u> </u>	
Person No	_		Alle a consequence of the second of the seco	Date:							
By Whom:	)E		della compressione in construction and the construc	Via:	[ ∣eMa	il [	Phone [	Fax	In Person		
Regarding			**************************************	<del>.</del>						_	
Client Instr 17. Additional rema											
18. Cooler Informa	ation Temp °C	Condition	العظمة الموطاء	Cool No. 1	Cacl D	. 1	. Ól	ا د ن			
1331 1311 1313 1313 1313		· · · · · · · · · · · · · · · · · · ·	Seal Intact Yes	Seal No	Seal Da	re	Signed I	эу			

ပ	hain-	of-Cu	Chain-of-Custody Record	Turn-Around Time:	ıme:				_	Į	Ш	2	LEC	Z	<u> </u>	HALL ENVIRONMENTAL	_	
Client:	BP A	BP AMERICA		Standard	□ Rush			· ·		Z	֡֝֟֝֓֓֓֟֝֝֓֓֓֟֝֝֓֓֓֓֟֝֟֝֓֓֓֓֓֓֓֓֓֓֓֓֟֝֟֝֓֓֓֡֝֡֡֝֡֝֡֡֝֡֡֡֡֝֡֡֡֝	SIS	<u>'</u>	BO	<b>8</b>	ANALYSIS LABORATORY	<b>\</b>	
	公文及	ENG	ENGLUEERUG	Project Name:						www.hallenvironmental.com	ıallen	ironr	ental.	E03				
Mailing	Mailing Address:			FLORANCE (3C)	を含くれ	16A	•	49011	Hawk	4901 Hawkins NE - Albuquerque, NM 87109	- A	enbno	rdne, Î	VM 87	7109			
				Project #:				Tel. 5	05-34	Tel. 505-345-3975	ίΩ	Fax 5	505-345-4107	5-410	7			
Phone #:	# 505	2-320	5-1183								Anal	sis F	Analysis Request	st				
email or Fax#:	· Fax#:			Project Manager:	er:							(þC	·					
QA/QC Package:	ackage:			ス ス	BAGE					,,,	(0	)S <sup>'†</sup> (	s,ac					
X Standard	dard	:	☐ Level 4 (Full Validation)	,						, vic	MIC	Эď,	)d 7					
Accreditation	tation ₄P	□ Other		Sampler: 🍑	BAGG Ves	S ON L					0.170	<sup>2</sup> ΟΝ'ε <sub>ι</sub>	<b>.</b> 808 /	( <i>F</i>	-		(N A	/NLI
□ EDD (Type)	(Type)			Sample Temb	Temberature: 2.							ON'						o 1)
Date	Time	Matrix	Sample Request ID	ner nd #	Preservative Type	HEAL NO.	BTEX + MT	BTEX + MTE B2108 H9T	odteM) H9T	EDB (Metho	PAH's (8310 RCRA 8 Me	IO,7) anoinA	8081 Pestici 40V) 80928	-im92) 0728	CHROST		aelddug aiv	Air Bubbles
1/2017	1303	2011	MW-7(34-84)	402×1	CEDI		-		<u> </u>		1				×			4
Ξ	1313	17	MW-7(82-132)	1,	-	700-	~	×							×			
11	1321	ĺη	(381-421) L-MW	1)	37	-603	×	×							×			
ž	6281	<b>H</b>	(752-781) L-MW	رز	t t	1007	×	×							×			
1)	b5E1	11	(782-782)L-MW	11	11	SW-	×	×							×			
1)	1347	11	MW-7(282-332)	ĴΊ	J1	-88	×	×							×			
<b>-</b>	1405	<u>-</u>	N. /	<u>.</u>	)}	T-007	×	X							×			
_	वाम	11	MW-7(381-40)	1)	Į,	-008	×	×							×			
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<u></u>	necessary,	samples subi	<u> </u>	I ontracted to other acc	dited laboratorie	- 10	ijiqissod	by. Any:	uoo-qns	racted d	ata wili b	e clearly	notated	on the a	ınalytica	l report.		



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

January 18, 2017

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: FAX

RE: Florance GC J 16A OrderNo.: 1701388

### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 6 sample(s) on 1/11/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 1/18/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-8 (5'-9')

 Project:
 Florance GC J 16A
 Collection Date: 1/10/2017 1:04:00 PM

 Lab ID:
 1701388-001
 Matrix: SOIL
 Received Date: 1/11/2017 8:43:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	1/17/2017 2:31:52 PM	29731
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	S				Analys	t: <b>MAB</b>
Diesel Range Organics (DRO)	20	9.5		mg/Kg	1	1/12/2017 5:15:37 PM	29649
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/12/2017 5:15:37 PM	29649
Surr: DNOP	113	70-130		%Rec	1	1/12/2017 5:15:37 PM	29649
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	87	4.7		mg/Kg	1	1/12/2017 8:29:14 PM	29643
Surr: BFB	527	68.3-144	S	%Rec	1	1/12/2017 8:29:14 PM	29643
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.024		mg/Kg	1	1/12/2017 8:29:14 PM	29643
Toluene	ND	0.047		mg/Kg	1	1/12/2017 8:29:14 PM	29643
Ethylbenzene	ND	0.047		mg/Kg	1	1/12/2017 8:29:14 PM	29643
Xylenes, Total	0.30	0.094		mg/Kg	1	1/12/2017 8:29:14 PM	29643
Surr: 4-Bromofluorobenzene	123	80-120	S	%Rec	1	1/12/2017 8:29:14 PM	29643

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 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: 1/18/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-8 (9'-14')

 Project:
 Florance GC J 16A
 Collection Date: 1/10/2017 1:13:00 PM

 Lab ID:
 1701388-002
 Matrix: SOIL
 Received Date: 1/11/2017 8:43:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	1/17/2017 3:09:05 PM	29731
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANIC	S			Analys	t: <b>MAB</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	1/12/2017 5:43:06 PM	29649
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	1/12/2017 5:43:06 PM	29649
Surr: DNOP	109	70-130	%Rec	1	1/12/2017 5:43:06 PM	29649
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/12/2017 8:52:41 PM	29643
Surr: BFB	101	68.3-144	%Rec	1	1/12/2017 8:52:41 PM	29643
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.025	mg/Kg	1	1/12/2017 8:52:41 PM	29643
Toluene	ND	0.049	mg/Kg	1	1/12/2017 8:52:41 PM	29643
Ethylbenzene	ND	0.049	mg/Kg	1	1/12/2017 8:52:41 PM	29643
Xylenes, Total	ND	0.098	mg/Kg	1	1/12/2017 8:52:41 PM	29643
Surr: 4-Bromofluorobenzene	99.0	80-120	%Rec	1	1/12/2017 8:52:41 PM	29643

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 10 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.

Date Reported: 1/18/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-8 (14'-19')

 Project:
 Florance GC J 16A
 Collection Date: 1/10/2017 1:21:00 PM

 Lab ID:
 1701388-003
 Matrix: SOIL
 Received Date: 1/11/2017 8:43:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	1/17/2017 3:21:29 PM	29731
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	S				Analys	t: <b>MAB</b>
Diesel Range Organics (DRO)	78	9.8		mg/Kg	1	1/12/2017 6:10:37 PM	29649
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/12/2017 6:10:37 PM	29649
Surr: DNOP	111	70-130		%Rec	1	1/12/2017 6:10:37 PM	29649
EPA METHOD 8015D: GASOLINE RAI	NGE					Analys	t: NSB
Gasoline Range Organics (GRO)	23	4.9		mg/Kg	1	1/12/2017 9:16:07 PM	29643
Surr: BFB	228	68.3-144	S	%Rec	1	1/12/2017 9:16:07 PM	29643
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.024		mg/Kg	1	1/12/2017 9:16:07 PM	29643
Toluene	ND	0.049		mg/Kg	1	1/12/2017 9:16:07 PM	29643
Ethylbenzene	ND	0.049		mg/Kg	1	1/12/2017 9:16:07 PM	29643
Xylenes, Total	0.27	0.097		mg/Kg	1	1/12/2017 9:16:07 PM	29643
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	1/12/2017 9:16:07 PM	29643

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

### Date Reported: 1/18/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-8 (19'-24')

 Project:
 Florance GC J 16A
 Collection Date: 1/10/2017 1:32:00 PM

 Lab ID:
 1701388-004
 Matrix: SOIL
 Received Date: 1/11/2017 8:43:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	33	30	mg/Kg	20	1/17/2017 3:33:53 PM	29731
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: <b>MAB</b>
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	1/12/2017 6:38:06 PM	29649
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	1/12/2017 6:38:06 PM	29649
Surr: DNOP	109	70-130	%Rec	1	1/12/2017 6:38:06 PM	29649
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/12/2017 9:39:33 PM	29643
Surr: BFB	94.7	68.3-144	%Rec	1	1/12/2017 9:39:33 PM	29643
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.025	mg/Kg	1	1/12/2017 9:39:33 PM	29643
Toluene	ND	0.049	mg/Kg	1	1/12/2017 9:39:33 PM	29643
Ethylbenzene	ND	0.049	mg/Kg	1	1/12/2017 9:39:33 PM	29643
Xylenes, Total	ND	0.098	mg/Kg	1	1/12/2017 9:39:33 PM	29643
Surr: 4-Bromofluorobenzene	96.2	80-120	%Rec	1	1/12/2017 9:39:33 PM	29643

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: 1/18/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-8 (24'-29')

 Project:
 Florance GC J 16A
 Collection Date: 1/10/2017 1:44:00 PM

 Lab ID:
 1701388-005
 Matrix: SOIL
 Received Date: 1/11/2017 8:43:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: LGT
Chloride	ND	30	mg/Kg	20	1/17/2017 3:46:18 PM	29731
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	t: MAB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	1/12/2017 7:05:40 PM	29649
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/12/2017 7:05:40 PM	29649
Surr: DNOP	107	70-130	%Rec	1	1/12/2017 7:05:40 PM	29649
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	1/12/2017 10:03:02 PM	1 29643
Surr: BFB	91.9	68.3-144	%Rec	1	1/12/2017 10:03:02 PM	1 29643
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.023	mg/Kg	1	1/12/2017 10:03:02 PM	1 29643
Toluene	ND	0.047	mg/Kg	1	1/12/2017 10:03:02 PM	1 29643
Ethylbenzene	ND	0.047	mg/Kg	1	1/12/2017 10:03:02 PM	1 29643
Xylenes, Total	ND	0.093	mg/Kg	1	1/12/2017 10:03:02 PM	1 29643
Surr: 4-Bromofluorobenzene	94.7	80-120	%Rec	1	1/12/2017 10:03:02 PM	1 29643

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

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 1/18/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-8 (29'-34')

 Project:
 Florance GC J 16A
 Collection Date: 1/10/2017 1:52:00 PM

 Lab ID:
 1701388-006
 Matrix: SOIL
 Received Date: 1/11/2017 8:43:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: LGT
Chloride	ND	30	mg/Kg	20	1/17/2017 3:58:43 PM	29731
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	t: MAB
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	1/12/2017 7:33:09 PM	29649
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	1/12/2017 7:33:09 PM	29649
Surr: DNOP	118	70-130	%Rec	1	1/12/2017 7:33:09 PM	29649
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	1/12/2017 10:49:58 PM	1 29643
Surr: BFB	90.6	68.3-144	%Rec	1	1/12/2017 10:49:58 PM	1 29643
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	1/12/2017 10:49:58 PM	1 29643
Toluene	ND	0.048	mg/Kg	1	1/12/2017 10:49:58 PM	1 29643
Ethylbenzene	ND	0.048	mg/Kg	1	1/12/2017 10:49:58 PM	1 29643
Xylenes, Total	ND	0.095	mg/Kg	1	1/12/2017 10:49:58 PM	1 29643
Surr: 4-Bromofluorobenzene	95.2	80-120	%Rec	1	1/12/2017 10:49:58 PM	1 29643

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 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#: **1701388** 

18-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29731 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 29731 RunNo: 40098

Prep Date: 1/17/2017 Analysis Date: 1/17/2017 SeqNo: 1256752 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29731 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29731 RunNo: 40098

Prep Date: 1/17/2017 Analysis Date: 1/17/2017 SeqNo: 1256753 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.8 90 110

### 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 10

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1701388** 

18-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID LCS-29649 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 29649 RunNo: 39978 Prep Date: 1/11/2017 Analysis Date: 1/12/2017 SeqNo: 1252783 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

 Diesel Range Organics (DRO)
 48
 10
 50.00
 0
 96.0
 63.8
 116

 Surr: DNOP
 6.0
 5.000
 119
 70
 130

Sample ID MB-29649 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 29649 RunNo: 39978

Prep Date: 1/11/2017 Analysis Date: 1/12/2017 SeqNo: 1252784 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 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 10

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1701388** 

18-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29643 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 29643 RunNo: 39980

Prep Date: 1/11/2017 Analysis Date: 1/12/2017 SeqNo: 1253022 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 85.7 68.3 144

Sample ID LCS-29643 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 29643 RunNo: 39980

970

Prep Date: 1/11/2017 Analysis Date: 1/12/2017 SeqNo: 1253023 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 25.00 106 74.6 123

97.3

68.3

144

### 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
- 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#: 1701388

18-Jan-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID MB-29643 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 29643 RunNo: 39980 Prep Date: 1/11/2017 Analysis Date: 1/12/2017 SeqNo: 1253047 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 Surr: 4-Bromofluorobenzene 0.93 1.000 92.8 80 120

Sample ID LCS-29643	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batcl	n ID: <b>29</b>	643	R							
Prep Date: 1/11/2017	Analysis D	Date: 1/	12/2017	S	SeqNo: 1	253048	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.025	1.000	0	112	75.2	115				
Toluene	1.0	0.050	1.000	0	104	80.7	112				
Ethylbenzene	0.99	0.050	1.000	0	98.9	78.9	117				
Xylenes, Total	2.9	0.10	3.000	0	98.3	79.2	115				
Surr: 4-Bromofluorobenzene	1.0		1.000		101	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
- 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
- $\mathbf{W}$ Sample container temperature is out of limit as specified

