OIL CONS. DIV DIST. 3

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

* Attach Additional Sheets If Necessary

State of New Mexico Energy Minerals and Natural Resources

JAN 08 2016

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

× 199	AND THE	16.	Rel	ease Notifi	catio	n and Co	orrective A	ction	1				
						OPERA'	ГOR		☐ Initia	al Report	\boxtimes	Final Report	
Name of C	ompany: B	P				Contact: Jef	f Peace					+ 1	
		Court, Farm		M 87401		Telephone No.: 505-326-9479							
Facility Na	me: Ulaba	rri Gas Com	001A			Facility Type: Natural gas well							
Surface Ov	vner: Fee	T. Maray		Mineral	Owner:	Fee			API No. 3004511632 -				
				LOC	ATIO	N OF RE	LEASE	30-645-2219				198	
Unit Letter	Section	Township	Range	Feet from the		/South Line	Feet from the	East/V	West Line	County: Sa	an Juan		
0	35	30N	9W	915	South		1,630	East			373027725323		
		Lati	itude3				-107.74640						
				NA	FURE	OF REL							
Type of Rele							Release: unknow			tecovered: n		0.1	
tank.	elease: Fault	y piping conn	ection bet	ween the separat	or and	unknown	Iour of Occurrent	e:	17, 2011	Hour of Dis	covery:	October	
Was Immedi	iate Notice (Given?				If YES, To	Whom?						
			Yes ≥	No Not F	Required		34-7-1-		3 7.75				
By Whom?		1 10				Date and F	The state of the s						
Was a Water	rcourse Read		Yes 🗵	No		If YES, Volume Impacting the Watercourse.							
If a Waterco	urse was Im	pacted, Descr	ibe Fully.	*									
groundwater cubic yards to Describe Arc treatment. To and removed Results of the	around 7.5 that were researched Affected The area of each from the side laboratory	feet suggested moved and tra and Cleanup A xcavation ext te. Laborator analysis of th	d high pote insported of Action Takended app y results a	ential of groundwoff site for treatment.* Approximator for attached. Gro	vater imp ent. Gro tely 3,10 square f undwater	acts. An exter oundwater more 00 cubic yards feet with depth r impacts were	ing the installationsive excavation nitoring wells we of soil was excavate reaching 13 feet as suspected. Mor impacts to ground	of impa re instal vated and et. The onitoring	cted soils re led to deter d removed extents of in wells were	emoved appr mine impact from the site mpacted soil installed, pu	for off s were or	Site determined d sampled.	
regulations a public health should their or the enviro	ify that the all operators or the envi operations homent. In a	information g are required t ronment. The	o report and acceptant adequately OCD accep	nd/or file certain ce of a C-141 rep investigate and	release n ort by the remediat	otifications as e NMOCD m e contaminati	knowledge and und perform correct arked as "Final R on that pose a three the operator of	ctive acti eport" d eat to gr	ions for rele oes not reli ound water	eases which eve the oper , surface wa	may end ator of ter, hun	danger liability nan health	
Signature:	Olas	Men					OIL CON		1	DIVISIO	N		
Printed Nam	e: Steve Mo	skal				Approved by	Environmental S	pecialist		nose	7		
Title: Field I	Environmen	al Coordinate	or			Approval Dat	e: 03/16/2	016	Expiration I				
E-mail Addr	ess: steven.i	moskal@bp.co	om			Conditions of	Approval:			Attached			
Date: Januar	ry 7, 2015		Phone:	505-326-9497								gladi)	

NUF 1604749779

1

BP AMERICA PRODUCTION CO.

REMEDIATION REPORT

ULIBARRI GC 001A API #: 300-45-22198 (O) SECTION 35, T30N, R9W, NMPM SAN JUAN COUNTY, NEW MEXICO

PREPARED FOR:
NEW MEXICO OIL CONSERVATION DIVISION
1220 ST. FRANCIS DRIVE
SANTA FE, NEW MEXICO 87504

JANUARY 2016

PREPARED BY: BLAGG ENGINEERING, INC.

Consulting Petroleum / Reclamation Services P.O. Box 87 Bloomfield, New Mexico 87413

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BP AMERICA PRODUCTION COMPANY

REMEDIATION OF SUBSURFACE PIPING RELEASE ULIBARRI GC # 1A

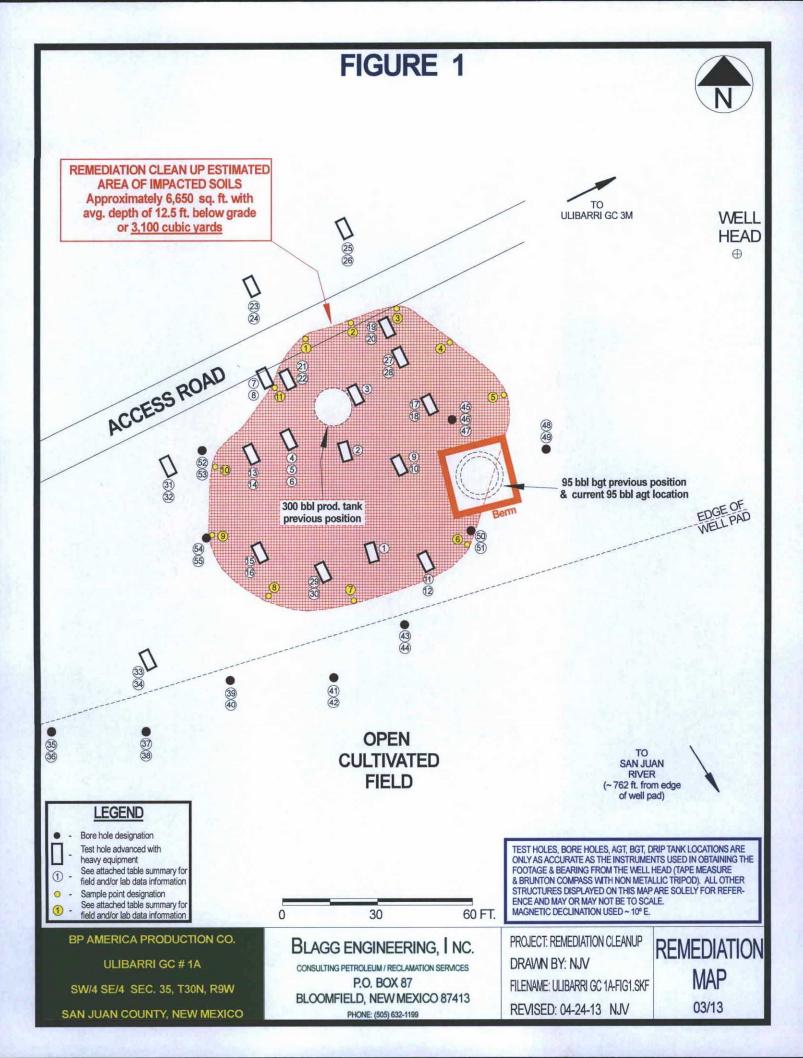
API #: 300-45-22198

Legal Description: (Unit Letter 0, Sec. 35, T30N, R9W, NMPM)

CHRONOLOGICAL EVENT SUMMATION

- 1. October 17, 2011 (Monday): During pipe refitting at the site after closing a 95 barrel below-grade tank (bgt), discolored soil was observed adjacent to the 300 barrel (bbl) production tank (p.t.). There was no evidence of a loss of integrity from the p.t. The release mostly likely originated from a loose piping threaded connection leading to the separator unit from the p.t. (see Field Report page 1 of 2). Three (3) test holes were advanced during the initial assessment using a backhoe to approximately seven (7) feet (ft.) below grade (b.g.). Field screening and lab analyses from two (2) of the three (3) test holes (lab reports attached) confirmed the impact to soils. Depth to groundwater was estimated at seven and a half (7½) to eight (8) ft. b.g.
- 2. June 25, 2012 (Monday): Secondary investigation was conducted around 300 bbl p.t. using a backhoe (see Field Report page 2 of 2). A total of eight (8) test holes were advanced to a maximum depth of seven and a half (7½) ft. b.g. Samples from the total depth of each test holes were field screened, and submitted to an accredited laboratory to be analyzed for Total Petroleum Hydrocarbons (TPH) per US EPA Method 8015B, chlorides per US EPA Method 300.0, benzene, toluene, ethylbenzene, and total xylenes (BTEX) per US EPA Method 8021B.
- January 25, 2013 (Friday): Subsequent investigation to further delineate lateral and vertical impacts was conducted using an extendahoe. A total of seven (7) test holes were advanced to a maximum depth of thirteen (13) ft. b.g. Samples collected from each test hole were field screened only.
- 4. February 6th & 7th, 2013 (Wednesday & Thursday): Subsequent investigation to continue to delineate lateral and vertical of impacts was conducted using a geoprobe. A total of thirteen (13) borings were advanced to a maximum depth of thirteen (13) ft. b.g. Samples collected from each boring were field screened only (<u>Field and Lab Data Summary Sheets attached</u>, see also corresponding Figure 2 for sample locations).
- 5. February 2013: BP commenced excavation of impacted soils.
- 6. February 27, 2013 (Wednesday): A three (3) point composite sample (3pcs) of the northern extent of the excavation was collected and submitted to a laboratory for TPH, BTEX, and chloride analyzes. The lab results recorded all constituents to be not detected (ND) at the reporting limits. The three (3) individual grab samples were field screened prior to combining for the 3pcs.
- 7. March 5th & 7th, 2013 (Tuesday & Thursday): Eight (8) grab samples from the completed excavation were collected, field screened, and submitted to a laboratory for TPH, BTEX, and chloride analyzes. The lab results recorded all constituents to be ND at the reporting limits. Approximately 3,100 cubic yards of soil was excavated and transported to BP's Crouch Mesa Facility (<u>Field and Lab Data Summary Sheets attached</u>, see also corresponding Figure 3 for sample locations).

- 8. March 22nd & 25th, 2013 (Friday & Monday): Blagg Engineering, Inc. (BEI) was contacted to provide technical support for the installation of a groundwater monitor wells for both sites on the well pad (Ulibarri GC #1A & #2). Boring logs and well completion data are attached (see also corresponding Figure 4 for well locations).
- 9. March 27, 2013 (Wednesday): BEI conducted survey of the monitor well casing tops.
- 10. April 11, 2013 (Thursday): BEI conducted development/purging of the three (3) monitor wells addressing the remedial effort at the site. The goal was to eliminate sediment accumulation during the installation process and to observe recovery patterns during high and low purging levels. All purged groundwater was disposed into the on-site low profile above-grade tank.
- 11. April 29, 2013 (Monday): BEI conducted environmental sampling of the three (3) on-site monitor wells (Field Sampling Data Sheet attached).
- 12. May 16, 2013 (Thursday): BEI & BP received final lab reports for samples collected on 04/29/2013. The lab results recorded all BTEX constituents to be ND at the reporting limits or well below the New Mexico Water Quality Control Commission's groundwater closure standards (Field and Lab Data Summary Sheet attached).



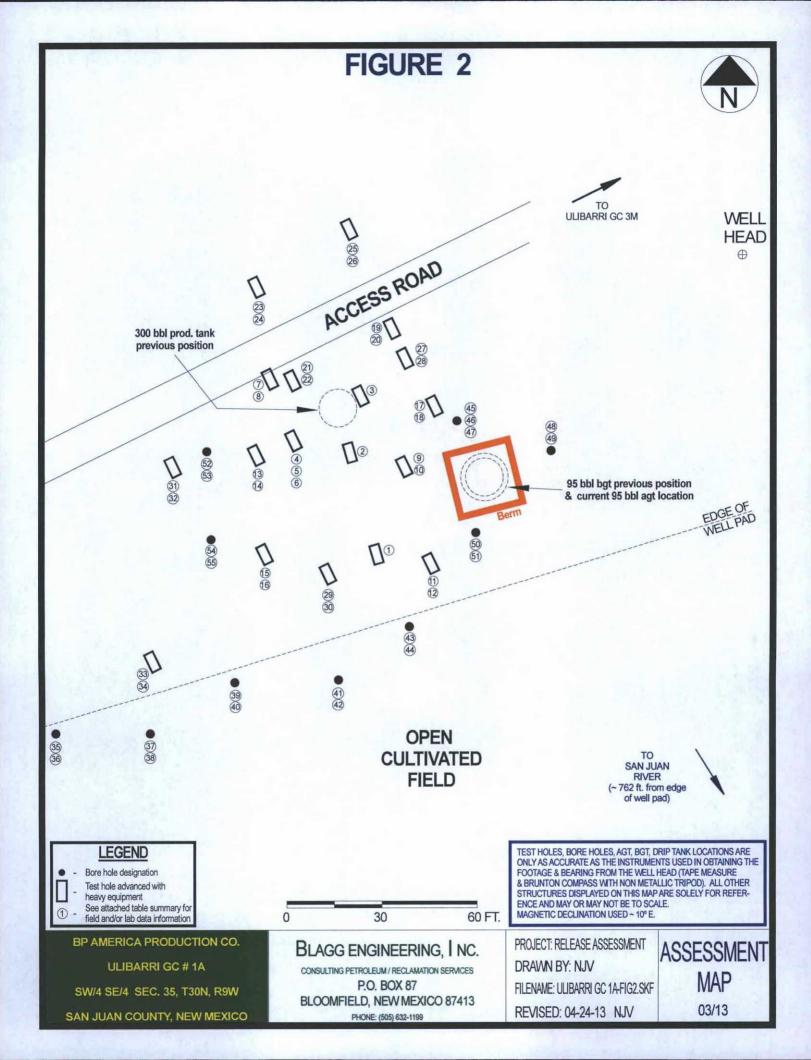
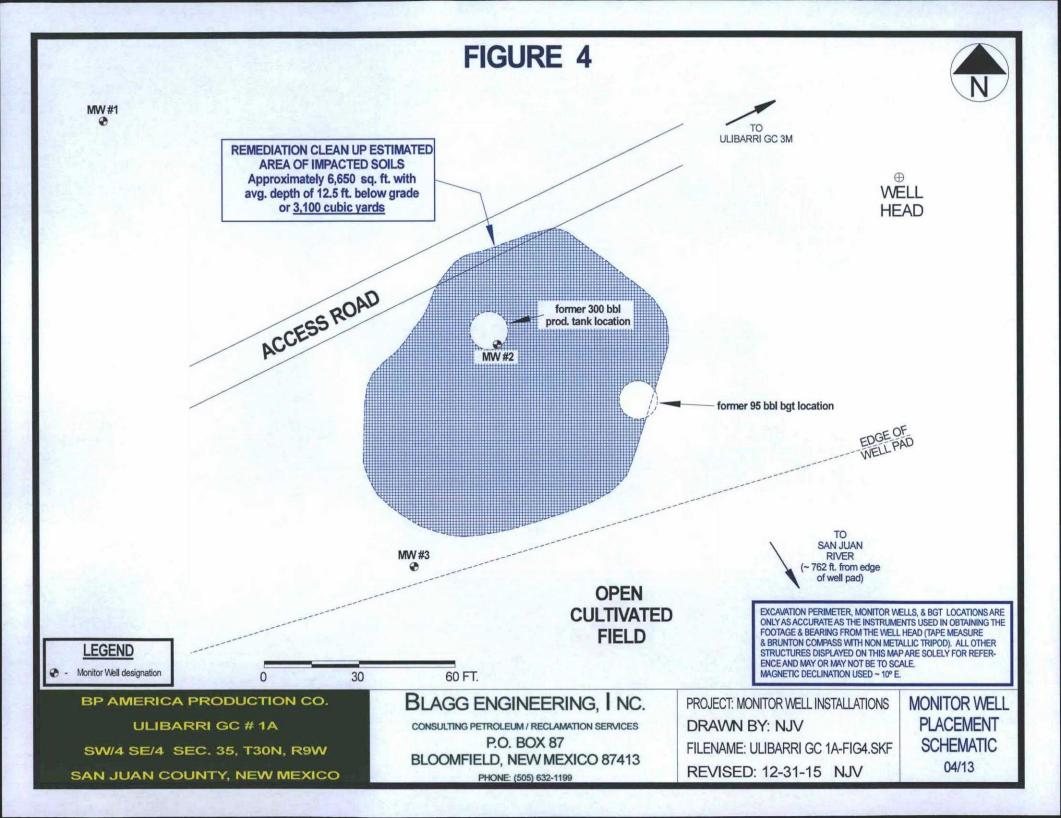


FIGURE 3 REMEDIATION CLEAN UP ESTIMATED AREA OF IMPACTED SOILS Approximately 6,650 sq. ft. with TO avg. depth of 12.5 ft. below grade **ULIBARRI GC 3M** WELL or 3,100 cubic yards HEAD 0 ACCESS ROAD 300 bbl prod. tank previous position 95 bbl bgt previous position & current 95 bbl agt location EDGE OF WELL PAD **OPEN** TO **CULTIVATED** SAN JUAN RIVER **FIELD** (~762 ft. from edge of well pad) TEST HOLES, BORE HOLES, AGT, BGT, DRIP TANK LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (TAPE MEASURE **LEGEND** & BRUNTON COMPASS WITH NON METALLIC TRIPOD). ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFER-Sample point designation ENCE AND MAY OR MAY NOT BE TO SCALE. See attached table summary for MAGNETIC DECLINATION USED ~ 10° E. 60 FT. 30 field and/or lab data information BP AMERICA PRODUCTION CO. **EXCAVATION** PROJECT: REMEDIATION CLEAN UP BLAGG ENGINEERING, I NC. DRAWN BY: NJV **ULIBARRI GC #1A** CONSULTING PETROLEUM / RECLAMATION SERVICES MAP P.O. BOX 87 FILENAME: ULIBARRI GC 1A-FIG3.SKF SW/4 SE/4 SEC. 35, T30N, R9W **BLOOMFIELD, NEW MEXICO 87413** 03/13 REVISED: 04-24-13 NJV SAN JUAN COUNTY, NEW MEXICO PHONE: (505) 632-1199



BP AMERICA PRODUCTION COMPANY

ULIBARRI GC #1A

Unit Letter O, Section 35, T30N, R9W - API Number: 30-045-22198

Historical Release Assessment Data (Figure 2)

