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

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

Revised August 8, 2011

Form C-141

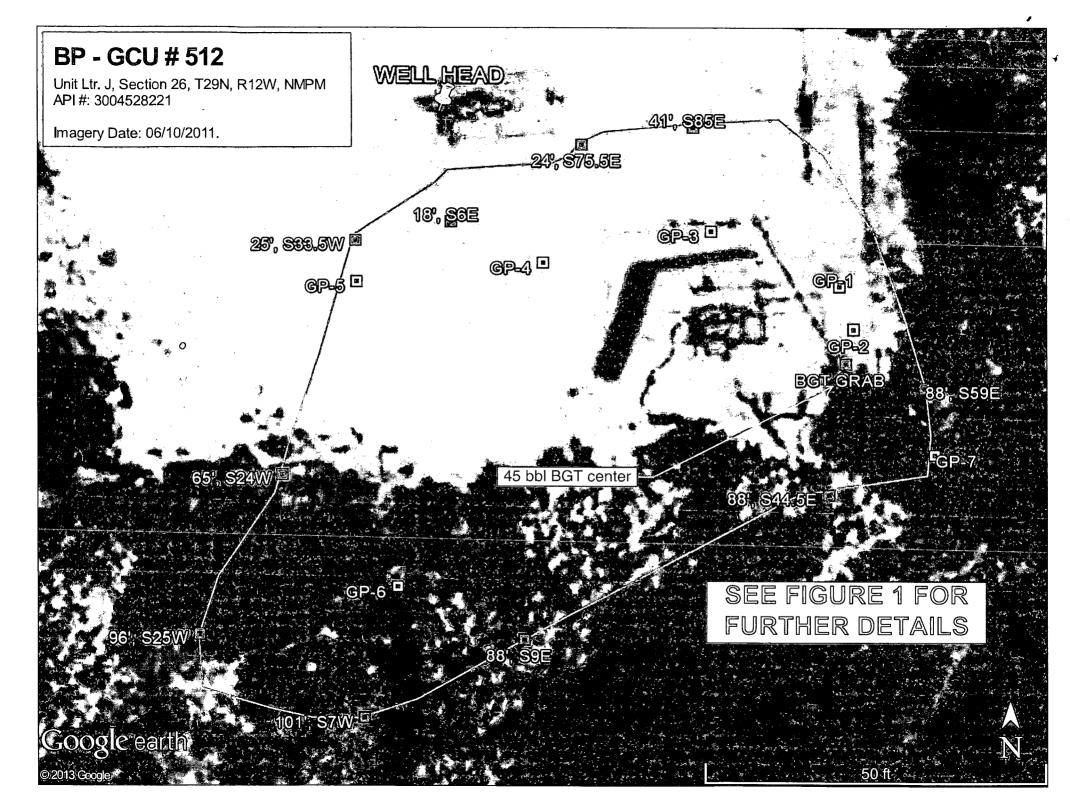
Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

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

	Latitude36.69451											
						<b>OPERA</b>	ΓOR		☐ Initi	al Report	$\boxtimes$	Final Repor
Name of Co	mpany: B	P				Contact: Jef	f Peace					
			ngton, N	M 87401	,	Telephone 1	No.: 505-326-94	79				
Facility Nar	ne: GCU 5	512			. :	Facility Typ	e: Natural gas v	vell				
Sumfa a a Our	nam DI M			Ministra					ADIN	2004520	201	
Surface Ow	ner: BLM			Mineral O	wner: I	ree			APINO	5. 30045282	<u> 221                                   </u>	
				LOCA	TION	OF RE	LEASE					
Unit Letter			Range		North/	South Line	Feet from the	East/V	Vest Line	County: S	an Juan	l
J	26	29	12	1530	South		1715	East				
<u></u>								<u></u>	(	DIL CONS	. DIV	DIST. 3
		Lat	itude3	6.69451		Longitud	le 108.0657					
				NAT	HDE					AUG	<b>29</b> 2	014
Type of Relea	ase: conden	sate/oil			UKE			m	Volume I	Danovarad: r		
												August 1
		8.440				[	iour or occurrenc				00 (01).	riugust i,
Was Immedia	nte Notice C					If YES, To	Whom?					
		$\boxtimes$	Yes [	No 🗌 Not Re	quired	Jonathan K	lelly					
						Date and F	lour August 1, 21	03; 10:3	30 AM			
Was a Watero	course Reac	_				If YES, Vo	lume Impacting t	he Wate	ercourse.			
		Ш	Yes 🗵	No								
If a Watercou	rse was Im	pacted, Descri	be Fully.*									
Danasila Cau	<del></del>	J D		. T-1 * D					+ 1 (DC	72)		*1
			rater ande	i the talk was oos	or rea.	Ground water	was at roar root s	201011 111	CDGI. D	ntory eduse i	, 0 ( ) ( ) (	ow from the
Describe Ares	α Affected s	and Cleanup 4	Action Tak	en * Borehole dril	lling wa	s done to col	 lect soil samples a	and dete	rmine vert	ical and later	al evte	nt of the
960 cubic yar	ds of impac	eted soil was t	aken to the	e IEI landfarm for	treatme	nt. Excavati	on continued unti	I remain	ing soil sa	mples resulte	ed in les	ss than 100
			packfilled	with clean soil, the	e top so	il was replace	ed and the area wa	as comp	acted. Mo	nitor wells v	/ill be i	nstalled to
assess ground	water impa	acts, if any.										
federal, state,	or local lay	vs and/or regu	lations.									·
							OIL CONS	<u>SERV</u>	<u>ATION</u>	<u> DIVISIO</u>	$\underline{N}$	
Signature:	Jolk	Vans	<u>-</u>						_		11	
Signature.	X 170	Ju				A managed by	Environmental Co	. a a i a li at	.1 —	H1) (	/. W	
Printed Name	: Jeff Peace	2			<i>I</i>	Approved by	Environmentai S	peciansi	your	<i>W.</i> ハ・1		
							11/2/2	,	1	•		
Title: Field E	nvironment	al Advisor			A	Approval Dat	e: 11/12/2014		Expiration	Date:		<u> </u>
   E-mail Addre	cc: neace is	offrey@hn.com	n			Conditions of	Annroval					
E-man Addre	ss. peace.je	лисушор.сог			— (	onarrons 01	ripprovar.			Attached		
Date: Novem	ber 15, 201	13	Pho	ne: 505-326-9479								

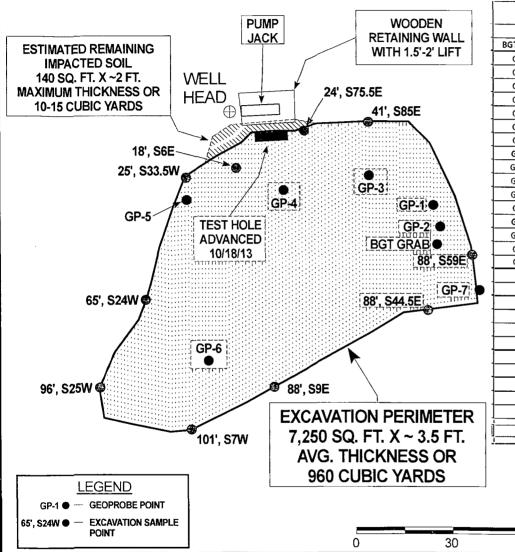
\* Attach Additional Sheets If Necessary

n5K1431651157





## FIGURE 1



SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLING COLLECTION	FIELD OVM READING	TPH -	Benzene	BTEX -
				(ppm)	(ppm)	(ppm)	(ppm)
BGT Grab (78', \$56E) @ 4'	08/01/13	0915	GRAB	313	4,700	ND	29
GP-1 (70', S65E) 0'-4'	09/04/13	0843	GEOPROBE	4.3	-	-	•
GP-1 (70', \$65E) 4'-8'	09/04/13	0850	GEOPROBE	3.4	-	-	-
GP-2 (75', S61E) 0'-4'	09/04/13	0913	GEOPROBE	1.8	-	-	-
GP-2 (75', S61E) 4'-7'	09/04/13	0920	GEOPROBE	1.9	-	-	-
GP-3 (48', S65E) 0'-4'	09/04/13	0944	GEOPROBE	3.9	-	-	-
GP-3 (48', \$65E) 4'-8'	09/04/13	0950	GEOPROBE	15.1	-	•	-
GP-4 (30', \$34E) 0'-4'	09/04/13	1003	GEOPROBE	1.9	-	-	-
GP-4 (30', S34E) 4'-8'	09/04/13	1006	GEOPROBE	861	-	-	-
GP-4 (30', S34E) 8'-10'	09/04/13	1014	GEOPROBE	1.9	-	-	-
GP-5 (31', \$26W) 0'-4'	09/04/13	1038	GEOPROBE	1.4	-	-	-
GP-5 (31', \$26W) 4'-6'	09/04/13	1055	GEOPROBE	1.0	-	-	-
GP-6 (79', S5W) 0'-4'	09/04/13	1140	GEOPROBE	-	-	-	-
GP-6 (79', S5W) 4'-8'	09/04/13	1155	GEOPROBE	647	-	-	-
GP-6 (79', S5W) 8'-11'	09/04/13	1205	GEOPROBE	0.0	-	-	-
GP-7 (96', \$54E) 0'-4'	09/04/13	1330	GEOPROBE	0.0	-	-	-
GP-7 (96', S54E) 4'-7'	09/04/13	1345	GEOPROBE	0.0		-	-
88', \$59E @ 2-2.5'	10/01/13	1452	GRAB	0.0	ND	ND	ND
88', \$44.5E@3'	10/01/13	1457	GRAB	0.0	ND	ND	ND
41', \$85E @ 4'	10/07/13	1040	GRAB	1.1	ND	ND	ND
24', S75.5E @ 4'	10/07/13	1110	GRAB	593	-	-	-
18', S6E @ 4'	10/07/13	1202	GRAB	1.7	ND	ND	ND
18', S6E @ 6'	10/07/13	1206	GRAB	592	1,350	ND	76.4
88', S9E @ 5'	10/14/13	1330	GRAB	1.0	ND	ND	ND
101', S7W @ 5'	10/14/13	1340	GRAB	0.0	ND	ND	ND
25', \$33.5W @ 3'	10/18/13	0900	GRAB	1.4	ND	ND	ND
65', \$24W @ 5'	10/18/13	0910	GRAB	3.0	ND	ND	ND
96', \$25W @ 6'	10/18/13	0930	GRAB	1.3	ND	ND	ND
NMOCE	RELEASE CLO	SURE STANDA	ARDS (soils) -	100	100	10	50
					L		I

SAMPLING POINT LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS). ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE. MAGNETIC DECLINATION USED ~ 10° E.