Analyte detected in the associated Method Blank

Page 10 of 10



Hail 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:	BLAGG	Work Order Numb	er: 1701388		RcptNo: 1	
Received by/da	te: LM	0111117				
Logged By: Completed By:	Andy Jansson	1/11/2017 8:43:00 A	М	associ		
Reviewed By:	W	willer				
Chain of Cus	stody	U(IIII)				
Tax a transport many	als intact on sampl	le bottles?	Yes	No 🗆	Not Present 🗹	
2. Is Chain of	Custody complete	?	Yes 🗸	No 🗌	Not Present	
3. How was the	e sample delivered	1?	Courier			
Log In						
4. Was an atte	empt made to cool	the samples?	Yes 🗸	No 🗆	NA $\square$	
5. Were all sa	mples received at	a temperature of >0° C to 6.0°C	Yes 🗸	No 🗌	NA 🗆	
6. Sample(s) i	in proper container	(s)?	Yes 🗸	No 🗆		
7. Sufficient sa	ample volume for in	ndicated test(s)?	Yes 🔽	No 🗆		
8. Are sample:	s (except VOA and	ONG) properly preserved?	Yes 🗸	No 🗌		
9. Was preser	vative added to bo	ttles?	Yes	No 🗸	NA 🗆	
10. VOA vials h	ave zero headspac	ce?	Yes 🗌	No 🗆	No VOA Vials	
11. Were any s	sample containers i	received broken?	Yes	No 🗸	# of preserved	
	work match bottle		Yes 🗸	No 🗆	bottles checked for pH:	·12 unless noted)
13, Are matrice	s correctly identifie	d on Chain of Custody?	Yes 🗸	No 🗆	Adjusted?	
14. Is it clear wi	hat analyses were	requested?	Yes 🗸	No 🗌	\$200 E00000	
	lding times able to customer for auth		Yes 🗹	No 🗌	Checked by:	
Special Hand	dling (if applic	able)				
		epancies with this order?	Yes	No 🗆	NA 🗹	
Perso	on Notified:	Date		10/85 Y-16		
By W	hom:	Via:	eMail E	Phone Fax	In Person	
Regar	rding					
Client	Instructions:					
17. Additional	remarks:					
18. Cooler Info	ormation					
Cooler N	No Temp ℃ C	Condition   Seal Intact   Seal No	Seal Date	Signed By		
1	2.4 Go	od Yes				

NMENTAL	BORATORY	om	JM 87109	5-4107	**				(N		- -ΛΟ	S270 (Semi	×	¥	· · · · · · · · · · · · · · · · · · ·	×	×	×					卢	_
HALL ENVIDONMENTAL	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	-3975 Fax 505-345-4107	Analysis		)S <sup>'†</sup> (	ОЧ,	<sup>2</sup> ON	. 85 1, <sub>E</sub> C	no 0 stals n,N,n	EDB (Methd 1831) 2 'HA9 PCRA 8 Me D.(7) (F.C 8081 Pestic											1	VHIXOUEURA
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Chai	Client: 20	Burder	Mailing Address:		Phone #: \$	email or Fax#:	QA/QC Package:	X Standard	Accreditation	□ NELAP	□ EDD (Type	Date Time	4051 1304	1313	1321	1332	1344	1352				Time.	7	Date: Time: //o/17   [817]



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

January 23, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1701532

### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 8 sample(s) on 1/13/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

4901 Hawkins NE

Albuquerque, NM 87109

### Date Reported: 1/23/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-9 (3 1/2-8 1/2)

 Project:
 Florance GC J 16A
 Collection Date: 1/11/2017 8:47:00 AM

 Lab ID:
 1701532-001
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	:: LGT
Chloride	ND	30	mg/Kg	20	1/18/2017 3:26:31 PM	29774
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	1/16/2017 11:18:57 PM	1 29680
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/16/2017 11:18:57 PM	1 29680
Surr: DNOP	111	70-130	%Rec	1	1/16/2017 11:18:57 PM	1 29680
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	1/15/2017 11:27:51 PM	1 29679
Surr: BFB	83.5	68.3-144	%Rec	1	1/15/2017 11:27:51 PM	1 29679
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	1/15/2017 11:27:51 PM	1 29679
Toluene	ND	0.047	mg/Kg	1	1/15/2017 11:27:51 PM	1 29679
Ethylbenzene	ND	0.047	mg/Kg	1	1/15/2017 11:27:51 PM	1 29679
Xylenes, Total	ND	0.094	mg/Kg	1	1/15/2017 11:27:51 PM	1 29679
Surr: 4-Bromofluorobenzene	90.1	80-120	%Rec	1	1/15/2017 11:27:51 PM	1 29679

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

### Date Reported: 1/23/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: MW-9 (8 1/2-13 1/2)

Project: Florance GC J 16A

Collection Date: 1/11/2017 8:57:00 AM

**Lab ID:** 1701532-002 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	1/18/2017 3:38:55 PM	29774
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	1/16/2017 11:46:37 PN	A 29680
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/16/2017 11:46:37 PN	A 29680
Surr: DNOP	112	70-130	%Rec	1	1/16/2017 11:46:37 PN	A 29680
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/16/2017 1:00:32 AM	29679
Surr: BFB	83.4	68.3-144	%Rec	1	1/16/2017 1:00:32 AM	29679
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.025	mg/Kg	1	1/16/2017 1:00:32 AM	29679
Toluene	ND	0.050	mg/Kg	1	1/16/2017 1:00:32 AM	29679
Ethylbenzene	ND	0.050	mg/Kg	1	1/16/2017 1:00:32 AM	29679
Xylenes, Total	ND	0.099	mg/Kg	1	1/16/2017 1:00:32 AM	29679
Surr: 4-Bromofluorobenzene	88.0	80-120	%Rec	1	1/16/2017 1:00:32 AM	29679

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: 1/23/2017

CLIENT: Blagg Engineering

Client Sample ID: MW-9 (13 1/2-18 1/2)

Project: Florance GC J 16A

Collection Date: 1/11/2017 9:07:00 AM

**Lab ID:** 1701532-003 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	:: LGT
Chloride	ND	30	mg/Kg	20	1/18/2017 3:51:20 PM	29774
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	1/16/2017 5:22:13 PM	29681
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	1/16/2017 5:22:13 PM	29681
Surr: DNOP	118	70-130	%Rec	1	1/16/2017 5:22:13 PM	29681
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	1/16/2017 1:23:42 AM	29679
Surr: BFB	83.0	68.3-144	%Rec	1	1/16/2017 1:23:42 AM	29679
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	1/16/2017 1:23:42 AM	29679
Toluene	ND	0.047	mg/Kg	1	1/16/2017 1:23:42 AM	29679
Ethylbenzene	ND	0.047	mg/Kg	1	1/16/2017 1:23:42 AM	29679
Xylenes, Total	ND	0.095	mg/Kg	1	1/16/2017 1:23:42 AM	29679
Surr: 4-Bromofluorobenzene	87.5	80-120	%Rec	1	1/16/2017 1:23:42 AM	29679

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 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Date Reported: 1/23/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: MW-9 (18 1/2-23 1/2)

Project: Florance GC J 16A

Collection Date: 1/11/2017 9:15:00 AM

**Lab ID:** 1701532-004 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/18/2017 4:03:45 PM	29774
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	: ТОМ
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	1/16/2017 6:44:50 PM	29681
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	1/16/2017 6:44:50 PM	29681
Surr: DNOP	117	70-130	%Rec	1	1/16/2017 6:44:50 PM	29681
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	1/16/2017 1:46:57 AM	29679
Surr: BFB	82.9	68.3-144	%Rec	1	1/16/2017 1:46:57 AM	29679
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	1/16/2017 1:46:57 AM	29679
Toluene	ND	0.047	mg/Kg	1	1/16/2017 1:46:57 AM	29679
Ethylbenzene	ND	0.047	mg/Kg	1	1/16/2017 1:46:57 AM	29679
Xylenes, Total	ND	0.095	mg/Kg	1	1/16/2017 1:46:57 AM	29679
Surr: 4-Bromofluorobenzene	86.1	80-120	%Rec	1	1/16/2017 1:46:57 AM	29679

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 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: 1/23/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering **Project:** Florance GC J 16A

Lab ID:

**Client Sample ID:** MW-9 (23 1/2-28 1/2)

**Collection Date:** 1/11/2017 9:23:00 AM 1701532-005 Matrix: SOIL Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	:: LGT
Chloride	ND	30	mg/Kg	20	1/18/2017 4:16:09 PM	29774
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	1/16/2017 7:12:20 PM	29681
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	1/16/2017 7:12:20 PM	29681
Surr: DNOP	117	70-130	%Rec	1	1/16/2017 7:12:20 PM	29681
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/16/2017 2:10:08 AM	29679
Surr: BFB	83.3	68.3-144	%Rec	1	1/16/2017 2:10:08 AM	29679
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	1/16/2017 2:10:08 AM	29679
Toluene	ND	0.049	mg/Kg	1	1/16/2017 2:10:08 AM	29679
Ethylbenzene	ND	0.049	mg/Kg	1	1/16/2017 2:10:08 AM	29679
Xylenes, Total	ND	0.097	mg/Kg	1	1/16/2017 2:10:08 AM	29679
Surr: 4-Bromofluorobenzene	87.9	80-120	%Rec	1	1/16/2017 2:10:08 AM	29679

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 5 of 13 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

### Date Reported: 1/23/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: MW-9 (28 1/2-33 1/2)

Project: Florance GC J 16A

Collection Date: 1/11/2017 9:33:00 AM

**Lab ID:** 1701532-006 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>LGT</b>
Chloride	ND	30	mg/Kg	20	1/18/2017 4:28:34 PM	29774
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analys	t: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	1/16/2017 7:39:49 PM	29681
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	1/16/2017 7:39:49 PM	29681
Surr: DNOP	114	70-130	%Rec	1	1/16/2017 7:39:49 PM	29681
EPA METHOD 8015D: GASOLINE RANG	E				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	1/16/2017 2:33:14 AM	29679
Surr: BFB	82.1	68.3-144	%Rec	1	1/16/2017 2:33:14 AM	29679
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	1/16/2017 2:33:14 AM	29679
Toluene	ND	0.048	mg/Kg	1	1/16/2017 2:33:14 AM	29679
Ethylbenzene	ND	0.048	mg/Kg	1	1/16/2017 2:33:14 AM	29679
Xylenes, Total	ND	0.097	mg/Kg	1	1/16/2017 2:33:14 AM	29679
Surr: 4-Bromofluorobenzene	86.9	80-120	%Rec	1	1/16/2017 2:33:14 AM	29679

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 6 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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### Date Reported: 1/23/2017

**Client Sample ID:** MW-9 (33 1/2-38 1/2)

**Collection Date:** 1/11/2017 9:45:00 AM

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Florance GC J 16A

**Lab ID:** 1701532-007 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: LGT
Chloride	ND	30	mg/Kg	20	1/18/2017 4:41:00 PM	29774
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	1/16/2017 8:07:06 PM	29681
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	1/16/2017 8:07:06 PM	29681
Surr: DNOP	119	70-130	%Rec	1	1/16/2017 8:07:06 PM	29681
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/16/2017 2:56:22 AM	29679
Surr: BFB	83.2	68.3-144	%Rec	1	1/16/2017 2:56:22 AM	29679
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.025	mg/Kg	1	1/16/2017 2:56:22 AM	29679
Toluene	ND	0.050	mg/Kg	1	1/16/2017 2:56:22 AM	29679
Ethylbenzene	ND	0.050	mg/Kg	1	1/16/2017 2:56:22 AM	29679
Xylenes, Total	ND	0.099	mg/Kg	1	1/16/2017 2:56:22 AM	29679
Surr: 4-Bromofluorobenzene	88.2	80-120	%Rec	1	1/16/2017 2:56:22 AM	29679

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 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## **Analytical Report**

# Lab Order **1701532**Date Reported: **1/23/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-9 (38 1/2-43)

 Project:
 Florance GC J 16A
 Collection Date: 1/11/2017 10:07:00 AM

 Lab ID:
 1701532-008
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	<b>Date Analyzed</b>	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/19/2017 12:04:39 PM	29791
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	:: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	1/16/2017 8:34:30 PM	29681
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/16/2017 8:34:30 PM	29681
Surr: DNOP	109	70-130	%Rec	1	1/16/2017 8:34:30 PM	29681
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	1/16/2017 3:19:31 AM	29679
Surr: BFB	82.5	68.3-144	%Rec	1	1/16/2017 3:19:31 AM	29679
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	1/16/2017 3:19:31 AM	29679
Toluene	ND	0.046	mg/Kg	1	1/16/2017 3:19:31 AM	29679
Ethylbenzene	ND	0.046	mg/Kg	1	1/16/2017 3:19:31 AM	29679
Xylenes, Total	ND	0.093	mg/Kg	1	1/16/2017 3:19:31 AM	29679
Surr: 4-Bromofluorobenzene	85.9	80-120	%Rec	1	1/16/2017 3:19:31 AM	29679

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.

