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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☒ Final Report

Name of Company: BP	Contact: Steve Moskal
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9497
Facility Name: Gutierrez Gas Con B 001	Facility Type: Natural gas well

Surface Owner: Private	Mineral Owner: Federal	API No. 3004508808

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: San Juan
B	4	29N	09W	1,050	North	1,850	East	

Latitude 36.758165° **Longitude** -107.782619 °

NATURE OF RELEASE

Type of Release: condensate	Volume of Release: Unknown	Volume Recovered: none
Source of Release: Leaking flow line associated with condensate tank	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: May 31, 2012
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

OIL CONS. DIV DIST. 3

NOV 15 2016

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Soil impacts derived from a leaking flow line associated with a condensate production tank.. Remedial actions taken include excavation and groundwater monitoring.

Describe Area Affected and Cleanup Action Taken.* Site remediation included excavation and groundwater monitoring to confirm groundwater impacts. Soil samples confirm excavation extents were reached and impacted soils removed from the site. Groundwater monitoring indicates no impacts to groundwater from the condensate release as there are any BTEX impacts. Constituents above closure standards include sulfates, nitrates, iron and TDS which are likely the result of background concentrations common in the San Juan Basin.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION
Printed Name: Steve Moskal	Approved by Environmental Specialist:
Title: Field Environmental Coordinator	Approval Date: 2/8/17 Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval: Sample MW-1-6 Attached ☐
Date: November 14, 2016 Phone: 505-326-9497	

* Attach Additional Sheets If Necessary

#NCS1703952493

For Gen Chem / Cation / Anion to Verify Any Charge / Background. Submit Additional C-141 when completed.

109

bp

BP America Production Company
200 Energy Court
Farmington, NM 87401
Phone: (505) 326-9200

November 14, 2016

Mr. Cory Smith
Environmental Specialist
NMOCD District III Office
1000 Rio Brazos Road Aztec, NM

Re: Request for Permanent Closure
Gutierrez Gas Con B 001
API No. 30-045-08808; Unit letter B, Section 04, T29N, R09W; GPS: 36.758165°, -107.782619°

Dear Mr. Smith:

BP America Production Company has retained Blagg Engineering, Inc. to conduct environmental monitoring of groundwater at the Gutierrez Gas Con B 001. The site is located on private property.

Impacts were discovered in May of 2012 with a follow up excavation in August 2012. Groundwater impacts were suspected during the excavation activities. Six groundwater monitoring wells were installed in August of 2013 to determine groundwater impacts. The groundwater was sampled had elevated sulfate, iron and total dissolved solids. Produced water from an adjacent well, Jaquez Gas Com B 003E, drilled into the same formation was sampled for comparison. The results of the comparison sample demonstrated that the elevated sample results are likely derived from background concentrations.

The attached report requesting site closure demonstrates groundwater contaminants are elevated throughout the site and are consistent with background concentrations.

If you have any questions concerning this document, please contact either John Ritchie (john.ritchie@bp.com) or myself (steven.moskal@bp.com) at the address or phone number listed above. Thank you for your cooperation and assistance.

Sincerely,

Steve Moskal
Field Environmental Coordinator

bp

BP America Production Company
200 Energy Court
Farmington, NM 87401
Phone: (505) 326-9200

November 14, 2016

Mr. Cory Smith
Environmental Specialist
NMOCD District III Office
1000 Rio Brazos Road Aztec, NM

Re: Request for Permanent Closure
Gutierrez Gas Con B 001
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The attached report requesting site closure demonstrates groundwater contaminants are elevated throughout the site and are consistent with background concentrations.

If you have any questions concerning this document, please contact either John Ritchie (john.ritchie@bp.com) or myself (steven.moskal@bp.com) at the address or phone number listed above. Thank you for your cooperation and assistance.

Sincerely,

Steve Moskal
Field Environmental Coordinator

BP AMERICA PRODUCTION CO.

REMEDIATION REPORT

GUTIERREZ GC B 001
API #: 300-45-08808
(B) SECTION 4, T29N, R9W, NMPM
SAN JUAN COUNTY, NEW MEXICO

PREPARED FOR:
NEW MEXICO OIL CONSERVATION DIVISION
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410

FEBRUARY 2016

PREPARED BY:
BLAGG ENGINEERING, INC.

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

TABLE OF CONTENTS

BP AMERICA PRODUCTION COMPANY

REMEDIATION OF UNIDENTIFIED SOURCE(S)
GUTIERREZ GC B # 1
API #: 300408808
Legal Description: (Unit Letter B, Sec. 4, T29N, R9W, NMPM)

CHRONOLOGICAL EVENT SUMMATION

1. **May 31, 2012**: Impacted soils were discovered during removal of subsurface piping west of two (2) 300 barrel production tanks. Preliminary investigation commenced with the advancement of five (5) test holes (see field report page 1 of 7).