**BP AMERICA PRODUCTION CO.** 

GCU # 512

NW/4 SE/4 SEC. 26, T29N, R12W

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

60 FT.

CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87

**BLOOMFIELD, NEW MEXICO 87413** 

PHONE: (505) 632-1199

PROJECT: REMEDIATION

DRAWN BY: NJV

FILENAME: GCU 512-SM-1.SKF

**REVISED: 10-24-13 NJV** 

SITE

10/13

## **BP AMERICA PRODUCTION COMPANY**

### GCU #512 - [Release of Unknown Source(s)]

Unit Letter J, Section 26, T29N, R12W - API Number: 30-045-28221

SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLING COLLECTION	FIELD OVM READING	TPH - cumulative	Benzene	BTEX - cumulative	Soil Description / Comments
				(ppm)	(ppm)	(ppm)	(ppm)	
BGT Grab (78', S56E) @ 4'	08/01/13	0915	GRAB	313	4,700	ND	29	Black sand near groudwater interface
GP-1 (70', S65E) 0'-4'	09/04/13	0843	GEOPROBE	4.3	-	-		DYO sand, medium/course grain, moist
GP-1 (70', S65E) 4'-8'	09/04/13	0850	GEOPROBE	3.4	-	-		DYO sand, medium/course grain, saturated, recovered 1'
GP-2 (75', S61E) 0'-4'	09/04/13	0913	GEOPROBE	1.8	-			DYO sand, medium/course grain, moist
GP-2 (75', S61E) 4'-7'	09/04/13	0920	GEOPROBE	1.9	-	-		Gray to DYO sand, medium/course grain, saturated
GP-3 (48', S65E) 0'-4'	09/04/13	0944	GEOPROBE	3.9	-	-	-	DYO sand, medium/course grain, moist, recovered 3'
GP-3 (48', S65E) 4'-8'	09/04/13	0950	GEOPROBE	15.1	-	-	-	DYO sand, medium/course grain, saturated, recovered 1'
GP-4 (30', S34E) 0'-4'	09/04/13	1003	GEOPROBE	1.9	-	-	-	DYO sand, medium grain, moist
GP-4 (30', S34E) 4'-8'	09/04/13	1006	GEOPROBE	861	-		-	DYO sand (4'-7'), black sand, saturated (7'-8')
GP-4 (30', S34E) 8'-10'	09/04/13	1014	GEOPROBE	1.9	-	-	-	Black sand (8'-8.25'), DYB sand (8.25'-10'), refusal @ 10'
GP-5 (31', S26W) 0'-4'	09/04/13	1038	GEOPROBE	1.4	-	-	-	DYO sand, medium grain, moist
GP-5 (31', S26W) 4'-6'	09/04/13	1055	GEOPROBE	1.0	-	-	-	DYO sand, moist, cobble refusal, recovered 1'
GP-6 (79', S5W) 0'-4'	09/04/13	1140	GEOPROBE	-	-	-	-	DYO sand, moist, cobbles, recovered 1'
GP-6 (79', S5W) 4'-8'	09/04/13	1155	GEOPROBE	647		-	-	DYO sand, medium grain, (4'-7'), black sand, medium grain, saturated
GP-6 (79', S5W) 8'-11'	09/04/13	1205	GEOPROBE	0.0	-	-	-	DYO sand, course grain, saturated, refusal @ 11'
GP-7 (96', S54E) 0'-4'	09/04/13	1330	GEOPROBE	0.0	-	-	-	DYO sand, course grain, saturated @ 7'
GP-7 (96', S54E) 4'-7'	09/04/13	1345	GEOPROBE	0.0	-		-	DYO sand, saturated, refusal @ 7', recovered 2'
88', S59E @ 2-2.5'	10/01/13	1452	GRAB	0.0	ND	ND	ND	DYO sand, medium/course grain, moist
88', S44.5E @ 3'	10/01/13	1457	GRAB	0.0	ND	ND	ND	DYO sand, medium/course grain, moist
41', S85E @ 4'	10/07/13	1040	GRAB	1.1	ND	ND	ND	PYB sand, immediately above groudwater interface
24', \$75.5E @ 4'	10/07/13	1110	GRAB	593	-	-		Black sand, immediately above groudwater interface
18', S6E @ 4'	10/07/13	1202	GRAB	1.7	ND	ND	ND	PYB sand, immediately above groudwater interface
18', S6E @ 6'	10/07/13	1206	GRAB	592	1,350	ND	76.4	Black sand, immediately above groudwater interface
88', S9E @ 5'	10/14/13	1330	GRAB	1.0	ND	ND	ND	DYO to light gray sand, near groudwater interface
101', S7W @ 5'	10/14/13	1340	GRAB	0.0	ND	ND	ND	DYO to light gray sand, near groudwater interface
25', \$33.5W @ 3'	10/18/13	0900	GRAB	1.4	ND	ND_	ND	Moderate brown sand, non cohesive, slightly moist
65', S24W @ 5'	10/18/13	0910	GRAB	3.0	ND	ND	ND	DYO to light gray sand, near groudwater interface
96', S25W @ 6'	10/18/13	0930	GRAB	1.3	ND	ND	ND	DYO to light gray sand, near groudwater interface
NMC	OCD RELEASE CI	OSURE STAND	DARDS (soils) - I	100	100	10	50	7

Notes:

OVM - Organic vapor meter or photo-ionization detector (PID).

TPH - Total petroleum hydrocarbons by US EPA Method 8015B.

BTEX - Benzene, toluene, ethylbenzene, total xylenes by US EPA Method 8021B.

DYO - Dark yellowish orange

ppm - Parts per million or milligram per kilogram (mg/Kg).

ND - Not detected at Reporting Limit.

NMOCD - New Mexico Oil Conservation Division.

DYB - Dark yellowish brown

NMOCD RELEASE CLOSURE STANDARDS REFERENCE: "Guidelines for Remediation of Leaks, Spills and Releases" dated: August 13, 1993.

OVM CALIBRATION: RESPONSE FACTOR = 0.52 or 1.00, CALIBRATION GAS - 100 ppm ISOBUTYLENE.

OVM CALIBRATION DATA

DATE	TIME	READING
08/01/13	0930	52.8
09/04/13	0905	99.2

DATE	TIME	READING
10/01/13	1505	100.1
10/07/13	1131	52.3

DATE	TIME	READING
10/14/13	1406	52.2
10/18/13	1040	52.4

#### Lab Order 1308133

Date Reported: 8/12/2013

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Lab ID:

Project: GCU 512

1308133-001

3-001 Matrix: SOIL

Client Sample ID: BGT GRAB @ 4'

**Collection Date:** 8/1/2013 9:15:00 AM **Received Date:** 8/3/2013 10:30:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS				·	Analyst:	JME
Diesel Range Organics (DRO)	1500	100		mg/Kg	10	8/7/2013 8:47:33 AM	8722
Surr: DNOP	0	63-147	S	%REC	10	8/7/2013 8:47:33 AM	8722
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst:	DAM
Gasoline Range Organics (GRO)	3200	490		mg/Kg	100	8/6/2013 3:10:20 PM	8724
Surr: BFB	218	80-120	S	%REC	100	8/6/2013 3:10:20 PM	8724
EPA METHOD 8021B: VOLATILES						Analyst:	DAM
Benzene	ND	4.9		mg/Kg	100	8/6/2013 3:10:20 PM	8724
Toluene	ND	4.9		mg/Kg	100	8/6/2013 3:10:20 PM	8724
Ethylbenzene	6.3	4.9		mg/Kg	100	8/6/2013 3:10:20 PM	8724
Xylenes, Total	23	9.8		mg/Kg	100	8/6/2013 3:10:20 PM	8724
Surr: 4-Bromofluorobenzene	112	80-120		%REC	100	8/6/2013 3:10:20 PM	8724
EPA METHOD 300.0: ANIONS						Analyst:	JRR
Chloride	ND	15		mg/Kg	10	8/5/2013 <b>4</b> :17:57 PM	8731
EPA METHOD 418.1: TPH						Analyst:	LRW
Petroleum Hydrocarbons, TR	7800	200		mg/Kg	10	8/6/2013	8740

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

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

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1308133

12-Aug-13

Client:

Blagg Engineering

Project:

GCU 512

Sample ID MB-8731

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: PBS

RunNo: 12430

8/5/2013

Batch ID: 8731

PQL

Prep Date:

Analysis Date: 8/5/2013

Result

SeqNo: 353758

Units: mg/Kg

Analyte

HighLimit

**RPDLimit** 

Qual

Chloride

Sample ID LCS-8731

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 8731

RunNo: 12430

Prep Date: 8/5/2013 Analysis Date: 8/5/2013

SeqNo: 353759

Units: mg/Kg

Analyte

SPK value SPK Ref Val %REC

HighLimit

Qual

**PQL** 

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

Sample pH greater than 2 for VOA and TOC only.

Not Detected at the Reporting Limit

Reporting Detection Limit

Chloride

1.5

90

Result

SPK value SPK Ref Val %REC LowLimit

%RPD

15.00

96.6

Qualifiers:

Ε

0

Value exceeds Maximum Contaminant Level.

Analyte detected below quantitation limits

RPD outside accepted recovery limits

Value above quantitation range

RSD is greater than RSDlimit

Н

ND

P

LowLimit

%RPD

**RPDLimit** 

Page 2 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#:

**RPDLimit** 

1308133

12-Aug-13

Qual

Client:

Blagg Engineering

Project:

GCU 512

Sample ID MB-8740 TestCode: EPA Method 418.1: TPH SampType: MBLK Client ID: **PBS** Batch ID: 8740 RunNo: 12439 Prep Date: 8/6/2013 Analysis Date: 8/6/2013 SeqNo: 354090 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD

Petroleum Hydrocarbons, TR ND 20

Sample ID LCS-8740 SampType: LCS TestCode: EPA Method 418.1: TPH Client ID: LCSS Batch ID: 8740 RunNo: 12439 Prep Date: 8/6/2013 Analysis Date: 8/6/2013 SeqNo: 354091 Units: mg/Kg Analyte Result SPK value SPK Ref Val %REC **PQL** LowLimit HighLimit %RPD **RPDLimit** Qual Petroleum Hydrocarbons, TR 100 20 100.0 103 80 120

Sample ID LCSD-8740 SampType: LCSD TestCode: EPA Method 418.1: TPH Client ID: LCSS02 Batch ID: 8740 RunNo: 12439 Prep Date: 8/6/2013 Analysis Date: 8/6/2013 SeqNo: 354092 Units: mg/Kg Analyte SPK value SPK Ref Val %REC Result **PQL** LowLimit HighLimit %RPD **RPDLimit** Qual Petroleum Hydrocarbons, TR 100 20 100.0 101 80 120 2.67

### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

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

Page 3 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1308133 12-Aug-13

Client:

Blagg Engineering

Project:	GCU 512										
Sample ID	MB-8722	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8015D: Dies	el Range (	Organics	
Client ID:	PBS	Batch	1D: <b>87</b>	22	F	RunNo: 1	2400				
Prep Date:	8/5/2013	Analysis D	ate: 8	/5/2013	S	SeqNo: 3	53060	Units: mg/k	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	ND	10								
Surr: DNOP		9.9		10.00		99.2	63	147			
Sample ID	1308127-001AMS	SampT	ype: <b>M</b> :	3	Tes	tCode: El	PA Method	8015D: Dies	el Range (	Organics	
Client ID:	BatchQC	Batch	ı ID: <b>87</b>	22	F	RunNo: 1	2400				
Prep Date:	8/5/2013	Analysis D	ate: 8	/5/2013	S	SeqNo: 3	53063	Units: mg/h	<b>〈</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	50	10	49.95	14.67	70.7	61.3	138			
Surr: DNOP		3.7		4.995		73.3	63	147			
Sample ID	1308127-001AMSE	) SampT	ype: M	SD	Tes	tCode: El	PA Method	8015D: Dies	el Range (	Organics	
Client ID:	BatchQC	Batch	1D: <b>87</b>	22	F	RunNo: 1:	2400				
Prep Date:	8/5/2013	Analysis D	ate: 8/	5/2013	S	SeqNo: 3	53064	Units: mg/h	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	51	9.9	49.55	14.67	73.0	61.3	138	1.68	20	
Surr: DNOP		3.7		4.955		74.6	63	147	0	0	
Sample ID	LCS-8722	SampT	ype: LC	s	Test	tCode: El	PA Method	8015D: Dies	el Range (	Organics	
Client ID:	LCSS	Batch	ID: <b>87</b>	22	R	RunNo: 1:	2400				
Prep Date:	8/5/2013	Analysis D	ate: 8/	5/2013	S	SeqNo: 3	53065	Units: mg/h	<b>(</b> g		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	42	10	50.00	0	84.3	77.1	128			
Surr: DNOP		3.5		5.000		69.8	63	147			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit

Page 4 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1308133 12-Aug-13

Client:

Blagg Engineering

Project:

GCU 512

Sample ID MB-8724 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: **PBS** Batch ID: 8724 RunNo: 12441 Prep Date: Units: mg/Kg 8/5/2013 Analysis Date: 8/6/2013 SegNo: 354525 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 86.3 80 120

Sample ID LCS-8724 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 8724 RunNo: 12441 Prep Date: Analysis Date: 8/6/2013 8/5/2013 SeqNo: 354526 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 26 5.0 25.00 0 103 62.6 136 Surr: BFB 980 1000 97.9 80 120

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

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

Page 5 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1308133

12-Aug-13

Client:

Blagg Engineering

Project:

GCU 512

Sample ID MB-8724	Samp	Гуре: М	BLK	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batc	h ID: <b>87</b>	24	F	RunNo: 1	2441				
Prep Date: 8/5/2013	Analysis D	Date: 8/	6/2013	SeqNo: <b>354556</b>			Units: mg/h	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		97.6	80	120			
Sample ID LCS-8724	Sampl	Гуре: <b>LC</b>	s	Tes	TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batcl	h ID: <b>87</b> .	724 RunNo: 12441							

Sample ID LCS-8724	Samp1	Гуре: <b>LC</b>	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batch	h ID: <b>87</b> :	24	F	RunNo: 1	2441				
Prep Date: 8/5/2013	Analysis D	Date: 8/	6/2013	9	SeqNo: 3	54557	Units: mg/K	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	106	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	105	80	120			
Xylenes, Total	3.2	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID 1308132-001AMS	SampT	Гуре: МЅ	3	TestCode: EPA Method 8021B: Volatiles						
Client ID: BatchQC	Batcl	h ID: <b>87</b> :	24	F	RunNo: 1	2441				
Prep Date: 8/5/2013	i/2013 Analysis Date: 8/6/2013			5	SeqNo: 3	54558	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.047	0.9416	0	114	67.3	145			
Toluene	1.1	0.047	0.9416	0.007148	111	66.8	144			
Ethylbenzene	1.1	0.047	0.9416	0	115	61.9	153			
Xylenes, Total 3.3 0.094 2.825		0	116	65.8	149					
Surr: 4-Bromofluorobenzene	<b>71</b>		0.9416		106	80	120			

Sample ID 1308132-001AM	SD SampT	Гуре: <b>М</b> S	SD	TestCode: EPA Method 8021B: Volatiles						
Client ID: BatchQC	Batch	h ID: <b>87</b>	24	RunNo: 12441						
Prep Date: 8/5/2013	Analysis D	Date: <b>8/</b>	6/2013	9	SeqNo: 3	54559	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.047	0.9416	0	103	67.3	145	10.6	20	
Toluene	0.93	0.047	0.9416	0.007148	98.5	66.8	144	12.2	20	
Ethylbenzene	0.96	0.047	0.9416	0	102	61.9	153	12.2	20	
Xylenes, Total	2.9	0.094	2.825	0	103	65.8	149	12.0	20	
Surr: 4-Bromofluorobenzene	1.0		0.9416		106	80	120	0	0	

### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

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

Analyte detected in the associated Method Diank

Page 6 of 6



tiau Environmeniai 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

**BLAGG** Client Name: Work Order Number: 1308133 RcptNo: 1 Received by/date: Logged By: Michelle Garcia 8/3/2013 10:30:00 AM Completed By: Michelle Garcia 8/5/2013 9:09:56 AM 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 🗌 4. Was an attempt made to cool the samples? No 🗔 NA 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No 🗌 6. Sample(s) in proper container(s)? No 🗌 7. Sufficient sample volume for indicated test(s)? 8. Are samples (except VOA and ONG) properly preserved? No No 🗹 NA 🗌 Yes 🗌 9. Was preservative added to bottles? 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 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 🗹 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) NA 🗹 No 🔲 16. Was client notified of all discrepancies with this order? Yes Person Notified: Date: By Whom: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Yes

C	hain.	-of-Cu	stody Record	Turn-Around	Time:			١.			L	A L			NIX	/TE	· ^			NT	A 1	
Client:	BLAG	=6 ENG	WEERING INC.		□ Rush	!														TO		,
			A	Project Name				1 🖢				www										ı
Mailing	Address	P.O.	Box 87	1	CU SI	2			49	<b>01</b> H	lawki								109			
			NM 87413	Project #:				1			)5-34				•			410				
Phone :			632-1199																	2 A 3 5	, 1 de	
email o				Project Mana	iger:			<u></u>		_								- 1000			* * * *	
QA/QC I	Package:		☐ Level 4 (Full Validation)	J Sampler:	: BLAGG			s (8021)	(Gas or	<b>本/</b> / O			SIMS)		PO4,SC	PCB's						
Accredi		□ Othe	r	Sampler:	工- BidG 数 %3	G Singue			TPH	O/DF	8.1)	£.	8270 S		3,NO <sub>2</sub> ,	/ 8082						Z
□ EDD	(Type)_			Sample Ten	eaure?	2.5		4	Ж Т	(GR	d 41	d 50	ō	sle	8	des		Š	الم	į		jo Y
Date	Time	Matrix	Sample Request ID		Preservative Type	GOTTLE THE MENT OF THE PERSON	PERSONAL PROPERTY AND ADDRESS OF THE PERSON	BTEX + MTBE-	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MR®)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides /	8260B (VOA)	8270 (Semi-VOA)	CALORIDE			Air Bubbles
1/13	0915	Soll	BGT GRAB @ 4	402 x1	Teol	ľ	-001	×		X	×		_	_=		1.	-		X	1		Ť
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Date:	Time:	Relinquishe	ed by:	Received by:	$\overline{}$	Date	Time .	Ren	narks	3:	Ī	Biu		<u> </u>						<u> </u>		
2/13 Date:	1400 Time:	Refinquishe	ed by:	Received by:	Maela	2/3 Date	1400 Time					_			31	EVI	H 0	1 B	67	2		
12/13	1530	1 /	tu Walla	da	an -	108	Time //03//											+cF				

#### Lab Order 1310180

Date Reported: 10/14/2013

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Project: GCU 512

**Lab ID:** 1310180-001

Matrix: SOIL

Client Sample ID: 88' S 59E @ 2'-2.5' Collection Date: 10/1/2013 2:52:00 PM

Received Date: 10/3/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analys	: BCN
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/4/2013 9:27:34 PM	9632
Surr: DNOP	95.6	63-147	%REC	1	10/4/2013 9:27:34 PM	9632
EPA METHOD 8015D: GASOLINE RA	ANGE				Analys	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	10/4/2013 7:49:13 PM	9636
Surr: BFB	99.7	80-120	%REC	1	10/4/2013 7:49:13 PM	9636
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.046	mg/Kg	1	10/4/2013 7:49:13 PM	9636
Toluene	ND	0.046	mg/Kg	1	10/4/2013 7:49:13 PM	9636
Ethylbenzene	ND	0.046	mg/Kg	1	10/4/2013 7:49:13 PM	9636
Xylenes, Total	ND	0.092	mg/Kg	1	10/4/2013 7:49:13 PM	9636
Surr: 4-Bromofluorobenzene	109	80-120	%REC	1	10/4/2013 7:49:13 PM	9636
EPA METHOD 300.0: ANIONS					Analyst	: JRR
Chloride	33	.1.5	mg/Kg	1	10/7/2013 11:10:30 AM	9665

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

#### Qualifiers:

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

Page 1 of 6

- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

### Lab Order 1310180

Date Reported: 10/14/2013

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 88' S 44.5E @ 3'

**Project:** GCU 512 Collection Date: 10/1/2013 2:57:00 PM

Lab ID: 1310180-002

Matrix: SOIL

Received Date: 10/3/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analysi	:: BCN
Diesel Range Organics (DRO)	ND	10	· mg/Kg	1	10/4/2013 9:49:31 PM	9632
Surr: DNOP	97.6	63-147	%REC	1	10/4/2013 9:49:31 PM	9632
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	10/4/2013 8:19:31 PM	9636
Surr; BFB	100	80-120	%REC	1	10/4/2013 8:19:31 PM	9636
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	0.046	mg/Kg	1	10/4/2013 8:19:31 PM	9636
Toluene	ND	0.046	mg/Kg	1	10/4/2013 8:19:31 PM	9636
Ethylbenzene	ND	0.046	mg/Kg	1	10/4/2013 8:19:31 PM	9636
Xylenes, Total	ND	0.092	mg/Kg	1	10/4/2013 8:19:31 PM	9636
Surr: 4-Bromofluorobenzene	109	80-120	%REC	1	10/4/2013 8:19:31 PM	9636
EPA METHOD 300.0: ANIONS					Analyst	: JRR
Chloride	3.8	1.5	mg/Kg	1	10/7/2013 11:35:18 AM	9665

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

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits
- О RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND

- Not Detected at the Reporting Limit

  Page 2 of 6

  Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1310180

14-Oct-13

Client:

Blagg Engineering

Project:

GCU 512

Sample ID MB-9665

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PRS

Batch ID: 9665

RunNo: 13905

Prep Date: 10/7/2013 Analysis Date: 10/7/2013

SeqNo: 397291

Units: mg/Kg

Analyte

Result **PQL** SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit** 

Qual

Chloride

ND 1.5

Sample ID LCS-9665

SampType: LCS Batch ID: 9665

**PQL** 

PQL

1.5

1.5

TestCode: EPA Method 300.0: Anions RunNo: 13905

Client ID: LCSS

Prep Date: 10/7/2013 Analysis Date: 10/7/2013

Result

15

SeqNo: 397292

%REC

96.7

Units: mg/Kg

%RPD **RPDLimit** 

Analyte Chloride

HighLimit 110

Qual

Qual

Sample ID 1310180-002AMS

SampType: MS

TestCode: EPA Method 300.0: Anions

LowLimit

58.8

90

LowLimit

Client ID: 88' S 44.5E @ 3'

Batch ID: 9665

Result

18

RunNo: 13905

Prep Date: 10/7/2013 Analysis Date: 10/7/2013

SeqNo: 397296

93.2

Units: mg/Kg

109

HighLimit %RPD **RPDLimit** 

Analyte Chloride

Sample ID 1310180-002AMSD

SampType: MSD

TestCode: EPA Method 300.0: Anions

Client ID: 88' S 44.5E @ 3'

Batch ID: 9665

RunNo: 13905

Units: mg/Kg

Prep Date: 10/7/2013

Analysis Date: 10/7/2013

1.5

SeqNo: 397297

Qual

Analyte

%RPD **RPDLimit** 

Chloride

SPK Ref Val

SPK value SPK Ref Val %REC

3.812

SPK value SPK Ref Val

15.00

15.00

%REC

58.8

HighLimit

18

Result

SPK value 15.00

3.812

92.6

LowLimit

109

0.470

20

**Qualifiers:** 

S

Value exceeds Maximum Contaminant Level

Value above quantitation range Ε

Analyte detected below quantitation limits J

Spike Recovery outside accepted recovery limits

RSD is greater than RSDlimit 0

RPD outside accepted recovery limits R

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

Р Sample pH greater than 2 for VOA and TOC only.

Reporting Detection Limit

Н

Page 3 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1310180

14-Oct-13

Client:

Blagg Engineering

Project:

GCU 512

Sample ID LCS-9632	SampT	ype: LC	S	Tes	tCode: E	PA Method	8015D: Dies	el Range (	Organics	
Client ID: LCSS	Batch	ID: 96	32	R	RunNo: 1	3798				
Prep Date: 10/3/2013	Analysis D	ate: 10	0/3/2013	S	SeqNo: 3	94361	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	77.2	77.1	128			
Surr: DNOP	5.4		5.000		108	63	147			

Sample ID MB-9632	. SampT	уре: МЕ	BLK	Test	tCode: El	PA Method	8015D: Dies	el Range C	Organics	
Client ID: PBS	Batch	ID: 96	32	R	tunNo: 1	3798				
Prep Date: 10/3/2013	Analysis D	ate: 10	0/3/2013	S	SeqNo: 3	94539	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	10		10.00		104	63	147			

### Qualifiers:

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

Page 4 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1

1310180 14-Oct-13

Client:

Blagg Engineering

Project:

GCU 512

Sample ID MB-9636	Sampl	Гуре: <b>МЕ</b>	BLK	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	je	
Client ID: PBS	Batcl	h ID: 96	36	F	RunNo: 1	3860				
Prep Date: 10/3/2013	Analysis [	Date: 10	0/4/2013		SeqNo: 3	96249	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0		,						
Surr: BFB	1000		1000		102	80	120			
Sample ID LCS-9636	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
				_						

,	•	• •						-		
Client ID: LCSS	Batch	h ID: <b>96</b>	36	F	RunNo: 1	3860				
Prep Date: 10/3/2013	Analysis D	)ate: 10	0/4/2013	S	SeqNo: 3	96250	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.5	74.5	126			
Surr: BFB	1100		1000		106	80	120			

#### Qualifiers:

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

Page 5 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1310180

14-Oct-13

Client:

Blagg Engineering

Project:

GCU 512

Sample ID MB-9636	Sampī	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batch	h ID: 96	36	R	lunNo: 1	3860				
Prep Date: 10/3/2013	Analysis D	Date: 10	0/4/2013	S	eqNo: 3	96276	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050				•				
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
(ylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		115	80	120			

Sample ID LCS-9636	Samp	Гуре: LC	s	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batc	h ID: <b>96</b>	36	F	RunNo: 1	3860				
Prep Date: 10/3/2013	Analysis [	Date: 10	0/4/2013	S	SeqNo: 3	96277	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.050	1.000	0	96.4	80	120			
Toluene	0.97	0.050	1.000	0	96.6	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.9	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

#### Qualifiers:

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

Page 6 of 6



Hall Environmental Analysis Laboratory
4901 Hawkins NE

Albuquerque, NM 87105 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

Client Name:	BLAGG		Work Order	r Number:	131018	0		R	cptNo:	1
Received by/date	e:LM		[0/0	7/13						
Logged By:	Michelle G	arcia	/ 10/3/2013 10:	, :00:00 AN	Л	17	June C	prus		
Completed By:	Michelle G	arcia	10/3/2013 10:	:24:18 AN	A	1	Jurillo C Jurillo C	Janua		
Reviewed By	4	≥/	IDIO	2/2	012	>	'	•		
Chain of Cus	tody	0	10	7						
1. Custody sea	ls intact on sa	imple bottles?			Yes [		No 🗌	Not Prese	nt 🗹	
2. Is Chain of C	Custody comp	lete?			Yes 🖢	Ī	No 🗌	Not Prese	nt 🗌	
3. How was the	sample deliv	ered?			Courier	<u>.</u>				
Log In										
4. Was an atte	mpt made to	cool the samples?	,		Yes 🖢		No 🗌	] <b>•</b>	NA 🗆	
5. Were all san	nples received	d at a temperature	of >0° C to 6.	0°C	Yes <b>⊻</b>	•	No 🗆	N	<b>A</b> 🗆	
6. Sample(s) in	n proper conte	iner(s)?			Yes 5		No 🗌			
7. Sufficient sa	mple volume	for indicated test(	s)?		Yes 🛂		No 🗌			
8. Are samples	(except VOA	and ONG) proper	ty preserved?		Yes 🗹		No 🗆			
9. Was preserv	ative added to	bottles?			Yes [		No 🗹	N	A 🗆	
10.VOA vials ha	ive zero head	space?			Yes [	]	No 🗆	No VOA Via	ils 🗹	
11, Were any sa	mple contain	ers received broke	en?		Yes [		No 🗹			
a							_	# of preserve		
12. Does paperv					Yes 🗹		No ∐	for pH:	(<2 ni	'>12 unless noted)
		ain of custody) htifled on Chain of	Custody?		Yes 🗹	7	No 🔲	Adjust	-	- 12 dilless floted)
14. Is it clear who	•				Yes 🛂	_	No 🗆			
15. Were all hold					Yes 🛂	•	No 🗆	Checke	ed by:	
(If no, notify	customer for	authorization.)								
Special Hand	lina (if ant	olicable)								
		screpancies with	this order?		Yes E	]	No 🗌	N	IA 🗹	
Person	Notified:			Date:			******	<b>*</b>		
By Wh	om:			Via: [	eMail	Phon	e 🔲 Fax	x In Person		
Regard	ling:							· · · · · · · · · · · · · · · · · · ·		
Client I	Instructions:									
17. Additional re	emarks:					·				•
18. Cooler Info.								,		
Cooler No	7 Temp ℃	Good Ye		ai No S	Seal Date	Sig	ned By			
[1	1.0	Journal of the	<u> </u>							