WO#: **1701532** 

23-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29774 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 29774 RunNo: 40130

Prep Date: 1/18/2017 Analysis Date: 1/18/2017 SeqNo: 1257870 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29774 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29774 RunNo: 40130

Prep Date: 1/18/2017 Analysis Date: 1/18/2017 SeqNo: 1257871 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 93.5 90 110

Sample ID MB-29791 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 29791 RunNo: 40154

Prep Date: 1/19/2017 Analysis Date: 1/19/2017 SeqNo: 1258757 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29791 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29791 RunNo: 40154

Prep Date: 1/19/2017 Analysis Date: 1/19/2017 SeqNo: 1258758 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.8 90 110

### 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 13

**Client:** 

### Hall Environmental Analysis Laboratory, Inc.

**Blagg Engineering** 

WO#: **1701532** 

23-Jan-17

Project: Florance	e GC J 16A								
Sample ID LCS-29680	SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 29	680	RunNo: <b>40029</b>						
Prep Date: 1/13/2017	Analysis Date: 1/	16/2017	S	SeqNo: 12	254791	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45 10	50.00	0	90.6	63.8	116			
Surr: DNOP	4.8	5.000		95.1	70	130			
Sample ID MB-29680	SampType: <b>ME</b>	BLK	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batch ID: 29	680	R	RunNo: <b>40</b>	0029				
Prep Date: 1/13/2017	Analysis Date: 1/	16/2017	S	SeqNo: 12	254792	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	9.6	10.00		95.9	70	130			
Sample ID 1701532-003AM	S SampType: MS	3	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: MW-9 (13 1/2-18	3 1/2) Batch ID: 29	681	R	RunNo: <b>40</b>	0030				
Prep Date: 1/13/2017	Analysis Date: 1/	16/2017	S	SeqNo: 12	255437	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50 9.6	47.94	2.137	100	51.6	130			
Surr: DNOP	6.0	4.794		124	70	130			
Sample ID 1701532-003AM	SD SampType: MS	SD	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: MW-9 (13 1/2-18	3 1/2) Batch ID: 29	681	R	RunNo: <b>40</b>	0030				
Prep Date: 1/13/2017	Analysis Date: 1/	16/2017	S	SeqNo: 12	255438	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47 9.3	46.38	2.137	95.8	51.6	130	7.72	20	
Surr: DNOP	5.7	4.638		122	70	130	0	0	
Sample ID LCS-29681	SampType: <b>LC</b>	:s	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Die	esel Rang	e Organics	·
Client ID: LCSS	Batch ID: 29	681	R	RunNo: <b>4(</b>	0030				
Prep Date: 1/13/2017	Analysis Date: 1/	16/2017	S	SeqNo: 12	255449	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47 10	50.00	0	94.3	63.8	116			

### Qualifiers:

Surr: DNOP

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

5.9

5.000

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

70

130

E Value above quantitation range

J Analyte detected below quantitation limits

D C 1 HN LD

117

Page 10 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.

WO#: 1701532

23-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29681 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 29681 RunNo: 40030

Prep Date: 1/13/2017 Analysis Date: 1/16/2017 SeqNo: 1255450 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 12 10.00 117 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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### Hall Environmental Analysis Laboratory, Inc.

WO#: **1701532** 

23-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29679 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 29679 RunNo: 40013

Prep Date: 1/13/2017 Analysis Date: 1/15/2017 SeqNo: 1253875 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 85.0 68.3 144

Sample ID LCS-29679 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 29679 RunNo: 40013

940

Prep Date: 1/13/2017 Analysis Date: 1/15/2017 SeqNo: 1253876 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 25.00 105 74.6 123

### 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
- 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

ayee detected in the associated Wethou Blank

68.3

94.4

144

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### Hall Environmental Analysis Laboratory, Inc.

WO#: 1701532

23-Jan-17

**Client: Blagg Engineering Project:** Florance GC J 16A

Sample ID MB-29679 SampType: MBLK TestCode: EPA Method 8021B: Volatiles **PBS** Client ID: Batch ID: 29679 RunNo: 40013 Prep Date: 1/13/2017 Analysis Date: 1/15/2017 SeqNo: 1253918 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 Surr: 4-Bromofluorobenzene 0.93 1.000 93.1 80 120

Sample ID LCS-29679	Samp	s	Tes	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batc	h ID: <b>29</b>	679	RunNo: 40013						
Prep Date: 1/13/2017	13/2017 Analysis Date: 1/15/2017 SeqNo: 1253			253919	919 Units: mg/Kg					
Analyte	alyte Result PQL SPK value		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.0	0.025	1.000	0	103	75.2	115			
Toluene	0.93	0.050	1.000	0	93.1	80.7	112			
Ethylbenzene	0.91	0.050	1.000	0	90.9	78.9	117			
Xylenes, Total	(ylenes, Total 2.7 0.10 3.000		0	90.0	79.2	115				
Surr: 4-Bromofluorobenzene 0.95 1.000				94.6	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
- 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

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

# Sample Log-In Check List

Client Name: BLAGG	Work Order Number:	1701532		RcptNo:	1
Received by/date:	01/13/17				
Logged By: Lindsay Mangin	1/13/2017 7:20:00 AM		Jimeky Hbanzo		
Completed By: Lindsay Manģiŋ	1/13/2017 8:56:48 AM		Simulay Hlopings		
Reviewed By:	orlisha		000		
Chain of Custody	20121				]
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 same	ples?	Yes 🔽	No 🗀	NA []	
5. Were all samples received at a temperature	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 to	test(s)?	Yes 🗸	No 🗀		
8. Are samples (except VOA and ONG) pr	operly 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 🗹	#	
40 -			r-,	# of preserved bottles checked	
12.Does paperwork match bottle labels? (Note discrepancies on chain of custods)	ιΛ	Yes 🗸	No 🗔	for pH:	r >12 unless noted)
13. Are matrices correctly identified on Cha	,,	Yes 🗸	No 🗔	Adjusted?	i - 12 dilicas noted)
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 v	vith this order?	Yes 🗌	No 🗌	NA 🗹	
Person Notified:	Date:	William en en en en en en en en en en en en en	Mark to the second seco		]
By Whom:	Via:	eMail 📗	Phone [] Fax	[ ] In Person	
Regarding:			annen er en en en en en en en en en en en en en		
Client Instructions:					
17. Additional remarks:					
18. Cooler Information					
Cooler No Temp °C Condition		eal Date	Signed By		
1 2.1 Good	Yes		18 M. 18 allan adams and a second and a second at a second at a second at a second at a second at a second at a		

Chain-of-Custody Record	Turn-Around Time:			HALL	HALL ENVIRONMENTAL	NO	ENTAL	
Client: 15/P AMERICA	<b>★</b> Standard	Rush		ANAL	YSIS L	ABOF	ANALYSIS LABORATORY	
BLAGE ENGINEERING INC.	Project Name:	6. T 10.A		www.hal	www.hallenvironmental.com	al.com		
Mailing Address:	7000	)	4901 H	4901 Hawkins NE -	Albuquerque, NM 87109	e, NM 871	60	
	Project #:		Tel. 5(	Tel. 505-345-3975	Fax 505-	505-345-4107		
Phone #: 505-320-[(83				V	Analysis Request	uest		
-ax#:	Project Manager:	-	(ʎju		_			
ige:	J. B.Ms	9	992 0	(SN				
X Standard □ Level 4 (Full Validation)	Į		D) F					
Accreditation  □ NELAP  □ Other	Sampler: 4 6	(\$.466 es □ No	<del> </del> ЧТ +	(r.40	ON'εC	(A	OK (J)	OLIA)
□ EDD (Type)	Sample Température:	), 2, (	38.	g po	N'I	-۸٥		( J
Date Time Matrix Sample Request ID	Container Preser	Preservative HEAL No. Type ITON 527	3TEX + <u>WI</u> 3TEX + MT 1PH 8015B	DAth (Methors) DB (Methors) DES) s'HAG	RCRA 8 Me Prions (F,C 18081 Pestic	OV) 80828 imə8) 0728	141707177	Air Bubbles
1/2017 0847 SOIL MW-a(3=-8=>	403×1 Ceol	70-70					×	1
1 (35) 4 NW-9 (81-131)	11	- 005	×			,	×	
11 (281-181) MW-9(134-181)	n h	-003	×   ×				×	
(152-781) PW-9(187-231)	l h	-00H	× ×				×	
11 0923 11 MW-9(231-281)	)1	-005	×				×	i
" 0933 " MW-9(281-331)	11 68	$\sim\!\!\mathcal{O}\widetilde{l_o}$	× ×				×	
(785-327) p-MM n SHOO 11	11	-007	×				X	
11 (201 " NW-9(382-43)	ft 13	800/-	<u>х</u> х				×	
								ļ
Dodo: Timo: Dolina inhood hyr	Received hy:	Data Time	Domorks:					
7 1337	+3	Necto 1/4/1 (337	None and a second	COUNTACT!		NESTA	•	
Date: Time: Relinquished by:	Received by:	Date Time		Z Q Z	VHIXOXEVEJ	ה על אירוי ער אירויי	,	
If necessary, samples submitted to Hall		≝ اــ	possibility. Any s	ub-contracted data	will be clearly notal	ted on the ans	lytical report.	



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

January 18, 2017

Jeff Blagg
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Florance GC J 16A OrderNo.: 1701526

### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 6 sample(s) on 1/13/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Date Reported: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW-10 (4'-9')

 Project:
 Florance GC J 16A
 Collection Date: 1/12/2017 12:30:00 PM

 Lab ID:
 1701526-001
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: LGT
Chloride	ND	30		mg/Kg	20	1/16/2017 3:20:52 PM	29704
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S				Analyst	: TOM
Diesel Range Organics (DRO)	810	9.1		mg/Kg	1	1/16/2017 2:25:07 PM	29680
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/16/2017 2:25:07 PM	29680
Surr: DNOP	104	70-130		%Rec	1	1/16/2017 2:25:07 PM	29680
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst	: NSB
Gasoline Range Organics (GRO)	530	24		mg/Kg	5	1/14/2017 2:59:36 PM	29678
Surr: BFB	643	68.3-144	S	%Rec	5	1/14/2017 2:59:36 PM	29678
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.12		mg/Kg	5	1/14/2017 2:59:36 PM	29678
Toluene	ND	0.24		mg/Kg	5	1/14/2017 2:59:36 PM	29678
Ethylbenzene	1.1	0.24		mg/Kg	5	1/14/2017 2:59:36 PM	29678
Xylenes, Total	3.3	0.48		mg/Kg	5	1/14/2017 2:59:36 PM	29678
Surr: 4-Bromofluorobenzene	130	80-120	S	%Rec	5	1/14/2017 2:59:36 PM	29678

*	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 1 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
	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: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-10 (9-'14)

 Project:
 Florance GC J 16A
 Collection Date: 1/12/2017 12:36:00 PM

 Lab ID:
 1701526-002
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	:: LGT
Chloride	ND	30		mg/Kg	20	1/16/2017 3:58:05 PM	29704
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S				Analys	t: TOM
Diesel Range Organics (DRO)	640	9.6		mg/Kg	1	1/16/2017 2:48:28 PM	29680
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/16/2017 2:48:28 PM	29680
Surr: DNOP	99.3	70-130		%Rec	1	1/16/2017 2:48:28 PM	29680
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	560	23		mg/Kg	5	1/14/2017 3:23:06 PM	29678
Surr: BFB	602	68.3-144	S	%Rec	5	1/14/2017 3:23:06 PM	29678
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.12		mg/Kg	5	1/14/2017 3:23:06 PM	29678
Toluene	ND	0.23		mg/Kg	5	1/14/2017 3:23:06 PM	29678
Ethylbenzene	ND	0.23		mg/Kg	5	1/14/2017 3:23:06 PM	29678
Xylenes, Total	7.9	0.47		mg/Kg	5	1/14/2017 3:23:06 PM	29678
Surr: 4-Bromofluorobenzene	136	80-120	S	%Rec	5	1/14/2017 3:23:06 PM	29678

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 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: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-10 (14'-19')

Project: Florance GC J 16A Collection Date: 1/12/2017 12:44:00 PM

**Lab ID:** 1701526-003 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: LGT
Chloride	ND	30		mg/Kg	20	1/17/2017 1:16:00 PM	29727
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	s				Analyst	: TOM
Diesel Range Organics (DRO)	240	9.5		mg/Kg	1	1/16/2017 3:11:53 PM	29680
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/16/2017 3:11:53 PM	29680
Surr: DNOP	100	70-130		%Rec	1	1/16/2017 3:11:53 PM	29680
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	: NSB
Gasoline Range Organics (GRO)	110	9.2		mg/Kg	2	1/15/2017 1:22:10 PM	29678
Surr: BFB	386	68.3-144	S	%Rec	2	1/15/2017 1:22:10 PM	29678
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.046		mg/Kg	2	1/15/2017 1:22:10 PM	29678
Toluene	ND	0.092		mg/Kg	2	1/15/2017 1:22:10 PM	29678
Ethylbenzene	0.27	0.092		mg/Kg	2	1/15/2017 1:22:10 PM	29678
Xylenes, Total	1.6	0.18		mg/Kg	2	1/15/2017 1:22:10 PM	29678
Surr: 4-Bromofluorobenzene	116	80-120		%Rec	2	1/15/2017 1:22:10 PM	29678

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

# Date Reported: 1/18/2017

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-10 (19'-24')

Project: Florance GC J 16A Collection Date: 1/12/2017 12:52:00 PM

**Lab ID:** 1701526-004 **Matrix:** SOIL **Received Date:** 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/17/2017 1:28:00 PM	29727
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analyst	: TOM
Diesel Range Organics (DRO)	12	9.2	mg/Kg	1	1/16/2017 3:35:11 PM	29680
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	1/16/2017 3:35:11 PM	29680
Surr: DNOP	101	70-130	%Rec	1	1/16/2017 3:35:11 PM	29680
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/15/2017 1:45:28 PM	29678
Surr: BFB	98.5	68.3-144	%Rec	1	1/15/2017 1:45:28 PM	29678
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	1/15/2017 1:45:28 PM	29678
Toluene	ND	0.050	mg/Kg	1	1/15/2017 1:45:28 PM	29678
Ethylbenzene	ND	0.050	mg/Kg	1	1/15/2017 1:45:28 PM	29678
Xylenes, Total	ND	0.10	mg/Kg	1	1/15/2017 1:45:28 PM	29678
Surr: 4-Bromofluorobenzene	94.7	80-120	%Rec	1	1/15/2017 1:45:28 PM	29678

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: 1/18/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-10 (27')

**Project:** Florance GC J 16A **Collection Date:** 1/12/2017 1:00:00 PM Lab ID: 1701526-005 Matrix: SOIL Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: LGT
Chloride	ND	30	mg/Kg	20	1/17/2017 1:41:00 PM	29727
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analyst	:: ТОМ
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	1/16/2017 4:22:01 PM	29680
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/16/2017 4:22:01 PM	29680
Surr: DNOP	106	70-130	%Rec	1	1/16/2017 4:22:01 PM	29680
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/14/2017 8:27:54 PM	29678
Surr: BFB	88.0	68.3-144	%Rec	1	1/14/2017 8:27:54 PM	29678
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.024	mg/Kg	1	1/14/2017 8:27:54 PM	29678
Toluene	ND	0.049	mg/Kg	1	1/14/2017 8:27:54 PM	29678
Ethylbenzene	ND	0.049	mg/Kg	1	1/14/2017 8:27:54 PM	29678
Xylenes, Total	ND	0.097	mg/Kg	1	1/14/2017 8:27:54 PM	29678
Surr: 4-Bromofluorobenzene	96.3	80-120	%Rec	1	1/14/2017 8:27:54 PM	29678