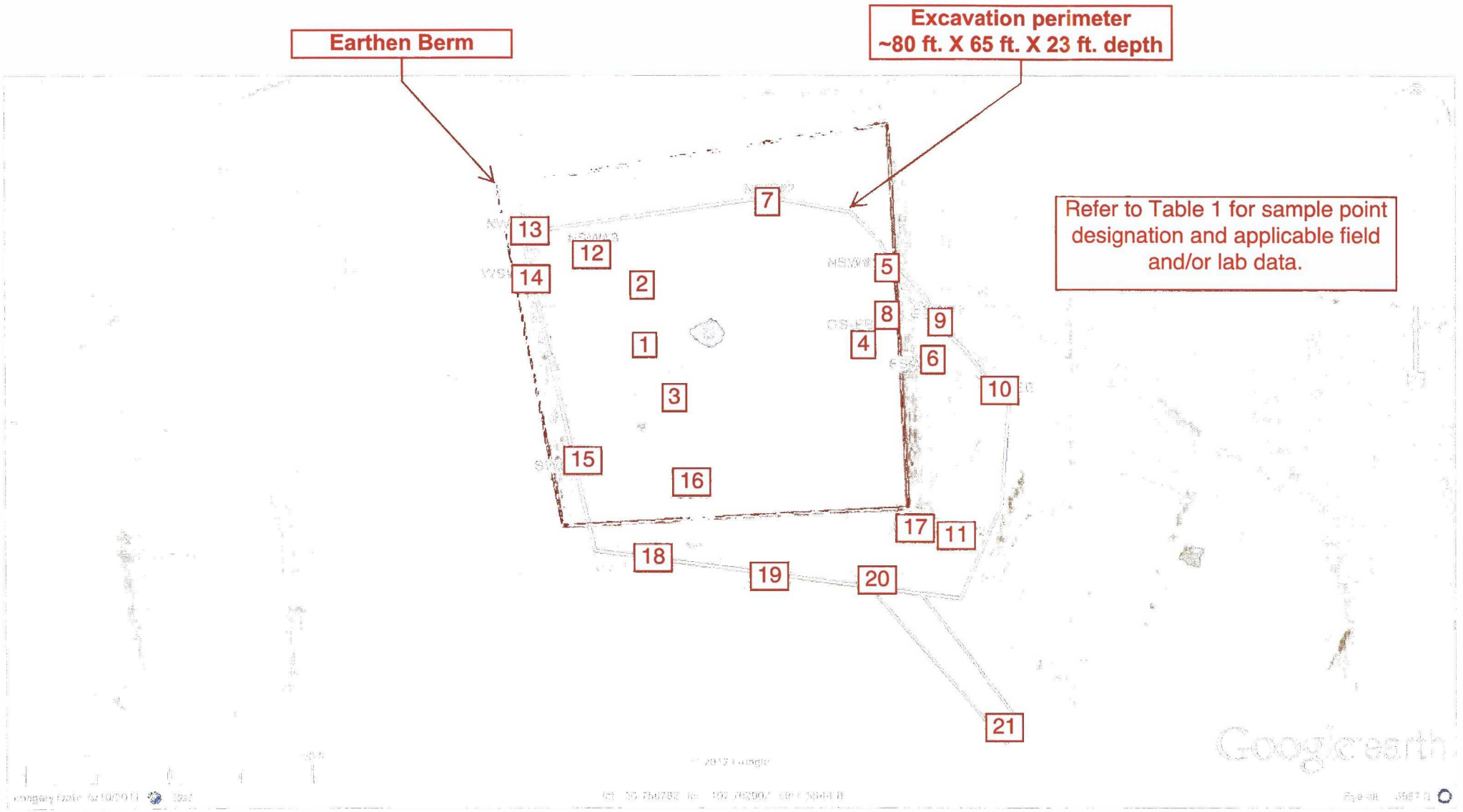
2. **August 2012**: Remediation of impacted soils via excavation initiated and completed (see Aerial Map #1, Figure 1, and field report pages 2 through 7 of 7). Soils sampling were conducted on August 17th and 24th, September 5th, 10th, 17th, 18th, 20th, and 26th. Potential groundwater was observed at approximately twenty-one (21) feet (ft.) below grade (b.g.).

3. **August 2013**: Six (6) groundwater monitor wells were installed on August 2nd, 5th, and 6th (see Aerial Map #2, Figure 1, and attached Boring Logs). Water level gauging and initial development on the monitor wells were completed on August 12th. Groundwater levels below grade were measured between 17.5 and 22.7 ft. b.g. Monitor well casing tops were surveyed on August 13th. Monitor well sampling for laboratory analytical testing was completed on August 15th.

4. **January 20, 2016**: Completed sampling of produced water from nearby Jaquez Gas Com B 003E well site (API #: 3004524217; Legals: Unit Letter D, Sec. 4, T29N, R9W) for anion/cation balance per US EPA Method 300.1 (total dissolved solids and sulfate).

5. **February 2, 2016**: BP received final laboratory analytical report.

AERIAL MAP #1



BP - Gutierrez GC B #1 - Historical Release of Unidentified Origin
Unit letter B, Section 4, T29N, R9W