C	hain-	of-Cu	stody Record	Turn-Around	Time:	By M	ONDA!	1									_		<b>.</b>	ai <del>t</del>	<b>A</b> I	
Client:	BLAGG	ENGNE	ZERWO INC.	□ Standard		10/-	7/2013	]													AL ORY	<b>,</b>
ī	2P A.	<u> YERICA</u>		Project Name	<b>:</b>			] 1	2				.halle									
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			NM 87413	Project #:			-				5-34						345~					<b>V</b> -
Phone #	#: 5	05-6	32-1199										Ar	alys	sis F	Requ	ıest					
email or				Project Mana	ger:			1_	<u>ر</u> اد	æ		- [			<u>4</u>							
QA/QC F	-		□ Level 4 (Full Validation)	J. B.	Aida			\$ (8021	(Gas or	30 / <del>101</del>			SIMS)		PO4,S(	PCB's						
Accredi				Sampler: J	- BLAGE			7 健	H	JO.			8	1	ဝ္နီ	88		l				
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Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	76	ALNOS C	BTEX + WIBE + TWB'S (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO /##RB)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270	RCRA 8 Metals	Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORYDE			Air Bubbles (Y or N)
1/2013	1452	Soil	88 859E @ 2-21	402×1	SOIL		001	X		×									X			
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Date: 0/2/2013		PIL	Blogg	Received by:  Must	Lacla	Date 10/2/2015			mark	s:	BIL	LB	iA6	6								
Date:	Time:	Reinquist		Received by:		Date	Time															
	1800	1 Mix	the Walters			0/03/13					3P								1CF			
ŀ	f necessary,	samples sub	omitted to Hall Environmental may be sub-	contracted to other a	ccredited laboratorie	es. This serv	es as notice of the	is possi	bility.	Any sı	ib-cont	racted	data w	rill be o	clearly	notat	ed on	the ar	ıalytica	ıl report	t.	

Lab Order 1310437

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/15/2013

**CLIENT:** Blagg Engineering

Client Sample ID: 41', S85E @ 4'

Project:

GCU #512

Collection Date: 10/7/2013 10:40:00 AM

Lab ID: 1310437-001

Matrix: SOIL

Received Date: 10/9/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analy	/st: <b>JME</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/10/2013 10:10:10	AM 9731
Surr: DNOP	104	63-147	%REC	1	10/10/2013 10:10:10	AM 9731
EPA METHOD 8015D: GASOLINE R	ANGE				Analy	/st: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/10/2013 2:28:44 F	PM 9739
Surr: BFB	101	80-120	%REC	1	10/10/2013 2:28:44 F	PM 9739
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.050	mg/Kg	1	10/10/2013 2:28:44 F	PM 9739
Toluene	ND	0.050	mg/Kg	1	10/10/2013 2:28:44 F	PM 9739
Ethylbenzene	ND	0.050	mg/Kg	1	10/10/2013 2:28:44 F	PM 9739
Xylenes, Total	ND	0.099	mg/Kg	1	10/10/2013 2:28:44 F	PM 9739
Surr: 4-Bromofluorobenzene	112	80-120	%REC	1	10/10/2013 2:28:44 F	PM 9739
EPA METHOD 300.0: ANIONS					Analy	st: <b>JRR</b>
Chloride	4.5	1.5	mg/Kg	1	10/10/2013 4:57:50 F	PM 9767

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

#### Qualifiers:

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

Page 1 of 7

- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

### Lab Order 1310437

Date Reported: 10/15/2013

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

GCU #512 Project:

1310437-002

Lab ID:

Matrix: SOIL

Client Sample ID: 18', S6E @ 4'

Collection Date: 10/7/2013 12:02:00 PM Received Date: 10/9/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analy	/st: <b>JME</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/10/2013 10:41:23	AM 9731
Surr: DNOP	93.3	63-147	%REC	1	10/10/2013 10:41:23	AM 9731
EPA METHOD 8015D: GASOLINE RA	ANGE				Analy	/st: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/10/2013 3:59:16 F	PM 9739
Surr: BFB	102	80-120	%REC	1	10/10/2013 3:59:16 F	PM 9739
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.049	mg/Kg	1	10/10/2013 3:59:16 F	PM 9739
Toluene	ND	0.049	mg/Kg	1	10/10/2013 3:59:16 F	PM 9739
Ethylbenzene	ND	0.049	mg/Kg	1	10/10/2013 3:59:16 F	PM 9739
Xylenes, Total	ND	0.098	mg/Kg	1	10/10/2013 3:59:16 F	PM 9739
Surr: 4-Bromofluorobenzene	114	80-120	%REC	1	10/10/2013 3:59:16 F	PM 9739
EPA METHOD 300.0: ANIONS					Analy	st: <b>JRR</b>
Chloride	130	30	mg/Kg	20	10/10/2013 5:35:05 F	PM 9767

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- RSD is greater than RSDlimit Ο
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Not Detected at the Reporting Limit Page 2 of 7 Sample pH greater than 2 for VOA and TOC only. P
- Reporting Detection Limit

Lab Order 1310437

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/15/2013

**CLIENT:** Blagg Engineering

Client Sample ID: 18', S6E @ 6'

GCU #512 Project:

Collection Date: 10/7/2013 12:06:00 PM

1310437-003 Lab ID:

Matrix: SOIL

Received Date: 10/9/2013 10:00:00 AM

Analyses	Result	RL (	Qual	. Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS					Analy	/st: JME
Diesel Range Organics (DRO)	250	10		mg/Kg	1	10/10/2013 11:12:34	AM 9731
Surr: DNOP	90.0	63-147		%REC	1	10/10/2013 11:12:34	AM 9731
EPA METHOD 8015D: GASOLINE RA	NGE					Analy	/st: NSB
Gasoline Range Organics (GRO)	1100	95		mg/Kg	20	10/11/2013 12:01:59	AM 9739
Surr: BFB	349	80-120	S	%REC	20	10/11/2013 12:01:59	AM 9739
EPA METHOD 8021B: VOLATILES						Analy	/st: NSB
Benzene	ND	0.48		mg/Kg	20	10/11/2013 12:01:59	AM 9739
Toluene	1.7	0.95		mg/Kg	20	10/11/2013 12:01:59	AM 9739
Ethylbenzene	7.7	0.95		mg/Kg	20	10/11/2013 12:01:59	AM 9739
Xylenes, Total	67	1.9		mg/Kg	20	10/11/2013 12:01:59	AM 9739
Surr: 4-Bromofluorobenzene	127	80-120	S	%REC	20	10/11/2013 12:01:59	AM 9739
EPA METHOD 300.0: ANIONS						Analy	st: <b>JRR</b>
Chloride	ND	15		mg/Kg	10	10/10/2013 6:12:18 F	PM 9767

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
  - Page 3 of 7
- Sample pH greater than 2 for VOA and TOC only. P
- Reporting Detection Limit

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1310437

15-Oct-13

Client:

Blagg Engineering

**Project:** 

GCU #512

Sample ID MB-9767

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 9767

RunNo: 14007

Prep Date: 10/10/2013 Analysis Date: 10/10/2013 **PQL** 

SeqNo: 400633

Units: mg/Kg

HighLimit

**RPDLimit** 

**RPDLimit** 

%RPD

Qual

Qual

Analyte Chloride

Result ND 1.5

Sample ID LCS-9767

LCSS

SampType: LCS

TestCode: EPA Method 300.0: Anions

SPK value SPK Ref Val %REC LowLimit

Batch ID: 9767

RunNo: 14007

Prep Date: 10/10/2013

Analysis Date: 10/10/2013

SeqNo: 400634

Units: mg/Kg

LowLimit HighLimit

%RPD

Analyte

Client ID:

**PQL** 

90

110

SPK value SPK Ref Val %REC Chloride 14 1.5 15.00 95.5

Qualifiers:

Value exceeds Maximum Contaminant Level.

Ε Value above quantitation range

Analyte detected below quantitation limits J

О RSD is greater than RSDlimit

R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits

В Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Sample pH greater than 2 for VOA and TOC only.

RLReporting Detection Limit Page 4 of 7

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1310437

15-Oct-13

Client:

Blagg Engineering

Project:

GCU #512

Sample ID MB-9731	Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8015D: Dies	el Range (	Organics	
Client ID: PBS	Batc	h ID: <b>97</b>	31	F	RunNo: 1	3967				
Prep Date: 10/9/2013	Analysis [	Date: 10	)/10/2013	\$	SeqNo: 3	99428	Units: mg/F	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.5		10.00		95.0	63	147			

Sample ID LCS-9731	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015D: Dies	el Range (	Organics	
Client ID: LCSS	Batch	1D: <b>97</b>	31	F	RunNo: 1	3967				
Prep Date: 10/9/2013	Analysis D	)ate: 10	0/10/2013	S	SeqNo: 3	99503	Units: mg/h	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	106	77.1	128			
Surr: DNOP	5.0		5.000		99.2	63	147			

#### Qualifiers:

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

Page 5 of 7

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1310437

15-Oct-13

Client:

Blagg Engineering

Project:	GCU #51	gineering 2		<u> </u>							
Sample ID	MB-9739	SampT	ype: M	BLK	Tes	tCode: El	PA Method	8015D: Gas	oline Rang	je	
Client ID:	PBS	Batch	n ID: <b>97</b>	'39	F	RunNo: 1	3978				
Prep Date:	10/9/2013	Analysis D	ate: <b>1</b>	0/10/2013	\$	SeqNo: 4	00097	Units: mg/i	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0								-
Surr: BFB		1000		1000		101	80	120			
Sample ID	LCS-9739	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	e	
Client ID:	LCSS	Batch	1D: <b>97</b>	39	F	RunNo: 1	3978				
Prep Date:	10/9/2013	Analysis D	ate: 1	0/10/2013	5	SeqNo: 4	00098	Units: mg/l	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	23	5.0	25.00	0	90.2	74.5	126			
Surr: BFB		1100		1000		110	80	120			
Sample ID	1310437-001AMS	SampT	ype: M	S	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID:	41', S85E @ 4'	Batch	ID: <b>97</b>	39	F	RunNo: 1	3978				
Prep Date:	10/9/2013	Analysis D	ate: <b>1</b> 0	0/10/2013	5	SeqNo: 40	00104	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	24	5.0	24.78	0	96.9	76	156			
Surr: BFB		1100		991.1		115	80	120			
Sample ID	1310437-001AMSI	) SampT	ype: MS	SD	Tes	tCode: <b>E</b>	PA Method	8015D: Gaso	line Rang	e	
Client ID:	41', S85E @ 4'	Batch	ID: <b>97</b>	39	F	RunNo: 1:	3978				
Prep Date:	10/9/2013	Analysis D	ate: 10	0/10/2013	8	SeqNo: 40	00105	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	25	5.0	24.78	0	99.9	76	156	3.05	17.7	
Surr: BFB		1200		991.1		117	80	120	0	0	

#### Qualifiers:

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

Page 6 of 7

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1310437

15-Oct-13

Client:

Blagg Engineering

Project:	GCU #51	12									
Sample ID	MB-9739	Samp	Туре: М	BLK	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	h ID: 97	39	F	RunNo: 1	3978				
Prep Date:	10/9/2013	Analysis [	Date: <b>1</b> 0	0/10/2013	\$	SeqNo: 4	00173	Units: mg/l	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.050								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	nofluorobenzene	1.1		1.000		109	80	120			
Sample ID	LCS-9739	Samp	Type: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: 97	39	F	RunNo: 1	3978				
Prep Date:	10/9/2013	Analysis D	Date: 10	0/10/2013	8	SeqNo: 4	00174	Units: mg/h	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<del></del>	0.91	0.050	1.000	0	91.3	80	120			
Toluene		0.93	0.050	1.000	0	92.8	80	120			
Ethylbenzene		0.95	0.050	1.000	0	95.2	80	120			
Xylenes, Total		3.0	0.10	3.000	0	98.7	80	120			
Surr 4-Brom	ofluorobenzene	1.2		1.000		118	80	120			
- Odii. 4 Bioli											
	1310437-002AMS	Samp1	Гуре: МS		Tes			8021B: Vola	tiles		
			Гуре: <b>М</b> .S h ID: <b>97</b> :	<u> </u>			PA Method		tiles	***	
Sample ID	1310437-002AMS		h ID: <b>97</b> :	39	F	tCode: EI	PA Method 3978				
Sample ID Client ID:	1310437-002AMS 18', S6E @ 4'	Batcl	h ID: <b>97</b> :	39 0/10/2013	F	tCode: El	PA Method 3978	8021B: Vola		RPDLimit	Qual
Sample ID Client ID: Prep Date:	1310437-002AMS 18', S6E @ 4'	Batcl Analysis D	h ID: <b>97</b> : Date: <b>10</b>	39 0/10/2013	F	tCode: EI RunNo: 1: SeqNo: 4	PA Method 3978 00183	8021B: Vola Units: mg/k	(g	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte	1310437-002AMS 18', S6E @ 4'	Batcl Analysis D Result	h ID: <b>97</b> : Date: <b>1</b> 0	S 39 0/10/2013 SPK value	SPK Ref Val	tCode: EI RunNo: 1: SeqNo: 4:	PA Method 3978 00183 LowLimit	8021B: Vola Units: mg/ <del>/</del> HighLimit	(g	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene	1310437-002AMS 18', S6E @ 4'	Batcl Analysis D Result 0.92	h ID: <b>97</b> : Date: <b>10</b> PQL 0.049	SPK value 0.9823	SPK Ref Val	tCode: El RunNo: 1 SeqNo: 4 %REC 93.3	PA Method 3978 00183 LowLimit 67.3	8021B: Vola Units: mg/k HighLimit 145	(g	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene	1310437-002AMS 18', S6E @ 4'	Batcl Analysis D Result 0.92 0.94	PQL 0.049	S 39 0/10/2013 SPK value 0.9823 0.9823	SPK Ref Val 0 0.02106	tCode: El RunNo: 1 SeqNo: 4 %REC 93.3 93.6	PA Method 3978 00183 LowLimit 67.3 66.8	8021B: Vola Units: mg/k HighLimit 145 144	(g	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	1310437-002AMS 18', S6E @ 4'	Batcl Analysis D Result 0.92 0.94 0.97	PQL 0.049 0.049 0.049	S 39 0/10/2013 SPK value 0.9823 0.9823 0.9823	SPK Ref Val 0 0.02106 0.01821	tCode: EI RunNo: 1: 6eqNo: 4: %REC 93.3 93.6 96.7	PA Method 3978 00183 LowLimit 67.3 66.8 61.9	8021B: Vola Units: mg/# HighLimit 145 144 153	(g	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	1310437-002AMS 18', S6E @ 4' 10/9/2013	Batcl Analysis E Result 0.92 0.94 0.97 3.0 1.1	PQL 0.049 0.049 0.049	SPK value 0.9823 0.9823 0.9823 2.947 0.9823	SPK Ref Val 0 0.02106 0.01821 0.04616	tCode: EI RunNo: 1: SeqNo: 40 %REC 93.3 93.6 96.7 102 117	PA Method 3978 00183 LowLimit 67.3 66.8 61.9 65.8 80	8021B: Vola Units: mg/F HighLimit 145 144 153 149	<b>Kg</b> %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	1310437-002AMS 18', S6E @ 4' 10/9/2013	Batcl Analysis E  Result 0.92 0.94 0.97 3.0 1.1  SampT	PQL 0.049 0.049 0.049 0.049 0.098	SPK value 0.9823 0.9823 0.9823 2.947 0.9823	SPK Ref Val 0 0.02106 0.01821 0.04616	tCode: EI RunNo: 1: SeqNo: 40 %REC 93.3 93.6 96.7 102 117	PA Method 3978 00183 LowLimit 67.3 66.8 61.9 65.8 80	8021B: Vola Units: mg/F HighLimit 145 144 153 149 120	<b>Kg</b> %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	1310437-002AMS 18', S6E @ 4' 10/9/2013  ofluorobenzene 1310437-002AMSE	Batcl Analysis E  Result 0.92 0.94 0.97 3.0 1.1  SampT	PQL 0.049 0.049 0.049 0.098  Type: MS	SPK value 0.9823 0.9823 0.9823 2.947 0.9823	SPK Ref Val 0 0.02106 0.01821 0.04616	tCode: EI RunNo: 1: SeqNo: 4: %REC 93.3 93.6 96.7 102 117	PA Method 3978 00183 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 3978	8021B: Vola Units: mg/F HighLimit 145 144 153 149 120	%RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID:	1310437-002AMS 18', S6E @ 4' 10/9/2013 ofluorobenzene 1310437-002AMSE 18', S6E @ 4'	Batcl Analysis E Result 0.92 0.94 0.97 3.0 1.1  C Samp1 Batcl Analysis E Result	PQL 0.049 0.049 0.049 0.098  Type: MS h ID: 97: Date: 10	SPK value 0.9823 0.9823 0.9823 2.947 0.9823 6D 39 0/10/2013 SPK value	SPK Ref Val 0 0.02106 0.01821 0.04616 Test	tCode: EI RunNo: 1: SeqNo: 46 %REC 93.3 93.6 96.7 102 117 tCode: EI RunNo: 1: SeqNo: 46 %REC	PA Method 3978 00183 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 3978 00184 LowLimit	8021B: Volar  Units: mg/k  HighLimit 145 144 153 149 120  8021B: Volat  Units: mg/k  HighLimit	%RPD  tiles  %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date:	1310437-002AMS 18', S6E @ 4' 10/9/2013 ofluorobenzene 1310437-002AMSE 18', S6E @ 4'	Result 0.92 0.94 0.97 3.0 1.1  D SampT Batch Analysis D Result 0.96	PQL 0.049 0.098  Type: MS h ID: 97: 0.049 0.098	SPK value 0.9823 0.9823 0.9823 2.947 0.9823 5D 39 0/10/2013 SPK value 0.9843	SPK Ref Val 0 0.02106 0.01821 0.04616 Tesi R S SPK Ref Val 0	tCode: El RunNo: 1: SeqNo: 4: %REC 93.3 93.6 96.7 102 117 tCode: El RunNo: 1: SeqNo: 4: %REC 97.5	PA Method 3978 00183 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 3978 00184 LowLimit 67.3	8021B: Volar  Units: mg/k  HighLimit  145 144 153 149 120  8021B: Volat  Units: mg/k	(g %RPD tiles (g %RPD 4.53	RPDLimit 20	
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte	1310437-002AMS 18', S6E @ 4' 10/9/2013 ofluorobenzene 1310437-002AMSE 18', S6E @ 4'	Result  0.92 0.94 0.97 3.0 1.1  D SampT Batch Analysis D  Result 0.96 0.98	PQL 0.049 0.098  Type: MS h ID: 97: 0.049 0.098  Type: MS ph ID: 97: 0.049 0.049 0.049 0.049 0.049 0.049	SPK value 0.9823 0.9823 0.9823 2.947 0.9823 6D 39 0/10/2013 SPK value 0.9843 0.9843 0.9843	SPK Ref Val 0 0.02106 0.01821 0.04616 Tesi R SPK Ref Val 0 0.02106	tCode: El RunNo: 1: SeqNo: 4: %REC 93.3 93.6 96.7 102 117 tCode: El RunNo: 1: SeqNo: 4: %REC 97.5 97.0	PA Method 3978 00183 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 3978 00184 LowLimit 67.3 66.8	8021B: Volar  Units: mg/K  HighLimit  145 144 153 149 120  8021B: Volat  Units: mg/K  HighLimit  145 144	(g %RPD tiles %RPD 4.53 3.71	RPDLimit 20 20	
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte Benzene	1310437-002AMS 18', S6E @ 4' 10/9/2013 ofluorobenzene 1310437-002AMSE 18', S6E @ 4'	Result  0.92 0.94 0.97 3.0 1.1  D SampT Batch Analysis D  Result 0.96 0.98 1.0	PQL 0.049 0.098  Type: MS h ID: 97: 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049 0.049	SPK value 0.9823 0.9823 0.9823 2.947 0.9823 6D 39 0/10/2013 SPK value 0.9843 0.9843 0.9843 0.9843	SPK Ref Val  0 0.02106 0.01821 0.04616  Test  SSPK Ref Val  0 0.02106 0.01821	## Code: EI RunNo: 1: SeqNo: 4: ## ## ## ## ## ## ## ## ## ## ## ## ##	PA Method 3978 00183 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 3978 00184 LowLimit 67.3 66.8 61.9	8021B: Volar  Units: mg/k  HighLimit  145 144 153 149 120  8021B: Volar  Units: mg/k  HighLimit  145 144 153	%RPD  tiles  %RPD  4.53 3.71 5.52	RPDLimit 20 20 20 20	
Sample ID Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID Client ID: Prep Date: Analyte Benzene Toluene	1310437-002AMS 18', S6E @ 4' 10/9/2013 ofluorobenzene 1310437-002AMSE 18', S6E @ 4'	Result  0.92 0.94 0.97 3.0 1.1  D SampT Batch Analysis D  Result 0.96 0.98	PQL 0.049 0.098  Type: MS h ID: 97: 0.049 0.098  Type: MS ph ID: 97: 0.049 0.049 0.049 0.049 0.049 0.049	SPK value 0.9823 0.9823 0.9823 2.947 0.9823 6D 39 0/10/2013 SPK value 0.9843 0.9843 0.9843	SPK Ref Val 0 0.02106 0.01821 0.04616 Tesi R SPK Ref Val 0 0.02106	tCode: El RunNo: 1: SeqNo: 4: %REC 93.3 93.6 96.7 102 117 tCode: El RunNo: 1: SeqNo: 4: %REC 97.5 97.0	PA Method 3978 00183 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 3978 00184 LowLimit 67.3 66.8	8021B: Volar  Units: mg/K  HighLimit  145 144 153 149 120  8021B: Volat  Units: mg/K  HighLimit  145 144	(g %RPD tiles %RPD 4.53 3.71	RPDLimit 20 20	

#### Qualifiers:

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

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

## Sample Log-In Check List

RcptNo: 1 Client Name: **BLAGG** Work Order Number: 1310437 10/09/13 Received by/date: anne Sham 10/9/2013 10:00:00 AM Logged By: Anne Thorne 10/9/2013 Completed By: Anne Thorne Reviewed By: 10/09/13 Chain of Custody Yes 🗍 No 🗆 Not Present 🗹 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 🗸 4. Was an attempt made to cool the samples? 5. Were all samples received at a temperature of >0° C to 6.0°C No 🔲 NA 🗌 Yes 🗸 No □ Yes 🔽 6. Sample(s) in proper container(s)? No 🗌 Yes 🗹 7. Sufficient sample volume for indicated test(s)? Yes 🗸 No  $\square$ 8. Are samples (except VOA and ONG) properly preserved? No 🗹 NA 🗌 Yes 9. Was preservative added to bottles? No VOA Viais 🗹 Yes 🗔 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 🔽 No 🗆 Yes 🗹 14. Is it clear what analyses were requested? No 🗀 Checked by: Yes 🗹 15. Were all holding times able to be met? (if no, notify customer for authorization.) Special Handling (if applicable) Yes No 🗆 NA 🗹 16. Was client notified of all discrepancies with this order? Person Notified: Date eMail Phone Fax In Person By Whom: Via: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Condition Seal Intact | Seal No Seal Date Signed By Cooler No Temp °C Good 1.0 Yes

CI	nain-c	of-Cus	tody Record	1 urn-Arouna 1	ıme:			١,	,		1-	1A		FI	NV	/TE	<b>?</b> ∩	MI	ME	NT	A	1	
Client:	BLAG	G ENGR.	/ BP AMERICA	Standard Project Name:	☑ Rush _	72 HR.			3		A		AL	YS	SIS	5 L	A	30	R	<b>A</b> TO			,
Mailing Ac	ldress:	P.O. BO	X 87		GCU #51	2			49	01 H										9			
		BLOOM	FIELD, NM 87413	Project #:						el. 50					•	505-							
Phone #:		(505) 63	2-1199					製造する		'A - A		79.7	A	naly	/sis	Rec	ļues	t .	7.	i i			ela el Ela
email or F	ax#:			Project Manag	jer:				4	To V					4)				.1)				Γ
QA/QC Pad Standa	_		Level 4 (Full Validation)		NELSON VI	ELEZ		8021B)	+ TPH (Gas only)	ľ′a⊵l			/IS)		PO4,SO	2 PCB's			ter - 300.1)			e	
Accreditat	ion:			Sampler:	NELSON VI		hu	<u>%</u>	(Ga	DRO,	ਜ	司	NISO.		NO <sub>2</sub>	8082			/ water			sample	
□ NELAP		☐ Other		On Ice	x Yes	☑ No ::		1	TPH	1/0	418.1)	50	827	S	ő			OA)	300.0			te s	Į,
□ EDD (T	ype)	1		Sample Tempi	erature // /// 	<u>0</u>		£	BE +	। ७।	bel	hod	0 or	leta	2	Pesticides	OA)	ni-V	- 10		ble	composite	2
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALN 13/443		BTEX +***	BTEX + MTBE	трн 8015в	TPH (Method	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pes	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0		Grab sample	5 pt. com	Al- Dubblo
10/7/13	1040	SOIL	41', S85E @ 4'	4 oz 1	Cool	-7	- 1	٧		٧									٧		٧		
												_											
10/7/13	1202	SOIL	18', S6E @ 4'	4 oz 1	Cool	0	U2_	٧		٧		_	_						٧		<u>۷</u>		
10/7/13	1206	SOIL	18', S6E @ 6'	4 oz 1	Cool	-0	03	٧		<b>v</b>		_							٧		٧	_	_
							<b></b>	_				_		_							_		_
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Date: 7/8/13	Time:	Relinquish	ed by: Air of	Received by:	whichter	Date Tim	ne DJD	i	nark nd ir	s: woic	e to :		og Ex	nglne	orin	a In					<u>, , , , , , , , , , , , , , , , , , , </u>		
Date:	Time: 1746	Relinquish	ed by:  Lotto Localeto  Lotto Localeto  Lotto Localeto  Lotto Hall Environmental may be s	Received by:	enes	Date Tim	3				·····	P.O Bloc	. Box	( 87 eld, i	NM i	8741	.3						