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 5 of 10 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc. Date Reported: 1/18/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-10 (29'-31')

 Project:
 Florance GC J 16A
 Collection Date: 1/12/2017 1:11:00 PM

 Lab ID:
 1701526-006
 Matrix: SOIL
 Received Date: 1/13/2017 7:20:00 AM

Analyses	Result	PQL (	Qual U	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	:: LGT
Chloride	ND	30		mg/Kg	20	1/17/2017 1:53:00 PM	29727
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANIC	S				Analyst	:: TOM
Diesel Range Organics (DRO)	42	9.5		mg/Kg	1	1/16/2017 4:45:33 PM	29680
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/16/2017 4:45:33 PM	29680
Surr: DNOP	103	70-130		%Rec	1	1/16/2017 4:45:33 PM	29680
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst	:: NSB
Gasoline Range Organics (GRO)	20	4.7		mg/Kg	1	1/15/2017 2:08:47 PM	29678
Surr: BFB	160	68.3-144	S	%Rec	1	1/15/2017 2:08:47 PM	29678
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.024		mg/Kg	1	1/15/2017 2:08:47 PM	29678
Toluene	ND	0.047		mg/Kg	1	1/15/2017 2:08:47 PM	29678
Ethylbenzene	ND	0.047		mg/Kg	1	1/15/2017 2:08:47 PM	29678
Xylenes, Total	0.20	0.095		mg/Kg	1	1/15/2017 2:08:47 PM	29678
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	1	1/15/2017 2:08:47 PM	29678

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
	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#: **1701526** 

18-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29704 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 29704 RunNo: 40057

Prep Date: 1/16/2017 Analysis Date: 1/16/2017 SeqNo: 1255351 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29704 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29704 RunNo: 40057

Prep Date: 1/16/2017 Analysis Date: 1/16/2017 SeqNo: 1255352 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.3 90 110

Sample ID MB-29727 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 29727 RunNo: 40074

Prep Date: 1/16/2017 Analysis Date: 1/17/2017 SeqNo: 1256647 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-29727 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 29727 RunNo: 40074

Prep Date: 1/16/2017 Analysis Date: 1/17/2017 SeqNo: 1256648 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 92.8 90 110

#### 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 10

**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

Result

5.5

**Blagg Engineering** 

WO#: 1701526

18-Jan-17

	e GC J 16A							
Sample ID MB-29674	SampType: <b>N</b>	IBLK	Test	Code: <b>EPA Method</b>	8015M/D: Die	sel Range	e Organics	
Client ID: PBS	Batch ID: 2	9674	Ri	unNo: <b>40030</b>				
Prep Date: 1/13/2017	Analysis Date:	1/16/2017	Se	eqNo: <b>1254788</b>	Units: %Rec			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10	10.00		105 70	130			
Sample ID LCS-29680	SampType: L	cs	Test	Code: EPA Method	8015M/D: Die	sel Range	e Organics	
Client ID: LCSS	Batch ID: 2	9680	Ru	unNo: <b>40029</b>				
Prep Date: 1/13/2017	Analysis Date:	1/16/2017	Se	eqNo: <b>1254791</b>	Units: mg/K	9		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45 10	50.00	0	90.6 63.8	116			
Surr: DNOP	4.8	5.000		95.1 70	130			
Sample ID MB-29680	SampType: N	IBLK	Test	Code: <b>EPA Method</b>	8015M/D: Die	sel Range	e Organics	
Client ID: PBS	Batch ID: 2	9680	Ri	unNo: <b>40029</b>				
Prep Date: 1/13/2017	Analysis Date:	1/16/2017	Se	eqNo: <b>1254792</b>	Units: mg/K	9		
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	9.6	10.00		95.9 70	130			
Sample ID LCS-29674	SampType: <b>L</b>	cs	Test	Code: <b>EPA Method</b>	8015M/D: Die	sel Range	e Organics	
Client ID: LCSS	Batch ID: 2	9674	Rı	unNo: <b>40030</b>				
Prep Date: 1/13/2017	Analysis Date:	1/16/2017	Se	eqNo: <b>1254824</b>	Units: %Rec			

SPK value SPK Ref Val %REC

5.000

### Qualifiers:

Analyte

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

LowLimit

70

109

HighLimit

130

- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 8 of 10

%RPD

**RPDLimit** 

Qual

- 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#: 1701526

18-Jan-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-29678 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: 29678 RunNo: 40009

Prep Date: 1/13/2017 Analysis Date: 1/14/2017 SeqNo: 1253705 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 86.2 68.3 144

TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-29678 SampType: LCS

Client ID: LCSS Batch ID: 29678 RunNo: 40009

950

Prep Date: Analysis Date: 1/14/2017 SeqNo: 1253706 1/13/2017 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 25.00 109 74.6 123

95.3

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
- 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

Page 9 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1701526** 

18-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-29678 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: 29678 RunNo: 40009 Prep Date: 1/13/2017 Analysis Date: 1/14/2017 SeqNo: 1253745 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 Surr: 4-Bromofluorobenzene 0.93 1.000 93.1 80 120

Sample ID LCS-29678 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 29678 RunNo: 40009 Prep Date: Analysis Date: 1/14/2017 SeqNo: 1253746 1/13/2017 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1.1 0.025 1.000 0 109 75.2 115 Benzene Toluene 0.97 0.050 1.000 0 96.8 80.7 112 Ethylbenzene 0.92 0.050 1.000 0 92.3 78.9 117 92.6 79.2 Xylenes, Total 2.8 0.10 3.000 0 115 99.6 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

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:	BLAGG		Work Order Number:	1701				-	tNo: 1	
Received by/o	late:	<del>*************************************</del>	01/13/17		-					
Logged By:	Lindsay N	langin	1/13/2017 7:20:00 AM			Jinaky	Albaga	ס		
Completed By	: (Lindsay M	langin	1/13/2017 8:32:58 AM			Jinaky	Allega	b		İ
Reviewed By:	Kara	11/13/17				U	U			
Chain of Cu	$\sim$	Costation in the								
1 Custody s	eals intact on s	ample bottles?		Yes	["]	No		Not Present	<b>✓</b>	
2, Is Chain o	f Custody com	plete?		Yes	0.00	No		Not Present		
3. How was t	the sample deli	vered?		Cou	<u>rier</u>					
<u>Log In</u>										
4. Was an a	ttempt made to	cool the samples?		Yes	Y	No		NA	[1]	
5. Were all s	amples receive	ed at a temperature o	of >0° C to 6.0°C	Yes	<b>Y</b>	No		NA [		
6. Sample(s)	) in proper cont	ainer(s)?		Yes	<b>\</b>	No				
7. Sufficient	sample volume	for indicated test(s)	?	Yes	<b>V</b>	No				
8. Are sample	es (except VOA	and ONG) properly	preserved?	Yes	<b>\</b>	No				
9. Was prese	ervative added t	to bottles?		Yes	[ ]	No		NA		
10.VOA vials	have zero head	ispace?		Yes	[]	No		No VOA Vials	<b>✓</b> ]	
11. Were any	sample contair	ers received broken	?	Yes		No	<b>Y</b>	# of preserved		
12 Does name	erwork match bo	ettle lebele?		.,	[ق]	NI-	[]	bottles checked		
		nain of custody)		Yes		No	lJ	for pH:	<2 or >12 unless n	oted)
13. Are matrice	es correctly ide	ntified on Chain of C	ustody?	Yes	<b>\</b>	No		Adjusted?	·	
		vere requested?				No	<u>                                     </u>			
	olding times abl y customer for			Yes	<b>Y</b>	No		Checked b	py:	
Special Han	dling (if apı	olicable)								
16. Was client	notified of all d	iscrepancies with thi	s order?	Yes	[_]	No		NA [	Ž	
Perso	on Notified:		Date:		halifard belaverary or					
By ₩	/hom:	The second secon	Via:	_ eMa	il [	] Phone [_]	Fax	[] In Person		
Rega	ırding:						***************************************		*	
l	t Instructions:									
17. Additional	remarks:									
18. <u>Cooler Inf</u>										
Cooler I			Intact   Seal No   S	eal Da	te .	Signed B	y .			
	2.1	Good Yes								

Buttle Engineers   Project Name: Address: Address: Address: Address: Address: Futtle	Chain-of-Custody Record	Turn-Around Time:	me:  Krush	Liozali Liozali			IA	AL		V.	HALL ENVIRONMENTAL		ME	Ž P	A K	
Contained by   Cont	Burge Training	Project Name:					5	ww.h	allenv	ronm	ental.	Шo		) :		
Project #:   Pro	V .	FLORANCE		K91	4	901 F	awkin	S NE	- Alb	ndne	dne, l	∑ Z	7109			
Contained   Cont		Project #:			'	Tel. 5(	5-34	-3978		ax 5	5-34	5-410	7(			
Control   Cont	505-320-118	<u>, , , , , , , , , , , , , , , , , , , </u>							Anal)		edne	st				
Devel 4 (Full Validation)   Container	nail or Fax#:	Project Manage	er:							(*0	ę					
Outher   Sample   Employer   Sample	je:		sale is					(SM)		S,₄Oq	LCB					
Time   Matrix   Sample Request   D   Container   Preservative   A   Los &   Container   Preservative   A   Los &   Container   Preservative   A   Los &   Container   Preservative   A   A   Container   Preservative   A   A   A   Container   Preservative   A   A   A   A   A   A   A   A   A	□ Other	<b>\bar{\bar{\bar{\bar{\bar{\bar{\bar{</b>	. BARK							, <sub>s</sub> ,NO <sub>2,</sub>		(A				N N
Time   Matrix   Sample Request   D   Container   Preservative   HEAL No.   HEAL NO.	(pe)	Sample Temple	rature: $2$							ON'I						)
12.35 50.42 MW-10(4-9') 44.02 x ( CEOZ — OO) X X X X X X X X X X X X X X X X X X	Matrix	Container P Type and #	reservative Type	HEAL NO. 1701626						O,4) anoinA						Air <b>B</b> ubbles
1234 11 Nww-10(4-14) 11 11 -002 X X X X X X X X X X X X X X X X X X	Soil		CEOIL	100-	×	×							×			
	n 9221	11	) 1	200-	×	×	··· <del>-</del>						×			
	ท	<b>1</b>	)1	200-	×	×							×			
	11	))	11	100-	$\times$	×							×			
	11	ft f	11	-005	×	×							×			
Received by:  Re	11 NW 10(29)	11	<i>i (</i>	-000-	<b>'</b>	X					_		×			
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	Relifiquished by:	Received by:	X	Date Time			Z		VH(x	75	3	2			•	



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

January 23, 2017

Jeff Blagg

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 632-1199 FAX (505) 632-3903

RE: Florance GC J 16A OrderNo.: 1701717

### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 4 sample(s) on 1/18/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

andyl

4901 Hawkins NE

Albuquerque, NM 87109

# Lab Order **1701717**Date Reported: **1/23/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: MW-6

 Project:
 Florance GC J 16A
 Collection Date: 1/17/2017 10:55:00 AM

 Lab ID:
 1701717-001
 Matrix: AQUEOUS
 Received Date: 1/18/2017 7:25:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
SM2340B: HARDNESS						Analyst	: pmf
Hardness (As CaCO3)	230	6.6		mg/L	1	1/19/2017	R40136
SPECIFIC GRAVITY						Analyst	: LGT
Specific Gravity	0.9963	0			1	1/23/2017 11:42:00 AM	
EPA METHOD 300.0: ANIONS						Analyst	: I GT
Chloride	30	10		mg/L	20	1/19/2017 8:33:24 PM	R40154
Sulfate	20	0.50		mg/L	1	1/19/2017 8:33:24 PM	R40154
SM2510B: SPECIFIC CONDUCTANCE		0.00		mg/L	•	Analyst	
		4.0			4	•	
Conductivity	620	1.0		µmhos/cm	1	1/19/2017 1:39:28 PM	R40164
SM2320B: ALKALINITY						Analyst	: JRR
Bicarbonate (As CaCO3)	255.0	20.00		mg/L CaCO3	1	1/19/2017 1:39:28 PM	R40164
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	1/19/2017 1:39:28 PM	R40164
Total Alkalinity (as CaCO3)	255.0	20.00		mg/L CaCO3	1	1/19/2017 1:39:28 PM	R40164
SM2540C MOD: TOTAL DISSOLVED	SOLIDS					Analyst	: KS
Total Dissolved Solids	370	100	D	mg/L	1	1/19/2017 6:33:00 PM	29768
SM4500-H+B: PH						Analyst	: JRR
рН	7.67	1.68	Н	pH units	1	1/19/2017 1:39:28 PM	R40164
EPA METHOD 6010B: DISSOLVED M	ETALS					Analyst	: pmf
Calcium	75	1.0		mg/L	1	1/19/2017 11:56:29 AM	B40136
Iron	ND	0.020		mg/L	1	1/19/2017 11:56:29 AM	B40136
Magnesium	10	1.0		mg/L	1	1/19/2017 11:56:29 AM	B40136
Potassium	4.4	1.0		mg/L	1	1/19/2017 11:56:29 AM	B40136
Sodium	28	1.0		mg/L	1	1/19/2017 11:56:29 AM	B40136
EPA METHOD 8260B: VOLATILES						Analyst	: AG
Benzene	8.4	1.0		μg/L	1	1/18/2017 5:26:21 PM	B40108
Toluene	1.6	1.0		μg/L	1	1/18/2017 5:26:21 PM	B40108
Ethylbenzene	23	1.0		μg/L	1	1/18/2017 5:26:21 PM	B40108
Methyl tert-butyl ether (MTBE)	ND	1.0		μg/L	1	1/18/2017 5:26:21 PM	B40108
1,2,4-Trimethylbenzene	16	1.0		μg/L	1	1/18/2017 5:26:21 PM	B40108
1,3,5-Trimethylbenzene	83	1.0		μg/L	1	1/18/2017 5:26:21 PM	B40108
1,2-Dichloroethane (EDC)	ND	1.0		μg/L	1	1/18/2017 5:26:21 PM	B40108
1,2-Dibromoethane (EDB)	ND	1.0		μg/L	1	1/18/2017 5:26:21 PM	B40108
Naphthalene	13	2.0		μg/L	1	1/18/2017 5:26:21 PM	B40108
1-Methylnaphthalene	19	4.0		μg/L	1	1/18/2017 5:26:21 PM	B40108
2-Methylnaphthalene	20	4.0		μg/L	1	1/18/2017 5:26:21 PM	B40108
Acetone	15	10		μg/L	1	1/18/2017 5:26:21 PM	B40108