Well head: 36.758165, -107.782619
Imagery Date: 06/10/2011

BP - Gutierrez GC B 001

Unit Letter B, Sec. 4, T29N, R9W
API #: 3004508808

Imagery Date: 03/15/2015

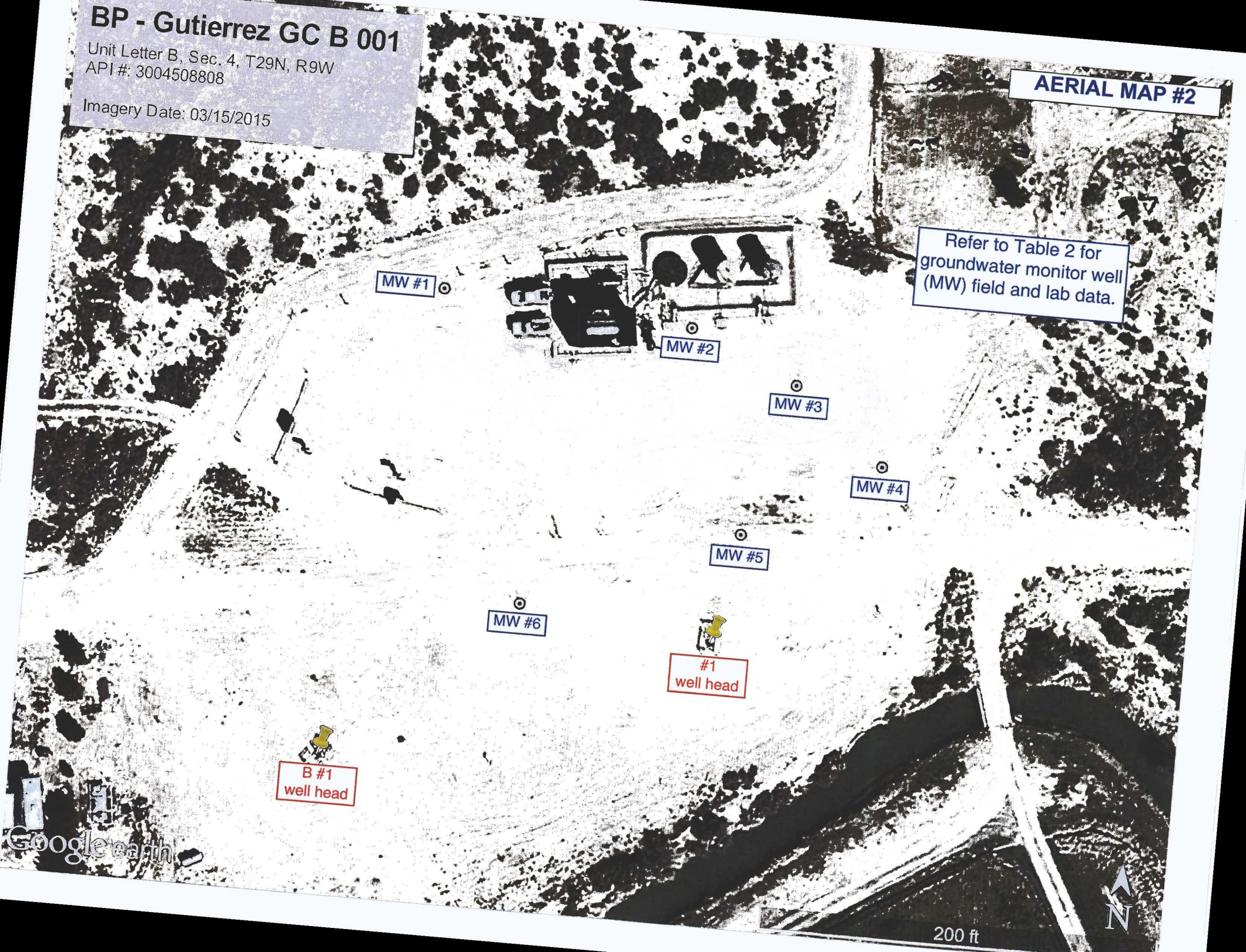
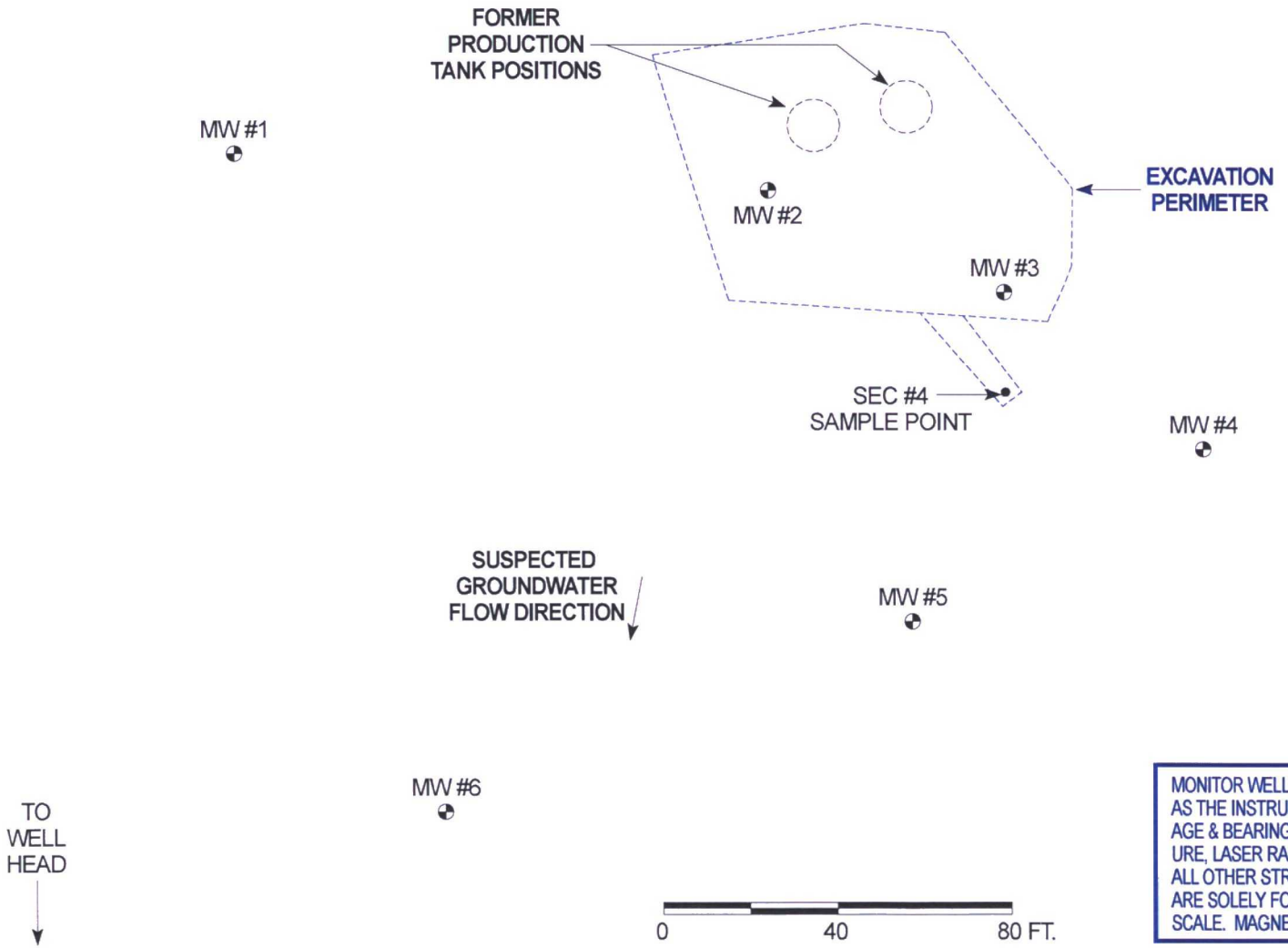