MAP DESIGNATION	SAMPLE ID	DEPTH	DATE	TIME	OVM (ppm)	TPH (ppm)	Benzene (ppm)	Total BTEX (ppm)	Chloride (ppm)
1	TH #1	7'	10/17/11	0950	0.0	ND	NA	NA	NA
2	TH #2	7'	10/17/11	1000	516	1,530	NA	NA	NA
3	TH #3	4'	10/17/11	1005	745	6,700	NA	NA	NA
4	TH #4	4.5'	06/25/12	1007	2.6	NA	NA	NA	NA
5	TH #4	7'	06/25/12	1010	531	NA	NA	NA	NA
6	TH #4	8'	06/25/12	1011	1,902	216	ND	6.92	ND
7	TH #5	5'	06/25/12	1025	1.6	NA	NA	NA	NA
8	TH #5	7.5'	06/25/12	1029	13	ND	ND	ND	ND
9	TH #6	4.5'	06/25/12	1059	4.2	NA	NA	NA	NA
10	TH #6	7.5'	06/25/12	1102	953	3,810	18	301	ND
11	TH #7	5'	06/25/12	1111	0.0	NA	NA	NA	NA
12	TH #7	7.5'	06/25/12	1114	0.0	ND	ND	ND	ND
13	TH #8	5'	06/25/12	1128	0.0	NA	NA	NA	NA
14	TH #8	7.5'	06/25/12	1132	0.0	ND	ND	ND	ND
15	TH #9	5.5'	06/25/12	1140	0.0	NA	NA	NA	NA
16	TH #9	7.5'	06/25/12	1143	0.0	ND	ND	ND	ND
17	TH #10	4.5'	06/25/12	1335	0.0	NA	NA	NA	NA
18	TH #10	7.5'	06/25/12	1340	44	22	ND	3.09	ND
19	TH #11	5'	06/25/12	1350	0.0	NA	NA	NA	NA
20	TH #11	7.5'	06/25/12	1355	0.0	ND	ND	ND	ND
21	TH 147', S74.5W	8'	01/25/13	1050	6.4	NA	NA	NA	NA
22	TH 147', S74.5W	10'	01/25/13	1058	249	NA	NA	NA	NA
23	TH 154', S86W	8.5'	01/25/13	1126	1.5	NA	NA	NA	NA
24	TH 154', S86W	10'	01/25/13	1130	1.5	NA	NA	NA	NA
25	TH 124.5', N86W	8'	01/25/13	1205	0.0	NA	NA	NA	NA
26	TH 124.5', N86W	10'	01/25/13	1210	0.9	NA	NA	NA	NA
27	TH 111.3', S73W	8'	01/25/13	1304	6.4	NA	NA	NA	NA
28	TH 111.3', S73W	10'	01/25/13	1309	376	NA	NA	NA	NA
29	TH 164.7', S52.5W	8'	01/25/13	1318	16.0	NA	NA	NA	NA
30	TH 164.7', S52.5W	10'	01/25/13	1324	402	NA	NA	NA	NA
31	TH 192', S69.5W	8'	01/25/13	1333	0.0	NA	NA	NA	NA
32	TH 192', S69.5W	10'	01/25/13	1338	0.0	NA	NA	NA	NA
33	TH 226', S55.5W	8'	01/25/13	1348	0.0	NA	NA	NA	NA
34	TH 226', S55.5W	10'	01/25/13	1357	0.8	NA	NA	NA	NA

MAP DESIGNATION	SAMPLE ID	DEPTH	DATE	TIME	OVM (ppm)	TPH (ppm)	Benzene (ppm)	Total BTEX (ppm)	Chloride (ppm)
35	BH-9	10'	02/06/13	1303	0.4	NA	NA	NA I	NA
36	BH-9	12'-13'	02/06/13	1306	0.4	NA	NA	NA	NA
37	BH-10	10'	02/06/13	1328	1.2	NA	NA	NA	NA
38	BH-10	12'-13'	02/06/13	1330	0.0	NA	NA	NA	NA
39	BH-11	10'	02/06/13	1357	0.0	NA	NA	NA	NA
40	BH-11	13'	02/06/13	1359	0.0	NA	NA	NA	NA
41	BH-12	10'	02/06/13	1424	5.7	NA	NA	NA	NA
42	BH-12	12'-13'	02/06/13	1427	4.8	NA	NA	NA	NA
43	BH-13	10'	02/06/13	1525	0.0	NA	NA	NA	NA
44	BH-13	12'-13'	02/06/13	1528	2.0	NA	NA	NA	NA
45	BH-14	7'	02/07/13	1115	0.9	NA	NA	NA	NA
46	BH-14	10'	02/07/13	1149	392	NA	NA	NA	NA
47	BH-14	12'-13'	02/07/13	1153	356	NA	NA	NA	NA
48	BH-15	10'	02/07/13	1240	3.8	NA	NA	NA	NA
49	BH-15	12'-13'	02/07/13	1244	3.5	NA	NA	NA	NA
50	BH-16	10'	02/07/13	1345	16.0	NA	NA	NA	NA
51	BH-16	12'-13'	02/07/13	1351	7.0	NA	NA	NA	NA
52	BH-17	10'	02/07/13	1445	0.0	NA	NA	NA	NA
53	BH-17	12'-13'	02/07/13	1447	0.0	NA	NA	NA	NA
54	BH-18	10'	02/07/13	1512	0.0	NA	NA	NA	NA
55	BH-18	12'-13'	02/07/13	1514	0.0	NA	NA	NA	NA
	NMOCE	RELEASE CLOS	SURE STANDAR	DS (soils) -	100	100	10	50	NA

Notes:

DEPTH - Footage beneath current ground surface grade.

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.

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

ND - Not detected at Reporting Limit.

NA - Not applicable or available

NMOCD - New Mexico Oil Conservation Division.

BP AMERICA PRODUCTION COMPANY

ULIBARRI GC #1A

Unit Letter O, Section 35, T30N, R9W - API Number: 30-045-22198

Historical Release Cleanup Data (Figure 3)

MAP DESIGNATION	SAMPLE ID	DEPTH	DATE	TIME	OVM (ppm)	TPH (ppm)	Benzene (ppm)	Total BTEX (ppm)	Chloride (ppm)
1	139', S79W	11'-13'	02/27/13	0945	NA	NA	NA	l NA	NA
2	124', S80W	11'-13'	02/27/13	0947	NA	NA	NA	NA	NA
3	109', S81W	11'-13'	02/27/13	0949	NA	NA	NA	NA	NA
4	95', S73W	11'-12'	03/05/13	0915	1.2	ND	ND	ND	ND
5	86', S59W	11'-12'	03/05/13	0925	1.6	ND	ND	ND	ND
6	125', S43W	11'-12'	03/05/13	0935	10.5	ND	ND	ND	ND
7	163', S48W	10'-12'	03/07/13	0918	0.0	ND	ND	ND	ND
8	183', S54W	10'-12'	03/07/13	0926	1.3	ND	ND	ND	ND
9	188', S62W	10'-12'	03/07/13	0932	1.7	ND	ND	ND	ND
10	178', S68W	10'-12'	03/07/13	0939	0.9	ND	ND	ND	ND
11	152', S74W	10'-12'	03/07/13	0953	1.3	ND	ND	ND	ND
-	Northern Extent 3-pt. comp	11'	02/27/13	0949	NA	ND	ND	ND	ND
	NMOCD RE	EASE CLOS	SURE STANDAR	DS (soils) -	100	100	10	50	NA

Notes:

DEPTH - Footage beneath current ground surface grade.

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.

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

ND - Not detected at Reporting Limit.

NA - Not applicable or available

NMOCD - New Mexico Oil Conservation Division.

Northern Extent 3-pt. comp - 3 point composite sample from Map Designations 1, 2, & 3 grab samples.

BLAGG ENGINEERING, INC.

P.O. BOX 87 **BLOOMFIELD, NM 87413** (505) 632-1199

MW#2

BORE / TEST HOLE REPORT

CLIENT: LOCATION NAME:

CONTRACTOR: EQUIPMENT USED:

28

29

BORING LOCATION:

BP AMERICA PRODUCTION CO

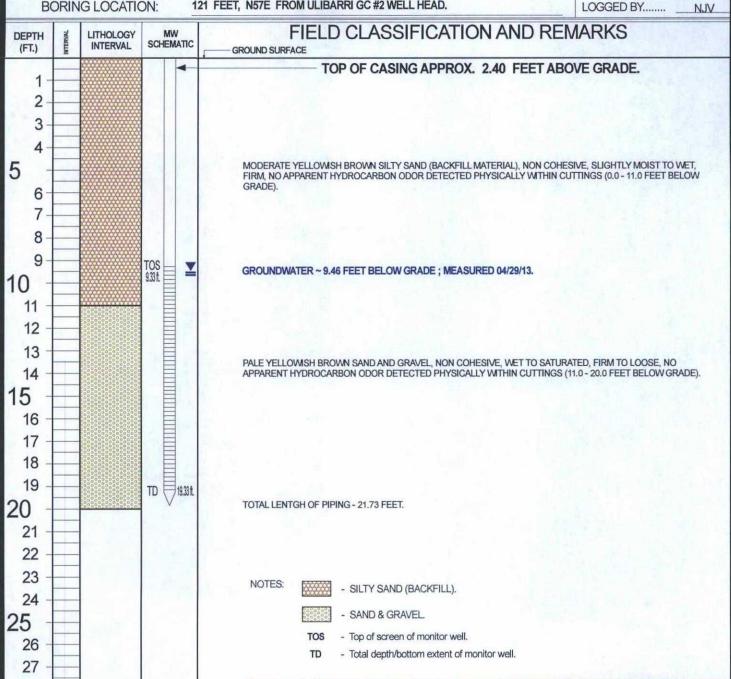
UNIT O, SEC. 35, T30N, R9W ULIBARRI GC # 1A API # 3004522198

BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.

MOBILE DRILL RIG (CME 75) - HOLLOW STEM AUGER

121 FEET, N57E FROM ULIBARRI GC #2 WELL HEAD.

BORING #..... BH - 4 MW#..... PAGE #..... 2 DATE STARTED 03/25/13 DATE FINISHED 03/25/13 OPERATOR..... KP



Monitor well consist of 2 inch PVC piping - casing from 2.40 feet above grade to 9.33 feet below grade, 0.020 slotted screen between 9.33 to 19.33 feet below grade, sand packed annular to 7.0 feet below grade, bentonite grout between 5.0 to 7.0 feet below grade,

DRAWING: ULIBARRI GC 1A & 2 MW-2 2013-03-25,SKF DATE: 12/28/15

cuttings fill the remaining annular to grade. Secured casing top with steel well protector and padlock.

BLAGG ENGINEERING, INC.

P.O. BOX 87 BLOOMFIELD, NM 87413 (505) 632-1199

MW#3

BORE / TEST HOLE REPORT

CLIENT: LOCATION NAME: CONTRACTOR: **EQUIPMENT USED:**

29

BP AMERICA PRODUCTION CO.

ULIBARRI GC # 1A API # 3004522198 UNIT O. SEC. 35, T30N, R9W

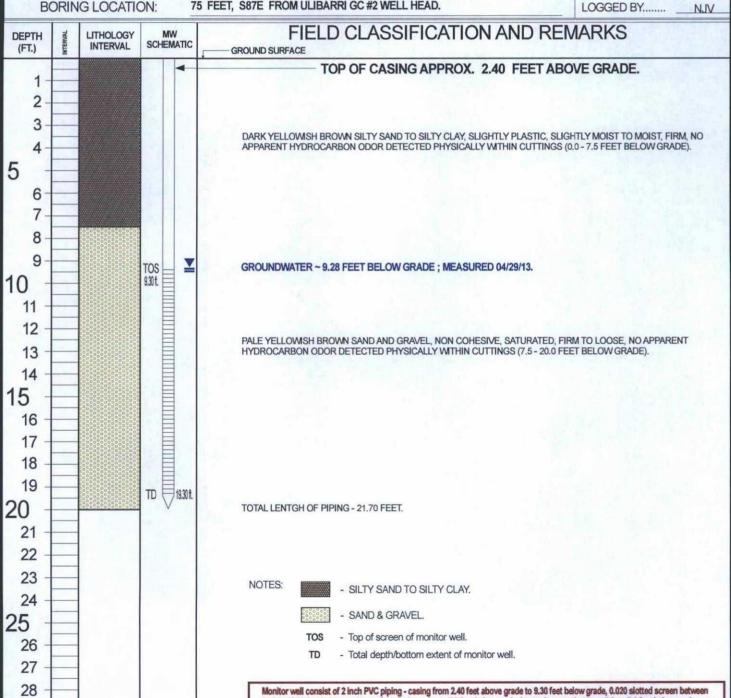
BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.

MOBILE DRILL RIG (CME 75) - HOLLOW STEM AUGER

75 FEET, S87E FROM ULIBARRI GC #2 WELL HEAD.

BORING #..... BH - 2 MW#..... PAGE #..... 3 DATE STARTED 03/22/13 DATE FINISHED 03/22/13 OPERATOR..... KP LOGGED BY..... NJV

DWN BY: NJV



9.30 to 19.30 feet below grade, sand packed annular to 7.0 feet below grade, bentonite grout between 5.0 to 7.0 feet below grade,

DRAWING: ULIBARRI GC 1A & 2 MW-3 2013-03-22.SKF DATE: 12/28/15

cuttings fill the remaining annular to grade. Secured casing top with steel well protector and padlock.

BP AMERICA PRODUCTION COMPANY

Ulibarri GC # 1A

Unit Letter O, Section 35, T30N, R9W - API Number: 30-045-22198

Field & Laboratory Data from Groundwater Monitor Wells

	FIELD PARAMETERS											
SAMPLE ID	SAMPLE DATE	SAMPLE TIME	DEPTH TO WATER (feet)	TOTAL MW LENGTH (feet)	pH	Conductivity (µmhos/cm)	Temperature (°Celcius)	Volume Purged (gallons)				
MW # 1	04/29/13	1100	9.93	20.57	6.81	900	14.1	5.25				
MW # 2	04/29/13	1510	11.86	21.73	7.22	800	13.7	4.75				
MW # 3	04/29/13	1320	11.68	21.70	6.80	1,000	14.0	5.00				
			1 -2 000 000 000 000		40							

NMWQCC STANDARDS - 6 - 9

				LA	BORATORY	PARAMETE	RS			
SAMPLE ID	Fluoride (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate- Nitrite as N (mg/L)	Iron (mg/L)	TDS (mg/L)	Benzene (µg/L)	Toluene (μg/L)	Ethyl - benzene (μg/L)	Total Xylene (μg/L)
MW # 1	0.56	4.6	78	ND	1.8	570	ND	ND	ND	ND
MW # 2	0.51	4.0	59	ND	0.30	550	4.9	1.3	3.4	29
MW#3	0.6	4.6	130	ND	2	690	ND	ND	ND	ND
NMWQCC STANDARDS -	1.6	250	600	10	1.0	1,000	10	750	750	620

Notes:

Depth to water measured from casing top of monitor well.

Groundwater standards are applied to values assigned in blue highlighted boxes or confirmed background levels, which ever is higher.

MW - Monitor well

µmhos/cm - Micromhos per centimeter

TDS - Total dissolved solids

mg/L - Milligram per Liter

μg/L - Microgram per liter

ND - Not detected at Reporting Limit

NMWQCC - New Mexico Water Quality Control Commission

BLAGG ENGINEERING, INC.

P.O. BOX 87 BLOOMFIELD, NM 87413 (505) 632-1199

MW # 1

BORE / TEST HOLE REPORT

CLIENT: LOCATION NAME: CONTRACTOR: EQUIPMENT USED:

BORING LOCATION:

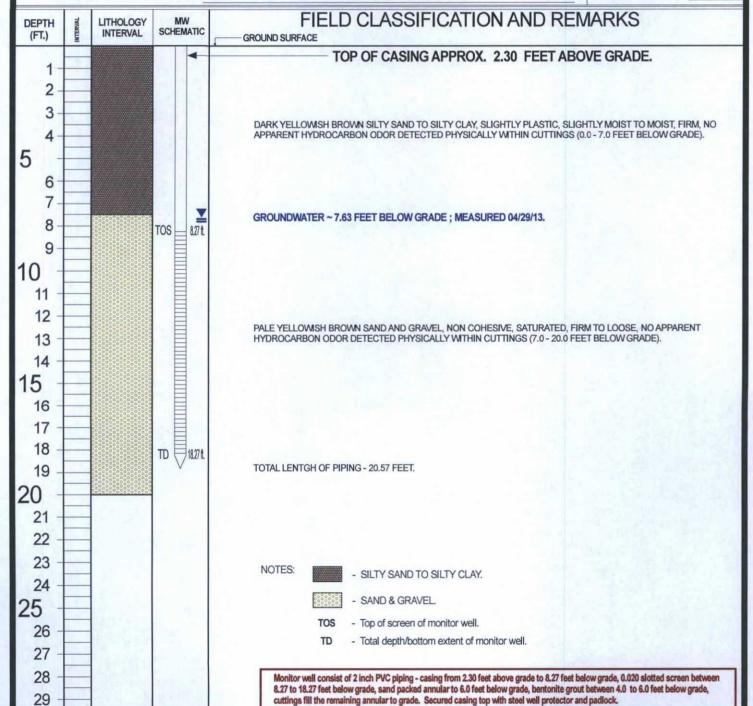
BP AMERICA PRODUCTION CO.

ULIBARRI GC # 1A API # 3004522198 UNIT O, SEC. 35, T30N, R9W

BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.

MOBILE DRILL RIG (CME 75) - HOLLOW STEM AUGER

137.5 FEET, N9W FROM ULIBARRI GC #2 WELL HEAD.



DRAWING: ULIBARRI GC 1A & 2 MW-1 2013-03-22 SKF DATE: 12/27/15

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT: BP AMERICA PROD. CO. N/A CHAIN-OF-CUSTODY #:

Ulibarri GC #1A & #2 LABORATORY (S) USED: HALL ENVIRONMENTAL

UNIT O, SEC. 35, T30N, R9W

NJV Date: April 29, 2013 DEVELOPER / SAMPLER : Filename: Ulibarri GC 1A&2 mw log 04-29-13.xls JCB

PROJECT MANAGER:

WATER TEMP. VOLUME WELL WELL DEPTH TO TOTAL SAMPLING Hq CONDUCT # ELEV. ELEV. WATER DEPTH TIME (umhos) (celcius) PURGED (ft) (ft) (ft) (ft) (gal.) 1 102.32 92.39 9.93 20.57 1100 6.81 900 14.1 5.25 2 102.84 90.98 11.86 21.73 1510 7.22 800 13.7 4.75 3 102.52 90.84 11.68 21.70 1320 6.80 1,000 14.0 5.00 91.25 11.23 10.00 1410 0.05 1,200 14.2 1205 1.000 10.7

> 1,100 4.01/7.00/10.00 2,800 INSTRUMENT CALIBRATIONS = 04/29/13 0700 DATE & TIME =

Volume of water purged from well prior to sampling; V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores). NOTES:

(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00 " well diameter = 0.49 gal. / ft. of water.