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 19
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Lab Order 1701717

Date Reported: 1/23/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW-6

 Project:
 Florance GC J 16A
 Collection Date: 1/17/2017 10:55:00 AM

 Lab ID:
 1701717-001
 Matrix: AQUEOUS
 Received Date: 1/18/2017 7:25:00 AM

Analyses	Result	PQL Qu	al Units	DF I	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	: AG
Bromobenzene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Bromodichloromethane	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Bromoform	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Bromomethane	ND	3.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
2-Butanone	ND	10	μg/L	1	1/18/2017 5:26:21 PM	B40108
Carbon disulfide	ND	10	μg/L	1	1/18/2017 5:26:21 PM	B40108
Carbon Tetrachloride	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Chlorobenzene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Chloroethane	ND	2.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Chloroform	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Chloromethane	ND	3.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
2-Chlorotoluene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
4-Chlorotoluene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
cis-1,2-DCE	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Dibromochloromethane	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Dibromomethane	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,2-Dichlorobenzene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,3-Dichlorobenzene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,4-Dichlorobenzene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Dichlorodifluoromethane	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,1-Dichloroethane	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,1-Dichloroethene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,2-Dichloropropane	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,3-Dichloropropane	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
2,2-Dichloropropane	ND	2.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,1-Dichloropropene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Hexachlorobutadiene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
2-Hexanone	ND	10	μg/L	1	1/18/2017 5:26:21 PM	B40108
Isopropylbenzene	9.6	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
4-Isopropyltoluene	5.0	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
4-Methyl-2-pentanone	ND	10	μg/L	1	1/18/2017 5:26:21 PM	B40108
Methylene Chloride	ND	3.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
n-Butylbenzene	ND	3.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
n-Propylbenzene	5.6	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
sec-Butylbenzene	2.6	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Styrene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
tert-Butylbenzene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108

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 19
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Lab Order **1701717**Date Reported: **1/23/2017**

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW-6

 Project:
 Florance GC J 16A
 Collection Date: 1/17/2017 10:55:00 AM

 Lab ID:
 1701717-001
 Matrix: AQUEOUS
 Received Date: 1/18/2017 7:25:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst:	AG
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
trans-1,2-DCE	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,1,1-Trichloroethane	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,1,2-Trichloroethane	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Trichloroethene (TCE)	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Trichlorofluoromethane	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
1,2,3-Trichloropropane	ND	2.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Vinyl chloride	ND	1.0	μg/L	1	1/18/2017 5:26:21 PM	B40108
Xylenes, Total	260	15	μg/L	10	1/20/2017 12:06:20 AM	D40131
Surr: 1,2-Dichloroethane-d4	94.7	70-130	%Rec	1	1/18/2017 5:26:21 PM	B40108
Surr: 4-Bromofluorobenzene	94.1	70-130	%Rec	1	1/18/2017 5:26:21 PM	B40108
Surr: Dibromofluoromethane	95.2	70-130	%Rec	1	1/18/2017 5:26:21 PM	B40108
Surr: Toluene-d8	101	70-130	%Rec	1	1/18/2017 5:26:21 PM	B40108

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 19
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Lab Order **1701717**Date Reported: **1/23/2017**

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-7

 Project:
 Florance GC J 16A
 Collection Date: 1/17/2017 10:10:00 AM

 Lab ID:
 1701717-002
 Matrix: AQUEOUS
 Received Date: 1/18/2017 7:25:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
SM2340B: HARDNESS						Analyst	: pmf
Hardness (As CaCO3)	160	6.6		mg/L	1	1/19/2017	R40136
SPECIFIC GRAVITY						Analyst	: LGT
Specific Gravity	0.9979	0			1	1/23/2017 11:42:00 AM	R40203
EPA METHOD 300.0: ANIONS						Analyst	: LGT
Chloride	13	2.5		mg/L	5	1/19/2017 8:45:48 PM	R40154
Sulfate	56	2.5		mg/L	5	1/19/2017 8:45:48 PM	R40154
SM2510B: SPECIFIC CONDUCTANCE	<u>.</u>			-		Analyst	:: JRR
Conductivity	420	1.0		µmhos/cm	1	1/19/2017 1:52:44 PM	R40164
SM2320B: ALKALINITY				•		Analyst	·· .IRR
Bicarbonate (As CaCO3)	131.2	20.00		mg/L CaCO3	1	1/19/2017 1:52:44 PM	R40164
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	1/19/2017 1:52:44 PM	R40164
Total Alkalinity (as CaCO3)	131.2	20.00		mg/L CaCO3	1	1/19/2017 1:52:44 PM	R40164
SM2540C MOD: TOTAL DISSOLVED S	SOLIDS					Analyst	: KS
Total Dissolved Solids	300	200	D	mg/L	1	1/19/2017 6:33:00 PM	29768
SM4500-H+B: PH				-		Analyst	:: JRR
рН	8.06	1.68	Н	pH units	1	1/19/2017 1:52:44 PM	R40164
EPA METHOD 6010B: DISSOLVED MI	ETALS					Analyst	:: pmf
Calcium	54	1.0		mg/L	1	1/19/2017 12:02:11 PM	B40136
Iron	ND	0.020		mg/L	1	1/19/2017 12:02:11 PM	B40136
Magnesium	7.1	1.0		mg/L	1	1/19/2017 12:02:11 PM	B40136
Potassium	2.9	1.0		mg/L	1	1/19/2017 12:02:11 PM	B40136
Sodium	19	1.0		mg/L	1	1/19/2017 12:02:11 PM	B40136
EPA METHOD 8260B: VOLATILES						Analyst	:: AG
Benzene	ND	1.0		μg/L	1	1/18/2017 6:52:32 PM	B40108
Toluene	ND	1.0		μg/L	1	1/18/2017 6:52:32 PM	B40108
Ethylbenzene	ND	1.0		μg/L	1	1/18/2017 6:52:32 PM	B40108
Methyl tert-butyl ether (MTBE)	ND	1.0		μg/L	1	1/18/2017 6:52:32 PM	B40108
1,2,4-Trimethylbenzene	ND	1.0		μg/L	1	1/18/2017 6:52:32 PM	B40108
1,3,5-Trimethylbenzene	1.1	1.0		μg/L	1	1/18/2017 6:52:32 PM	B40108
1,2-Dichloroethane (EDC)	ND	1.0		μg/L	1	1/18/2017 6:52:32 PM	B40108
1,2-Dibromoethane (EDB)	ND	1.0		μg/L	1	1/18/2017 6:52:32 PM	B40108
Naphthalene	ND	2.0		μg/L	1	1/18/2017 6:52:32 PM	B40108
1-Methylnaphthalene	ND	4.0		μg/L	1	1/18/2017 6:52:32 PM	B40108
2-Methylnaphthalene	ND	4.0		μg/L	1	1/18/2017 6:52:32 PM	B40108
Acetone	ND	10		μg/L	1	1/18/2017 6:52:32 PM	B40108

Qualifiers:	*	Value exceeds Maximum Contaminant Lev

- 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 19
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Lab Order **1701717**Date Reported: **1/23/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-7

 Project:
 Florance GC J 16A
 Collection Date: 1/17/2017 10:10:00 AM

 Lab ID:
 1701717-002
 Matrix: AQUEOUS
 Received Date: 1/18/2017 7:25:00 AM

Analyses	Result	PQL Qua	al Units	DF Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analys	t: <b>AG</b>
Bromobenzene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Bromodichloromethane	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Bromoform	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Bromomethane	ND	3.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
2-Butanone	ND	10	μg/L	1 1/18/2017 6:52:32 PM	B40108
Carbon disulfide	ND	10	μg/L	1 1/18/2017 6:52:32 PM	B40108
Carbon Tetrachloride	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Chlorobenzene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Chloroethane	ND	2.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Chloroform	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Chloromethane	ND	3.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
2-Chlorotoluene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
4-Chlorotoluene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
cis-1,2-DCE	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
cis-1,3-Dichloropropene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Dibromochloromethane	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Dibromomethane	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
1,2-Dichlorobenzene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
1,3-Dichlorobenzene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
1,4-Dichlorobenzene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Dichlorodifluoromethane	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
1,1-Dichloroethane	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
1,1-Dichloroethene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
1,2-Dichloropropane	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
1,3-Dichloropropane	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
2,2-Dichloropropane	ND	2.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
1,1-Dichloropropene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Hexachlorobutadiene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
2-Hexanone	ND	10	μg/L	1 1/18/2017 6:52:32 PM	B40108
Isopropylbenzene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
4-Isopropyltoluene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
4-Methyl-2-pentanone	ND	10	μg/L	1 1/18/2017 6:52:32 PM	B40108
Methylene Chloride	ND	3.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
n-Butylbenzene	ND	3.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
n-Propylbenzene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
sec-Butylbenzene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
Styrene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108
tert-Butylbenzene	ND	1.0	μg/L	1 1/18/2017 6:52:32 PM	B40108

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 19
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Lab Order **1701717**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 1/23/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-7

 Project:
 Florance GC J 16A
 Collection Date: 1/17/2017 10:10:00 AM

 Lab ID:
 1701717-002
 Matrix: AQUEOUS
 Received Date: 1/18/2017 7:25:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	: AG
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
trans-1,2-DCE	ND	1.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
1,1,1-Trichloroethane	ND	1.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
1,1,2-Trichloroethane	ND	1.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
Trichloroethene (TCE)	ND	1.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
Trichlorofluoromethane	ND	1.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
1,2,3-Trichloropropane	ND	2.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
Vinyl chloride	ND	1.0	μg/L	1	1/18/2017 6:52:32 PM	B40108
Xylenes, Total	2.2	1.5	μg/L	1	1/18/2017 6:52:32 PM	B40108
Surr: 1,2-Dichloroethane-d4	99.7	70-130	%Rec	1	1/18/2017 6:52:32 PM	B40108
Surr: 4-Bromofluorobenzene	94.5	70-130	%Rec	1	1/18/2017 6:52:32 PM	B40108
Surr: Dibromofluoromethane	101	70-130	%Rec	1	1/18/2017 6:52:32 PM	B40108
Surr: Toluene-d8	96.9	70-130	%Rec	1	1/18/2017 6:52:32 PM	B40108

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 19
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Lab Order **1701717**Date Reported: **1/23/2017**

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW-8

 Project:
 Florance GC J 16A
 Collection Date: 1/17/2017 12:30:00 PM

 Lab ID:
 1701717-003
 Matrix: AQUEOUS
 Received Date: 1/18/2017 7:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	<b>Date Analyzed</b>	Batch
SM2340B: HARDNESS						Analyst	: pmf
Hardness (As CaCO3)	280	6.6		mg/L	1	1/19/2017	R40136
SPECIFIC GRAVITY						Analyst	: LGT
Specific Gravity	0.9982	0			1	1/23/2017 11:42:00 AM	R40203
EPA METHOD 300.0: ANIONS						Analyst	:: LGT
Chloride	22	10		mg/L	20	1/19/2017 9:23:01 PM	R40154
Sulfate	24	0.50		mg/L	1	1/19/2017 9:10:36 PM	R40154
SM2510B: SPECIFIC CONDUCTANCE	=			o .		Analyst	: JRR
Conductivity	- 710	1.0		µmhos/cm	1	1/19/2017 2:28:38 PM	R40164
SM2320B: ALKALINITY	7.10	1.0		printed, em	•		
	200.7	00.00				Analyst	
Bicarbonate (As CaCO3)	332.7	20.00 2.000		mg/L CaCO3 mg/L CaCO3	1	1/19/2017 2:28:38 PM 1/19/2017 2:28:38 PM	R40164 R40164
Carbonate (As CaCO3) Total Alkalinity (as CaCO3)	ND 332.7	20.00		mg/L CaCO3	1 1	1/19/2017 2:28:38 PM	R40164
, ,		20.00		mg/L Cacos			
SM2540C MOD: TOTAL DISSOLVED		400	_			Analyst	
Total Dissolved Solids	465	100	D	mg/L	1	1/19/2017 6:33:00 PM	29768
SM4500-H+B: PH						Analyst	:: JRR
рН	7.54	1.68	Н	pH units	1	1/19/2017 2:28:38 PM	R40164
EPA METHOD 6010B: DISSOLVED M	ETALS					Analyst	: pmf
Calcium	86	1.0		mg/L	1	1/19/2017 12:04:00 PM	B40136
Iron	ND	0.020		mg/L	1	1/19/2017 12:04:00 PM	B40136
Magnesium	15	1.0		mg/L	1	1/19/2017 12:04:00 PM	B40136
Potassium	4.1	1.0		mg/L	1	1/19/2017 12:04:00 PM	B40136
Sodium	35	1.0		mg/L	1	1/19/2017 12:04:00 PM	B40136
EPA METHOD 8260B: VOLATILES						Analyst	: AG
Benzene	12	1.0		μg/L	1	1/18/2017 7:21:15 PM	B40108
Toluene	26	1.0		μg/L	1	1/18/2017 7:21:15 PM	B40108
Ethylbenzene	10	1.0		μg/L	1	1/18/2017 7:21:15 PM	B40108
Methyl tert-butyl ether (MTBE)	ND	1.0		μg/L	1	1/18/2017 7:21:15 PM	B40108
1,2,4-Trimethylbenzene	2.1	1.0		μg/L	1	1/18/2017 7:21:15 PM	B40108
1,3,5-Trimethylbenzene	7.5	1.0		μg/L	1	1/18/2017 7:21:15 PM	B40108
1,2-Dichloroethane (EDC)	ND	1.0		μg/L	1	1/18/2017 7:21:15 PM	B40108
1,2-Dibromoethane (EDB)	ND	1.0		μg/L	1	1/18/2017 7:21:15 PM	B40108
Naphthalene	ND	2.0		μg/L	1	1/18/2017 7:21:15 PM	B40108
1-Methylnaphthalene	ND	4.0		μg/L	1	1/18/2017 7:21:15 PM	B40108
2-Methylnaphthalene	ND	4.0		μg/L	1	1/18/2017 7:21:15 PM	B40108
Acetone	ND	10		μg/L	1	1/18/2017 7:21:15 PM	B40108