FIGURE 1



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

BP AMERICA PRODUCTION COMPANY

GUTIERREZ GC B# 1

NW/4 NE/4 SEC. 4, T29N, R9W

SAN JUAN COUNTY, NEW MEXICO

B LAGG ENGINEERING, I NC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW INSTALLATIONS

DRAWN BY: NJV

FILENAME: GUTIERREZ GC B 1 MW-SM.SKF

DRAFTED: 12-18-2015

SITE MAP

08/13

BP AMERICA PRODUCTION COMPANY

TABLE 1

Gutierrez GC B #1

Unit Letter B, Section 4, T29N, R9W - API Number: 30-045-08808

Cleanup of Historical Release of Unidentified Origin

SAMPLE ID & MAP NUMBER		SAMPLE DATE	SAMPLE TIME	SAMPLING COLLECTION	FIELD OVM READING (ppm)	TPH - cumulative (ppm)	Benzene (ppm)	BTEX - cumulative (ppm)	Comments
TH1 @ 10'	1	05/31/12	0855	GRAB	1,809	2,160	ND	84.1	Soils eventually excavated and transported to BP's Crouch Mesa Facilty
TH2 @ 9'	2	05/31/12	0933	GRAB	0.0	ND	ND	ND	
TH3 @ 10'	3	05/31/12	0950	GRAB	796	2,200	ND	4.88	Soils eventually excavated and transported to BP's Crouch Mesa Facilty
TH5 @ 10'	4	05/31/12	1016	GRAB	0.0	ND	ND	ND	
GS-NSW#1 @ 19'	5	08/17/12	1017	GRAB	0.0	ND	ND	ND	
GS-ESW @ 15'	6	08/17/12	1014	GRAB	0.0	-	-	-	
GS-NSW#2 @ 20'	7	08/17/12	1022	GRAB	0.0	ND	ND	ND	
GS-NSW#2 @ 7'		08/17/12	1052	GRAB	0.0	-	-	-	
GS-PB#1 @ 21'	8	08/21/12	0826	GRAB	207	-	-	-	Soils eventually excavated and transported to BP's Crouch Mesa Facilty
GS-PB#1 @ 23'		08/21/12	0846	GRAB	0.0	ND	ND	ND	
GS-ESW#1 @ 16'	9	08/24/12	1200	GRAB	0.0	ND	-	-	
SEC @ 21'	10	09/05/12	1543	GRAB	234	-	-	-	Soils eventually excavated and transported to BP's Crouch Mesa Facilty
SEC#2 @ 21'	11	09/10/12	0936	GRAB	182	-	-	-	Soils eventually excavated and transported to BP's Crouch Mesa Facilty
SEC#2 @ 23'		09/10/12	0950	GRAB	12.1	-	-	-	
NSW#3 @ 21'	12	09/10/12	1008	GRAB	0.0	-	-	-	
NWC @ 20'	13	09/17/12	0925	GRAB	25.2	ND	ND	ND	
WSW @ 22'	14	09/17/12	0930	GRAB	20.2	ND	ND	ND	
SWC @ 21'	15	09/17/12	0938	GRAB	100.0	44	ND	0.19	
SSW @ 19'	16	09/17/12	0945	GRAB	256	5,900	ND	369	Soils eventually excavated and transported to BP's Crouch Mesa Facilty
SEC#3 @ 21'	17	09/20/12	1044	GRAB	225	ND	ND	ND	
SSW#2 @ 23'	18	09/20/12	0925	GRAB	35.6	ND	ND	ND	
SSW#3 @ 20'	19	09/20/12	0939	GRAB	0.0	ND	ND	ND	
SSW#4 @ 20'	20	09/20/12	0943	GRAB	217.4	510	ND	1.70	Soils eventually excavated and transported to BP's Crouch Mesa Facilty
SEC#4 @ 20'	21	09/26/12	1114	GRAB	0.0	-	-	-	
SEC#4 @ 21'		09/26/12	1115	GRAB	0.0	ND	ND	ND	
NMOCD RELEASE CLOSURE STANDARDS (soils) -					100	100	10	50	

Notes:

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

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

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

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

ND - Not detected at Reporting Limit.

NMOCD - New Mexico Oil Conservation Division.

\- Not available.