Comments or note well diameter if not standard 2".

Excellent recovery in all monitor wells (MWs). All MWs except MW #2 & #3 were brownish tint in appearance. MW #2 & #3 contained light gray tint appearance without an indication of hydrocarbon sheen within purged water. Collected samples for BTEX per US EPA Method 8021B and general chemistry analyses from all MWs. Purged wells using 2 inch submersible electrical pump, new / clear vinyl tubing, and with brass adjustable flow valve attachment added near sampling end of tubing .

Top of casing MW #1 ~ 2.30 ft., MW #2 ~ 2.40 ft., MW #3 ~ 2.40 ft., MW #4 ~ 2.30 ft., MW #5 ~ 2.25 ft., MW #6 ~ 2.20 ft. above grade.

on-site	10:20 AM	temp	64 F
off-site	3:20 PM	temp	82 F
sky cond.		Sunny	
wind speed	0 - 15	direct.	SE - WNW

						T 1930	17-17-1	
CLIENT: BP		GG ENG				API#: 30	04522	198
CLIENT:	P.O. BOX				187413	TANK ID	A	
			632-119			(if applicble):	A	
FIELD REPORT:	(circle one): BGT CONF	IRMATION REL	EASE INVESTIG	ATION 0	THER:	PAGE #:	1 of	2
SITE INFORMATION	SITE NAME: U	JLIBARRI	GC #1A			DATE STARTED:	10/1	7/11
QUAD/UNIT: O SEC: 35 TWP:	30N RNG: 9	W PM:	M CNT	SJ	ST: NM	DATE FINISHED:	4	
1/4 -1/4/FOOTAGE: 910'S / 1,620'	E SW/SE	LEASE TYPE:			FEE INDIAN	ENVIRONMENTAL		
LEASE #: -	PROD. FORMATION:	MV CONTE	RACTOR: BP	KHORN - J. DAV	/IS	SPECIALIST(S):	JC	B
REFERENCE POINT	: WELL HEAD	(W.H.) GPS COO	ORD.:	36.76	329 X 107.746	12 GLEL	.EV.:	5,626'
1) 300 BBL PROD. TANK	GPS COORD.:	36.7	6314 X 107.	74657	DISTANCE	BEARING FROM W.H.:	141', S	75.5W
2)TH#1@7'	GPS COORD.:	36.7	6306 X 107.	74648	DISTANCE	BEARING FROM W.H.:	153', \$	351W
3) TH #2 @ 7'	GPS COORD.:	36.7	6311 X 107.	74649	DISTANCE/	BEARING FROM W.H.:	145', \$	360W
4) TH #3 @ 4'	GPS COORD.:	36.7	6317 X 107.	74653	DISTANCE/	BEARING FROM W.H.:	135', \$	375W
SAMPLING DATA:	CHAIN OF CUSTODY RE	CORD(S) # OR LAI	B USED:	HAL	L			OVM READING
1) SAMPLE ID: TH #1 @ 7'	SAMPLE DATE:	10/17/11	SAMPLE TIME:	0950	LAB ANALYSIS:	8015		(ppm) 0.0
2) SAMPLE ID: TH #2 @ 7'	SAMPLE DATE:	10/17/11	SAMPLE TIME:		LAB ANALYSIS:	8015		516
3) SAMPLE ID: TH #3 @ 4'	SAMPLE DATE:	10/17/11	SAMPLETIME:	1005	LAB ANALYSIS:	8015		6,700
4) SAMPLE ID:	SAMPLE DATE:		SAMPLE TIME:		LAB ANALYSIS:		H. Cvi	
SOIL DESCRIPTION	SOIL TYPE: SA	NID ESII TV SAN	דוופ (דוופ (חו	V CLAV / C	CLAY / GRAVEL / C	THER	1	11/2-1
	YELLOWISH ORANGI			1001170	DENT TOTALETT			
COHESION (ALL OTHERS): NON COHESIVE SLIGHTLY			PLASTICITY (C	LAYS): NON PL	ASTIC / SLIGHTLY PLASTI	C / COHESIVE / MEDIUM PLAS	TIC / HIGHLY PL	ASTIC
CONSISTENCY (NON COHESIVE SOILS): LC			The second secon		Commence of the second	FT / FIRM / STIFF / VEF		
MOISTURE: DRY SLIGHTLY MOIST MOIST W		TURATED				PLANATION - PHYS	ICALLY EV	IDENT
SAMPLE TYPE: GRAB COMPOSITE - # DISCOLORATION/STAINING OBSERVED		ION - DARK GI			DILS ONLY.	G \ & TH #3 START	ING AT 2 F	FTRG
DISCOLOTATION OF TAINING OBSERVED	TEO NO EX EXIA	DAIN O	VALAT III#2	@411.DI	LLOW GIANDL (L	.o.) a III #0 OTAKI	ING AT 2.0	11. D.G.
ANY AREAS DISPLAYING WETNESS: YES NO						4614941.96		
ADDITIONAL COMMENTS: HYDROCAR				FLOWLIN	E PIPING CONN	ECTION NEAR TH#	3. TH #2 A	PPEARS
TO BE IMPACTED AS WELL BASED O	N SAME PHYSICAL CH	IARACTERISTIC	CS AS TH #3.					
SOIL IMPACT DIMENSION ESTIMATION:	ft. X		Χ	ft.		STIMATION (Cubic Y	ards):	
DEPTH TO GROUNDWATER: <50' N	EAREST WATER SOURCE:	<1,000' NE	EAREST SURFAC	CE WATER:	<1,000' NM	OCD TPH CLOSURE ST	D: 100	ppm
SITE SKETCH			PLOT PL	AN circ	le: attached 0	VM CALIB. READ. = 5	3.2 ppn	RF = 0.52
					A 0	VM CALIB. GAS = 1	OO ppn	111 - 0.02
1				WELL	N	ME: 10:20 (am/pm	DATE: 10	/17/11
STEEL				HEAD	1,15	MISCELL	NOT	FS
CONTAINMENT TAN		SEPARAT	OR			wo: N14109		LO
\	<i>j</i> ⊔					PO#: 55519	00	
						PK: ZSCHW	LIBGT	
	-1					PJ#: Z2-0069		
TH#2	1 (< 95 bbl E	BGT					T HET
TH#1			TO				Level	
		~	SAN JUAN	Λ.		ank Permit date	3	
OPEN	PASTURE)	K - S.P.D.	BGT Sidewalls	170.7507.550	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAV						BGT Sidewalls		
T.B. = TANK BOTTOM; PBGTL = PREVIOUS NA - NOT APPLICABLE OR NOT AVAILABLE						Magnetic declir	nation:	10° E
TRAVEL NOTES: CALLOUT:			ONSITE:					CT

CLIENT: BP	BLAGG ENGINEER P.O. BOX 87, BLOOMFIE (505) 632-119	LD, NM 87413	API #: 3004522198 TANK ID (if applicble): A
FIELD REPORT:	(circle one): BGT CONFIRMATION RELEASE INVEST	TIGATION OTHER:	PAGE #: 2 of 2
QUAD/UNIT: O SEC: 35 TWP:	30N RNG: 9W PM: NM CN E SW/SE LEASE TYPE: FEDERA	TY: SJ ST: NM	DATE STARTED: 06/25/12 DATE FINISHED: ENVIRONMENTAL
LEASE #:		AUL & SÓNS IBF - D. DECKER	SPECIALIST(S): JCB
REFERENCE POINT 1) 300 BBL PROD. TANK 2) 3) 4)		7.74657 DISTANCE/BE DISTANCE/BE	2 GL ELEV.: 5,626' EARING FROM W.H.: EARING FROM W.H.: EARING FROM W.H.: EARING FROM W.H.:
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # OR LAB USED:	HALL	OVM READING
1) SAMPLE ID: 2) SAMPLE ID: 3) SAMPLE ID:	SAMPLE DATE: SAMPLE TIME: SAMPLE TIME:	LAB ANALYSIS:	
4) SAMPLE ID:SOIL DESCRIPTION	SAMPLE DATE: SAMPLE TIME:	LAB ANALYSIS:	
ANY AREAS DISPLAYING WETNESS: YES NO	OSE FIRM DENSE / VERY DENSE T / SATURATED / SUPER SATURATED HC ODC OF PTS. NA IN DISC YES NO EXPLANATION - > 7 FT. BELOW GRA	OR DETECTED: YES NO EXPL COLORED SOILS ONLY. DE AT TH #4 & TH #6 ONLY	F/FIRM/STIFF/VERYSTIFF/HARD ANATION - PHYSICALLY EVIDENT
SOIL IMPACT DIMENSION ESTIMATION: DEPTH TO GROUNDWATER:<50'_ N	50 ft. X 60 ft. X ? EAREST WATER SOURCE: <1,000' NEAREST SURF		TIMATION (Cubic Yards) : ? CD TPH CLOSURE STD: 100 ppm
ESTIMATED AREA OF IMPACTS (50 FT. X 60 FT.) STEEL CONTAINMENT RING TH#8 TH#9 OPEN	FORMER TH#10 SEPARATOR TH#10 SEPARATOR TH#2 95 bbl BGT TH#7 PASTURE TO SAN JUAN R.	WELL HEAD WINE TIME X - S.P.D.	BGT Sidewalls Visible: Y / N / NA
T.B. = TANK BOTTOM; PBGTL = PREVIOUS	ATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW, T.H. = BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGN SW-SINGLE WALL; DW-DOUBLE WALL; SB-SINGLE BOTTON ONSITION	NATION; R.W. = RETAINING WALL; M; DB - DOUBLE BOTTOM.	Agnetic declination: 10° E

Date: 24-Oct-11 Analytical Report

CLIENT:

Blagg Engineering

Lab Order:

1110913

Project:

Ulibarri GC 1A

Lab ID:

1110913-01

Client Sample ID: TH-1 @ 7'

Collection Date: 10/17/2011 9:50:00 AM

Date Received: 10/18/2011

Matrix: SOIL

					The state of the s
Analyses	Result	PQL C	Qual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	GE ORGANICS				Analyst: JB
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	10/22/2011 2:29:38 AM
Surr: DNOP	96.4	73.4-123	%REC	1	10/22/2011 2:29:38 AM
EPA METHOD 8015B: GASOLINE R	ANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/20/2011 12:10:41 PM
Surr: BFB	93.4	75.2-136	%REC	1	10/20/2011 12:10:41 PM
				7	

- Value exceeds Maximum Contaminant Level
- Estimated value
- Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits

Date: 24-Oct-11

Analytical Report

CLIENT:

Blagg Engineering

Lab Order:

1110913

Project:

Ulibarri GC 1A

Lab ID:

1110913-02

Client Sample ID: TH-2 @ 7'

iene Sample 10. 1112 (6)

Collection Date: 10/17/2011 10:00:00 AM

Date Received: 10/18/2011

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE OF	RGANICS					Analyst: JB
Diesel Range Organics (DRO)	750	9.8		mg/Kg	1	10/22/2011 2:58:47 AM
Surr: DNOP	99.9	73.4-123		%REC	1	10/22/2011 2:58:47 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	780	25		mg/Kg	5	10/20/2011 12:39:34 PM
Surr: BFB	606	75.2-136	S	%REC	5	10/20/2011 12:39:34 PM

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Date: 24-Oct-11

Analytical Report

CLIENT:

Blagg Engineering

Lab Order:

1110913

Project:

Ulibarri GC 1A

Lab ID:

1110913-03

Client Sample ID: TH-3 @ 4'

Collection Date: 10/17/2011 10:05:00 AM

Date Received: 10/18/2011

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	SE ORGANICS			-		Analyst: JB
Diesel Range Organics (DRO)	1300	52		mg/Kg	5	10/22/2011 8:01:28 AM
Surr: DNOP	112	73.4-123		%REC	5	10/22/2011 8:01:28 AM
EPA METHOD 8015B: GASOLINE RA	ANGE					Analyst: RAA
Gasoline Range Organics (GRO)	5400	100		mg/Kg	20	10/20/2011 1:08:23 PM
Surr: BFB	607	75.2-136	S	%REC	20	10/20/2011 1:08:23 PM

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Lab Order 1206B98

Date Reported: 7/12/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: Ulibarri GC 1A

Lab ID:

1206B98-001

Matrix: SOIL

Client Sample ID: TH4 @ 8'

Collection Date: 6/25/2012 10:11:00 AM Received Date: 6/28/2012 10:00:00 AM

Analyses Result **RL Qual Units** DF Date Analyzed **EPA METHOD 8015B: DIESEL RANGE ORGANICS** Analyst: JMP Diesel Range Organics (DRO) 16 6/30/2012 9:23:38 PM 10 mg/Kg 1 Surr: DNOP 103 77.6-140 %REC 6/30/2012 9:23:38 PM **EPA METHOD 300.0: ANIONS** Analyst: BRM Chloride ND 7.5 mg/Kg 5 7/3/2012 9:10:21 PM **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: RAA Benzene ND 0.24 mg/Kg 5 7/5/2012 4:30:18 PM Toluene 0.59 0.24 mg/Kg 5 7/5/2012 4:30:18 PM Ethylbenzene 0.43 0.24 mg/Kg 5 7/5/2012 4:30:18 PM 5 Xylenes, Total 5.9 0.48 mg/Kg 7/5/2012 4:30:18 PM Surr: 1,2-Dichloroethane-d4 85.4 70-130 %REC 5 7/5/2012 4:30:18 PM Surr: 4-Bromofluorobenzene 70-130 97.9 %REC 5 7/5/2012 4:30:18 PM Surr: Dibromofluoromethane 81.1 71.7-132 %REC 5 7/5/2012 4:30:18 PM Surr: Toluene-d8 86.9 70-130 %REC 5 7/5/2012 4:30:18 PM **EPA METHOD 8015B MOD: GASOLINE RANGE** Analyst: RAA Gasoline Range Organics (GRO) 24 mg/Kg 5 7/5/2012 4:30:18 PM Surr: BFB 97.9 %REC 5 7/5/2012 4:30:18 PM 70-130

Qualifiers: */X	Value exceeds Maximum	Contaminant Level
-----------------	-----------------------	-------------------

E Value above quantitation range

Analyte detected below quantitation limits

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

RL Reporting Detection Limit

U Samples with CalcVal < MDL

Page 1 of 12

Lab Order 1206B98

Date Reported: 7/12/2012

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: TH5 @ 7.5'

CLIENT: Blagg Engineering Ulibarri GC 1A Project: Collection Date: 6/25/2012 10:29:00 AM Matrix: SOIL

Received Date: 6/28/2012 10:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: JMP
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	6/30/2012 10:30:27 PM
Surr: DNOP	108	77.6-140	%REC	1	6/30/2012 10:30:27 PM
EPA METHOD 300.0: ANIONS					Analyst: BRM
Chloride	ND	7.5	mg/Kg	5	7/3/2012 8:20:42 PM
EPA METHOD 8260B: VOLATILES 5	SHORT LIST				Analyst: RAA
Benzene	ND	0.049	mg/Kg	1	7/3/2012 10:04:39 PM
Toluene	ND	0.049	mg/Kg	1	7/3/2012 10:04:39 PM
Ethylbenzene	ND	0.049	mg/Kg	1	7/3/2012 10:04:39 PM
Xylenes, Total	ND	0.098	mg/Kg	1	7/3/2012 10:04:39 PM
Surr: 1,2-Dichloroethane-d4	81.5	70-130	%REC	1	7/3/2012 10:04:39 PM
Surr: 4-Bromofluorobenzene	90.4	70-130	%REC	1	7/3/2012 10:04:39 PM
Surr: Dibromofluoromethane	82.1	71.7-132	%REC	1	7/3/2012 10:04:39 PM
Surr: Toluene-d8	89.6	70-130	%REC	1	7/3/2012 10:04:39 PM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/3/2012 10:04:39 PM
Surr: BFB	90.4	70-130	%REC	1	7/3/2012 10:04:39 PM

Qualifiers:

Lab ID:

1206B98-002

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank В
- H Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- Reporting Detection Limit
- Samples with CalcVal < MDL

Page 2 of 12

Lab Order 1206B98

Date Reported: 7/12/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

1206B98-003

Lab ID:

Client Sample ID: TH6 @ 7.5'

Project: Ulibarri GC 1A Collection Date: 6/25/2012 11:02:00 AM

Matrix: SOIL Received Date: 6/28/2012 10:00:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS			-44	Analyst: JMP
Diesel Range Organics (DRO)	310	10	mg/Kg	1	6/30/2012 10:52:41 PM
Surr: DNOP	110	77.6-140	%REC	1	6/30/2012 10:52:41 PM
EPA METHOD 300.0: ANIONS					Analyst: BRM
Chloride	ND	15	mg/Kg	10	7/3/2012 9:47:35 PM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: RAA
Benzene	18	2.4	mg/Kg	50	7/4/2012 1:47:03 AM
Toluene	ND	2.4	mg/Kg	50	7/4/2012 1:47:03 AM
Ethylbenzene	23	2.4	mg/Kg	50	7/4/2012 1:47:03 AM
Xylenes, Total	260	4.8	mg/Kg	50	7/4/2012 1:47:03 AM
Surr: 1,2-Dichloroethane-d4	83.1	70-130	%REC	50	7/4/2012 1:47:03 AM
Surr: 4-Bromofluorobenzene	96.6	70-130	%REC	50	7/4/2012 1:47:03 AM
Surr: Dibromofluoromethane	78.9	71.7-132	%REC	50	7/4/2012 1:47:03 AM
Surr: Toluene-d8	87.5	70-130	%REC	50	7/4/2012 1:47:03 AM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	3500	240	mg/Kg	50	7/4/2012 1:47:03 AM
Surr: BFB	96.6	70-130	%REC	50	7/4/2012 1:47:03 AM

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Page 3 of 12

Lab Order 1206B98

Date Reported: 7/12/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TH7 @ 7.5'