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
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- 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
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 19
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order **1701717** 

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 1/23/2017

CLIENT: Blagg Engineering Client Sample ID: MW-8

 Project:
 Florance GC J 16A
 Collection Date: 1/17/2017 12:30:00 PM

 Lab ID:
 1701717-003
 Matrix: AQUEOUS
 Received Date: 1/18/2017 7:25:00 AM

Analyses	Result	PQL Qua	al Units	DF Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst	: AG
Bromobenzene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Bromodichloromethane	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Bromoform	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Bromomethane	ND	3.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
2-Butanone	ND	10	μg/L	1 1/18/2017 7:21:15 PM	B40108
Carbon disulfide	ND	10	μg/L	1 1/18/2017 7:21:15 PM	B40108
Carbon Tetrachloride	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Chlorobenzene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Chloroethane	ND	2.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Chloroform	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Chloromethane	ND	3.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
2-Chlorotoluene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
4-Chlorotoluene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
cis-1,2-DCE	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
cis-1,3-Dichloropropene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Dibromochloromethane	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Dibromomethane	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
1,2-Dichlorobenzene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
1,3-Dichlorobenzene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
1,4-Dichlorobenzene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Dichlorodifluoromethane	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
1,1-Dichloroethane	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
1,1-Dichloroethene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
1,2-Dichloropropane	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
1,3-Dichloropropane	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
2,2-Dichloropropane	ND	2.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
1,1-Dichloropropene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Hexachlorobutadiene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
2-Hexanone	ND	10	μg/L	1 1/18/2017 7:21:15 PM	B40108
Isopropylbenzene	2.6	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
4-Isopropyltoluene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
4-Methyl-2-pentanone	ND	10	μg/L	1 1/18/2017 7:21:15 PM	B40108
Methylene Chloride	ND	3.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
n-Butylbenzene	ND	3.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
n-Propylbenzene	2.2	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
sec-Butylbenzene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
Styrene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108
tert-Butylbenzene	ND	1.0	μg/L	1 1/18/2017 7:21:15 PM	B40108

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 19
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Lab Order **1701717**Date Reported: **1/23/2017**

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW-8

 Project:
 Florance GC J 16A
 Collection Date: 1/17/2017 12:30:00 PM

 Lab ID:
 1701717-003
 Matrix: AQUEOUS
 Received Date: 1/18/2017 7:25:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	: AG
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
trans-1,2-DCE	ND	1.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
1,1,1-Trichloroethane	ND	1.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
1,1,2-Trichloroethane	ND	1.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
Trichloroethene (TCE)	ND	1.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
Trichlorofluoromethane	ND	1.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
1,2,3-Trichloropropane	ND	2.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
Vinyl chloride	ND	1.0	μg/L	1	1/18/2017 7:21:15 PM	B40108
Xylenes, Total	43	1.5	μg/L	1	1/18/2017 7:21:15 PM	B40108
Surr: 1,2-Dichloroethane-d4	93.9	70-130	%Rec	1	1/18/2017 7:21:15 PM	B40108
Surr: 4-Bromofluorobenzene	95.5	70-130	%Rec	1	1/18/2017 7:21:15 PM	B40108
Surr: Dibromofluoromethane	95.0	70-130	%Rec	1	1/18/2017 7:21:15 PM	B40108
Surr: Toluene-d8	103	70-130	%Rec	1	1/18/2017 7:21:15 PM	B40108

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 19
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Lab Order **1701717**Date Reported: **1/23/2017**

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-10

 Project:
 Florance GC J 16A
 Collection Date: 1/17/2017 11:43:00 AM

 Lab ID:
 1701717-004
 Matrix: AQUEOUS
 Received Date: 1/18/2017 7:25:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
SM2340B: HARDNESS						Analyst	pmf
Hardness (As CaCO3)	550	6.6		mg/L	1	1/19/2017	R40136
SPECIFIC GRAVITY						Analyst	LGT
Specific Gravity	0.9992	0			1	1/23/2017 11:42:00 AM	R40203
EPA METHOD 300.0: ANIONS						Analyst	LGT
Chloride	5.0	2.5		mg/L	5	1/19/2017 9:35:26 PM	R40154
Sulfate	ND	2.5		mg/L	5	1/19/2017 9:35:26 PM	R40154
SM2510B: SPECIFIC CONDUCTANO	CE					Analyst	: JRR
Conductivity	950	1.0		µmhos/cm	1	1/19/2017 2:43:43 PM	R40164
SM2320B: ALKALINITY						Analyst	: JRR
Bicarbonate (As CaCO3)	531.5	20.00		mg/L CaCO3	1	1/19/2017 2:43:43 PM	R40164
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	1/19/2017 2:43:43 PM	R40164
Total Alkalinity (as CaCO3)	531.5	20.00		mg/L CaCO3	1	1/19/2017 2:43:43 PM	R40164
SM2540C MOD: TOTAL DISSOLVED	SOLIDS					Analyst	: KS
Total Dissolved Solids	725	100	*D	mg/L	1	1/19/2017 6:33:00 PM	29768
SM4500-H+B: PH						Analyst	: JRR
рН	7.03	1.68	Н	pH units	1	1/19/2017 2:43:43 PM	R40164
EPA METHOD 6010B: DISSOLVED	METALS					Analyst	pmf
Calcium	190	5.0		mg/L	5	1/19/2017 12:19:40 PM	B40136
Iron	3.9	0.10		mg/L	5	1/19/2017 12:19:40 PM	B40136
Magnesium	19	1.0		mg/L	1	1/19/2017 12:05:51 PM	B40136
Potassium	1.2	1.0		mg/L	1	1/19/2017 12:05:51 PM	B40136
Sodium	10	1.0		mg/L	1	1/19/2017 12:05:51 PM	B40136
EPA METHOD 8260B: VOLATILES						Analyst	: AG
Benzene	10000	1000		μg/L	1E	1/20/2017 12:34:51 AM	D40131
Toluene	12000	1000		μg/L	1E	1/20/2017 12:34:51 AM	D40131
Ethylbenzene	550	10		μg/L	10	1/18/2017 7:49:58 PM	B40108
Methyl tert-butyl ether (MTBE)	ND	10		μg/L	10	1/18/2017 7:49:58 PM	B40108
1,2,4-Trimethylbenzene	250	10		μg/L	10	1/18/2017 7:49:58 PM	B40108
1,3,5-Trimethylbenzene	110	10		μg/L	10	1/18/2017 7:49:58 PM	B40108
1,2-Dichloroethane (EDC)	ND	10		μg/L	10	1/18/2017 7:49:58 PM	B40108
1,2-Dibromoethane (EDB)	ND	10		μg/L	10	1/18/2017 7:49:58 PM	B40108
Naphthalene	44	20		μg/L	10	1/18/2017 7:49:58 PM	B40108
1-Methylnaphthalene	ND	40		μg/L	10	1/18/2017 7:49:58 PM	B40108
2-Methylnaphthalene	ND	40		μg/L	10	1/18/2017 7:49:58 PM	B40108
Acetone	120	100		μg/L	10	1/18/2017 7:49:58 PM	B40108

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

Level.

Qualifiers: * Value exceeds Maximum Contaminan
--

- 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 19
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Lab Order 1701717

Date Reported: 1/23/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-10

**Project:** Florance GC J 16A Collection Date: 1/17/2017 11:43:00 AM 1701717-004 Lab ID: Matrix: AQUEOUS **Received Date:** 1/18/2017 7:25:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	: AG
Bromobenzene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Bromodichloromethane	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Bromoform	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Bromomethane	ND	30	μg/L	10	1/18/2017 7:49:58 PM	B40108
2-Butanone	ND	100	μg/L	10	1/18/2017 7:49:58 PM	B40108
Carbon disulfide	ND	100	μg/L	10	1/18/2017 7:49:58 PM	B40108
Carbon Tetrachloride	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Chlorobenzene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Chloroethane	ND	20	μg/L	10	1/18/2017 7:49:58 PM	B40108
Chloroform	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Chloromethane	ND	30	μg/L	10	1/18/2017 7:49:58 PM	B40108
2-Chlorotoluene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
4-Chlorotoluene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
cis-1,2-DCE	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
cis-1,3-Dichloropropene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,2-Dibromo-3-chloropropane	ND	20	μg/L	10	1/18/2017 7:49:58 PM	B40108
Dibromochloromethane	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Dibromomethane	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,2-Dichlorobenzene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,3-Dichlorobenzene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,4-Dichlorobenzene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Dichlorodifluoromethane	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,1-Dichloroethane	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,1-Dichloroethene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,2-Dichloropropane	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,3-Dichloropropane	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
2,2-Dichloropropane	ND	20	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,1-Dichloropropene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Hexachlorobutadiene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
2-Hexanone	ND	100	μg/L	10	1/18/2017 7:49:58 PM	B40108
Isopropylbenzene	37	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
4-Isopropyltoluene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
4-Methyl-2-pentanone	ND	100	μg/L	10	1/18/2017 7:49:58 PM	B40108
Methylene Chloride	ND	30	μg/L	10	1/18/2017 7:49:58 PM	B40108
n-Butylbenzene	ND	30	μg/L	10	1/18/2017 7:49:58 PM	B40108
n-Propylbenzene	34	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
sec-Butylbenzene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Styrene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
tert-Butylbenzene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108

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 11 of 19 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

### Lab Order 1701717 Date Reported: 1/23/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-10

**Project:** Florance GC J 16A Collection Date: 1/17/2017 11:43:00 AM 1701717-004 Lab ID: Matrix: AQUEOUS **Received Date:** 1/18/2017 7:25:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst:	AG
1,1,1,2-Tetrachloroethane	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,1,2,2-Tetrachloroethane	ND	20	μg/L	10	1/18/2017 7:49:58 PM	B40108
Tetrachloroethene (PCE)	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
trans-1,2-DCE	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
trans-1,3-Dichloropropene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,2,3-Trichlorobenzene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,2,4-Trichlorobenzene	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,1,1-Trichloroethane	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,1,2-Trichloroethane	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Trichloroethene (TCE)	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Trichlorofluoromethane	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
1,2,3-Trichloropropane	ND	20	μg/L	10	1/18/2017 7:49:58 PM	B40108
Vinyl chloride	ND	10	μg/L	10	1/18/2017 7:49:58 PM	B40108
Xylenes, Total	5500	1500	μg/L	1E	1/20/2017 12:34:51 AM	D40131
Surr: 1,2-Dichloroethane-d4	96.5	70-130	%Rec	10	1/18/2017 7:49:58 PM	B40108
Surr: 4-Bromofluorobenzene	99.3	70-130	%Rec	10	1/18/2017 7:49:58 PM	B40108
Surr: Dibromofluoromethane	96.9	70-130	%Rec	10	1/18/2017 7:49:58 PM	B40108
Surr: Toluene-d8	97.4	70-130	%Rec	10	1/18/2017 7:49:58 PM	B40108

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 12 of 19 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1701717** 

Qual

23-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBW Batch ID: R40154 RunNo: 40154

Prep Date: Analysis Date: 1/19/2017 SeqNo: 1258782 Units: mg/L

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

 Chloride
 ND
 0.50

 Sulfate
 ND
 0.50

Sample ID LCS SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSW Batch ID: R40154 RunNo: 40154

Prep Date: Analysis Date: 1/19/2017 SeqNo: 1258783 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Chloride 4.9 0.50 5.000 0 98.2 90 110 Sulfate 9.9 0 99.2 90 0.50 10.00 110

#### 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 13 of 19

# Hall Environmental Analysis Laboratory, Inc.

SampType: MBLK

WO#: **1701717** 

23-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID 100ng Ics	SampT	ype: <b>LC</b>	S	Tes	tCode: El					
Client ID: LCSW	Batch	1D: <b>B4</b>	0108	R	RunNo: 40108					
Prep Date:	Analysis D	ate: 1/	18/2017	S	SeqNo: 1	257616	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	20	1.0	20.00	0	98.5	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	87.3	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.3	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		99.6	70	130			

TestCode: EPA Method 8260B: VOLATILES

Client ID: PBW	Batch	n ID: <b>B4</b>	0108	F	RunNo: 4	0108				
Prep Date:	Analysis D	ate: 1/	18/2017	S	SeqNo: 1	257617	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

### Qualifiers:

Sample ID rb

- \* 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#: **1701717** 

23-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID rb SampType: MBLK TestCode: EPA Method 8260B: VOLATILES Client ID: **PBW** Batch ID: **B40108** RunNo: 40108 Analysis Date: 1/18/2017 Prep Date: SeqNo: 1257617 Units: µg/L Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 4-Chlorotoluene ND 1.0 ND cis-1,2-DCE 1.0 ND cis-1,3-Dichloropropene 1.0 1,2-Dibromo-3-chloropropane ND 2.0 Dibromochloromethane ND 1.0 Dibromomethane ND 1.0 1,2-Dichlorobenzene ND 1.0 ND 1,3-Dichlorobenzene 1.0 1,4-Dichlorobenzene ND 1.0 ND Dichlorodifluoromethane 1.0 1,1-Dichloroethane ND 1.0 ND 1,1-Dichloroethene 1.0 1,2-Dichloropropane ND 1.0 1,3-Dichloropropane ND 1.0 ND 2.0 2,2-Dichloropropane 1,1-Dichloropropene ND 1.0 Hexachlorobutadiene ND 1.0 2-Hexanone ND 10 Isopropylbenzene ND 1.0 4-Isopropyltoluene ND 1.0 4-Methyl-2-pentanone ND 10 Methylene Chloride ND 3.0 n-Butylbenzene ND 3.0 n-Propylbenzene ND 1.0 sec-Butylbenzene ND 1.0 ND 1.0 Styrene tert-Butylbenzene ND 1.0 1,1,1,2-Tetrachloroethane ND 1.0 1,1,2,2-Tetrachloroethane ND 2.0 Tetrachloroethene (PCE) ND 1.0 ND trans-1,2-DCE 1.0 ND 1.0 trans-1,3-Dichloropropene 1,2,3-Trichlorobenzene ND 1.0 1,2,4-Trichlorobenzene ND 1.0 1,1,1-Trichloroethane ND 1.0 1,1,2-Trichloroethane ND 1.0 ND Trichloroethene (TCE) 1.0 Trichlorofluoromethane ND 1.0 1,2,3-Trichloropropane ND 2.0