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

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

OVM CALIBRATION DATA

DATE	TIME	READING
05/31/12	0924	52.2
08/17/12	1043	52.4
08/21/12	0836	53.1

DATE	TIME	READING
09/05/12	1345	54.0
09/10/12	1026	53.6
09/17/12	0957	53.8

DATE	TIME	READING
09/20/12	0959	53.4
09/26/12	1135	52.6

BP AMERICA PRODUCTION COMPANY

Gutierrez GC B #1

Unit Letter B, Section 4, T29N, R9W - API Number: 30-045-08808

Field & Laboratory Data from Groundwater Monitor Wells & Produced Water from Jaquez GC B 003E

	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	08/15/13	1315	25.22	36.61	7.42	1,500	17.4	5.50
MW # 2	08/15/13	1530	22.03	31.52	7.16	1,900	17.8	4.75
MW # 3	08/15/13	1445	21.38	31.50	7.28	1,800	17.7	5.00
MW # 4	08/15/13	1400	20.41	30.50	7.48	2,000	17.4	5.00
MW # 5	08/15/13	1140	20.01	31.28	7.29	1,200	17.4	5.50
MW # 6	08/15/13	1225	20.96	31.09	7.32	1,500	17.8	5.00
LP AGT Produced Water	01/20/16	1210	NA	NA	NA	NA	NA	NA
				NMWQCC STANDARDS -	6 - 9			

	LABORATORY PARAMETERS									
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 Xylenes (µg/L)
MW # 1	0.85	18	1,700	ND	1.8	2,840	ND	ND	ND	ND
MW # 2	1.00	41	2,700	0.44	0.54	4,810	ND	ND	ND	ND
MW # 3	1.0	47	2,300	ND	13	4,330	ND	ND	ND	ND
MW # 4	0.93	92	2,900	0.25	8.1	5,050	ND	ND	ND	ND
MW # 5	0.53	12	1,300	ND	1.4	2,420	ND	ND	ND	ND
MW # 6	0.88	18	1,800	ND	0.85	3,460	ND	ND	ND	ND
LP AGT Produced Water	NA	NA	1.2	NA	NA	140	NA	NA	NA	NA
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

NA - Not Availble or Applicable

ND - Not detected at Reporting Limit

NMWQCC - New Mexico Water Quality Control Commission

BLAGG ENGINEERING, INC.

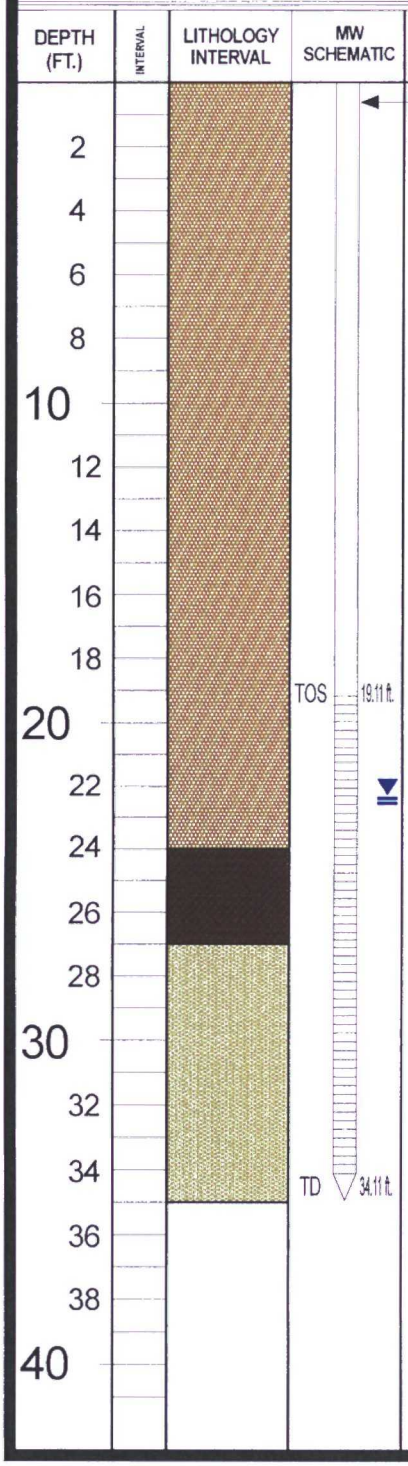
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 1

BORE / TEST HOLE REPORT

CLIENT:	BP AMERICA PRODUCTION CO.
LOCATION NAME:	GUTIERREZ GC B # 1 API # 3004508808 UNIT B, SEC. 4, T29N, R9W
CONTRACTOR:	BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (CME 75) - HOLLOW STEM AUGER
BORING LOCATION:	239.5 FEET, N 11 E FROM WELL HEAD.

BORING #.....	BH - 1
MW #.....	1
PAGE #.....	1
DATE STARTED	08/02/13
DATE FINISHED	08/02/13
OPERATOR.....	KP
LOGGED BY.....	NJV



FIELD CLASSIFICATION AND REMARKS

TOP OF CASING APPROX. 2.50 FEET ABOVE GRADE.

DARK YELLOWISH ORANGE SAND TO SILTY SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 24.0 FEET BELOW GRADE).

GROUNDWATER ~ 22.30 FEET BELOW GRADE ; MEASURED 08/05/13.

DARK YELLOWISH BROWN SILTY SAND TO SILTY CLAY, SLIGHTLY PLASTIC, MOIST TO SATURATED, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (24.0 - 27.0 FEET BELOW GRADE).

PALE YELLOWISH BROWN SAND AND GRAVEL, NON COHESIVE, SATURATED, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (27.0 - 35.0 FEET BELOW GRADE).

TOTAL LENTGH OF PIPING - 36.61 FEET.

NOTES: - SAND TO SILTY SAND. - SILTY SAND TO SILTY CLAY. - SAND & GRAVEL.

TOS - Top of screen of monitor well. **TD** - Total depth/bottom extent of monitor well.