 Project:
 Ulibarri GC 1A
 Collection Date: 6/25/2012 11:14:00 AM

 Lab ID:
 1206B98-004
 Matrix: SOIL
 Received Date: 6/28/2012 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: JMP
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/30/2012 11:14:50 PM
Surr: DNOP	109	77.6-140	%REC	1	6/30/2012 11:14:50 PM
EPA METHOD 300.0: ANIONS					Analyst: BRM
Chloride	ND	7.5	mg/Kg	5	7/3/2012 3:22:52 PM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: RAA
Benzene	ND	0.048	mg/Kg	1	7/4/2012 2:14:46 AM
Toluene	ND	0.048	mg/Kg	1	7/4/2012 2:14:46 AM
Ethylbenzene	ND	0.048	mg/Kg	1	7/4/2012 2:14:46 AM
Xylenes, Total	ND	0.095	mg/Kg	1	7/4/2012 2:14:46 AM
Surr: 1,2-Dichloroethane-d4	81.9	70-130	%REC	1	7/4/2012 2:14:46 AM
Surr: 4-Bromofluorobenzene	90.7	70-130	%REC	1	7/4/2012 2:14:46 AM
Surr: Dibromofluoromethane	81.1	71.7-132	%REC	1	7/4/2012 2:14:46 AM
Surr: Toluene-d8	87.1	70-130	%REC	1	7/4/2012 2:14:46 AM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/4/2012 2:14:46 AM
Surr: BFB	90.7	70-130	%REC	1	7/4/2012 2:14:46 AM

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Page 4 of 12

Lab Order 1206B98

Date Reported: 7/12/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TH8 @ 7.5'

 Project:
 Ulibarri GC 1A
 Collection Date: 6/25/2012 11:32:00 AM

 Lab ID:
 1206B98-005
 Matrix: SOIL
 Received Date: 6/28/2012 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN		Analyst: JMP			
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/30/2012 11:59:03 PM
Surr: DNOP	109	77.6-140	%REC	1	6/30/2012 11:59:03 PM
EPA METHOD 300.0: ANIONS					Analyst: BRM
Chloride	ND	15	mg/Kg	10	7/3/2012 4:49:44 PM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: RAA
Benzene	ND	0.049	mg/Kg	1	7/4/2012 2:42:28 AM
Toluene	ND	0.049	mg/Kg	1	7/4/2012 2:42:28 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/4/2012 2:42:28 AM
Xylenes, Total	ND	0.098	mg/Kg	1	7/4/2012 2:42:28 AM
Surr: 1,2-Dichloroethane-d4	83.2	70-130	%REC	1	7/4/2012 2:42:28 AM
Surr: 4-Bromofluorobenzene	91.8	70-130	%REC	1	7/4/2012 2:42:28 AM
Surr: Dibromofluoromethane	83.3	71.7-132	%REC	1	7/4/2012 2:42:28 AM
Surr: Toluene-d8	88.7	70-130	%REC	1	7/4/2012 2:42:28 AM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/4/2012 2:42:28 AM
Surr: BFB	91.8	70-130	%REC	1	7/4/2012 2:42:28 AM

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Page 5 of 12

Lab Order 1206B98

Date Reported: 7/12/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TH9 @ 7.5'

 Project:
 Ulibarri GC 1A
 Collection Date: 6/25/2012 11:43:00 AM

 Lab ID:
 1206B98-006
 Matrix: SOIL
 Received Date: 6/28/2012 10:00:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: JMP
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/1/2012 12:21:13 AM
Surr: DNOP	111	77.6-140	%REC	1	7/1/2012 12:21:13 AM
EPA METHOD 300.0: ANIONS					Analyst: BRM
Chloride	ND	7.5	mg/Kg	5	7/3/2012 4:24:55 PM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: RAA
Benzene	ND	0.048	mg/Kg	1	7/4/2012 3:10:05 AM
Toluene	ND	0.048	mg/Kg	1	7/4/2012 3:10:05 AM
Ethylbenzene	ND	0.048	mg/Kg	1	7/4/2012 3:10:05 AM
Xylenes, Total	ND	0.096	mg/Kg	1	7/4/2012 3:10:05 AM
Surr: 1,2-Dichloroethane-d4	82.1	70-130	%REC	1	7/4/2012 3:10:05 AM
Surr: 4-Bromofluorobenzene	88.0	70-130	%REC	1	7/4/2012 3:10:05 AM
Surr: Dibromofluoromethane	79.5	71.7-132	%REC	1	7/4/2012 3:10:05 AM
Surr: Toluene-d8	87.7	70-130	%REC	1	7/4/2012 3:10:05 AM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/4/2012 3:10:05 AM
Surr: BFB	88.0	70-130	%REC	1	7/4/2012 3:10:05 AM

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

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Lab Order 1206B98

Date Reported: 7/12/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: TH10 @ 7.5'

Project: Ulibarri GC 1A Collection Date: 6/25/2012 1:40:00 PM

Lab ID: 1206B98-007 Matrix: SOIL Received Date: 6/28/2012 10:00:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS			1	Analyst: JMP
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/1/2012 12:43:14 AM
Surr: DNOP	111	77.6-140	%REC	1	7/1/2012 12:43:14 AM
EPA METHOD 300.0: ANIONS					Analyst: BRM
Chloride	ND	15	mg/Kg	10	7/3/2012 4:12:31 PM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: RAA
Benzene	0.31	0.048	mg/Kg	1	7/5/2012 5:25:44 PM
Toluene	ND	0.048	mg/Kg	1	7/5/2012 5:25:44 PM
Ethylbenzene	0.18	0.048	mg/Kg	1	7/5/2012 5:25:44 PM
Xylenes, Total	2.6	0.097	mg/Kg	1	7/5/2012 5:25:44 PM
Surr: 1,2-Dichloroethane-d4	86.0	70-130	%REC	1	7/5/2012 5:25:44 PM
Surr: 4-Bromofluorobenzene	88.2	70-130	%REC	1	7/5/2012 5:25:44 PM
Surr: Dibromofluoromethane	82.2	71.7-132	%REC	1	7/5/2012 5:25:44 PM
Surr: Toluene-d8	85.8	70-130	%REC	1	7/5/2012 5:25:44 PM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	22	4.8	mg/Kg	1	7/5/2012 5:25:44 PM
Surr: BFB	88.2	70-130	%REC	1	7/5/2012 5:25:44 PM

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

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Lab Order 1206B98

Date Reported: 7/12/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: TH11 @ 7.5'

 Project:
 Ulibarri GC 1A
 Collection Date: 6/25/2012 1:55:00 PM

 Lab ID:
 1206B98-008
 Matrix: SOIL
 Received Date: 6/28/2012 10:00:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: JMP
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/1/2012 1:05:19 AM
Surr: DNOP	111	77.6-140	%REC	1	7/1/2012 1:05:19 AM
EPA METHOD 300.0: ANIONS					Analyst: BRM
Chloride	ND	7.5	mg/Kg	5	7/3/2012 7:55:53 PM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: RAA
Benzene	ND	0.048	mg/Kg	1	7/4/2012 4:05:11 AM
Toluene	ND	0.048	mg/Kg	1	7/4/2012 4:05:11 AM
Ethylbenzene	ND	0.048	mg/Kg	1	7/4/2012 4:05:11 AM
Xylenes, Total	ND	0.095	mg/Kg	1	7/4/2012 4:05:11 AM
Surr: 1,2-Dichloroethane-d4	81.3	70-130	%REC	1	7/4/2012 4:05:11 AM
Surr: 4-Bromofluorobenzene	90.4	70-130	%REC	1	7/4/2012 4:05:11 AM
Surr: Dibromofluoromethane	77.1	71.7-132	%REC	1	7/4/2012 4:05:11 AM
Surr: Toluene-d8	88.0	70-130	%REC	1	7/4/2012 4:05:11 AM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/4/2012 4:05:11 AM
Surr: BFB	90.4	70-130	%REC	1	7/4/2012 4:05:11 AM

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Page 8 of 12

CLIENT: Blagg Engineering Client Sample ID: Northern Extent 3-pt comp @ 11'

 Project:
 Ulibarri GC 1A
 Collection Date: 2/27/2013 9:49:00 AM

 Lab ID:
 1302920-001
 Matrix: SOIL
 Received Date: 2/28/2013 9:59:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG		Analyst: MMD			
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	3/1/2013 12:07:47 PM
Surr: DNOP	113	72.4-120	%REC	1	3/1/2013 12:07:47 PM
EPA METHOD 8015B: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	3/1/2013 3:05:56 PM
Surr: BFB	114	84-116	%REC	1	3/1/2013 3:05:56 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.047	mg/Kg	1	3/1/2013 3:05:56 PM
Toluene	ND	0.047	mg/Kg	1	3/1/2013 3:05:56 PM
Ethylbenzene	ND	0.047	mg/Kg	1	3/1/2013 3:05:56 PM
Xylenes, Total	ND	0.094	mg/Kg	1	3/1/2013 3:05:56 PM
Surr: 4-Bromofluorobenzene	108	80-120	%REC	1	3/1/2013 3:05:56 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	ND	7.5	mg/Kg	5	3/1/2013 12:53:45 PM

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits Page 1 of 5

Lab Order 1303187

Date Reported: 3/7/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: 95' S73W @ 11'-12'

 Project:
 Ulibarri GC 1A
 Collection Date: 3/5/2013 9:15:00 AM

 Lab ID:
 1303187-001
 Matrix: MEOH (SOIL)
 Received Date: 3/6/2013 9:53:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG			Analyst: MMD		
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	3/7/2013 10:34:20 AM
Surr: DNOP	101	72.4-120	%REC	1	3/7/2013 10:34:20 AM
EPA METHOD 8015B: GASOLINE R.	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	3/6/2013 1:19:29 PM
Surr: BFB	109	84-116	%REC	1	3/6/2013 1:19:29 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	3/6/2013 1:19:29 PM
Toluene	ND	0.050	mg/Kg	1	3/6/2013 1:19:29 PM
Ethylbenzene	ND	0.050	mg/Kg	1	3/6/2013 1:19:29 PM
Xylenes, Total	ND	0.10	mg/Kg	1	3/6/2013 1:19:29 PM
Surr: 4-Bromofluorobenzene	107	80-120	%REC	1	3/6/2013 1:19:29 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	ND	7.5	mg/Kg	5	3/7/2013 9:10:01 AM

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits 1 of 8

Lab Order 1303187

Date Reported: 3/7/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: 86' S59W @ 11'-12'

 Project:
 Ulibarri GC 1A
 Collection Date: 3/5/2013 9:25:00 AM

 Lab ID:
 1303187-002
 Matrix: MEOH (SOIL)
 Received Date: 3/6/2013 9:53:00 AM

Result	RL Qu	al Units	DF	Date Analyzed	
EPA METHOD 8015B: DIESEL RANGE ORGANICS					
ND	10	mg/Kg	1	3/7/2013 11:39:25 AM	
98.3	72.4-120	%REC	1	3/7/2013 11:39:25 AM	
NGE				Analyst: NSB	
ND	5.0	mg/Kg	1	3/6/2013 1:48:21 PM	
110	84-116	%REC	1	3/6/2013 1:48:21 PM	
				Analyst: NSB	
ND	0.050	mg/Kg	1	3/6/2013 1:48:21 PM	
ND	0.050	mg/Kg	1	3/6/2013 1:48:21 PM	
ND	0.050	mg/Kg	1	3/6/2013 1:48:21 PM	
ND	0.10	mg/Kg	1	3/6/2013 1:48:21 PM	
110	80-120	%REC	1	3/6/2013 1:48:21 PM	
				Analyst: JRR	
ND	7.5	mg/Kg	5	3/7/2013 9:59:38 AM	
	SE ORGANICS ND 98.3 ANGE ND 110 ND ND ND ND ND ND 110	ND 10 98.3 72.4-120 ANGE ND 5.0 110 84-116 ND 0.050 ND 0.050 ND 0.050 ND 0.050 ND 0.10 110 80-120	ND	ND 10 mg/Kg 1 98.3 72.4-120 %REC 1 ND S.0 mg/Kg 1 110 84-116 %REC 1 ND 0.050 mg/Kg 1 ND 0.050 mg/Kg 1 ND 0.050 mg/Kg 1 ND 0.050 mg/Kg 1 ND 0.10 mg/Kg 1 110 80-120 %REC 1	

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits 2 of 8

Lab Order 1303187

Date Reported: 3/7/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: 125' S43W @ 11'-12' Ulibarri GC 1A Project: Collection Date: 3/5/2013 9:35:00 AM

Lab ID: 1303187-003 Matrix: MEOH (SOIL) Received Date: 3/6/2013 9:53:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS					Analyst: MMD
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	3/7/2013 12:01:10 PM
Surr: DNOP	101	72.4-120	%REC	1	3/7/2013 12:01:10 PM
EPA METHOD 8015B: GASOLINE RANGE				Analyst: NSB	
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	3/6/2013 2:17:09 PM
Surr: BFB	111	84-116	%REC	1	3/6/2013 2:17:09 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	3/6/2013 2:17:09 PM
Toluene	ND	0.050	mg/Kg	1	3/6/2013 2:17:09 PM
Ethylbenzene	ND	0.050	mg/Kg	1	3/6/2013 2:17:09 PM
Xylenes, Total	ND	0.10	mg/Kg	1	3/6/2013 2:17:09 PM
Surr: 4-Bromofluorobenzene	108	80-120	%REC	1	3/6/2013 2:17:09 PM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	ND	7.5	mg/Kg	5	3/7/2013 10:24:27 AM

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

- Analyte detected in the associated Method Blank В
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits Page 3 of 8

Lab Order 1303374

Date Reported: 3/14/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 163' S48W @ 10'-12'

Ulibarri GC 1A Project:

Collection Date: 3/7/2013 9:18:00 AM

Lab ID: 1303374-001

Matrix: SOIL

Received Date: 3/8/2013 10:00:00 AM

Date Analyzed
Analyst: MMD
3/11/2013 10:31:30 AM
3/11/2013 10:31:30 AM
Analyst: JRR
3/11/2013 10:22:01 AM
Analyst: RAA
3/8/2013 6:14:52 PM
Analyst: RAA
3/8/2013 6:14:52 PM
3/8/2013 6:14:52 PM

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH greater than 2
- Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits 1 of 11

Lab Order 1303374

Date Reported: 3/14/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: Lab ID: Ulibarri GC 1A

1303374-002

Client Sample ID: 183' S54W @ 10'-12'

Collection Date: 3/7/2013 9:26:00 AM

Received Date: 3/8/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS			11.29	Analyst: MMD
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	3/11/2013 10:53:12 AM
Surr: DNOP	106	72.4-120	%REC	1	3/11/2013 10:53:12 AM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	ND	30	mg/Kg	20	3/11/2013 10:59:14 AM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: RAA
Benzene	ND	0.050	mg/Kg	1	3/8/2013 6:43:25 PM
Toluene	ND	0.050	mg/Kg	1	3/8/2013 6:43:25 PM
Ethylbenzene	ND	0.050	mg/Kg	1	3/8/2013 6:43:25 PM
Xylenes, Total	ND	0.10	mg/Kg	1	3/8/2013 6:43:25 PM
Surr: 1,2-Dichloroethane-d4	84.7	70-130	%REC	1	3/8/2013 6:43:25 PM
Surr: 4-Bromofluorobenzene	91.8	70-130	%REC	1	3/8/2013 6:43:25 PM
Surr: Dibromofluoromethane	92.3	70-130	%REC	1	3/8/2013 6:43:25 PM
Surr: Toluene-d8	100	70-130	%REC	1	3/8/2013 6:43:25 PM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	3/8/2013 6:43:25 PM
Surr: BFB	91.8	70-130	%REC	1	3/8/2013 6:43:25 PM

Matrix: SOIL

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits 2 of 11

Lab Order 1303374

Date Reported: 3/14/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Project:

Lab ID:

Ulibarri GC 1A

1303374-003

Matrix: SOIL

Client Sample ID: 188' S62W @ 10'-12'

Collection Date: 3/7/2013 9:32:00 AM Received Date: 3/8/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: MMD
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	3/11/2013 11:14:58 AM
Surr: DNOP	109	72.4-120	%REC	1	3/11/2013 11:14:58 AM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	ND	30	mg/Kg	20	3/11/2013 11:11:39 AM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: RAA
Benzene	ND	0.050	mg/Kg	1	3/8/2013 7:11:49 PM
Toluene	ND	0.050	mg/Kg	1	3/8/2013 7:11:49 PM
Ethylbenzene	ND	0.050	mg/Kg	1	3/8/2013 7:11:49 PM
Xylenes, Total	ND	0.10	mg/Kg	1	3/8/2013 7:11:49 PM
Surr: 1,2-Dichloroethane-d4	89.4	70-130	%REC	1	3/8/2013 7:11:49 PM
Surr: 4-Bromofluorobenzene	96.7	70-130	%REC	1	3/8/2013 7:11:49 PM
Surr: Dibromofluoromethane	96.0	70-130	%REC	1	3/8/2013 7:11:49 PM
Surr: Toluene-d8	97.8	70-130	%REC	1	3/8/2013 7:11:49 PM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	3/8/2013 7:11:49 PM
Surr: BFB	96.7	70-130	%REC	1	3/8/2013 7:11:49 PM

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- Analyte detected in the associated Method Blank В
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits and 11

Lab Order 1303374

Date Reported: 3/14/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Project: Ulibarri GC 1A

Lab ID: 1303374-004

Client Sample ID: 178' S68W @ 10'-12'

Collection Date: 3/7/2013 9:39:00 AM

Received Date: 3/8/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS			212	Analyst: MMD
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	3/11/2013 11:36:43 AM
Surr: DNOP	105	72.4-120	%REC	1	3/11/2013 11:36:43 AM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	ND	30	mg/Kg	20	3/11/2013 11:24:03 AM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: RAA
Benzene	ND	0.050	mg/Kg	1	3/8/2013 7:40:01 PM
Toluene	ND	0.050	mg/Kg	1	3/8/2013 7:40:01 PM
Ethylbenzene	ND	0.050	mg/Kg	1	3/8/2013 7:40:01 PM
Xylenes, Total	ND	0.10	mg/Kg	1	3/8/2013 7:40:01 PM
Surr: 1,2-Dichloroethane-d4	89.4	70-130	%REC	1	3/8/2013 7:40:01 PM
Surr: 4-Bromofluorobenzene	90.3	70-130	%REC	1	3/8/2013 7:40:01 PM
Surr: Dibromofluoromethane	93.8	70-130	%REC	1	3/8/2013 7:40:01 PM
Surr: Toluene-d8	96.3	70-130	%REC	1	3/8/2013 7:40:01 PM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	3/8/2013 7:40:01 PM
Surr: BFB	90.3	70-130	%REC	1	3/8/2013 7:40:01 PM