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/21/2013

**CLIENT:** Blagg Engineering

GCU #512 Project:

Client Sample ID: 88', S9E@5'

Collection Date: 10/14/2013 1:30:00 PM

Lab ID: 1310766-001

Matrix: SOIL

Received Date: 10/16/2013 10:00:00 AM

Analyses	Result	RL (	Qual U	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	SE ORGANICS				<u> </u>	Analyst:	BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/17/2013 10:05:18 AM	9850
Surr: DNOP	116	63-147		%REC	1	10/17/2013 10:05:18 AM	9850
EPA METHOD 8015D: GASOLINE RA	ANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/17/2013 3:15:49 PM	9871
Surr: BFB	69.2	74.5-129	S	%REC	1	10/17/2013 3:15:49 PM	9871
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.047		mg/Kg	1	10/17/2013 3:15:49 PM	9871
Toluene	ND	0.047		mg/Kg	1	10/17/2013 3:15:49 PM	9871
Ethylbenzene	ND	0.047		mg/Kg	1	10/17/2013 3:15:49 PM	9871
Xylenes, Total	ND	0.094		mg/Kg	1	10/17/2013 3:15:49 PM	9871
Surr: 4-Bromofluorobenzene	72.2	80-120	S	%REC	1	10/17/2013 3:15:49 PM	9871
EPA METHOD 300.0: ANIONS						Analyst:	JRR
Chloride	1.8	1.5		mg/Kg	1	10/17/2013 12:32:31 PM	9888

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

#### Qualifiers:

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

### Lab Order 1310766

Date Reported: 10/21/2013

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 101', S7W@5'

Project:

GCU #512

Collection Date: 10/14/2013 1:40:00 PM

Lab ID: 1310766-002

Matrix: SOIL

Received Date: 10/16/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analy	st: BCN
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/17/2013 10:42:21	AM 9850
Surr: DNOP	105	63-147	%REC	1	10/17/2013 10:42:21	AM 9850
EPA METHOD 8015D: GASOLINE RA	NGE				Analy	st: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	10/17/2013 4:41:34 F	M 9871
Surr: BFB	75.7	74.5-129	%REC	1	10/17/2013 4:41:34 F	PM 9871
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.047	mg/Kg	1	10/17/2013 4:41:34 F	M 9871
Toluene	ND	0.047	mg/Kg	1	10/17/2013 4:41:34 F	M 9871
Ethylbenzene	ND	0.047	mg/Kg	1	10/17/2013 4:41:34 F	M 9871
Xylenes, Total	ND	0.095	mg/Kg	1	10/17/2013 4:41:34 F	M 9871
Surr: 4-Bromofluorobenzene	82.8	80-120	%REC	1	10/17/2013 4:41:34 F	M 9871
EPA METHOD 300.0: ANIONS					Analy	st: JRR
Chloride	3.0	1.5	mg/Kg	1	10/17/2013 12:57:20	PM 9888

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

#### Qualifiers:

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

Page 2 of 6

- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

### Hall Environmental Analysis Laboratory, Inc.

WO#: '

1310766 21-Oct-13

Client:

Blagg Engineering

Project:

GCU #512

Sample	ID	MB-9888
--------	----	---------

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 9888

PQL

RunNo: 14185

Prep Date: 10/17/2013 Analysis Date: 10/17/2013

SeqNo: 406219

Units: mg/Kg

HighLimit

Result

%REC LowLimit

Analyte Chloride

ND 1.5

Sample ID LCS-9888

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID:

LCSS

Batch ID: 9888

**PQL** 

RunNo: 14185

93.5

Prep Date: 10/17/2013 Analysis Date: 10/17/2013

Result

15.00

15.00

SeqNo: 406220

Units: mg/Kg

HighLimit %RPD

Analyte Chloride

14 1.5

SPK value SPK Ref Val

SPK value SPK Ref Val

%REC LowLimit

110

**RPDLimit** Qual

**RPDLimit** 

SampType: MS

TestCode: EPA Method 300.0: Anions

%RPD

Qual

Qual

Qual

Sample ID 1310766-002AMS

Result

17

Batch ID: 9888

RunNo: 14185

Client ID: Prep Date:

101', S7W@5' 10/17/2013

Analysis Date: 10/17/2013

SeqNo: 406226

95.2

Units: mg/Kg

Analyte

**PQL** 

1.5

SPK value SPK Ref Val %REC

3.034

109

%RPD **RPDLimit** HighLimit

Chloride

Sample ID 1310766-002AMSD

SampType: MSD

TestCode: EPA Method 300.0: Anions

58.8

90

Client ID: Prep Date: 101', S7W@5'

RunNo: 14185

10/17/2013

Batch ID: 9888 Analysis Date: 10/17/2013

Units: mg/Kg

HighLimit

109

Analyte Chloride

SeqNo: 406227

LowLimit

Result **PQL** 15.00 17 1.5

SPK value SPK Ref Val 3.034

%REC 94.7

LowLimit 58.8 %RPD 0.436 **RPDLimit** 20

Qualifiers:

Value above quantitation range E

J Analyte detected below quantitation limits

Value exceeds Maximum Contaminant Level.

RSD is greater than RSDlimit 0

RPD outside accepted recovery limits R Spike Recovery outside accepted recovery limits

Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Н ND

Sample pH greater than 2 for VOA and TOC only. P

RL Reporting Detection Limit

Not Detected at the Reporting Limit Page 3 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1

1310766 21-Oct-13

Client:

Blagg Engineering

Project: GCU#	Engineering 512			
Sample ID MB-9850	SampType: MBLK	TestCode: EPA Method	8015D: Diesel Range C	Organics
Client ID: PBS	Batch ID: 9850	RunNo: 14112		
Prep Date: 10/16/2013	Analysis Date: 10/16/2013	SeqNo: <b>404291</b>	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Diesel Range Organics (DRO)	ND 10			
Surr: DNOP	10 10.00	102 63	147	
Sample ID LCS-9850	SampType: LCS	TestCode: EPA Method	8015D: Diesel Range C	Organics
Client ID: LCSS	Batch ID: 9850	RunNo: 14112		
Prep Date: 10/16/2013	Analysis Date: 10/16/2013	SeqNo: <b>404292</b>	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Diesel Range Organics (DRO)	46 10 50.00	0 91.2 77.1	128	
Surr: DNOP	4.7 5.000	93.9 63	147	
Sample ID MB-9886	SampType: <b>MBLK</b>	TestCode: EPA Method	8015D: Diesel Range C	)rganics
Client ID: PBS	Batch ID: 9886	RunNo: 14149		
Prep Date: 10/17/2013	Analysis Date: 10/17/2013	SeqNo: <b>405466</b>	Units: %REC	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	10 10.00	100 63	147	
Sample ID LCS-9886	SampType: <b>LCS</b>	TestCode: EPA Method	8015D: Diesel Range C	)rganics
Client ID: LCSS	Batch ID: 9886	RunNo: 14149		
Prep Date: 10/17/2013	Analysis Date: 10/17/2013	SeqNo: 405467	Units: %REC	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	4.5 5.000	89.3 63	147	

#### Qualifiers:

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

Page 4 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1310766

21-Oct-13

Client:

Blagg Engineering

Project:

GCU #512

Project:	GCU #512 					<u>.                                    </u>				
Sample ID MB-987	l Samp	Туре: МЕ	BLK	Tes	tCode: E	PA Method	8015D: Gas	oline Rang	je	
Client ID: PBS	Bate	ch ID: 98	71	· F	RunNo: 1	4160				
Prep Date: 10/16/2	013 Analysis	Date: 10	0/17/2013	5	SeqNo: 4	06096	Units: mg/l	Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	(GRO) ND	5.0								
Surr: BFB	830		1000		82.6	74.5	129			
Sample ID LCS-987	1 Samp	Type: LC	s	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	le	
Client ID: LCSS	Bate	ch ID: 98	71	F	RunNo: 1	4160				
Prep Date: 10/16/2	013 Analysis	Date: <b>10</b>	0/17/2013	5	SeqNo: 4	06097	Units: mg/l	≺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	74.5	126			•
Surr: BFB	940		1000		93.6	74.5	129			
Sample ID 1310766	.002AMS Samp	Туре: МЅ	3	Tes	tCode: EI	PA Method	8015D: Gaso	oline Rang	e	
Client ID: 101', S7	<b>v@5</b> ' Bato	h ID: 98	71	F	RunNo: 1	4160				
Prep Date: 10/16/2	013 Analysis	Date: 10	)/17/2013	8	SeqNo: 4	06104	Units: mg/l	<b>K</b> g		
Analyte .	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	(GRO) 26	4.8	24.22	0	105	76	156			
Surr: BFB	790		969.0		81.8	74.5	129			
Sample ID 1310766-	002AMSD Samp	Type: MS	SD	Tes	tCode: Ef	PA Method	8015D: Gaso	oline Rang	e	
Client ID: 101', S7V	<b>v@5</b> ' Bato	h ID: 987	71	F	RunNo: 14	<b>4</b> 160				
Prep Date: 10/16/2	013 Analysis	Date: 10	)/17/2013	S	SeqNo: 40	06112	Units: mg/h	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (		4.8	24.22	0	106	76	156	0.719	17.7	
Surr: BFB	850		969.0		87.8	74.5	129	0	0	

#### Qualifiers:

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

Page 5 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1310766

21-Oct-13

Client:

Blagg Engineering

Project.