Monitor well consist of 2 inch PVC piping - casing from 2.50 feet above grade to 19.11 feet below grade, 0.020 slotted screen between 19.11 to 34.11 feet below grade, sand packed annular to 17.0 feet below grade, bentonite grout between 15.0 to 17.0 feet below grade, cuttings fill the remaining annular to grade. Secured casing top with steel well protector and padlock.

DRAWING: GUTIERREZ GC B 1 MW-1 2013-08-02.SKF | DATE: 12/17/13 | DWN BY: NJV

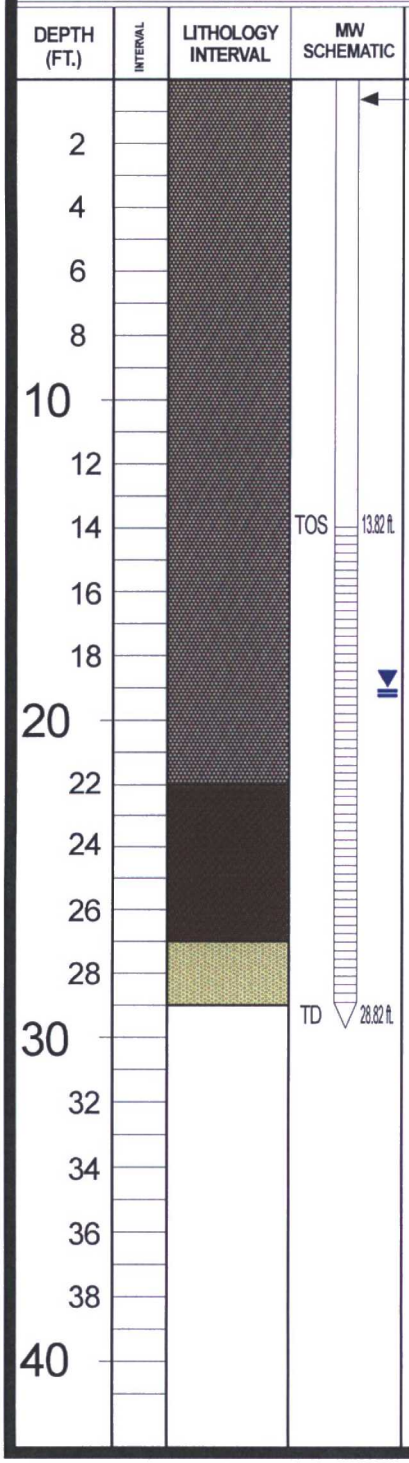
BLAGG ENGINEERING, INC.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 2

BORE / TEST HOLE REPORT

CLIENT:	BP AMERICA PRODUCTION CO.
LOCATION NAME:	GUTIERREZ GC B # 1 API # 3004508808 UNIT B, SEC. 4, T29N, R9W
CONTRACTOR:	BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (CME 75) - HOLLOW STEM AUGER
BORING LOCATION:	282 FEET, N36.5E FROM WELL HEAD.

BORING #.....	BH - 2
MW #.....	2
PAGE #.....	2
DATE STARTED	08/02/13
DATE FINISHED	08/02/13
OPERATOR.....	KP
LOGGED BY.....	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.70 FEET ABOVE GRADE.

DARK YELLOWISH BROWN SILTY SAND (FILL MATERIAL), NON COHESIVE, DRY TO SLIGHTLY MOIST, FIRM TO DENSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 22.0 FEET BELOW GRADE).

GROUNDWATER ~18.93 FEET BELOW GRADE ; MEASURED 08/05/13.

DARK YELLOWISH BROWN SILTY SAND TO SILTY CLAY, SLIGHTLY PLASTIC, MOIST TO SATURATED, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (22.0 - 27.0 FEET BELOW GRADE).

PALE YELLOWISH BROWN SAND AND GRAVEL, NON COHESIVE, SATURATED, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (27.0 - 29.0 FEET BELOW GRADE).

TOTAL LENTGH OF PIPING - 31.52 FEET.

NOTES: - SILTY SAND. - SILTY SAND TO SILTY CLAY. - SAND & GRAVEL.

TOS - Top of screen of monitor well. **TD** - Total depth/bottom extent of monitor well.

Monitor well consist of 2 inch PVC piping - casing from 2.70 feet above grade to 13.82 feet below grade,0.020 slotted screen between 13.82 to 28.82 feet below grade, sand packed annular to 12.0 feet below grade, bentonite grout between 10.0 to 12.0 feet below grade, cuttings fill the remaining annular to grade. Secured casing top with steel well protector and padlock.

DRAWING: GUTIERREZ GC B 1 MW-2 2013-08-02.SKF | DATE: 12/17/13 | DWN BY: NJV

BLAGG ENGINEERING, INC.

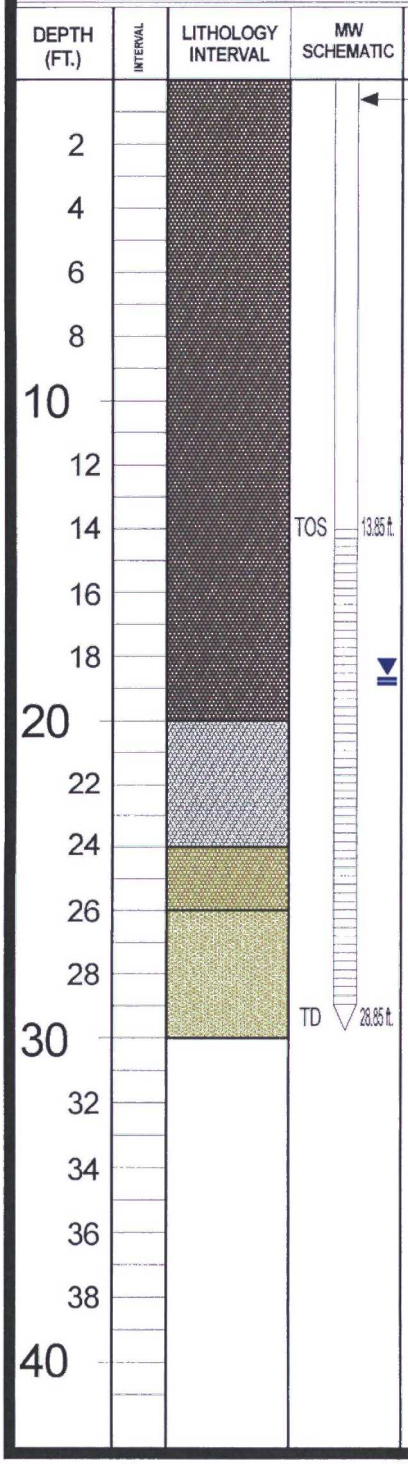
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 3