Matrix: SOIL

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits 4 of 11

Lab Order 1303374

Date Reported: 3/14/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Project: Lab ID: 1303374-005

Ulibarri GC 1A

Matrix: SOIL

Client Sample ID: 152' S74W @ 10'-12'

Collection Date: 3/7/2013 9:53:00 AM

Received Date: 3/8/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS				Analyst: MMD
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	3/11/2013 11:58:40 AM
Surr: DNOP	104	72.4-120	%REC	1	3/11/2013 11:58:40 AM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	ND	30	mg/Kg	20	3/11/2013 11:36:28 AM
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst: RAA
Benzene	ND	0.050	mg/Kg	1	3/8/2013 8:08:14 PM
Toluene	ND	0.050	mg/Kg	1	3/8/2013 8:08:14 PM
Ethylbenzene	ND	0.050	mg/Kg	1	3/8/2013 8:08:14 PM
Xylenes, Total	ND	0.10	mg/Kg	1	3/8/2013 8:08:14 PM
Surr: 1,2-Dichloroethane-d4	88.8	70-130	%REC	1	3/8/2013 8:08:14 PM
Surr: 4-Bromofluorobenzene	95.6	70-130	%REC	1	3/8/2013 8:08:14 PM
Surr: Dibromofluoromethane	94.9	70-130	%REC	1	3/8/2013 8:08:14 PM
Surr: Toluene-d8	99.2	70-130	%REC	1	3/8/2013 8:08:14 PM
EPA METHOD 8015B MOD: GASOL	INE RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	3/8/2013 8:08:14 PM
Surr: BFB	95.6	70-130	%REC	1	3/8/2013 8:08:14 PM

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits 5 of 11

Lab Order 1305026

Date Reported: 5/16/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: MW # 1

Project: ULIBARRI GC # 1A/#2

Collection Date: 4/29/2013 11:00:00 AM

Lab ID: 1305026-001

Matrix: AQUEOUS

Received Date: 5/1/2013 9:50:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	1.0		μg/L	1	5/3/2013 12:28:43 AM	R10280
Toluene	ND	1.0		μg/L	1	5/3/2013 12:28:43 AM	R10280
Ethylbenzene	ND	1.0		μg/L	1	5/3/2013 12:28:43 AM	R10280
Xylenes, Total	ND	2.0		μg/L	1	5/3/2013 12:28:43 AM	R10280
Surr: 4-Bromofluorobenzene	99.0	69.4-129		%REC	1	5/3/2013 12:28:43 AM	R10280
EPA METHOD 300.0: ANIONS						Analyst	JRR
Fluoride	0.56	0.10		mg/L	1	5/1/2013 9:36:57 PM	R10269
Chloride	4.6	0.50		mg/L	1	5/1/2013 9:36:57 PM	R10269
Sulfate	78	10		mg/L	20	5/2/2013 6:43:21 PM	R10292
Nitrate+Nitrite as N	ND	1.0		mg/L	5	5/2/2013 11:53:36 PM	R10292
EPA METHOD 200.7: DISSOLVED N	METALS					Analyst	JLF
Iron	1.8	0.10	*	mg/L	5	5/9/2013 1:11:30 PM	R10516
SM2540C MOD: TOTAL DISSOLVED	SOLIDS					Analyst	KS
Total Dissolved Solids	570	200	*	mg/L	1	5/5/2013 5:03:00 PM	7282

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

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- 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 10
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Lab Order 1305026

Date Reported: 5/16/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: MW # 2

Project: ULIBARRI GC # 1A/#2

Collection Date: 4/29/2013 3:10:00 PM

Lab ID: 1305026-002

Matrix: AQUEOUS Received Date: 5/1/2013 9:50:00 AM

Analyses	Result	RL Q	ual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES		7-1.				Analyst	NSB
Benzene	4.9	1.0		µg/L	1	5/3/2013 12:58:59 AM	R10280
Toluene	1.3	1.0		µg/L	1	5/3/2013 12:58:59 AM	R10280
Ethylbenzene	3.4	1.0		μg/L	1	5/3/2013 12:58:59 AM	R10280
Xylenes, Total	29	2.0		μg/L	1	5/3/2013 12:58:59 AM	R10280
Surr: 4-Bromofluorobenzene	104	69.4-129		%REC	1	5/3/2013 12:58:59 AM	R10280
EPA METHOD 300.0: ANIONS						Analyst	JRR
Fluoride	0.51	0.10		mg/L	1	5/1/2013 10:01:47 PM	R10269
Chloride	4.0	0.50		mg/L	1	5/1/2013 10:01:47 PM	R10269
Sulfate	59	10		mg/L	20	5/2/2013 6:55:46 PM	R10292
Nitrate+Nitrite as N	ND	1.0		mg/L	5	5/3/2013 12:06:01 AM	R10292
EPA METHOD 200.7: DISSOLVED METAL	S					Analyst:	JLF
Iron	0.30	0.020	*	mg/L	1	5/9/2013 1:13:43 PM	R10516
SM2540C MOD: TOTAL DISSOLVED SOL	IDS					Analyst:	KS
Total Dissolved Solids	550	200	*	mg/L	1	5/5/2013 5:03:00 PM	7282

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

- 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 10

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

Lab Order 1305026

Date Reported: 5/16/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: MW # 3

Project: ULIBARRI GC # 1A/#2

Collection Date: 4/29/2013 1:20:00 PM

Lab ID: 1305026-003

Matrix: AQUEOUS Rec

Received Date: 5/1/2013 9:50:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	1.0		μg/L	1	5/3/2013 1:29:10 AM	R10280
Toluene	ND	1.0		µg/L	1	5/3/2013 1:29:10 AM	R10280
Ethylbenzene	ND	1.0		µg/L	1	5/3/2013 1:29:10 AM	R10280
Xylenes, Total	ND	2.0		μg/L	1	5/3/2013 1:29:10 AM	R10280
Surr: 4-Bromofluorobenzene	99.0	69.4-129		%REC	1	5/3/2013 1:29:10 AM	R10280
EPA METHOD 300.0: ANIONS						Analyst	JRR
Fluoride	0.64	0.10		mg/L	1	5/1/2013 10:26:36 PM	R10269
Chloride	4.6	0.50		mg/L	1	5/1/2013 10:26:36 PM	R10269
Sulfate	130	10		mg/L	20	5/2/2013 7:08:11 PM	R10292
Nitrate+Nitrite as N	ND	1.0		mg/L	5	5/3/2013 12:18:26 AM	R10292
EPA METHOD 200.7: DISSOLVED ME	TALS					Analyst	JLF
Iron	1.7	0.10	*	mg/L	5	5/9/2013 1:16:05 PM	R10516
SM2540C MOD: TOTAL DISSOLVED	SOLIDS					Analyst	KS
Total Dissolved Solids	690	200	*	mg/L	1	5/5/2013 5:03:00 PM	7282

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

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

Page 3 of 10

Chain-of-Custody Record				Turn-Around	Time:	Talley (4)															
Client:	BLACE	Ente	INEERING INC.	Standard	□ Rush														NT	AL	
	KP 1	LAGO		Project Name								v.hal								1	
Mailing	Address	P.o.	Bax 87	ULIBAR	m GC 1	LA		49	01 H								M 87	109			
	Bloom	field	NM 87413	Project #:						5-34							4107				
Phone	#: 50	15-6	32-1199							374		Name of Street				ues	22.00				
email o	r Fax#:			Project Mana	ger:			nly)	sel)					04)							
QA/QC Stan	Package:		☐ Level 4 (Full Validation)	J.B	HAGE		TMB's (8021)	(Gas or	as/Die					PO4,SC	PCB's						
Accred NEL		□ Othe	r	Sampler: J	BUGG VIES	EING	+ TMB'	+ TPH	15B (G	18.1)	04.1)	AH)		3,NO2,	1 8082		A)		1	3	rN)
□ EDD	(Type)_			Sample Tem	perature.	1	BE	BE	d 80	4 pc	od 5	or P	tals	N,	ides	7	-00				30
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALNO	BTEX + MTBE	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
1/1/11	0950	Soil	TH-187'	40221	402×1 COOL -1				X			w		1	w	w	w				d
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117/11	1635 f necessary,	samples subr	mitted to Hall Environmental may be subo	ed to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the									the an	alvtical	renort						

Chain-of-Custody Record				Turn-Around	Time:																
Client:	BLAGG	ENGIN	EERING INC.	★ Standard	□ Rush				H										NT		,
F	PAL	EDICA		Project Name):										ment			-			
Mailing	Address:	PO 1	30× 87	ULIBAR	eri GC	1A		49	01 H	awki								109			
			u 87413	Project #:						5-34					505-						
Phone #	±: 50	5-637	2-1199												Req		-			U SU	
email or		1 25		Project Mana	ger:		1	nly)	sel)					04)	-						T
QA/QC F			□ Level 4 (Full Validation)	J.B	LA66		\$ (8021)	(Gas o	as/Die					PO4,S	PCB's						
Accredit		□ Othe	or	Sampler: J		200.	E TME'S	+ TPH (Gas only)	15B (G	18.1)	04.1)	(HA		3,NO2	1 8082		A)				:
□ EDD	(Type)_			Samue rem	ueleniği eğ		#	BE	d 80	4 bc	od 5	or P	stals	N,I	ides	F	-40	N			5
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALNS.	BTEX +##	BTEX + MTBE	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE			Air Dubble
6/25/12	1011	SOIL	TH408'	403X1 COOL -OCIX					X									x			T
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Date:	Time:	Relinquish	dd by:	Received by:	Date Time	P	k:	ZF	EA	CJ	LDE	w									
7/12	necessary.	samples sub	mitted to Hall Environmental may be sub-	contracted to other a		16/38/11	C	0~	TAC	71	Ja	FF	FE	AC	Z						

Chain-of-Custody Record Client: BLAGGERER INC.				Turn-Around	Time:	Br Mondar 3/4/2013				н	IAI	LL	E	NV	/IF	20	NF	ИE	TM	AL	
Client:	BLAG	6 ENG	WEERING INC.	□ Standard	Rush	37-7-017														OR	
	KP	A MED.	. 4	Project Name												tal.co					
Mailing	Address	P.o.	Box 27	ULIBA	ARRI GC	_ 1A		49	01 H	awkii	ns N	E -	Alb	uqu	erqu	e, Ni	M 87	109			
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QA/QC Star	Package: ndard		□ Level 4 (Full Validation)		1A66		's (8021)	TPH (Gas o	(Gas/Diesel)					,PO4,S	PCB's						
Accred		□ Othe	er	THE RESERVE THE PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COL	ACA CARREST	FOING THE PARTY	11	+	5B	(18.1)	(1.70	AH)		O3,NO2	s / 8082		(A)				Or NI
	(Type)			Sample Tem	त्वस्त्राप्रतिकृष्ट [ा] ः ग्र		出出	MTBE)d 8(od 4	bo	or	etals	Z,N	cide	(A)	-\C	IDE			2
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALING I	BTEX + MTBE	BTEX + M	TPH Method 801	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)	CHLONDE			Air Ruhhlac
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Date: Time: Relinquished by: 343				MHW.	cele	Z2/3 /43/				GR			2/60	0.	,	801	> 15	•			
2/27/13	Date: Time: Relibquished by:				2 02/	28 13 0959 les. This serves as notice of	B	P	Co	eta	ct	`	J	ef	£ .	Pea	æ				

Chain-of-Custody Record Client: BLAGG ENGINEERING INC. BP AMERICA Mailing Address: P.O. Box 87 BLOOMFIELD NM 87413	Turn-Around Time: Standard X Rush 3/1/2013 Project Name: ULIBARRI GC 1A Project #:	HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request
Phone #: 505 - 632 - 1199 email or Fax#: QA/QC Package: Standard Level 4 (Full Validation)	Project Manager: J. BLAGG	
Accreditation NELAP Other EDD (Type)	Sampler: J. BLAGG On Ice O Yes I No Sample remperature	BTEX £MTBE + TWB's (8021) BTEX + MTBE + TPH (Gas only) TPH Method 8015B (Gas/Diesel TPH (Method 418.1) EDB (Method 504.1) 8310 (PNA or PAH) RCRA 8 Metals Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄) 8081 Pesticides / 8082 PCB's 8260B (VOA) CHUMUNE Air Bubbles (Y or N)
Date Time Matrix Sample Request ID	Container Preservative Type and Whype M. OH 1303180	BTEX EMTBE = TWB's BTEX + MTBE + TPH (BTEX + MTBE + TPH (TPH Method 8015B (G TPH (Method 418.1) EDB (Method 504.1) EDB (Method 504.1) B310 (PNA or PAH) RCRA 8 Metals Anions (F,CI,NO ₃ ,NO ₂ ,F 8081 Pesticides / 8082 8260B (VOA) 8270 (Semi-VOA) CHUMUNE
5/2013 0915 501L 95 573We 11-12	402×1 care -001	X X X
" 0925 4 86'S59W@N-12'		X X X
1 0935 1 125 5 43WC11-12		X X
Date: Time: Relinquished by: 3/5/13 1740	Received by: Date Time 1405	Remarks: GRO + DRO ON GUIS B BILL BLAGG BP Govern: Jeff Peace spossibility. Any sub-contracted data will be clearly notated on the analytical report.

C	Cliant C			Turn-Around	Time:	By V	londey				-	IAI			WW	TE	0		AEI	NT	AI	
Client:	BLAG	& Engi	neevy Inc.	□ Standard	Time:	3/19	18013														RY	,
	BP	Am	entea Box 97	Project Name ULIBAR	eri GC				491	01 H		www	/.hall	envi	ronn	nent	al.co	om				
			2 NM 87413	Project #:		THE	Findle Fa	1			5-34							410				
Phone			632-1199										1195	The state of	1000 000	Req	-					
email o				Project Mana	ger:	0-11-54	11.		(KIL	(g)					(4)							F
QA/QC Stan	Package: idard		□ Level 4 (Full Validation)	J-	BLAGE			MB's (8021)	+ TPH (Gas only)	30 / MRG)			SIMS)		PO4,SC	PCB's						
Accred		□ Othe	er	On lice	I- B-AC	□ No		* 1115	+ TPH	RO / DI	18.1)	04.1)	8270	-	ON'EC	s / 8087		(A)	W			or N)
	(Type)			Sample Tem	perature.	1.0		FBE	MTBE	3 (G	od 4	od 5	0 or	etals	N,E	side	F	i-Vo	610			2
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HE 1303	44 NOV	BTEX + ₩	BTEX + MT	TPH 8015B (GRO		EDB (Method 504.1)	PAH's (8310	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	CHEORIB			Air Bubbles (Y or N)
3/1/13	0918	Soil	163'548W @16-12"		COOL		-001	X		X	15	TP/			10	ā,			X			
ų	0926	lt	183'554W C10'-12"		lf	Man.	-002	X		X									X			
11	0932	r(188 S6ZW C10 -12	(1	rl		-003	X		X	-				5				X		-	T
lſ	0939	11	178 S68W C10'-12"	ч	11		004	X		X									X			T
11	0953	11	152' 574W C10'-12'	U	11		-as	Х	16	Х									X			F
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					12,5						1											F
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3/1/13	1758	Samples sub	Walls mitted to Hall Environmental may be subc	ontracted to other a	ccredited laboratorie	03.09 es. This serve	13 10 a					a - 1944 - 3	300		-		ted or		nalytica	report.		

L	nain-c	ot-Cus	tody Record	Tuni-Albuna 1							H	ALI	E	NV	/IF	20	NI	1EN	TA	L	
Client:	BLAG	G ENGR.	BP AMERICA	✓ Standard	☐ Rush _													RAT			
Mailing A	ddress:	P.O. BOX	187	Project Name: ULIB	ARRI GC#	1A/#2			490	1 Ha	w	ww.h	aller	viro	nme	ntal	.com			78	
		BLOOMF	IELD, NM 87413	Project #:		property.		1			5-345					- Table	-410				
Phone #:		(505) 632	2-1199										Ana					Committee of			
email or F	ax#:			Project Manag	er:									-							
QA/QC Pa			Level 4 (Full Validation)		JEFF BL	AGG		(8021B)	TPH (Gas only)	(Out		IS)		POT,504)						o)	
Accreditat	tion:	-LUTTE		Sampler:	NELSON	VELEZ	nv	4	(Gas	DRO /	11	NIS(nu	2	Solids	red)	z	12 5		sample	
□ NELAF)	□ Other_		On ice:	Yes	□ No:		f	F	-	418.1)	8270SIMS)	100	37		(filtered)	Nitrite			e sa	1
□ EDD (Type)	1		Sample Tempe	rature, Z	6		#	MTBE +	(GR	pou	o o	Metais	(F,Cl,NO3,	olve	ns (Nit		e e	osit	:
Date	Time	Matrix	Sample Request ID	Container Type and # Preservative Type #EAL No.						TPH 8015B	TPH (Method	PAH (8310 or	RCRA 8 M	Anions (F,	Total Dissolved	Iron, Ferrous	Nitrate N		Grab sample	5 pt. composite	:::
4/29/13	1100	WATER	MW # 1						ВТЕХ		3-			9					٧		Γ
4/29/13	1100	WATER	MW # 1	500 ml - 1 Cool										V	V				V		_
4/29/13	1100	WATER	MW # 1	250 ml - 1	HNO ₃ & Cool	Deser										٧			٧		Γ
4/29/13	1100	WATER	MW # 1	250 ml - 1	H ₂ SO ₄												V		٧		T
4/29/13	1510	WATER	MW # 2	40 ml VOA - 2	HCl & Cool	-00	2	٧					1						٧		Γ
4/29/13	1510	WATER	MW # 2	500 ml - 1	Cool	THE WAY								٧	٧				٧		_
4/29/13	1510	WATER	MW # 2	250 ml - 1	HNO ₃ & Cool											٧			٧		Γ
4/29/13	1510	WATER	MW # 2	250 ml - 1	H ₂ SO ₄												٧		٧		
4/29/13	1320	WATER	MW # 3	40 ml VOA - 2 HCl & Cool — ○ Q3 V															٧		
4/29/13	1320	WATER	MW # 3	500 ml - 1 Cool										٧	٧				٧		
4/29/13	1320	WATER	MW # 3	250 ml - 1 HNO ₃ & Cool												٧			٧		
4/29/13	1320	WATER	MW # 3	250 ml - 1 H ₂ SO ₄													٧		٧	Ť	
Date: 4/30/13 Date: 1/30/13	Time: SILe Time: 1740	Relinquishe	lun of	Received by:	Wasters OSI	Date Tim 1/30/13 & Date Tim 01/13 899	110	Rem				Blagg P.O. E	Engii	7	ng, lı	ıc.					