GCU #512

Project: GCU #:	512									
Sample ID MB-9871	Samp	Туре: М	BLK	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batc	h ID: 98	71	F	RunNo: 1	4160				
Prep Date: 10/16/2013	Analysis [	Date: 10	0/17/2013	5	SeqNo: 4	06134	Units: mg/h	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.9	80	120			
Sample ID LCS-9871	Samp <sup>*</sup>	Type: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batc	h ID: 98	71	F	RunNo: 1	4160				
Prep Date: 10/16/2013	Analysis [	Date: 10	0/17/2013	5	SeqNo: 4	06135	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.050	1.000	0	96.5	80	120		•	
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.3	80	120			
					01.0					
Sample ID 1310766-001AM		Туре: МЅ		Tes			8021B: Vola	tiles		
Sample ID 1310766-001AM: Client ID: 88', S9E@5'	<b>S</b> Samp⁻	Type: <b>MS</b> h ID: <b>98</b>	3			PA Method		tiles		
,	<b>S</b> Samp⁻	h ID: 98	71	F	tCode: El	PA Method 4160				
Client ID: 88', S9E@5'	S Samp	h ID: 98	71	F	tCode: El	PA Method 4160	8021B: Vola		RPDLimit	Qual
Client ID: 88', S9E@5' Prep Date: 10/16/2013	S Samp Batc Analysis D	h ID: 98' Date: 10	3 71 0/17/2013	F	tCode: ERRUNO: 14 SeqNo: 46 %REC 93.2	PA Method 4160 06137 LowLimit 67.3	8021B: Volate Units: mg/K HighLimit 145	(g	RPDLimit	Qual
Client ID: 88', S9E@5' Prep Date: 10/16/2013 Analyte	S Sampi Batci Analysis I Result	h ID: <b>98</b> * Date: <b>10</b> PQL	5 71 0/17/2013 SPK value 0.9515 0.9515	F S SPK Ref Val	tCode: ER RunNo: 14 SeqNo: 4 %REC 93.2 100	PA Method 4160 06137 LowLimit	8021B: Volat Units: mg/K HighLimit	(g	RPDLimit	Qual
Client ID: 88', S9E@5' Prep Date: 10/16/2013 Analyte Benzene Toluene Ethylbenzene	S Samp Batcl Analysis D Result 0.89 0.96 1.0	PQL 0.048 0.048 0.048	5 71 0/17/2013 SPK value 0.9515 0.9515 0.9515	SPK Ref Val 0 0.005473	**RunNo: 4.** **Rec 93.2 100 107	PA Method 4160 06137 LowLimit 67.3 66.8 61.9	8021B: Volate Units: mg/K HighLimit 145 144 153	(g	RPDLimit	Qual
Client ID: 88', S9E@5' Prep Date: 10/16/2013 Analyte Benzene Toluene Ethylbenzene Xylenes, Total	S Samp Batcl Analysis D Result 0.89 0.96 1.0 3.0	PQL 0.048 0.048	5 71 0/17/2013 SPK value 0.9515 0.9515 0.9515 2.854	SPK Ref Val 0 0.005473	RunNo: 1- SeqNo: 4- %REC 93.2 100 107 104	PA Method 4160 06137 LowLimit 67.3 66.8 61.9 65.8	8021B: Volate Units: mg/K HighLimit 145 144 153 149	(g	RPDLimit	Qual
Client ID: 88', S9E@5' Prep Date: 10/16/2013 Analyte Benzene Toluene Ethylbenzene	S Samp Batcl Analysis D Result 0.89 0.96 1.0	PQL 0.048 0.048 0.048	5 71 0/17/2013 SPK value 0.9515 0.9515 0.9515	SPK Ref Val 0 0.005473	**RunNo: 4.** **Rec 93.2 100 107	PA Method 4160 06137 LowLimit 67.3 66.8 61.9	8021B: Volate Units: mg/K HighLimit 145 144 153	(g	RPDLimit	Qual
Client ID: 88', S9E@5' Prep Date: 10/16/2013 Analyte Benzene Toluene Ethylbenzene Xylenes, Total	S Samp Batcl Analysis E Result 0.89 0.96 1.0 3.0 0.83	PQL 0.048 0.048 0.048	5 71 0/17/2013 SPK value 0.9515 0.9515 2.854 0.9515	SPK Ref Val 0 0.005473 0 0	**RunNo: 14** **Rec 93.2 100 107 104 87.7	PA Method 4160 06137 LowLimit 67.3 66.8 61.9 65.8 80	8021B: Volate Units: mg/K HighLimit 145 144 153 149	<b>śg</b> %RPD	RPDLimit	Qual
Client ID: 88', S9E@5' Prep Date: 10/16/2013 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene	S Sampi Batci Analysis D Result 0.89 0.96 1.0 3.0 0.83	PQL 0.048 0.048 0.048 0.048 0.095	SPK value 0.9515 0.9515 0.9515 2.854 0.9515	SPK Ref Val 0 0.005473 0 0	**RunNo: 14** **Rec 93.2 100 107 104 87.7	PA Method 4160 06137 LowLimit 67.3 66.8 61.9 65.8 80	8021B: Volate Units: mg/k HighLimit 145 144 153 149 120	<b>śg</b> %RPD	RPDLimit	Qual
Client ID: 88', S9E@5' Prep Date: 10/16/2013  Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID 1310766-001AM3	S Sampi Batci Analysis D Result 0.89 0.96 1.0 3.0 0.83	PQL 0.048 0.048 0.048 0.095 Type: MS	SPK value 0.9515 0.9515 0.9515 2.854 0.9515	SPK Ref Val 0 0.005473 0 0	tCode: ER RunNo: 14 SeqNo: 4 %REC 93.2 100 107 104 87.7	PA Method 4160 06137 LowLimit 67.3 66.8 61.9 65.8 80 PA Method	8021B: Volate Units: mg/k HighLimit 145 144 153 149 120	%RPD	RPDLimit	Qual
Client ID: 88', S9E@5' Prep Date: 10/16/2013 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID 1310766-001AM3 Client ID: 88', S9E@5'	S Sampi Batci Analysis D Result 0.89 0.96 1.0 3.0 0.83 SD Sampi Batci Analysis D	PQL 0.048 0.048 0.048 0.095 Type: MS	SPK value 0.9515 0.9515 0.9515 2.854 0.9515 6D 71 0/17/2013 SPK value	SPK Ref Val  0 0.005473 0 0 Tes F	tCode: ER RunNo: 14 SeqNo: 46 93.2 100 107 104 87.7 tCode: ER RunNo: 14 SeqNo: 46	PA Method 4160 06137 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4160 06138 LowLimit	8021B: Volate Units: mg/K HighLimit 145 144 153 149 120  8021B: Volate Units: mg/K HighLimit	Kg %RPD tiles	RPDLimit	Qual
Client ID: 88', S9E@5' Prep Date: 10/16/2013  Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID 1310766-001AM3 Client ID: 88', S9E@5' Prep Date: 10/16/2013	S Samp  Batcl  Analysis D  Result  0.89  0.96  1.0  3.0  0.83  SD Samp  Batcl  Analysis D  Result  0.87	PQL 0.048 0.095  Type: MS h ID: 98: 10  PQL 0.048 0.095	SPK value 0.9515 0.9515 0.9515 2.854 0.9515 6D 71 SPK value - 0.9506	SPK Ref Val 0 0.005473 0 0 Tes F S SPK Ref Val 0	tCode: El RunNo: 14 SeqNo: 4 %REC 93.2 100 107 104 87.7 tCode: El RunNo: 14 SeqNo: 4 %REC 91.3	PA Method 4160 06137 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4160 06138 LowLimit 67.3	8021B: Volate Units: mg/K HighLimit 145 144 153 149 120  8021B: Volate Units: mg/K HighLimit 145	%RPD  tiles  %RPD  2.11	RPDLimit 20	
Client ID: 88', S9E@5' Prep Date: 10/16/2013  Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID 1310766-001AMS Client ID: 88', S9E@5' Prep Date: 10/16/2013 Analyte Benzene Toluene	Batol Analysis D Result 0.89 0.96 1.0 3.0 0.83  SD Sampl Batol Analysis D Result 0.87 0.93	PQL 0.048 0.095  Type: MS h ID: 98*  Date: 10  PQL 0.048 0.095	SPK value 0.9515 0.9515 0.9515 2.854 0.9515 6D 71 0/17/2013 SPK value - 0.9506 0.9506	SPK Ref Val 0 0.005473 0 0 Tes F SPK Ref Val 0 0.005473	tCode: Ele RunNo: 14 %REC 93.2 100 107 104 87.7 tCode: Ele RunNo: 14 %REC 91.3 96.8	PA Method 4160 06137 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4160 06138 LowLimit 67.3 66.8	8021B: Volati Units: mg/K HighLimit 145 144 153 149 120  8021B: Volati Units: mg/K HighLimit 145 144	%RPD  ### ST	RPDLimit 20 20	
Client ID: 88', S9E@5' Prep Date: 10/16/2013  Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID 1310766-001AMS Client ID: 88', S9E@5' Prep Date: 10/16/2013  Analyte Benzene Toluene Ethylbenzene	Samp    Batc    Analysis   E	PQL 0.048 0.095  Type: MS 0.048 0.048 0.095  Type: MS 0.048 0.048 0.048 0.048 0.048 0.048 0.048 0.048	3 71 0/17/2013 SPK value 0.9515 0.9515 2.854 0.9515 6D 71 0/17/2013 SPK value - 0.9506 0.9506 0.9506	SPK Ref Val  0 0.005473 0 0  Tes F SPK Ref Val 0 0 0 0 0	**REC 93.2 100 107 104 87.7 **Code: EF RunNo: 14 SeqNo: 44 %**REC 91.3 96.8 102	PA Method 4160 06137  LowLimit 67.3 66.8 61.9 65.8 80  PA Method 4160 06138  LowLimit 67.3 66.8 61.9	8021B: Volate Units: mg/k HighLimit 145 144 153 149 120  8021B: Volate Units: mg/k HighLimit 145 144 153	%RPD  tiles  (g  %RPD  2.11  3.66  5.00	RPDLimit 20 20 20	
Client ID: 88', S9E@5' Prep Date: 10/16/2013  Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene  Sample ID 1310766-001AMS Client ID: 88', S9E@5' Prep Date: 10/16/2013 Analyte Benzene Toluene	Batol Analysis D Result 0.89 0.96 1.0 3.0 0.83  SD Sampl Batol Analysis D Result 0.87 0.93	PQL 0.048 0.095  Type: MS h ID: 98*  Date: 10  PQL 0.048 0.095	SPK value 0.9515 0.9515 0.9515 2.854 0.9515 6D 71 0/17/2013 SPK value - 0.9506 0.9506	SPK Ref Val 0 0.005473 0 0 Tes F SPK Ref Val 0 0.005473	tCode: Ele RunNo: 14 %REC 93.2 100 107 104 87.7 tCode: Ele RunNo: 14 %REC 91.3 96.8	PA Method 4160 06137 LowLimit 67.3 66.8 61.9 65.8 80 PA Method 4160 06138 LowLimit 67.3 66.8	8021B: Volati Units: mg/K HighLimit 145 144 153 149 120  8021B: Volati Units: mg/K HighLimit 145 144	%RPD  ### ST	RPDLimit 20 20	

#### Qualifiers:

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

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### 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 Numbe	r: <b>13107</b>	66		RcptN	lo: 1
	4	1 1					
Received by/dat		10/110/13	`				
Logged By:	Ashley Gallegos	10/16/2013 10:00:00	AM		AZ		
Completed By:	Ashley Gallegos	10/16/2013 10:58:20	AM		AZ		
Reviewed By:	Ma	10/16/13			V		
Chain of Cus	, , , ,	( , ,					
1. Custody sea	als intact on sample bottles?		Yes	i .	No :	Not Present	•
2. Is Chain of 0	Custody complete?		Yes	<b>V</b>	No :	Not Present	
3. How was the	e sample delivered?		Couri	<u>er</u>			
Log In							
	empt made to cool the sample	s?	Yes	<b>~</b>	No	NA	
5. Were all sar	mples received at a temperatu	re of >0° C to 6.0°C	Yes	<b>~</b>	No	NA	
6. Sample(s) i	n proper container(s)?		Yes	<b>v</b>	No <sup>1</sup>		
7. Sufficient sa	ample volume for indicated tes	t(s)?	Yes	<b>√</b> i	No :		
8. Are samples	(except VOA and ONG) prop	erly preserved?	Yes	✓	No		
9. Was presen	vative added to bottles?		Yes		No 🗸	NA	
10 VOA vials h	ave zero headspace?		Yes		No	No VOA Vials V	,
	ample containers received bro	kan?	Yes		No i <b>∨</b> :	NO VOX VIDIO	
. vvcic ally s	ample containers received bro	Relif	165		NO	# of preserved	
12. Does papen	work match bottle labels?		Yes	<b>V</b>	No	bottles checked for pH:	
	pancies on chain of custody)			•	:	(<	2 or >12 unless noted)
13. Are matrices	s correctly identified on Chain	of Custody?	Yes	<b>✓</b>	No	Adjusted?	
14. Is it clear wh	nat analyses were requested?		Yes	✓	No		
	ding times able to be met? customer for authorization.)		Yes	.✔	No	Checked by	<i>t</i> :
<u>Special Hano</u>	lling (if applicable)						
16. Was client n	notified of all discrepancies with	n this order?	Yes	i	No :	NA ¥	•
Person	n Notified:	Date:		NA WARRANTA MARKATA	CANADATA ANTARANA MARANA MARANA		
By Wh	nom:	Via:	eMa	i	Phone Fax	In Person	
Regar	ding:			*****	THE TAXABLE PARTY OF THE PARTY	A STATE OF THE STA	<b>,</b>
Client	Instructions:						•
17. Additional r	emarks:	•					
18. Cooler Info	ormation						
Cooler N		Seal Intact   Seal No	Seal Da	te	Signed By		
1		es					

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Client:	BLAG	iG ENGR.	/ BP AMERICA	Standard Project Name	Rush _	72 HR.	-				AN		.Y:	SI	S L	A.	BO	R	AT(		
Mailing Ad	ddress:	P.O. BO	X 87		GCU # 51	12		49	01 F	ławi								'' 37 <b>10</b> !	9		
		BLOOM	FIELD, NM 87413	Project #:			1					 3975		-	505						
Phone #:		(505) 63	32-1199	7			ئىرىد							ysis	Ré	{ues	șt.	* 1	1,500		
email or F	ax#:			Project Manag	ger:				n	F											T
QA/QC Pad	=		Level 4 (Full Validation)		NELSON V	ELEZ	WIB'5-(8021B)	only)	1			(S)	i i	02,50	PCB's			er - 300.1)			a l
Accreditat	ion:			Sampler:	NELSON V	ELEZ MY	骨	(Gas		1	7	8270SIMS)		02	3082			/ wat		1	sample
□ NELAP	)	□ Other		On lee	<b>∕</b> £Yes:	□ No	<b>1</b>	표	2	418.	52	3270		18	18/2		(A)	00.0			e Sa
□ EDD (1	уре)	<del></del> _		Sample Temp	erature:		1	+ #	(GRC	g	g	ğ	etak	S,	cide	র	-i-V	- ji	.	흥	osit
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALNO 13/07/20	BTEX +*NATE	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or	RCRA 8 Metals	Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 / water		Grab sample	5 pt. composite
10/14/13	1330	SOIL	88', S9E @ 5'	4 oz 1	Cool	-001	V		٧									٧		٧	
10/14/13	1340	SOIL	101', S7W @ 5'	4 oz 1	Cool	-002	V		٧									٧		٧	
							<u>L</u>												[		
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Date: /	Time:	Relinquishe	ed by:	Received by:	1	Date Time	Ren	nark	Լ s:				L		<u> </u>		lJ				
2/15/13 Date:	1457 Time:	Relinguishe	and hu	Mustu Received by:	Wolfe	(0)/5//3 /457 Date Time	Se	nd ir	voic	e to	Bla	igg Ei		eerin	ıg, In	c.					
1/15/13	1800	Shr	ntale) aller		< 10/11g	d13 100C					Blo	o. Bo: omfi	ield,								
	If necess	ary, samples s	ubmitted to Hall Environmental may be s	ubcontracted to other	accredited laboratorie	es. This serves as notice of	this p	ossibil	itv. Ar	dua vr	-contr	acted (	data u	rill he	ole ortu	natate	^d ~~ ·		a 1. at 1		