BORE / TEST HOLE REPORT

BORING #.....	BH - 3
MW #.....	3
PAGE #.....	3
DATE STARTED	08/05/13
DATE FINISHED	08/05/13
OPERATOR.....	KP
LOGGED BY.....	NJV

CLIENT:	BP AMERICA PRODUCTION CO.
LOCATION NAME:	GUTIERREZ GC B # 1 API # 3004508808 UNIT B, SEC. 4, T29N, R9W
CONTRACTOR:	BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (CME 75) - HOLLOW STEM AUGER
BORING LOCATION:	301 FEET, N47.5E FROM WELL HEAD.



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.65 FEET ABOVE GRADE.

DARK YELLOWISH BROWN SILTY SAND (FILL MATERIAL), NON COHESIVE, DRY TO SLIGHTLY MOIST, FIRM TO DENSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 20.0 FEET BELOW GRADE).

GROUNDWATER ~18.65 FEET BELOW GRADE ; MEASURED 08/12/13.

SAME AS ABOVE EXCEPT MEDIUM GRAY, APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (20.0 - 24.0 FEET BELOW GRADE).

PALE YELLOWISH BROWN SILTY SAND TO SILTY CLAY, SLIGHTLY PLASTIC, WET TO SATURATED, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (24.0 - 26.0 FEET BELOW GRADE).

PALE YELLOWISH BROWN SAND AND GRAVEL, NON COHESIVE, SATURATED, LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS(26.0 - 30.0 FEET BELOW GRADE).

TOTAL LENTGH OF PIPING - 31.50 FEET.

NOTES: - SILTY SAND. - SILTY SAND TO SILTY CLAY. - SAND & GRAVEL.

TOS - Top of screen of monitor well. **TD** - Total depth/bottom extent of monitor well.

Monitor well consist of 2 inch PVC piping - casing from 2.65 feet above grade to 13.85 feet below grade,0.020 slotted screen between 13.85 to 28.85 feet below grade, sand packed annular to 12.0 feet below grade, bentonite grout between 10.0 to 12.0 feet below grade, cuttings fill the remaining annular to grade. Secured casing top with steel well protector and padlock.

DRAWING: GUTIERREZ GC B 1 MW-3 2013-08-05.SKF | DATE: 12/17/13 | DWN BY: NJV

BLAGG ENGINEERING, INC.

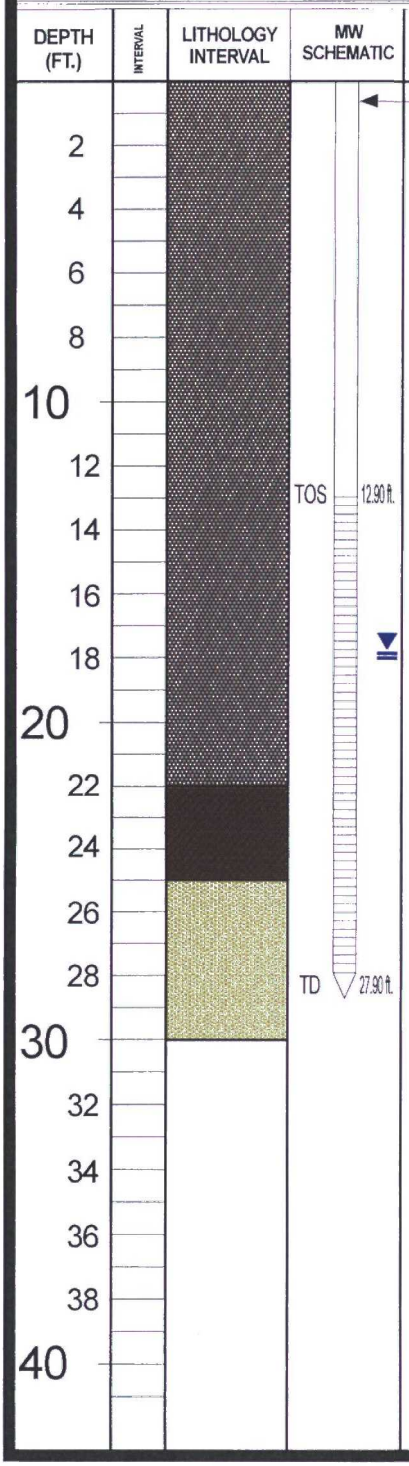
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 4

BORE / TEST HOLE REPORT

CLIENT:	BP AMERICA PRODUCTION CO.
LOCATION NAME:	GUTIERREZ GC B # 1 API # 3004508808 UNIT B, SEC. 4, T29N, R9W
CONTRACTOR:	BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (CME 75) - HOLLOW STEM AUGER
BORING LOCATION:	316 FEET, N58E FROM WELL HEAD.