Client:

Blagg Engineering

Project: Ulibarri GC 1A

Work Order:

Date: 24-Oct-11

1110913

Analyte	Result	Units	PQL	SPK Va S	SPK ref	%Rec L	owLimit Hi	ghLimit %RPI	RPDLimit Qual
Method: EPA Method 8015B: D Sample ID: MB-28968	Diesel Range	Organics MBLK		75		Batch ID:	28968	Analysis Date:	10/20/2011 10:32:25 PM
Diesel Range Organics (DRO) Sample ID: LCS-28968	ND	mg/Kg LCS	10			Batch ID:	28968	Analysis Date:	10/20/2011 11:02:36 PM
Diesel Range Organics (DRO)	54.45	mg/Kg	10	50	0	109	66.7	119	
Method: EPA Method 8015B: G Sample ID: 1110913-01A MSD	Sasoline Rai	nge MSD				Batch ID:	28975	Analysis Date:	10/20/2011 9:20:24 PM
Gasoline Range Organics (GRO) Sample ID: MB-28975	33.95	mg/Kg <i>MBLK</i>	5.0	25	0	136 Batch ID:	72.4 28975	149 1.75 Analysis Date:	19.2 10/20/2011 4:03:24 PM
Gasoline Range Organics (GRO) Sample ID: LCS-28975	ND	mg/Kg LCS	5.0			Batch ID:	28975	Analysis Date:	10/20/2011 11:12:58 AM
Gasoline Range Organics (GRO) Sample ID: 1110913-01A MS	29.65	mg/Kg MS	5.0	25	0	119 Batch ID:	86.4 28975	132 Analysis Date:	10/20/2011 8:51:36 PM
Gasoline Range Organics (GRO)	33.36	mg/Kg	5.0	25	0	133	72.4	149	

E Estimated value

J Analyte detected below quantitation limits

NC Non-Chlorinated

R RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG			Date Receiv	red:	10/18/2011
Work Order Number 1110913			Received I		A
Checklist completed by:	h		/ Sample ID	labels checked b	Initials
Signature		Date			0
Matrix:	Carrier name: Cou	rier			
Shipping container/cooler in good condition?	Yes	V	No 🗆	Not Present	
Custody seals intact on shipping container/cooler?	Yes		No 🗆	Not Present	☐ Not Shipped ☐
Custody seals intact on sample bottles?	Yes		No 🗌	N/A	
Chain of custody present?	Yes	V	No 🗌		
Chain of custody signed when relinquished and received	d? Yes	V	No 🗆		
Chain of custody agrees with sample labels?	Yes	V	No 🗆		
Samples in proper container/bottle?	Yes	V	No 🗆		
Sample containers intact?	Yes	V	No 🗌		
Sufficient sample volume for indicated test?	Yes	V	No 🗆		SHOP THE LAND
All samples received within holding time?	Yes	V	No 🗆		Number of preserved
Water - VOA vials have zero headspace? No V	OA vials submitted	V	Yes	No 🗆	bottles checked for pH:
Water - Preservation labels on bottle and cap match?	Yes		No 🗆	N/A 🗹	
Water - pH acceptable upon receipt?	Yes		No 🗆	N/A	<2 >12 unless noted
Container/Temp Blank temperature?	1	.9°	<6° C Accepta	ble	below.
COMMENTS:			If given sufficie	nt time to cool.	
			=====		========
Client contacted Date co	ontacted:		Per	rson contacted	
Contacted by: Regard	ing:				
Comments:					
				-	
Corrective Action	***		,,,,,		
				10	

Hall Environmental Analysis Laboratory, Inc.

WO#: 1206B98

12-Jul-12

Client: Blagg Engineering
Project: Ulibarri GC 1A

Sample ID MB-2690 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 2690 RunNo: 3861

Prep Date: 7/3/2012 Analysis Date: 7/3/2012 SeqNo: 109558 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-2690 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 2690 RunNo: 3861

Prep Date: 7/3/2012 Analysis Date: 7/3/2012 SeqNo: 109561 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 92.6 90 110

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

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

RL Reporting Detection Limit

Page 9 of 12

Hall Environmental Analysis Laboratory, Inc.

PQL

10

39

3.9

WO#: 1206B98

%RPD

RPDLimit

Qual

12-Jul-12

Client: Blagg Engineering
Project: Ulibarri GC 1A

Sample ID MB-2638 SampType: MBLK TestCode: EPA Method 8015B: Diesel Range Organics Client ID: **PBS** Batch ID: 2638 RunNo: 3783 Prep Date: 6/29/2012 Analysis Date: 6/30/2012 SeqNo: 107010 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 11 10.00 106 77.6 140 TestCode: EPA Method 8015B: Diesel Range Organics Sample ID LCS-2638 SampType: LCS Client ID: LCSS Batch ID: 2638 RunNo: 3783 Prep Date: 6/29/2012 Analysis Date: 6/30/2012 SeqNo: 107012 Units: mg/Kg

%REC

78.3

77.7

LowLimit

52.6

77.6

HighLimit

130

140

SPK value SPK Ref Val

50.00

5.000

Qualifiers:	0	ual	li	fi	e	rs	
-------------	---	-----	----	----	---	----	--

Analyte

Surr: DNOP

Diesel Range Organics (DRO)

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

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

RL Reporting Detection Limit

Page 10 of 12

Hall Environmental Analysis Laboratory, Inc.

WO#: 1206B98

12-Jul-12

Client: Blagg Engineering
Project: Ulibarri GC 1A

Sample ID mb-2629 Client ID: PBS	-	SampType: MBLK Batch ID: 2629		5.500	TestCode: EPA Method 8260B: Volatiles Short List RunNo: 3860					
Prep Date: 6/28/2012	Analysis [Date: 7/	3/2012	8	SeqNo: 1	09692	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: 1,2-Dichloroethane-d4	0.41		0.5000		82.1	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.2	70	130			
Surr: Dibromofluoromethane	0.42		0.5000		84.1	71.7	132			
Surr: Toluene-d8	0.43		0.5000		86.3	70	130			

Sample ID Ics-2629	Samp	Гуре: LC	S	Tes	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: LCSS	Batc	Batch ID: 2629			RunNo: 3	860					
Prep Date: 6/28/2012	Analysis [Date: 7/	3/2012		SeqNo: 1	09717	Units: mg/k	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.98	0.050	1.000	0	97.8	70.7	123		37 2		
Toluene	0.93	0.050	1.000	0	93.3	80	120				
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		83.2	70	130				
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.2	70	130				
Surr: Dibromofluoromethane	0.40		0.5000		80.1	71.7	132				
Surr: Toluene-d8	0.43		0.5000		85.4	70	130				

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

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

RL Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

32

430

5.0

25.00

500.0

WO#: 1206B98

S

12-Jul-12

Client: Blagg Engineering
Project: Ulibarri GC 1A

Gasoline Range Organics (GRO)

Surr: BFB

Sample ID mb-2629 SampType: MBLK TestCode: EPA Method 8015B Mod: Gasoline Range Client ID: **PBS** Batch ID: 2629 RunNo: 3860 Prep Date: Analysis Date: 7/3/2012 SeqNo: 109463 Units: mg/Kg 6/28/2012 Analyte Result PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 450 500.0 90.2 70 130 TestCode: EPA Method 8015B Mod: Gasoline Range Sample ID LCS-2629 SampType: LCS Client ID: LCSS Batch ID: 2629 RunNo: 3860 Analysis Date: 7/3/2012 SeqNo: 109466 Units: mg/Kg Prep Date: 6/28/2012 %RPD **RPDLimit** SPK value SPK Ref Val %REC Qual Result PQL LowLimit HighLimit

129

85.9

85

70

115

130

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

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

RL Reporting Detection Limit

Page 12 of 12



4901 Hawkins NE Albuquerque, NM 87105

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

Sample Log-In Check List

	ent Name: BLAGG sceived by/date: AG- C6/28//2	Work Order Number: 1206B98
Re	ceived by/date: HC- C6/20//2	
Lo	gged By: Anne Thorne 6/28/2012 10:00:00	AM am II-
	wiewed By: Anne Thorne 6/28/2012	AM Am Il-
Ch	ain of Custody	
	Were seals intact?	Yes ☐ No ☐ Not Present ☑
1000	Is Chain of Custody complete?	Yes ☑ No ☐ Not Present ☐
	How was the sample delivered?	Courier
Log	<u>q In</u>	
4.	Coolers are present? (see 19. for cooler specific information)	Yes ☑ No □ NA □
5.	Was an attempt made to cool the samples?	Yes 🗹 No 🗌 NA 🗔
6.	Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑ No ☐ NA ☐
7.	Sample(s) in proper container(s)?	Yes ☑ No □
8.	Sufficient sample volume for indicated test(s)?	Yes ☑ No □
9.	Are samples (except VOA and ONG) properly preserved?	Yes ☑ No □
10	Was preservative added to bottles?	Yes □ No ☑ NA □
11.	VOA vials have zero headspace?	Yes ☐ No ☐ No VOA Vials ☑
12.	Were any sample containers received broken?	Yes No 🗹
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ✓ No ☐ # of preserved bottles checked for pH:
14.	Are matrices correctly identified on Chain of Custody?	Yes ✓ No ☐ (<2 or >12 unless noted)
15.	Is it clear what analyses were requested?	Yes ✓ No ☐ Adjusted?
16.	Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑ No ☐ Checked by:
Spe	cial Handling (if applicable)	
17.	Was client notified of all discrepancies with this order?	Yes ☐ No ☐ NA 🗹
	Person Notified: Date By Whom: Via: Regarding: Client Instructions:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
18.	Additional remarks:	
19.	Cooler Information Cooler No Temp ℃ Condition Seal Intact Seal No 1 1.0 Good Yes	Seal Date Signed By

Client:

Client ID: BatchQC

Hall Environmental Analysis Laboratory, Inc.

Batch ID: 6291

Blagg Engineering

WO#: 1302920

04-Mar-13

Chloride	15	1.5	15.00	0	99.1	90	110	1 2		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Prep Date: 3/1/2013	Analysis D	ate: 3/	1/2013	8	SeqNo: 2	54933	Units: mg/k	(g		
Client ID: LCSS	Batch	1D: 62	91	F	tunNo: 8	926				
Sample ID LCS-6291	SampT	ype: LC	s	Tes	tCode: E	PA Method	300.0: Anion	IS	100	
Chloride	ND	1.5		T. LES					A CONTRACTOR	WE
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Prep Date: 3/1/2013	Analysis D	ate: 3	1/2013	8	SeqNo: 2	54932	Units: mg/F	(g		
Client ID: PBS	Batc	n ID: 62	91	F	RunNo: 8	926				
Sample ID MB-6291	Samp	ype: MI	BLK	Tes	tCode: E	PA Method	300.0: Anion	IS		

Prep Date:	3/1/2013	Analysis D	ate: 3/	1/2013	8	SeqNo: 2	54949	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		20	1.5	15.00	6.050	90.2	64.4	117			
Sample ID	1302929-001AMSD	SampT	ype: MS	D	Tes	tCode: El	PA Method	300.0: Anion	ıs	ALC:	
Client ID:	BatchQC	Batch	ID: 629	91	F	RunNo: 8	926				

RunNo: 8926

Client ID: BatchQC	Batch	h ID: 62	91	F	RunNo: 8	926				
Prep Date: 3/1/2013	Analysis D	Date: 3/	1/2013	8	SeqNo: 2	54950	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	20	1.5	15.00	6.050	90.7	64.4	117	0.349	20	

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

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

Hall Environmental Analysis Laboratory, Inc.

WO#: 1302920

04-Mar-13

Client: Project:	Blagg Eng Ulibarri C										
Sample ID	MB-6278	SampTy	ype: ME	BLK	Tes	stCode: E	PA Method	8015B: Dies	el Range (Organics	
Client ID:	PBS	Batch	ID: 62	78	1	RunNo: 8	891				
Prep Date:	2/28/2013	Analysis Da	ate: 2/	28/2013		SeqNo: 2	54152	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	ND 11	10	10.00	Inches	106	72.4	120			
Sample ID	LCS-6278	SampTy	ype: LC	S	Tes	stCode: E	PA Method	8015B: Dies	el Range (Organics	
Client ID:	LCSS	Batch	ID: 62	78	1	RunNo: 8	891				
Prep Date:	2/28/2013	Analysis Da	ate: 2/	28/2013		SeqNo: 2	54153	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	51	10	50.00	0	102	47.4	122			
Surr: DNOP		5.6		5.000		112	72.4	120	- 1		
Sample ID	1302919-001AMS	SampTy	ype: MS	3	Tes	stCode: E	PA Method	8015B: Dies	el Range (Organics	7.
Client ID:	BatchQC	Batch	ID: 62	78		RunNo: 8	907				
Prep Date:	2/28/2013	Analysis Da	ate: 3/	1/2013		SeqNo: 2	54671	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	57	10	50.00	10.89	92.0	12.6	148		WE TO SE	13
Surr: DNOP		6.3		5.000		127	72.4	120	1,000		S
Sample ID	1302919-001AMSD	SampTy	/ре: М	SD	Tes	stCode: E	PA Method	8015B: Dies	el Range (Organics	e N
Client ID:	BatchQC	Batch	ID: 62	78	F	RunNo: 8	907				
Prep Date:	2/28/2013	Analysis Da	ate: 3/	1/2013		SeqNo: 2	54689	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	56	10	50.00	10.89	89.9	12.6	148	1.89	22.5	

5.000

Qualifiers:

Surr: DNOP

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

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

Hall Environmental Analysis Laboratory, Inc.

WO#: 1302920

04-Mar-13

Client:	Blagg Engineering
Project:	Ulibarri GC 1A

Sample ID MB-6284	SampType: N	IBLK	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	e	
Client ID: PBS	Batch ID: 6			RunNo: 8					
Prep Date: 2/28/2013	Analysis Date:	3/1/2013	5	SeqNo: 2	54976	Units: mg/k	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0	1000		108	84	116			
Sample ID LCS-6284	SampType: L	cs	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	e	Mar.
Client ID: LCSS	Batch ID: 6	284	F	RunNo: 8	927				
Prep Date: 2/28/2013	Analysis Date:	3/1/2013		SeqNo: 2	54977	Units: mg/F	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	28 5.0 1100	25.00 1000	0	110 113	62.6 84	136 116			
Sample ID 1302917-002AM						8015B: Gaso	line Rang	е	
Client ID: BatchQC	Batch ID: 6	284	F	RunNo: 8	927				
Prep Date: 2/28/2013	Analysis Date:	3/1/2013	8	SeqNo: 2	54980	Units: mg/k	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30 4.6		0	129	70	130			
Surr: BFB	1100	925.9		119	84	116			S
Sample ID 1302917-002AM	SD SampType: M	SD	Tes	tCode: El	PA Method	8015B: Gaso	line Rang	е	
Client ID: BatchQC	Batch ID: 6	284	F	RunNo: 8	927				
Prep Date: 2/28/2013	Analysis Date: 3	3/1/2013		SeqNo: 2	54981	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31 4.6	22.98	0	135	70	130	4.21	22.1	S
Surr: BFB	1100	919.1		117	84	116	0	0	S

Qualifiers:

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

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

RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit

Page 4 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#: 1302920

04-Mar-13

Client: Blagg Engineering
Project: Ulibarri GC 1A

Sample ID MB-6284	Samp	ype: ME	BLK	Tes	tiles					
Client ID: PBS				F	RunNo: 8927					
Prep Date: 2/28/2013				8	SeqNo: 2	55094	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								25.75
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Kylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID LCS-6284	ample ID LCS-6284 SampType: LCS					TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Client ID: LCSS Batch ID: 6284				RunNo: 8927								
Prep Date: 2/28/2013	Analysis [Date: 3/	1/2013		SeqNo: 2	55100	Units: mg/h	(g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	0.94	0.050	1.000	0	94.1	80	120						
Toluene	0.93	0.050	1.000	0	93.0	80	120						
Ethylbenzene	0.93	0.050	1.000	0	92.8	80	120						
Xylenes, Total	2.8	0.10	3.000	0	93.9	80	120						
Surr: 4-Bromofluorobenzene	1.1		1.000		112	80	120						

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

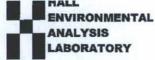
B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

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Hun Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-410;

Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: BLAGG Work Order Number: 1302920 Received by/date: Logged By: Michelle Garcia 2/28/2013 9:59:00 AM Completed By: 2/28/2013 10:35:13 AM Michelle Garcia Reviewed By: Chain of Custody Yes No Not Present 1. Were seals intact? Yes V No Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In Yes V No NA 🗌 4. Coolers are present? (see 19. for cooler specific information) NA 🗌 Yes V No 5. Was an attempt made to cool the samples? Yes V No NA 6. Were all samples received at a temperature of >0° C to 6.0°C Yes V No 7. Sample(s) in proper container(s)? Yes V No 8. Sufficient sample volume for indicated test(s)? Yes V No 9. Are samples (except VOA and ONG) properly preserved? Yes No V NA 🗌 10. Was preservative added to bottles? Yes No No VOA Vials 11. VOA vials have zero headspace? Yes No V 12. Were any sample containers received broken? # of preserved Yes V No 13. Does paperwork match bottle labels? bottles checked (Note discrepancies on chain of custody) for pH: Yes V No (<2 or >12 unless noted) 14. Are matrices correctly identified on Chain of Custody? Yes V No Adjusted? 15. Is it clear what analyses were requested? Yes V No 16. Were all holding times able to be met? (If no, notify customer for authorization.) Checked by: Special Handling (if applicable) NA V Yes No 17. Was client notified of all discrepancies with this order? Person Notified: Date: By Whom: eMail Phone Fax In Person Regarding: Client Instructions: 18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good	Yes			