Lab Order 1310A19

Date Reported: 10/24/2013

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Blagg Engineering

Client Sample ID: 25', S33.5W @ 3'

Project: GCU #512 Collection Date: 10/18/2013 9:00:00 AM

Lab ID: 1310A19-001

Received Date: 10/22/2013 10:00:00 AM Matrix: SOIL

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analyst	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/23/2013 2:56:06 PM	9947
Surr: DNOP	98.7	66-131	%REC	1	10/23/2013 2:56:06 PM	9947
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/23/2013 4:31:05 PM	9958
Surr: BFB	89.3	74.5-129	%REC	1	10/23/2013 4:31:05 PM	9958
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.048	mg/Kg	1	10/23/2013 4:31:05 PM	9958
Toluene	ND	0.048	mg/Kg	1	10/23/2013 4:31:05 PM	9958
Ethylbenzene	ND	0.048	mg/Kg	1	10/23/2013 4:31:05 PM	9958
Xylenes, Total	ND	0.096	mg/Kg	1	10/23/2013 4:31:05 PM	9958
Surr: 4-Bromofluorobenzene	106	80-120	%REC	1	10/23/2013 4:31:05 PM	9958

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit
- Page 1 of 6 Sample pH greater than 2 for VOA and TOC only P
- Reporting Detection Limit

# Analytical Report Lab Order 1310A19

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/24/2013

CLIENT: Blagg Engineering

Client Sample ID: 65', S24W @ 5'

Project: GCU #512

**Collection Date:** 10/18/2013 9:10:00 AM

**Lab ID:** 1310A19-002

Matrix: SOIL Received Date: 10/22/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analyst	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/23/2013 3:18:04 PM	9947
Surr: DNOP	101	66-131	%REC	1	10/23/2013 3:18:04 PM	9947
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/23/2013 5:56:41 PM	9958
Surr: BFB	89.3	74.5-129	%REC	1	10/23/2013 5:56:41 PM	9958
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.048	mg/Kg	1	10/23/2013 5:56:41 PM	9958
Toluene	ND	0.048	mg/Kg	1	10/23/2013 5:56:41 PM	9958
Ethylbenzene	ND	0.048	mg/Kg	1	10/23/2013 5:56:41 PM	9958
Xylenes, Total	ND	0.097	mg/Kg	1	10/23/2013 5:56:41 PM	9958
Surr: 4-Bromofluorobenzene	106	80-120	%REC	1	10/23/2013 5:56:41 PM	9958

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

#### Qualifiers:

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

Page 2 of 6

- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

### Lab Order 1310A19

Date Reported: 10/24/2013

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client

**Project:** GCU #512

Lab ID: 1310A19-003

Matrix: SOIL

Client Sample ID: 96', S25W @ 6'

**Collection Date:** 10/18/2013 9:30:00 AM

Received Date: 10/22/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS	•			Analyst	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/23/2013 3:40:09 PM	9947
Surr: DNOP	98.2	66-131	%REC	1	10/23/2013 3:40:09 PM	9947
EPA METHOD 8015D: GASOLINE RAN	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/23/2013 7:22:31 PM	9958
Surr: BFB	92.1	74.5-129	%REC	1	10/23/2013 7:22:31 PM	9958
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.048	mg/Kg	1	10/23/2013 7:22:31 PM	9958
Toluene	ND	0.048	mg/Kg	1	10/23/2013 7:22:31 PM	9958
Ethylbenzene	ND	0.048	mg/Kg	1	10/23/2013 7:22:31 PM	9958
Xylenes, Total	ND	0.096	mg/Kg	1	10/23/2013 7:22:31 PM	9958
Surr: 4-Bromofluorobenzene	111	80-120	%REC	1	10/23/2013 7:22:31 PM	9958

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

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
  - Page 3 of 6
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1310A19

24-Oct-13

Client:

Blagg Engineering

Project:

GCU #512

Sample ID MB-9947	Samp	Type: ME	BLK	Tes	tCode: El	PA Method	8015D: Dies	el Range (	Organics	
Client ID: PBS	Batc	h ID: 99	47	F	RunNo: 1	4241				
Prep Date: 10/22/2013	Analysis [	Date: 10	0/22/2013	5	SeqNo: 4	08483	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10				<u>-</u>				
Surr: DNOP	9.5		10.00		95.2	66	131			
Sample ID LCS-9947	Samp	Type: LC	s	Tes	tCode: El	PA Method	8015D: Dies	el Range (	Organics	
Client ID: LCSS	Batc	h ID: 99	47	F	RunNo: 1	4241				
Prep Date: 10/22/2013	Analysis [	Date: 10	)/22/2013	. 8	SeqNo: 4	08493	Units: mg/F	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit_	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.2	77.1	128			
Surr: DNOP	4.5		5.000		89.6	66	131			

#### Qualifiers:

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

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## Hall Environmental Analysis Laboratory, Inc.

WO#: 1310A19

24-Oct-13

Client:

Blagg Engineering

Project:	GCU #51	2									
Sample ID	MB-9958	SampT	уре: <b>М</b> Е	BLK	Tes	tCode: E	PA Method	8015D: Gas	oline Rang	e	
Client ID:	PBS	Batch	ID: <b>99</b>	58	F	RunNo: 1	4299				
Prep Date:	10/22/2013	Analysis D	ate: 10	0/24/2013	S	SeqNo: 4	10310	Units: mg/l	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0								
Surr: BFB	<u></u>	960		1000		95.6	74.5	129			
Sample ID	LCS-9958	SampT	ype: LC	:s	Tes	tCode: E	PA Method	8015D: Gas	oline Rang	e	
Client ID:	LCSS	Batch	ID: 99	58	F	lunNo: 1	4299				
Prep Date:	10/22/2013	Analysis D	ate: 10	0/24/2013	S	SeqNo: 4	10312	Units: mg/l	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	25	5.0	25.00	0	98.8	74.5	126			
Surr: BFB		1000		1000		103	74.5	129			
Sample ID	1310A19-001AMS	SampT	уре: <b>М</b> .	3	Tes	Code: El	PA Method	8015D: Gas	oline Rang	e	
Client ID:	25', S33.5W @ 3'	Batch	ID: 99	58	F	tunNo: 1	4299				
Prep Date:	10/22/2013	Analysis D	ate: 10	0/23/2013	S	eqNo: 4	10314	Units: mg/h	<b>(</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	26	4.8	24.13	0	107	76	156			
Surr: BFB		950		965.3		98.6	74.5	129			
Sample ID	1310A19-001AMSI	<b>)</b> SampT	ype: <b>MS</b>	SD	Test	:Code: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	25', S33.5W @ 3'	Batch	ID: 99	58	R	unNo: 1	4299				
Prep Date:	10/22/2013	Analysis D	ate: 10	)/23/2013	S	eqNo: 4	10315	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e Organics (GRO)	22	4.8	24.15	0	92.6	76	156	13.9	17.7	Ł
Surr: BFB		930		966.2		96.4	74.5	129	0	0	

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range Е

Analyte detected below quantitation limits J

RSD is greater than RSDlimit О

R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded Η

Not Detected at the Reporting Limit ND

Sample pH greater than 2 for VOA and TOC only. P

Reporting Detection Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#:

1310A19

24-Oct-13

Client:

Blagg Engineering

Project:

GCU #512

Sample ID MB-9958	SampT	уре: <b>М</b> Е	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch	n ID: 99	58	F	RunNo: 1	4299				
Prep Date: 10/22/2013	Analysis D	)ate: 10	0/24/2013	S	SeqNo: 4	10362	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		115	80	120			

Sample ID LCS-9958	Sampl	Гуре: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batcl	h ID: 99	58	F						
Prep Date: 10/22/2013	Analysis [	Date: 10	0/24/2013	SeqNo: 410363 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	94.6	80	120			
Toluene	0.97	0.050	1.000	0	97.4	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.9	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		121	80	120			S

Sample ID 1310A19-002AMS	Sampī	SampType: MS TestCode: EPA Method 8021B: Volatiles								
Client ID: 65', S24W @ 5'	Batcl	n ID: 99	58	F	RunNo: 1					
Prep Date: 10/22/2013	Analysis Date: 10/23/2013 SeqNo: 410368 Units: mg/Kg									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.049	0.9737	0	94.7	67.3	145			
Toluene	0.98	0.049	0.9737	0.008574	99.9	66.8	144			
Ethylbenzene	1.0	0.049	0.9737	0	104	61.9	153			
Xylenes, Total	3.1	0.097	2.921	0.01188	105	65.8	149			
Surr: 4-Bromofluorobenzene	1.1		0.9737		114	80	120			

Sample ID 1310A19-002AMS	SD SampType	e: MSD		Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: 65', S24W @ 5'	Batch ID	9958		F	RunNo: 1	4299				
Prep Date: 10/22/2013	Analysis Date	: 10/23	2013	8	SeqNo: 4	10369	Units: mg/K	(g		
Analyte	Result F	QL SP	K value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96 0	.049	0.9728	0	98.7	67.3	145	4.06	20	
Toluene	1.0 0	.049	0.9728	0.008574	104	66.8	144	3.81	20	
Ethylbenzene	1.1 0	.049	0.9728	0	108	61.9	153	3.35	20	
Xylenes, Total	3.2 0	.097	2.918	0.01188	109	65.8	149	3.32	20	
Surr: 4-Bromofluorobenzene	1.1		0.9728		111	80	120	0	0	

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
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- RL Reporting Detection Limit

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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

Work Order Number: 1310A19 RcptNo: 1 Client Name: **BLAGG** Received by/date: Logged By: Michelle Garcia 10/22/2013 10:00:00 AM 10/22/2013 11:17:37 AM Completed By: Michelle Garcia Reviewed By: Chain of Custody Not Present ✓ No 1. Custody seals intact on sample bottles? Yes Not Present Yes ✓ No 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No NΑ 4. Was an attempt made to cool the samples? Yes V NΑ Were all samples received at a temperature of >0° C to 6.0°C No Yes Sample(s) in proper container(s)? No 7. Sufficient sample volume for indicated test(s)? Νo 8. Are samples (except VOA and ONG) properly preserved? Yes V No No 🗸 NA 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? Yes No # 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 . 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? Nο (If no, notify customer for authorization.) Special Handling (if applicable) NA V 16. Was client notified of all discrepancies with this order? Yes No Person Notified: Date: In Person Via: eMail Phone Fax By Whom: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Seal Intact | Seal No | Seal Date Cooler No Temp °C Condition

Chain-of-Custody Record				Turry Tourid Tistic.				HALL ENVIRONMENTAL														
Client: BLAGG ENGR. / BP AMERICA			☐ Standard Project Name	☑ Rush _	72 HR.				#	<b>N</b>	AL	.Y	SI	S I	A	BO	R/	ATC				
Mailing Address: P.O. BOX 87			GCU # 512				www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109															
BLOOMFIELD, NM 87413				Project #:				Tel. 505-345-3975 Fax 505-345-4107														
Phone #: (505) 632-1199							Analysis Request															
email or Fax#:			Project Manag	ger:			6	'nν					7				300.1)					
QA/QC Package:  Standard		Level 4 (Full Validation)		NELSON VELEZ			₹(8021B)	+ TPH (Gas only)	(GARA)			15)		PO4,SC	PCB'			1 ' 1			۵	
Accreditation:			Sampler: NELSON VELEZ 900				Gas	DRO /	1)	(1)	8270SIMS)		02	8082	1		water		7	اَةٍ ا		
□ NELAP □ Other			On ice Yes 🔟 No. 🕆				PH (	1	418.1)	04	270		N,E	2/8		F	0.0			Sal		
□ EDD (Type)			Sample Femperature			F		(GRO		pq 2	ر م	tals	<u>N</u>	ide	2	9	<u>.</u> ۳	,	ا به	Sire		
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALNO. 1310A+19	BTEX + MITB	BTEX + MTBE	трн 8015в (	TPH (Method	EDB (Method 504.1)	PAH (8310 or	RCRA 8 Metals	Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	Chloride (soll - 300.0		윤   등	5 pt. composite sample	
10/18/13	0900	SOIL	25', S33.5W @ 3'	4 oz 1	Cool	-001	V		٧											V	十	
-	·					- 00,	<u>-</u>							<del>                                     </del>	$\vdash$				<del>-   '</del>	+	十	
10/18/13	0910	SOIL	65', S24W @ 5'	4 oz 1	Cool	-002	٧		٧										1	<u>,                                    </u>	+	
																				T	T	
10/18/13	0930	SOIL	96', S25W @ 6'	4 oz 1	Cool	-003	٧		٧										寸,	V	土	
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<u> </u>												-								+	十	
Date: Time: Relinquished by:							Remarks:															
9/21/13 843		* /	This of		Muster Weller 10/2/13 843			Send invoice to :  Blagg Engineering, Inc.														
Date:	Time: Relinquished by:    Nustry   Wells		Received by:   Date Time							P.C	). Bo	x 87 field,										
-1-11-		ary, samples s	ubmitted to Hall Environmental may be s	ubcontracted to other	accredited laboratorie	es. This serves as notice of	this p	ossibil	ity. Ar	ny sub	-contr	acted	data v	vill be	clearly	y notal	ed on	the ana	alytical n	eport.		