#### 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.

Result

ND

ND

ND

9.7

9.6

10

9.7

**PQL** 

1.0

1.0

1.5

10.00

10.00

10.00

10.00

WO#: **1701717** 

23-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID rb	SampT	SampType: MBLK TestCode: EPA Method						ATILES		
Client ID: PBW	Batch	h ID: <b>B4</b>	0108	F	RunNo: 4	0108				
Prep Date:	Analysis D	Date: 1/	18/2017	5	SeqNo: 1	257617	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.0	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			
Sample ID 100ng lcs	SampT	Гуре: <b>LC</b>	s	Tes	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batch	h ID: <b>D4</b>	0131	F	RunNo: 4	0131				
Prep Date:	Analysis D	Date: 1/	19/2017	Ş	SeqNo: 1	258823	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.4	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	8.9		10.00		89.1	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.9	70	130			
Surr: Toluene-d8	10		10.00		99.8	70	130			
Sample ID rb	SampT	Гуре: МЕ	BLK	Tes	tCode: <b>E</b>	PA Method	8260B: VOL	ATILES	<del></del>	
Client ID: PBW	Batch	h ID: <b>D4</b>	0131	F	RunNo: 4	0131				

SPK value SPK Ref Val %REC

### Qualifiers:

Analyte

Xylenes, Total

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Surr: Toluene-d8

Benzene Toluene

\* 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

LowLimit

70

70

70

70

97.4

95.9

105

97.4

HighLimit

130

130

130

130

%RPD

**RPDLimit** 

Qual

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 16 of 19

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1701717** 

23-Jan-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB-B SampType: MBLK TestCode: EPA Method 6010B: Dissolved Metals

Client ID: PBW Batch ID: B40136 RunNo: 40136

Prep Date: Analysis Date: 1/19/2017 SeqNo: 1258399 Units: mg/L

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

 Calcium
 ND
 1.0

 Iron
 ND
 0.020

 Magnesium
 ND
 1.0

 Potassium
 ND
 1.0

 Sodium
 ND
 1.0

Sample ID LCS-B	Samp	Гуре: <b>LC</b>	s	Tes	TestCode: EPA Method 6010B: Dissolved Metals						
Client ID: LCSW	Batc	atch ID: <b>B40136</b> RunNo: <b>40136</b>									
Prep Date:	Analysis Date: 1/19/2017			9	SeqNo: 1	258403	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Calcium	54	1.0	50.00	0	109	80	120				
Iron	0.54	0.020	0.5000	0	107	80	120				
Magnesium	52	1.0	50.00	0	105	80	120				
Potassium	50	1.0	50.00	0	100	80	120				
Sodium	50	1.0	50.00	0	100	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.

WO#: 1701717

23-Jan-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID mb-1 SampType: mblk TestCode: SM2320B: Alkalinity

Client ID: PBW Batch ID: R40164 RunNo: 40164

Prep Date: Analysis Date: 1/19/2017 SeqNo: 1259028 Units: mg/L CaCO3

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

Total Alkalinity (as CaCO3) ND 20.00

Sample ID Ics-1 SampType: Ics TestCode: SM2320B: Alkalinity

Batch ID: **R40164** Client ID: LCSW RunNo: 40164

Prep Date: Analysis Date: 1/19/2017 SeqNo: 1259029 Units: mg/L CaCO3

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

Total Alkalinity (as CaCO3) 77.68 20.00 80.00 0 97.1 110

#### Qualifiers:

- D
- 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
- 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

Value exceeds Maximum Contaminant Level.

Ε Sample Diluted Due to Matrix

Page 18 of 19

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1701717

23-Jan-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-29768 SampType: MBLK TestCode: SM2540C MOD: Total Dissolved Solids

Client ID: PBW Batch ID: 29768 RunNo: 40145

Prep Date: 1/18/2017 Analysis Date: 1/19/2017 SeqNo: 1258508 Units: mg/L

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

Total Dissolved Solids ND 20.0

Sample ID LCS-29768 SampType: LCS TestCode: SM2540C MOD: Total Dissolved Solids

Batch ID: 29768 Client ID: LCSW RunNo: 40145

Prep Date: 1/18/2017 Analysis Date: 1/19/2017 SeqNo: 1258509 Units: mg/L

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

Total Dissolved Solids 1010 20.0 1000 0 101 120

#### 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
- Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3075 F4Y: 505-345-4107

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

# Sample Log-In Check List

Client Name:	BLAGG		Work Order Number	er: 1701717		RcptNo:	1
Received by/date:							
Logged By:	Ashley Gal	legos	1/18/2017 7:25:00 AI	И	A		
Completed By:	Ashley Gai	legos	1/18/2017 8:36:33 AI	И	A		
Reviewed By:	( )	X	01/18/17		, O		
Chain of Custody							
1. Custody sea	als intact on sa	ample bottles?		Yes 🗌	No 🗔	Not Present	
2. Is Chain of	2. Is Chain of Custody complete?				No 🗔	Not Present	
3. How was the sample delivered?				<u>Courier</u>			
<u>Log In</u>							
4. Was an atte	empt 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 🗀	
1806. Sample(s) in proper container(s)?  ODIC - 004C joured off fromex for volume, Filtered and added out at this to each sample.							
7. Sufficient sample volume for indicated test(s)?							
8. Are samples (except VOA and ONG) properly preserved?				-Yes V	& No 🗹	4	
9. Was preservative added to bottles?				Yes 🗸	NO V	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	Ц
12. Does paperwork match bottle labels?				Yes 🗸	No 🗔	for pH:	or >12 unless noted)
(Note discrepancies on chain of custody) 13. Are matrices correctly identified on Chain of Custody?				Yes 🗸	No 🗔	Adjusted?	YES
14. Is it clear what analyses were requested?				Yes 🗹	No [		Λ
15. Were all holding times able to be met?				Yes 🗸	No []	Checked by:	fe
(If no, notify customer for authorization.)							
Snecial Hand	dlina (if anı	olicable)					
Special Handling (if applicable)  16. Was client notified of all discrepancies with this order?				Yes 🗌	No 🗔	NA 🔽	
Perso	n Notified:		Date				
	By Whom:		Via:	፤ ΓleΜail Γ	Phone Fax	in Person	
Regarding:							
	Instructions:			CTICAE O TITAE SALET AND AND AND AND THE SALET AND			
17. Additional r	remarks:						.l
18. <u>Cooler Information</u>							
Cooler N	the first section of the section of	Condition S	eal Intact   Seal No	Seal Date	Signed By	]	
1	1.4	Good Ye	S			]	

HALL ENVIRONMENTAL	LABORATORY		თ	3				(N 10		Air Bubble												ytical report
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Turn-Around Time:	□ Standard	Project Name:	TLORANCE	Project #:		Project Manager:	7	Sampler: J	Sample Temperature	ner nd #		3× Va.A × Jazz	3× VOA 3×500	3×104 1000	į					Received by:	Received Mr.	2 In the contracted to other acc
ustody Record	lient: Br America	Bak Englosen Inc.	ailing Address:		hone #: 565-320 - 1193	mail or Fax#:	A/QC Package:  Standard  Level 4 (Full Validation)	ر Other	1 EDD (Type)	Date Time Matrix Sample Request ID	1627 1055 Water MW-6	7-m " Gigt	" Paid-12	01-MM. "						pate: Time: Relinquished by:	Relinduished by:	17 17 18 1 1 10 10 10 10 10 10 10 10 10 10 10 10



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

February 28, 2017

Jeff Blagg Blagg Engineering P. O. Box 87

Bloomfield, NM 87413 TEL: (505) 632-1199 FAX (505) 632-3903

RE: Florance GC J 16A OrderNo.: 1702784

#### Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/17/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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

andyl

4901 Hawkins NE

Albuquerque, NM 87109

## **Analytical Report**

#### Lab Order 1702784

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/28/2017

**CLIENT:** Blagg Engineering Client Sample ID: MW-9

 Project:
 Florance GC J 16A
 Collection Date: 2/16/2017 2:30:00 PM

 Lab ID:
 1702784-001
 Matrix: AQUEOUS
 Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL (	Qual	Units	DF	Date Analyzed	Batch
SM2340B: HARDNESS						Analyst	pmf
Hardness (As CaCO3)	450	6.6		mg/L	1	2/22/2017	R40933
SPECIFIC GRAVITY						Analyst	: LGT
Specific Gravity	0.9964	0			1	2/22/2017 1:06:00 PM	R40903
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	49	10		mg/L	20	2/18/2017 1:24:47 AM	A40846
Sulfate	230	10		mg/L	20	2/18/2017 1:24:47 AM	A40846
SM2510B: SPECIFIC CONDUCTANCE	≣					Analyst	: JRR
Conductivity	950	1.0		µmhos/cm	1	2/20/2017 4:33:53 PM	R40869
SM2320B: ALKALINITY						Analyst	: JRR
Bicarbonate (As CaCO3)	208.4	20.00		mg/L CaCO3	1	2/20/2017 4:33:53 PM	R40869
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	2/20/2017 4:33:53 PM	R40869
Total Alkalinity (as CaCO3)	208.4	20.00		mg/L CaCO3	1	2/20/2017 4:33:53 PM	R40869
SM2540C MOD: TOTAL DISSOLVED	SOLIDS					Analyst	: KS
Total Dissolved Solids	670	20.0	*	mg/L	1	2/21/2017 7:32:00 PM	30293
SM4500-H+B: PH						Analyst	: JRR
рН	7.62	1.68	Н	pH units	1	2/20/2017 4:33:53 PM	R40869
EPA METHOD 6010B: DISSOLVED M	ETALS					Analyst	pmf
Calcium	140	5.0		mg/L	5	2/22/2017 4:18:00 PM	A40933
Iron	0.34	0.020		mg/L	1	2/22/2017 3:14:38 PM	A40933
Magnesium	25	1.0		mg/L	1	2/22/2017 3:14:38 PM	A40933
Potassium	6.7	1.0		mg/L	1	2/22/2017 3:14:38 PM	A40933
Sodium	45	1.0		mg/L	1	2/22/2017 3:14:38 PM	A40933
EPA METHOD 8260B: VOLATILES						Analyst	RAA
Benzene	ND	1.0		μg/L	1	2/17/2017 9:10:00 PM	R40819
Toluene	ND	1.0		μg/L	1	2/17/2017 9:10:00 PM	R40819
Ethylbenzene	ND	1.0		μg/L	1	2/17/2017 9:10:00 PM	R40819
Methyl tert-butyl ether (MTBE)	ND	1.0		μg/L	1	2/17/2017 9:10:00 PM	R40819
1,2,4-Trimethylbenzene	ND	1.0		μg/L	1	2/17/2017 9:10:00 PM	R40819
1,3,5-Trimethylbenzene	ND	1.0		μg/L	1	2/17/2017 9:10:00 PM	R40819
1,2-Dichloroethane (EDC)	ND	1.0		μg/L	1	2/17/2017 9:10:00 PM	R40819
1,2-Dibromoethane (EDB)	ND	1.0		μg/L	1	2/17/2017 9:10:00 PM	R40819
Naphthalene	ND	2.0		μg/L	1	2/17/2017 9:10:00 PM	R40819
1-Methylnaphthalene	ND	4.0		μg/L	1	2/17/2017 9:10:00 PM	R40819
2-Methylnaphthalene	ND	4.0		μg/L	1	2/17/2017 9:10:00 PM	R40819
Acetone	ND	10		μg/L	1	2/17/2017 9:10:00 PM	R40819

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

### **Analytical Report**

#### Lab Order 1702784

Date Reported: 2/28/2017

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering Client Sample ID: MW-9

 Project:
 Florance GC J 16A
 Collection Date: 2/16/2017 2:30:00 PM

 Lab ID:
 1702784-001
 Matrix: AQUEOUS
 Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL Qua	al Units	DF Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analysi	: RAA
Bromobenzene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Bromodichloromethane	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Bromoform	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Bromomethane	ND	3.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
2-Butanone	ND	10	μg/L	1 2/17/2017 9:10:00 PM	R40819
Carbon disulfide	ND	10	μg/L	1 2/17/2017 9:10:00 PM	R40819
Carbon Tetrachloride	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Chlorobenzene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Chloroethane	ND	2.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Chloroform	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Chloromethane	ND	3.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
2-Chlorotoluene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
4-Chlorotoluene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
cis-1,2-DCE	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
cis-1,3-Dichloropropene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Dibromochloromethane	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Dibromomethane	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
1,2-Dichlorobenzene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
1,3-Dichlorobenzene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
1,4-Dichlorobenzene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Dichlorodifluoromethane	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
1,1-Dichloroethane	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
1,1-Dichloroethene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
1,2-Dichloropropane	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
1,3-Dichloropropane	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
2,2-Dichloropropane	ND	2.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
1,1-Dichloropropene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Hexachlorobutadiene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
2-Hexanone	ND	10	μg/L	1 2/17/2017 9:10:00 PM	R40819
Isopropylbenzene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
4-Isopropyltoluene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
4-Methyl-2-pentanone	ND	10	μg/L	1 2/17/2017 9:10:00 PM	R40819
Methylene Chloride	ND	3.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
n-Butylbenzene	ND	3.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
n-Propylbenzene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
sec-Butylbenzene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
Styrene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819
tert-Butylbenzene	ND	1.0	μg/L	1 2/17/2017 9:10:00 PM	R40819