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303187

07-Mar-13

Client: Blagg Engineering
Project: Ulibarri GC 1A

Sample ID MB-6369 SampType: MBLK TestCode: EPA Method 300.0: Anions
Client ID: PBS Batch ID: 6369 RunNo: 9043

Prep Date: 3/7/2013 Analysis Date: 3/7/2013 SeqNo: 257814 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-6369 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 6369 RunNo: 9043

Prep Date: 3/7/2013 Analysis Date: 3/7/2013 SeqNo: 257815 Units: mg/Kg

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

Chloride 15 1.5 15.00 0 97.5 90 110

Sample ID 1303187-001BMS SampType: MS TestCode: EPA Method 300.0: Anions

Client ID: 95' S73W @ 11'-12' Batch ID: 6369 RunNo: 9043

Prep Date: 3/7/2013 Analysis Date: 3/7/2013 SeqNo: 257817 Units: mg/Kg

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

Chloride 16 7.5 15.00 3.438 86.3 64.4 117

Sample ID 1303187-001BMSD SampType: MSD TestCode: EPA Method 300.0: Anions

Client ID: 95' S73W @ 11'-12' Batch ID: 6369 RunNo: 9043

Prep Date: 3/7/2013 Analysis Date: 3/7/2013 SeqNo: 257818 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Chloride 16 7.5 15.00 3.438 87.0 0.675 20

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

Page 4 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303187

07-Mar-13

Client:	Blagg Engineering
Project:	Ulibarri GC 1A

Sample ID MB-6353	Samp1	ype: M	BLK	TestCode: EPA Method 8015B: Diesel Range Organics						
Client ID: PBS	Batcl	n ID: 63	53	F	RunNo: 9	026				
Prep Date: 3/6/2013	Analysis E)ate: 3/	/7/2013	5	SeqNo: 2	57536	Units: mg/F	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10				A THE			Sa Pic	
Surr: DNOP	10		10.00		103	72.4	120			
Sample ID LCS-6353	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015B: Dies	el Range (Organics	Was
Client ID: LCSS	Batch	n ID: 63	53	F	RunNo: 9	026				
Prep Date: 3/6/2013	Analysis D)ate: 3/	7/2013	S	SeqNo: 2	57611	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.7	47.4	122			
Surr: DNOP	5.3		5.000		106	72.4	120			

Sample ID 1303187-001AM	SampT	ype: MS	3	Tes	tCode: E	PA Method	8015B: Dies	el Range (Organics	
Client ID: 95' S73W @ 11'	-12' Batch	ID: 63	53	F	RunNo: 9	026				
Prep Date: 3/6/2013	Analysis D	ate: 3/	7/2013		SeqNo: 2	57721	Units: mg/F	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.7	48.45	0	97.0	12.6	148	N PF II	W. T.	
Surr: DNOP	5.1		4.845		106	72.4	120			

Sample ID 130	3187-001AMSD	SampTyp	e: MS	SD	Tes	tCode: El	PA Method	8015B: Diese	el Range (Organics	
Client ID: 95'	S73W @ 11'-12'	Batch I	D: 63	53	F	RunNo: 9	026				
Prep Date: 3/6	6/2013	Analysis Dat	e: 3/	7/2013	8	SeqNo: 2	57723	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organ	ics (DRO)	50	10	50.97	0	97.8	12.6	148	5.91	22.5	55 %
Surr: DNOP		5.5		5.097		107	72.4	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RPD outside accepted recovery limits

Page 5 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303187

07-Mar-13

Client: Project:	Blagg En Ulibarri C	Separation in											
Sample ID	MB-6334	SampT	ype: M	BLK	Tes	tCode: E	PA Method	8015B: Gas	oline Rang	je	7 1		
Client ID:	PBS	Batch	n ID: R	8996	F	RunNo: 8996							
Prep Date:	3/5/2013	Analysis D	ate: 3	3/6/2013		SeqNo: 2	257436	Units: mg/l	K g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Rang Surr: BFB	ge Organics (GRO)	ND 1000	5.0	1000		105	84	116	44	1.40			
Sample ID	LCS-6334	SampT	ype: Lo	cs	Tes	tCode: E	PA Method	8015B: Gase	oline Rang	je			
Client ID:	LCSS	Batch	ID: R	8996	F	RunNo: 8	996						
Prep Date:	3/5/2013	Analysis D	ate: 3	3/6/2013		SeqNo: 2	57437	Units: mg/h	K g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
	ge Organics (GRO)	29	5.0		0	114	62.6	136					
Surr: BFB		1200		1000		115	84	116		1000			
Sample ID Client ID:	MB-6334 PBS		ype: M			tCode: E		8015B: Gaso	oline Rang	je			
Prep Date:		Analysis D				SegNo: 2		Units: %RE	C				
	0/0/2010					200				DDD1 : - ''	0 1		
Analyte Surr: BFB		Result 1000	PQL	1000	SPK Ref Val	105	LowLimit 84	HighLimit 116	%RPD	RPDLimit	Qual		
Sample ID			ype: LO					8015B: Gaso	oline Rang	le			
Client ID:	LCSS		1D: 63			RunNo: 8							
Prep Date:	3/5/2013	Analysis D	ate: 3	/6/2013		SeqNo: 2	57444	Units: %RE	C				
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: BFB		1200		1000		115	84	116			BALL		
Sample ID	1303099-001AMS	SampT	ype: M	s	Tes	tCode: E	PA Method	8015B: Gaso	oline Rang	je			
Client ID:	BatchQC	Batch	ID: 63	334	F	RunNo: 8	996						
Prep Date:	3/5/2013	Analysis D	ate: 3	/6/2013		SeqNo: 2	57447	Units: %RE	C				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: BFB	1.539913	1100		947.0		117	84	116	10000		S		
Sample ID	1303099-001AMSE	SamnT	ype: M	SD	Tes	tCode: F	PA Method	8015B: Gaso	oline Rang	e			
Client ID:	BatchQC	100	ID: 63			RunNo: 8							
Prep Date:		Analysis D				SegNo: 2		Units: %RE	C				
		, ,											
Analyte		Result	PQL	SDK value	SPK Ref Val	% DEC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1303187 07-Mar-13

ngineering GC 1A					-6		- Auto		
Samp ⁻	Туре: МІ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles	party from	
Batc	h ID: R8	3996	F	RunNo: 8	996				
Analysis [Date: 3/	/6/2013		SeqNo: 2	57464	Units: mg/h	(g		
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
ND	0.050								
ND	0.050								
ND	0.050								
ND	0.10								
1.0		1.000		103	80	120			
Samp	Гуре: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Batc	h ID: R8	1996	F	RunNo: 8	996				
Analysis [Date: 3/	6/2013		SeqNo: 2	57465	Units: mg/F	(g		
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
0.93	0.050	1.000	0	93.3	80	120			
0.93	0.050	1.000	0	93.5	80	120			
0.93	0.050	1.000	0	93.5	80	120			
2.8	0.10	3.000	0	94.9	80	120			
1.1		1.000	1 10	111	80	120			14.
Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		10
Batc	h ID: 63	34	F	RunNo: 8	996				
Analysis E	Date: 3/	6/2013	5	SeqNo: 2	57473	Units: %RE	С		
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1.0		1.000		103	80	120		h (Kallyr)	No.
Samp	Type: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles	100	
Batcl	h ID: 63	34	F	RunNo: 8	996				
Analysis E	Date: 3/	6/2013		SeqNo: 2	57474	Units: %RE	С		
Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1.1		1.000		111	80	120			
			Too	Cada: El	DA Mathad	8021B: Vola	tilaa	1920 B 1971 B	
Samp	ype: MS	5	ies	loue. El	A Method	8021B. Vola	uies		
1	h ID: 63			RunNo: 8		8021B: Voia	uies		
	Sampine Batc Analysis I Result ND	SampType: MI Batch ID: R8 Analysis Date: 3, Result PQL ND 0.050 ND 0.050 ND 0.10 1.0 SampType: LC Batch ID: R8 Analysis Date: 3, Result PQL 0.93 0.050 0.93 0.050 0.93 0.050 2.8 0.10 1.1 SampType: MI Batch ID: 63 Analysis Date: 3, Result PQL 1.0 SampType: LC Batch ID: 63 Analysis Date: 3, Result PQL 1.0 SampType: LC Batch ID: 63 Analysis Date: 3, Result PQL 1.0	SampType: MBLK Batch ID: R8996 Analysis Date: 3/6/2013 Result PQL SPK value ND 0.050 ND 0.050 ND 0.10 1.00 SampType: LCS Batch ID: R8996 Analysis Date: 3/6/2013 Result PQL SPK value 0.93 0.050 1.000 0.93 0.050 1.000 0.93 0.050 1.000 2.8 0.10 3.000 1.1 3.000 1.1 3.000 SampType: MBLK Batch ID: 6334 Analysis Date: 3/6/2013 Result PQL SPK value 1.0 SPK value 1.0 SPK value 1.00 SampType: LCS Batch ID: 6334 Analysis Date: 3/6/2013 Result PQL SPK value	SampType: MBLK Batch ID: R8996 Analysis Date: 3/6/2013 Result PQL SPK value SPK Ref Val ND 0.050 ND 0.050 ND 0.10 1.0 1.000 SampType: LCS Tes Batch ID: R8996 Analysis Date: 3/6/2013 Result PQL SPK value SPK Ref Val 0.93 0.050 1.000 0 0.93 0.050 1.000 0 0.93 0.050 1.000 0 0.93 0.050 1.000 0 0.93 0.050 1.000 0 2.8 0.10 3.000 0 1.1 1.000 SampType: MBLK Batch ID: 6334 Analysis Date: 3/6/2013 Result PQL SPK value SPK Ref Val 1.0 SPK value SPK Ref Val 5 SPK Ref Val 6 SPK Ref Val 7 Es 8 SPK Ref Val 8 SPK Ref Val 1.0 1.000 SampType: LCS Tes 8 SPK Ref Val 9 SPK Ref Val 1.0 1.000	GC 1A SampType: MBLK TestCode: E Batch ID: R8996 RunNo: 8 Analysis Date: 3/6/2013 SeqNo: 2 Result PQL SPK value SPK Ref Val %REC ND 0.050 ND 0.03 ND 0.050 RunNo: 8 RunNo: 8 RunNo: 8 Analysis Date: 3/6/2013 SeqNo: 2 SeqNo: 2 2 Result PQL SPK value SPK Ref Val %REC 0.93.5	GC 1A SampType: MBLK TestCode: EPA Method Batch ID: R8996 RunNo: 8996 Analysis Date: 3/6/2013 SeqNo: 257464 Result PQL SPK value SPK Ref Val %REC LowLimit ND 0.050 ND	SampType: MBLK TestCode: EPA Method 8021B: Vola Batch ID: R8996 RunNo: 8996	SampType: MBLK Batch ID: R8996 RunNo: 8996 RunNo: 8996	SampType: MBLK

Qualifiers:

Analyte

* Value exceeds Maximum Contaminant Level.

Result

1.0

PQL

SPK value SPK Ref Val

0.9372

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

Surr: 4-Bromofluorobenzene

B Analyte detected in the associated Method Blank

LowLimit

HighLimit

120

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

%REC

R RPD outside accepted recovery limits

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%RPD

RPDLimit

Hall Environmental Analysis Laboratory, Inc.

1.0

WO#: 1303187

07-Mar-13

Client: Blagg Engineering Ulibarri GC 1A Project:

Surr: 4-Bromofluorobenzene

Sample ID 1303122-001AMSD TestCode: EPA Method 8021B: Volatiles SampType: MSD

Client ID: Batch ID: 6334 RunNo: 8996 BatchQC

Prep Date: 3/5/2013 Analysis Date: 3/6/2013 SeqNo: 257480 Units: %REC

0.9372

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

108

120

0

Oualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range

Analyte detected below quantitation limits

Sample pH greater than 2

B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

Page 8 of 8 RPD outside accepted recovery limits



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG		Nork Order Num	nber: 130318	7	
Received by/date:	03/06/13				
Logged By: Michelle Garcia	3/6/2013 9:53:00 AM		Michael Gan	iii)	
Completed By: Michelle Garcia	3/6/2013 10:11:39 AM		Міни Сра Міни Сра	نسن	1000
Reviewed By:O	03/06/201	3			Will the little
Chain of Custody	, ,				
1. Were seals intact?		Yes No	□ Not i	Present 🗸	
2. Is Chain of Custody complete?		Yes 🗸 No	□ Not i	Present	
3. How was the sample delivered?		Courier			
Log In					
4. Coolers are present? (see 19. for cooler sp	ecific information)	Yes V No		NA 🗆	
5. Was an attempt made to cool the samples	?	Yes V No		NA 🗆	
6. Were all samples received at a temperature	e of >0° C to 6.0°C	Yes V No		NA 🗆	
7. Sample(s) in proper container(s)?		Yes V No			
Sufficient sample volume for indicated test	(s)?	Yes V No			
Are samples (except VOA and ONG) proper		Yes V No			
10. Was preservative added to bottles?		Yes 🗌 No	✓	NA 🗆	
11. VOA vials have zero headspace?		Yes No	□ No VO	A Vials	
12. Were any sample containers received brok	ten?	Yes No		ANY CONTRACTOR OF THE PARTY OF	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes V No	'	# of preserved bottles checked for pH:	
14. Are matrices correctly identified on Chain of	of Custody?	Yes V No		(<2 or	>12 unless noted)
15. Is it clear what analyses were requested?				Adjusted?	
16. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes V No		Checked by:	
Special Handling (if applicable)				*	
17. Was client notified of all discrepancies with	this order?	Yes 🗌 No		NA 🗹	
Person Notified: By Whom: Regarding: Client Instructions:	Date: Via:	□ eMail □ F	Phone Fax	In Person	
18. Additional remarks:					
19. Cooler Information Cooler No Temp °C Condition S 1 1.0 Good Ye		Seal Date	Signed By		

Client:

Chloride

Project:

Sample ID MB-6415

Hall Environmental Analysis Laboratory, Inc.

ND

Blagg Engineering Ulibarri GC 1A

WO#: 1303374

14-Mar-13

Chloride

Qualifiers:

E

Analyte detected below quantitation limits

P Sample pH greater than 2

Reporting Detection Limit

SampType: MBLK TestCode: EPA Method 300.0: Anions

RunNo: 9111 Client ID: PBS Batch ID: 6415

Prep Date: 3/11/2013 Analysis Date: 3/11/2013 SegNo: 259480 Units: mg/Kg

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

Sample ID LCS-6415 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 6415 RunNo: 9111

1.5

Prep Date: 3/11/2013 Analysis Date: 3/11/2013 SeqNo: 259481 Units: mg/Kg

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

Chloride 15 1.5 15.00 0 97.2 90 110

Sample ID 1303374-001BMS SampType: MS TestCode: EPA Method 300.0: Anions

Client ID: 163' S48W @ 10'-12' Batch ID: 6415 RunNo: 9111

Prep Date: 3/11/2013 Analysis Date: 3/11/2013 SegNo: 259483 Units: mg/Kg

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

Chloride ND 30 15.00 6.318 76.4 64.4 117

Sample ID 1303374-001BMSD SampType: MSD TestCode: EPA Method 300.0: Anions

Client ID: 163' S48W @ 10'-12' Batch ID: 6415 RunNo: 9111

Prep Date: 3/11/2013 Analysis Date: 3/11/2013 SeqNo: 259484 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 30 6.318 20 Chloride ND 15.00 808 64.4 0

Sample ID 1303395-001AMS SampType: MS TestCode: EPA Method 300.0: Anions

Client ID: BatchQC Batch ID: 6415 RunNo: 9111

Prep Date: 3/11/2013 Analysis Date: 3/11/2013 SeqNo: 259494 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte PQL LowLimit HighLimit Qual Chloride 16 7.5 15.00 3.320 86.7 64.4 117

Sample ID 1303395-001AMSD SampType: MSD TestCode: EPA Method 300.0: Anions

Client ID: BatchQC Batch ID: 6415 RunNo: 9111

Prep Date: 3/11/2013 Analysis Date: 3/11/2013 SeqNo: 259495 Units: mg/Kg

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

16 15.00 3.320 82.0 64.4 4.39 20

Value exceeds Maximum Contaminant Level.

Analyte detected in the associated Method Blank

Value above quantitation range H Holding times for preparation or analysis exceeded

> ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1303374 14-Mar-13

	i GC 1A							19/2		
Sample ID MB-6403	Samp	Type: MI	BLK	Tes	tCode: E	PA Method	8015B: Dies	el Range (Organics	
Client ID: PBS	Bato	h ID: 64	103	F	RunNo: 9	086				
Prep Date: 3/8/2013	Analysis I	Date: 3	/11/2013		SeqNo: 2	58731	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qua
Diesel Range Organics (DRO)	ND	10					200	100		27.
Surr: DNOP	11		10.00	17.	105	72.4	120		15-11-11-	
Sample ID LCS-6403	Samp	Type: LC	cs	Tes	tCode: E	PA Method	8015B: Dies	el Range (Organics	
Client ID: LCSS	Batc	h ID: 64	03	F	RunNo: 9	086				
Prep Date: 3/8/2013	Analysis I	Date: 3	/11/2013	5	SeqNo: 2	59007	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qua
Diesel Range Organics (DRO)	50	10	50.00	0	100	47.4	122			
Surr: DNOP	5.6		5.000		112	72.4	120			4
Sample ID 1303336-001AM	S Samp	Type: MS	S	Tes	tCode: E	PA Method	8015B: Diese	el Range (Organics	
Client ID: BatchQC	Batc	Batch ID: 6403			RunNo: 9	099				
Prep Date: 3/8/2013	Analysis [Date: 3	/12/2013		SeqNo: 2	59283	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qua
Diesel Range Organics (DRO)	52	9.7	48.73	0	107	12.6	148			
Surr: DNOP	5.0		4.873	100	102	72.4	120			
Sample ID 1303336-001AM	SD Samp	Туре: М	SD	Tes	tCode: E	PA Method	8015B: Diese	el Range (Organics	
Client ID: BatchQC	Batc	h ID: 64	03	F	RunNo: 9	099				
	Analysis [Date: 3	/12/2013		SeqNo: 2	59284	Units: mg/K	g		
Prep Date: 3/8/2013	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qua
Prep Date: 3/8/2013 Analyte		10	51.76	0	113	12.6	148	11.5	22.5	31
	58					72.4	120	0	0	
Analyte	58 5.5		5.176	-10 Tac	106	12.4				
Analyte Diesel Range Organics (DRO)	5.5	Туре: М		Tes			8015B: Diese	el Range (Organics	
Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-6400	5.5 Samp		BLK			PA Method	8015B: Diese	el Range (Organics	
Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-6400	5.5 Samp	Type: MI	BLK 00	F	tCode: E	PA Method	8015B: Diese		Organics	
Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-6400 Client ID: PBS	5.5 Samp	Type: MI	BLK .00 /12/2013	F	tCode: El	PA Method			Organics RPDLimit	Qual

Qualifiers:

Analyte

Surr: DNOP

Client ID: LCSS

Prep Date: 3/8/2013

* Value exceeds Maximum Contaminant Level.

Batch ID: 6400

Analysis Date: 3/12/2013

Result

5.1

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

RL Reporting Detection Limit

B Analyte detected in the associated Method Blank

LowLimit

72.4

Units: %REC

120

HighLimit

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RunNo: 9099

SPK value SPK Ref Val %REC

5.000

SeqNo: 259675

101

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

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RPDLimit

Qual

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303374

14-Mar-13

Client: Blagg Engineering
Project: Ulibarri GC 1A

Sample ID 1303331-001AMS SampType: MS TestCode: EPA Method 8015B: Diesel Range Organics

Client ID: BatchQC Batch ID: 6400 RunNo: 9099

Prep Date: 3/8/2013 Analysis Date: 3/12/2013 SeqNo: 259695 Units: %REC

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

Surr: DNOP 5.6 5.198 108 72.4 120

Sample ID 1303331-001AMSD SampType: MSD TestCode: EPA Method 8015B: Diesel Range Organics

Client ID: BatchQC Batch ID: 6400 RunNo: 9099

Prep Date: 3/8/2013 Analysis Date: 3/12/2013 SeqNo: 259748 Units: %REC

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

Surr. DNOP 5.0 4.780 105 72.4 120 0 0

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

RL Reporting Detection Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike Recovery outside accepted recovery limits

RPD outside accepted recovery limits

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1303374 14-Mar-13

Client: Blagg Engineering
Project: Ulibarri GC 1A

Sample ID 5ml rb	Samp	Гуре: МЕ	BLK	Tes	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: PBS	Batc	h ID: R9	062	F	RunNo: 9						
Prep Date:	Analysis [Analysis Date: 3/8/2013			SeqNo: 2	58899	Units: mg/K				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.050							2.		
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.1	70	130				
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130				
Surr: Dibromofluoromethane	0.46		0.5000		92.3	70	130				
Surr: Toluene-d8	0.47		0.5000		93.2	70	130				

Samp	ype: LC	S	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: LCSS Batch ID: R9062				RunNo: 9062					
Analysis [Date: 3/	8/2013		SeqNo: 2	58900	Units: mg/k	(g		
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1.1	0.050	1.000	0	108	70	130			7
1.0	0.050	1.000	0	104	80	120			
0.45		0.5000		89.5	70	130			
0.49		0.5000		97.3	70	130			
0.48		0.5000		95.9	70	130			
0.46		0.5000		91.2	70	130			
	Result 1.1 1.0 0.45 0.49 0.48	Batch ID: R9 Analysis Date: 3/ Result PQL 1.1 0.050 1.0 0.050 0.45 0.49 0.48	Result PQL SPK value 1.1 0.050 1.000 1.0 0.050 1.000 0.45 0.5000 0.49 0.5000 0.48 0.5000	Batch ID: R9062 F Analysis Date: 3/8/2013 S Result PQL SPK value SPK Ref Val 1.1 0.050 1.000 0 1.0 0.050 1.000 0 0.45 0.5000 0.49 0.5000 0.48 0.5000	Batch ID: R9062 RunNo: 9 Analysis Date: 3/8/2013 SeqNo: 2 Result PQL SPK value SPK Ref Val %REC 1.1 0.050 1.000 0 108 1.0 0.050 1.000 0 104 0.45 0.5000 89.5 0.49 0.5000 97.3 0.48 0.5000 95.9	Batch ID: R9062 RunNo: 9062 Analysis Date: 3/8/2013 SeqNo: 258900 Result PQL SPK value SPK Ref Val %REC LowLimit 1.1 0.050 1.000 0 108 70 1.0 0.050 1.000 0 104 80 0.45 0.5000 89.5 70 0.49 0.5000 97.3 70 0.48 0.5000 95.9 70	Batch ID: R9062 RunNo: 9062 Analysis Date: 3/8/2013 SeqNo: 258900 Units: mg/k Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 1.1 0.050 1.000 0 108 70 130 1.0 0.050 1.000 0 104 80 120 0.45 0.5000 89.5 70 130 0.49 0.5000 97.3 70 130 0.48 0.5000 95.9 70 130	Batch ID: R9062 RunNo: 9062 Analysis Date: 3/8/2013 SeqNo: 258900 Units: mg/Ky Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD 1.1 0.050 1.000 0 108 70 130 1.0 0.050 1.040 89.5 70 130 0.49 0.5000 97.3 70 130 0.48 0.5000 95.9 70 130	Batch ID: R9062 RunNo: 9062 Analysis Date: 3/8/2013 SeqNo: 258900 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit 1.1 0.050 1.000 0 108 70 130 1.0 0.050 1.000 0 104 80 120 0.45 0.5000 89.5 70 130 0.49 0.5000 97.3 70 130 0.48 0.5000 95.9 70 130

Sample ID 1303370-001a ms	TestCode: EPA Method 8260B: Volatiles Short List									
Client ID: BatchQC	Batch	ID: R9	062	F	RunNo: 9	062				
Prep Date:	Analysis D	ate: 3/	9/2013		SeqNo: 2	58910	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.69	0.050	0.6741	0.003526	101	67.5	124			
Toluene	0.71	0.050	0.6741	0	106	55.8	142			
Surr: 1,2-Dichloroethane-d4	0.30		0.3370		89.0	70	130			
Surr: 4-Bromofluorobenzene	0.32		0.3370		93.7	70	130			
Surr: Dibromofluoromethane	0.31		0.3370		93.2	70	130			
Surr: Toluene-d8	0.33		0.3370		96.9	70	130			

Sample ID 1303370-001a m	TestCode: EPA Method 8260B: Volatiles Short List									
Client ID: BatchQC	Batc	h ID: R9	062	F	RunNo: 9	062				
Prep Date:	Analysis [Date: 3/	9/2013	8	SeqNo: 2	58911	Units: mg/F	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.050	0.6741	0.003526	107	67.5	124	5.09	20	
Toluene	0.71	0.050	0.6741	0	105	55.8	142	0.0834	20	
Surr: 1,2-Dichloroethane-d4	0.31		0.3370		92.7	70	130	0	0	

Qualifiers:

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

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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1303374

14-Mar-13

Client: Blagg Engineering
Project: Ulibarri GC 1A

Sample ID 1303370-001a msd	SampTyp	e: MSD	Tes	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: BatchQC	Batch ID	: R9062	F	RunNo: 9	062					
Prep Date:	Analysis Date	3/9/2013	5	SeqNo: 2	58911	Units: mg/k	(g			
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 4-Bromofluorobenzene	0.31	0.3370)	91.9	70	130	0	0		
Surr: Dibromofluoromethane	0.33	0.3370)	98.4	70	130	0	0		
Surr: Toluene-d8	0.34	0.3370		99 5	70	130	0	0		

Qualifiers:

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

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

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Hall Environmental Analysis Laboratory, Inc.

340

375.2

WO#: 1303374

14-Mar-13

Client: Project:	Blagg En Ulibarri (gineering GC 1A									
Sample ID 5r	ml rb	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	8015B Mod:	Gasoline	Range	
Client ID: PI	BS	Batch	ID: R	9062	F	RunNo: 9	062				
Prep Date:		Analysis D	ate: 3	/8/2013		SeqNo: 2	58886	Units: mg/l	Kg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range C Surr: BFB	Organics (GRO)	ND 510	5.0	500.0		102	70	130			
Sample ID 2.	.5ug gro lcs	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015B Mod:	Gasoline	Range	
Client ID: LC	css	Batch	ID: RS	0062	F	RunNo: 9	062				
Prep Date:		Analysis D	ate: 3	/8/2013		SeqNo: 2	58889	Units: mg/l	K g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range O	Organics (GRO)	25	5.0	25.00	0	102	74.6	137			
Surr: BFB		460		500.0	1	91.8	70	130	- 418		
Sample ID 13	303374-001a ms	g SampT	ype: MS	S	Tes	tCode: E	PA Method	8015B Mod:	Gasoline	Range	
Client ID: 16	63' S48W @ 10'-	12' Batch	ID: RS	0062	F	RunNo: 9	062				
Prep Date:		Analysis D	ate: 3	9/2013		SeqNo: 2	58897	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range O	Organics (GRO)	18	5.0	18.76	0	96.9	50.3	148	17.71		
Surr: BFB		340		375.2	ed	89.9	70	130	4.73	100 Tal. 1	d.
Sample ID 13	303374-001a ms	d g SampT	ype: MS	SD	Tes	tCode: E	PA Method	8015B Mod:	Gasoline	Range	101
Client ID: 16	63' S48W @ 10'-	12' Batch	ID: R9	062	F	RunNo: 9	062			3	
Prep Date:		Analysis D	ate: 3/	9/2013		SeqNo: 2	58898	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (GRO)	18	5.0	18.76	0	95.8	50.3	148	1.12	20	

Qualifiers:

Surr: BFB

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

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

90.8

70

130

0

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

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-410' Website: www.hallenvironmental.com

Sample Log-In Check List

Clien	t Name: BLAGG		Work Order Number: 1303374
Rece	ived by/date:	no 03/08/13	
Logge	ed By: Anne Thorr	ne 3/8/2013 10:00:	200 AM Am Am
Com	pleted By: Anne Thorr	ne 3/8/2013	an Il-
Revie	ewed By:		
Chai	n of Custody		
1. \	Were seals intact?		Yes ☐ No ☐ Not Present 🗹
2. 1	s Chain of Custody comp	elete?	Yes ✓ No Not Present
3. H	low was the sample deliv	rered?	Courier
Log	<u>In</u>		
4. (Coolers are present? (see	19. for cooler specific information	n) Yes ☑ No □ NA □
5. \	Was an attempt made to	cool the samples?	Yes ☑ No □ NA □
6. \	Nere all samples received	d at a temperature of >0° C to 6.0°	°C Yes ▼ No □ NA □
7. 5	Sample(s) in proper conta	iner(s)?	Yes ✓ No □
	Sufficient sample volume		Yes ☑ No □
0000		and ONG) properly preserved?	Yes ☑ No □
100000 and	Was preservative added to		Yes □ No ☑ NA □
11.	/OA vials have zero head	space?	Yes ☐ No ☐ No VOA Vials 🗹
12. \	Were any sample contain	ers received broken?	Yes No 🗹
	Does paperwork match bo Note discrepancies on ch		Yes ✓ No ☐ # of preserved bottles checked for pH:
14.	Are matrices correctly idea	ntified on Chain of Custody?	Yes ✓ No ☐ (<2 or >12 unless noted
15.1	s it clear what analyses w	/ere requested?	Yes ✓ No ☐ Adjusted?
	Were all holding times abl		Yes ☑ No □
	If no, notify customer for	1	Checked by:
	ial Handling (if app		Yes □ No □ NA ☑
17. 4	vas client notified of all d	iscrepancies with this order?	TES NO NA
	Person Notified: By Whom: Regarding:		Date Via: eMail Phone Fax In Person
	Client Instructions:		100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
18.	Additional remarks:		
19 (Cooler Information		
	Cooler No Temp °C	Condition Seal Intact Seal	No Seal Date Signed By
	1 1.0	Good Yes	

Hall Environmental Analysis Laboratory, Inc.

WO#: 1305026

16-May-13

Client: Blagg Engineering
Project: ULIBARRI GC # 1A/#2

Sample ID MB SampType: MBLK TestCode: EPA Method 200.7: Dissolved Metals

Client ID: PBW Batch ID: R10516 RunNo: 10516

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

SegNo: 297227

Units: mg/L

Iron ND 0.020

Prep Date:

Sample ID LCS SampType: LCS TestCode: EPA Method 200.7: Dissolved Metals

Client ID: LCSW Batch ID: R10516 RunNo: 10516

Analysis Date: 5/9/2013

Prep Date: Analysis Date: 5/9/2013 SeqNo: 297228 Units: mg/L

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

Iron 0.51 0.020 0.5000 0 102 85 115

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

R

S Spike Recovery outside accepted recovery limits

RPD outside accepted recovery limits

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1305026 16-May-13

Client: Project:	Blagg Engineering ULIBARRI GC # 1A/#2	
Sample ID MB	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBV	Batch ID: R10269	RunNo: 10269
Prep Date:	Analysis Date: 5/1/2013	SeqNo: 292821 Units: mg/L
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Fluoride	ND 0.10	
Chloride	ND 0.50	
Sample ID LCS	-b SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCS	W Batch ID: R10269	RunNo: 10269
Prep Date:	Analysis Date: 5/1/2013	SeqNo: 292823 Units: mg/L
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Fluoride	0.47 0.10 0.5000	
Chloride	4.6 0.50 5.000	0 92.5 90 110
Sample ID MB	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBV	Batch ID: R10292	RunNo: 10292
Prep Date:	Analysis Date: 5/2/2013	SeqNo: 293414 Units: mg/L
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Sulfate	ND 0.50	
Nitrate+Nitrite as N	ND 0.20	
Sample ID LCS	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCS	W Batch ID: R10292	RunNo: 10292
Prep Date:	Analysis Date: 5/2/2013	SeqNo: 293415 Units: mg/L
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Sulfate	9.5 0.50 10.00	0 95.1 90 110
Nitrate+Nitrite as N	3.4 0.20 3.500	0 96.1 90 110

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1305026

16-May-13

Client: Blagg Engineering ULIBARRI GC # 1A/#2 Project:

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBW Batch ID: R10280 RunNo: 10280 Prep Date: Analysis Date: 5/2/2013 SeqNo: 293191 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte ND 1.0 Benzene ND 1.0 Toluene ND 1.0 Ethylbenzene ND 2.0 Xylenes, Total 20.00 102 69.4 129 Surr: 4-Bromofluorobenzene 20

Sample ID 100NG BTEX LCS	Sampl	ype: LC	S	Tes						
Client ID: LCSW	Batch ID: R10280 Analysis Date: 5/2/2013			RunNo: 10280						
Prep Date:				SeqNo: 293192			Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	80	120			
Toluene	20	1.0	20.00	0	100	80	120			
Ethylbenzene	20	1.0	20.00	0	100	80	120			
Xylenes, Total	61	2.0	60.00	0	101	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		105	69.4	129			

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range E
- Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit RL

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits Spike Recovery outside accepted recovery limits
- Page 9 of 10

Hall Environmental Analysis Laboratory, Inc.

WO#: 1305026

16-May-13

Client: Blagg Engineering
Project: ULIBARRI GC # 1A/#2

Sample ID MB-7282 SampType: MBLK TestCode: SM2540C MOD: Total Dissolved Solids

Client ID: PBW Batch ID: 7282 RunNo: 10312

Prep Date: 5/3/2013 Analysis Date: 5/5/2013 SeqNo: 293852 Units: mg/L

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

Total Dissolved Solids ND 20.0

Sample ID LCS-7282 SampType: LCS TestCode: SM2540C MOD: Total Dissolved Solids

Client ID: LCSW Batch ID: 7282 RunNo: 10312

Prep Date: 5/3/2013 Analysis Date: 5/5/2013 SeqNo: 293853 Units: mg/L

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

Total Dissolved Solids 1020 20.0 1000 0 102 80 120

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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

RPD outside accepted recovery limits

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG Work	Order Nymber: 1305026		RcptNo:	1
Received by/date: 05	10113			
Logged By: Lindsay/Mangin 5/1/2013	9:50:00 AM	Andy Hayago		
	1:12:37 PM	of little		
	1.12.37 FIVI	On Marie		
Reviewed By: 05 0	12015			
Chain of Custody		_		
1. Custody seals intact on sample bottles?	Yes	No 🗆	Not Present	
2. Is Chain of Custody complete?	Yes 🗸	No □	Not Present	
3. How was the sample delivered?	Courier			9 01 17
<u>Log In</u>				
4. Was an attempt made to cool the samples?	Yes 🗸	No □	NA 🗆	
5. Were all samples received at a temperature of >0° C	to 6.0°C Yes ✓	No 🗆	NA 🗆	
6. Sample(s) in proper container(s)?	Yes 🗸	No □		
7. Sufficient sample volume for indicated test(s)?	Yes 🗸	No □		
8. Are samples (except VOA and ONG) properly preserv	red? Yes ✓	No 🗆		
9. Was preservative added to bottles?	Yes 🗌	No 🗹	NA 🗆	
10.VOA vials have zero headspace?	Yes 🗸	. No 🗆	No VOA Vials	
11. Were any sample containers received broken?	Yes	No ☑	# = # = = = = = = = = = = = = = = = = =	
			# of preserved bottles checked	0
12.Does paperwork match bottle labels?	Yes 🗸	No 🗆	for pH:	r >12 unless noted)
(Note discrepancies on chain of custody) 13 Are matrices correctly identified on Chain of Custody?	Yes 🗸	No 🗆	Adjusted	10.
14, Is it clear what analyses were requested?	Yes 🗸			X
15. Were all holding times able to be met?	Yes 🗸		Checked by:	36
(If no, notify customer for authorization.)		L		7
the section of the section of				
Special Handling (if applicable)				
16. Was client notified of all discrepancies with this order	? Yes	No 🗔	NA 🗹	
Person Notified:	Date:		19	
By Whom:	Via: eMail	Phone Fax	In Person	
Regarding:				
Client Instructions:	SELECTION CONTRACTOR C	Control of the same of the state of the stat	The state of the s	
17. Additional remarks:	the analysis of experience of a service of the serv	y and whater ingromes provided the second the	The second secon	
*				
18. Cooler Information Cooler No Temp °C Condition Seal Intact	Seal No Seal Date	Signed By		
1 2.6 Good Yes	- Court Date			