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 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

## **Analytical Report**

#### Lab Order 1702784

Date Reported: 2/28/2017

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: MW-9

 Project:
 Florance GC J 16A
 Collection Date: 2/16/2017 2:30:00 PM

 Lab ID:
 1702784-001
 Matrix: AQUEOUS
 Received Date: 2/17/2017 6:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	: RAA
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
trans-1,2-DCE	ND	1.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
1,1,1-Trichloroethane	ND	1.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
1,1,2-Trichloroethane	ND	1.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
Trichloroethene (TCE)	ND	1.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
Trichlorofluoromethane	ND	1.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
1,2,3-Trichloropropane	ND	2.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
Vinyl chloride	ND	1.0	μg/L	1	2/17/2017 9:10:00 PM	R40819
Xylenes, Total	ND	1.5	μg/L	1	2/17/2017 9:10:00 PM	R40819
Surr: 1,2-Dichloroethane-d4	94.1	70-130	%Rec	1	2/17/2017 9:10:00 PM	R40819
Surr: 4-Bromofluorobenzene	106	70-130	%Rec	1	2/17/2017 9:10:00 PM	R40819
Surr: Dibromofluoromethane	99.9	70-130	%Rec	1	2/17/2017 9:10:00 PM	R40819
Surr: Toluene-d8	100	70-130	%Rec	1	2/17/2017 9:10:00 PM	R40819

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 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#: **1702784** 

**RPDLimit** 

Qual

28-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID MB SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBW Batch ID: A40846 RunNo: 40846

Prep Date: Analysis Date: 2/17/2017 SeqNo: 1279397 Units: mg/L

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

 Chloride
 ND
 0.50

 Sulfate
 ND
 0.50

Sample ID LCS SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSW Batch ID: A40846 RunNo: 40846

Prep Date: Analysis Date: 2/17/2017 SeqNo: 1279398 Units: mg/L

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Chloride 5.0 0.50 5.000 0 99.0 90 110 Sulfate 0.50 0 99.5 90 9.9 10.00 110

#### 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
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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
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Page 4 of 11

### Hall Environmental Analysis Laboratory, Inc.

SampType: MBLK

WO#: **1702784** 

28-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID 100ng Ics	SampT	ype: LC	S4	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: BatchQC	Batch	n ID: <b>R4</b>	0819	R	RunNo: 4	0819				
Prep Date:	Analysis D	ate: <b>2/</b>	17/2017	S	SeqNo: 1	278766	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	23	1.0	20.00	0	115	70	130			
Chlorobenzene	22	1.0	20.00	0	109	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	114	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.6	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.4	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.5	70	130			
Surr: Toluene-d8	11		10.00		110	70	130			

TestCode: EPA Method 8260B: VOLATILES

Client ID: PBW	Batch	ID: R4	0819	R	RunNo: 4	0819				
Prep Date:	Analysis D	ate: 2/	17/2017	S	SeqNo: 1	278805	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

#### Qualifiers:

Sample ID rb

- \* 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
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- 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 11

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1702784** 

28-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID rb SampType: MBLK TestCode: EPA Method 8260B: VOLATILES RunNo: 40819 Client ID: **PBW** Batch ID: R40819 Analysis Date: 2/17/2017 Prep Date: SeqNo: 1278805 Units: µg/L Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 4-Chlorotoluene ND 1.0 ND cis-1,2-DCE 1.0 ND cis-1,3-Dichloropropene 1.0 1,2-Dibromo-3-chloropropane ND 2.0 Dibromochloromethane ND 1.0 Dibromomethane ND 1.0 1,2-Dichlorobenzene ND 1.0 ND 1,3-Dichlorobenzene 1.0 1,4-Dichlorobenzene ND 1.0 ND Dichlorodifluoromethane 1.0 1,1-Dichloroethane ND 1.0 ND 1,1-Dichloroethene 1.0 1,2-Dichloropropane ND 1.0 1,3-Dichloropropane ND 1.0 ND 2.0 2,2-Dichloropropane 1,1-Dichloropropene ND 1.0 Hexachlorobutadiene ND 1.0 2-Hexanone ND 10 Isopropylbenzene ND 1.0 4-Isopropyltoluene ND 1.0 4-Methyl-2-pentanone ND 10 Methylene Chloride ND 3.0 n-Butylbenzene ND 3.0 n-Propylbenzene ND 1.0 sec-Butylbenzene ND 1.0 ND 1.0 Styrene tert-Butylbenzene ND 1.0 1,1,1,2-Tetrachloroethane ND 1.0 1,1,2,2-Tetrachloroethane ND 2.0 Tetrachloroethene (PCE) ND 1.0 ND trans-1,2-DCE 1.0 ND 1.0 trans-1,3-Dichloropropene 1,2,3-Trichlorobenzene ND 1.0 1,2,4-Trichlorobenzene ND 1.0 1,1,1-Trichloroethane ND 1.0 1,1,2-Trichloroethane ND 1.0 ND Trichloroethene (TCE) 1.0 Trichlorofluoromethane ND 1.0 1,2,3-Trichloropropane ND 2.0

#### 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

Reporting Detection Limit

- J Analyte detected below quantitation limits
- P Sample pH Not In Range

RL

W Sample container temperature is out of limit as specified

Page 6 of 11

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1702784** 

28-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID rb SampType: MBLK TestCode: EPA Method 8260B: VOLATILES PBW Client ID: Batch ID: R40819 RunNo: 40819 Analysis Date: 2/17/2017 Prep Date: SeqNo: 1278805 Units: µg/L Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Vinyl chloride ND 1.0 Xylenes, Total ND 1.5 70 10.00 90.7 130 Surr: 1,2-Dichloroethane-d4 9.1 98.0 70 Surr: 4-Bromofluorobenzene 9.8 10.00 130 Surr: Dibromofluoromethane 10 10.00 102 70 130 Surr: Toluene-d8 10 10.00 100 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
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- 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 11

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1702784** 

28-Feb-17

Client:	Blagg Engineering
<b>Project:</b>	Florance GC J 16A

Sample ID MB-A	BLK	TestCode: EPA Method 6010B: Dissolved Metals								
Client ID: PBW Batch ID: A40933		F	RunNo: 4	0933						
Prep Date: Analysis Date: 2/22/2017		SeqNo: <b>1282207</b>			Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Iron	ND	0.020								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID LCS-A	SampT	Гуре: <b>LC</b>	:s	Test	tCode: El	PA Method	6010B: Disso	Ived Meta	als	
Client ID: LCSW	Batch	h ID: <b>A4</b>	0933	R	RunNo: 40	0933				
Prep Date:	Analysis D	)ate: <b>2/</b>	22/2017	S	SeqNo: 12	282208	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	52	1.0	50.00	0	103	80	120			
Iron	0.48	0.020	0.5000	0	96.9	80	120			
Magnesium	52	1.0	50.00	0	105	80	120			
Potassium	51	1.0	50.00	0	103	80	120			
Sodium	52	1.0	50.00	0	104	80	120			

Sample ID 1702784-001CMS	SampT	уре: М	3	Tes	tCode: El	PA Method	6010B: Disso	lved Meta	als	
Client ID: MW-9	Batcl	n ID: <b>A4</b>	0933	R	RunNo: 4	0933				
Prep Date:	Analysis D	Date: 2/	22/2017	S	SeqNo: 1	282212	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.87	0.020	0.5000	0.3405	106	75	125			
Magnesium	77	1.0	50.00	24.93	104	75	125			
Potassium	59	1.0	50.00	6.737	104	75	125			
Sodium	96	1.0	50.00	44.63	103	75	125			

Sample ID 1702784-001	CMSD Samp	Туре: М	SD	Tes	tCode: E	PA Method	6010B: Disso	lved Meta	als	
Client ID: MW-9	Bato	ch ID: A4	0933	F	RunNo: 4	0933				
Prep Date:	Analysis	Date: <b>2/</b>	22/2017	9	SeqNo: 1	282213	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.86	0.020	0.5000	0.3405	104	75	125	1.43	20	
Magnesium	76	1.0	50.00	24.93	103	75	125	0.654	20	
Potassium	58	1.0	50.00	6.737	103	75	125	0.733	20	
Sodium	95	1.0	50.00	44.63	101	75	125	0.550	20	

#### 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

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.

WO#: **1702784** 

28-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID mb-1 SampType: mblk TestCode: SM2320B: Alkalinity

Client ID: PBW Batch ID: R40869 RunNo: 40869

Prep Date: Analysis Date: 2/20/2017 SeqNo: 1280279 Units: mg/L CaCO3

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

Total Alkalinity (as CaCO3) ND 20.00

Sample ID Ics-1 SampType: Ics TestCode: SM2320B: Alkalinity

Client ID: LCSW Batch ID: R40869 RunNo: 40869

Prep Date: Analysis Date: 2/20/2017 SeqNo: 1280280 Units: mg/L CaCO3

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

Total Alkalinity (as CaCO3) 79.16 20.00 80.00 0 99.0 90 110

#### 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#: **1702784** 

28-Feb-17

Client: Blagg Engineering
Project: Florance GC J 16A

Sample ID 1702784-001BDUP SampType: DUP TestCode: Specific Gravity

Client ID: MW-9 Batch ID: R40903 RunNo: 40903

Prep Date: Analysis Date: 2/22/2017 SeqNo: 1281462 Units:

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

Specific Gravity 0.9967 0 0.0301 20

#### 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. Complemental Design

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#: 1702784

28-Feb-17

**Client:** Blagg Engineering **Project:** Florance GC J 16A

Sample ID MB-30293 SampType: MBLK TestCode: SM2540C MOD: Total Dissolved Solids

Client ID: PBW Batch ID: 30293 RunNo: 40889

Prep Date: 2/20/2017 Analysis Date: 2/21/2017 SeqNo: 1280722 Units: mg/L

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

Total Dissolved Solids ND 20.0

Sample ID LCS-30293 SampType: LCS TestCode: SM2540C MOD: Total Dissolved Solids

Batch ID: 30293 Client ID: LCSW RunNo: 40889

Prep Date: 2/20/2017 Analysis Date: 2/21/2017 SeqNo: 1280723 Units: mg/L

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

Total Dissolved Solids 1010 20.0 1000 0 101 120

#### 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

Page 11 of 11

P Sample pH Not In Range

RL Reporting Detection Limit 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

lient Name: BLAGG Work C	Order Number: 1702784		RcptNo: 1
eceived by/date: AQ 62/17	17		
gged By: Ashley Gallegos 2/17/2017	7 6:00:00 AM	AZ	
ompleted By: Ashley Gallegos 2/17/2017	7 6:32:20 AM	A	
eviewed By: $49/40$	7/1	o ← 0	
ain of Custody	411		
Custody seals intact on sample bottles?	Yes	No i	Not Present ✔
Is Chain of Custody complete?	Yes ✓	No	Not Present
How was the sample delivered?	Courier	140	Not Flesdiff
	<u>oouner</u>		
o <u>g In</u>			
Was an attempt made to cool the samples?	Yes 🗸	No	NA .
Were all samples received at a terror and a second		: 1	
Were all samples received at a temperature of >0° C to	o 6.0°C Yes '✔	No i	NA ·
Sample(s) in proper container(s)?	Yes 🗸	No f	
Sufficient sample volume for indicated test(s)?	V 1.0	Na i i	
Are samples (except VOA and ONG) properly preserve	Yes V	No V	
Was preservative added to bottles?	Yes	No IV	1 NA
	7e3   ¥	440 (V 100)	NA .
.VOA vials have zero headspace?	Yes 🗸	No 📗	No VOA Vials
Were any sample containers received broken?	Yes	No 🗸	# of preserved
Does paperwork match bottle labels?	Ca	1	bottles checked
(Note discrepancies on chain of custody)	Yes 🗸	No i	for pH: (a) or >12 unless noted)
Are matrices correctly identified on Chain of Custody?	Yes 🗸	No .	Adjusted? YeS
Is it clear what analyses were requested?	Yes 🗸	No !!	- -
Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗸	No i !	Checked by:
( authorization.)			
cial Handling (if applicable)			
Was client notified of all discrepancies with this order?	Yes	No !	NA ✔
Person Notified:	Date	and the common that the common of the common	
By Whom:	*	hone Fax	In Person
-3		······································	min ciaon
Regarding:			'

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		environmental.com Albuquerque, NM 87109	107		H	190	0	_	υΛ- ΟΛ-	1997 (Semi	×		ne analy
3	28	www.hallenvironmental.com	Eax 505-345-4107	nest	Г					8560B (VO	-		in a section of the s
-	ž ,,	ment	505	Analysis Request		bcB,e	280	8/5	səbi	8081 Pestic			Y worket
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ı	<u> </u>	allen		Fa		40000				RCRA 8 Me	-		TXOA 1XOA
	100	W. A	3975	200		(SWI		_		rss) s'HA9	-		V. ≥ Page
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100	7 -	www.h	Tel 505-345-3975	200	(0)	HW / OX				TPH 8015B	_		marks: Blue BP Counter; ST Vio: VH WBS ELEMENT;
-		490,	E F		1		200		200	TM + X3T8	-		arks:
100		III.			-	17.00				TM + X3T8	-		Remarks: W\$5
Turn-Around Time:	XStandard   Rush	3	Project #:		Project Manager:	J. BLAGE	Sampler: J. Bitte	6	Temp	Container Preservative HEAL No.  Type and # Type	3 VOA (Litter HCL CON)		Received by:  Received by:  Received by:  Date Time  Date Time  02   1705  Date Time  02   1705  Date Time  O2   1705  Date Time  O2   1705  Date Time  O2   1705  Date Time  O2   1705  Date Date Time  O2   1705  Date Time
Chain-of-Custody Record	P AMERICA	BLAGE ENGINEERING INC. Address:		(505) 320-1183		:kage:   Level 4 (Full Validation)	_	□ Other	ype)	Time Matrix Sample Request ID	1430 Water- MW-9		Time: Refinquished by: Time: Refinquished by:  [ 857
Ch	Client: BP	BLAG. Mailing Address:		Phone #: (	10	QA/QC Package:	Accreditation	□ NELAP	□ EDD (Type)	Date	2/16/617 14		Date: Tim Date: Tim