BORING #.....	BH - 4
MW #.....	4
PAGE #.....	4
DATE STARTED	08/05/13
DATE FINISHED	08/05/13
OPERATOR.....	KP
LOGGED BY.....	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.60 FEET ABOVE GRADE.

DARK YELLOWISH BROWN SAND TO SILTY SAND, NON COHESIVE, DRY TO SLIGHTLY MOIST, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 22.0 FEET BELOW GRADE).

GROUNDWATER ~17.67 FEET BELOW GRADE ; MEASURED 08/12/13.

DARK YELLOWISH BROWN TO MEDIUM GRAY SILTY SAND TO SILTY CLAY, COHESIVE TO SLIGHTLY PLASTIC, MOIST TO SATURATED, FIRM, SLIGHT APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (22.0 - 25.0 FEET BELOW GRADE).

LIGHT GRAY PHASING INTO PALE YELLOWISH BROWN SAND AND GRAVEL, NON COHESIVE, SATURATED, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (25.0 - 30.0 FEET BELOW GRADE).

TOTAL LENTGH OF PIPING - 30.50 FEET.

NOTES: - SAND TO SILTY SAND. - SILTY SAND TO SILTY CLAY. - SAND & GRAVEL.

TOS - Top of screen of monitor well. TD - Total depth/bottom extent of monitor well.

Monitor well consist of 2 inch PVC piping - casing from 2.60 feet above grade to 12.90 feet below grade,0.020 slotted screen between 12.90 to 27.90 feet below grade, sand packed annular to 11.0 feet below grade, bentonite grout between 9.0 to 11.0 feet below grade, cuttings fill the remaining annular to grade. Secured casing top with steel well protector and padlock.

DRAWING: GUTIERREZ GC B 1 MW-4 2013-08-05.SKF | DATE: 12/17/13 | DWN BY: NJV

BLAGG ENGINEERING, INC.

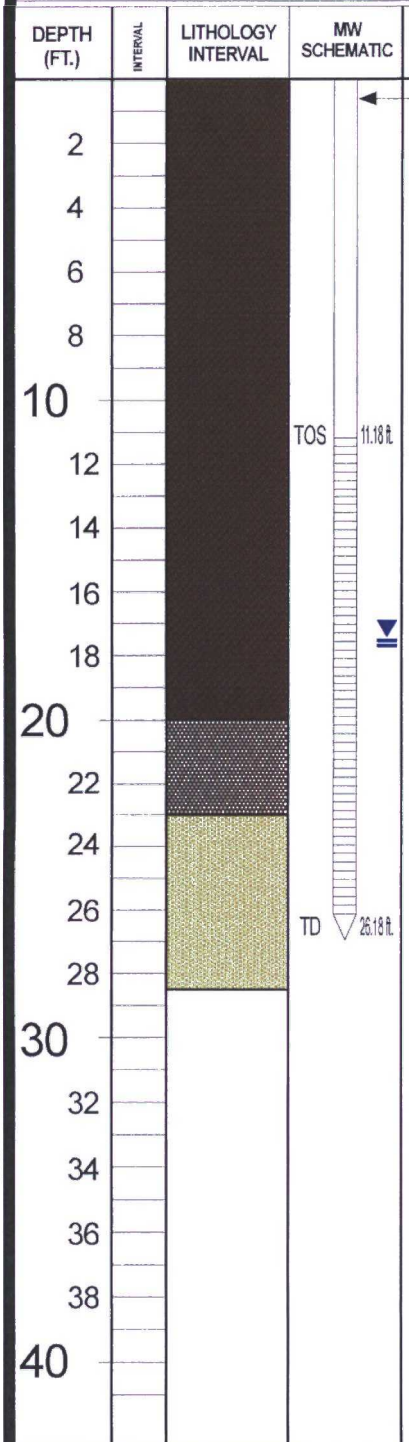
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 5

BORE / TEST HOLE REPORT

CLIENT:	BP AMERICA PRODUCTION CO.
LOCATION NAME:	GUTIERREZ GC B # 1 API # 3004508808 UNIT B, SEC. 4, T29N, R9W
CONTRACTOR:	BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (CME 75) - HOLLOW STEM AUGER
BORING LOCATION:	238 FEET, N57.5E FROM WELL HEAD.

BORING #.....	BH - 5
MW #.....	5
PAGE #.....	5
DATE STARTED	08/05/13
DATE FINISHED	08/05/13
OPERATOR.....	KP
LOGGED BY.....	JCB



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.55 FEET ABOVE GRADE.

DARK YELLOWISH BROWN SILTY SAND, NON COHESIVE, MOIST PHASING INTO WET APPROXIMATELY 19 FEET BELOW GRADE, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 20.0 FEET BELOW GRADE).

GROUNDWATER ~17.38 FEET BELOW GRADE ; MEASURED 08/12/13.

DARK YELLOWISH BROWN SAND, NON COHESIVE, SATURATED, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (20.0 - 23.0 FEET BELOW GRADE).

PALE YELLOWISH BROWN SAND AND GRAVEL, NON COHESIVE, SATURATED, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (23.0 - 28.5 FEET BELOW GRADE).

TOTAL LENTGH OF PIPING - 28.73 FEET.

NOTES: - SAND. - SILTY SAND. - SAND & GRAVEL.

TOS - Top of screen of monitor well. **TD** - Total depth/bottom extent of monitor well.

Monitor well consist of 2 inch PVC piping - casing from 2.55 feet above grade to 11.18 feet below grade,0.020 slotted screen between 11.18 to 26.18 feet below grade, sand packed annular to 9.0 feet below grade, bentonite grout between 7.0 to 9.0 feet below grade, cuttings fill the remaining annular to grade. Secured casing top with steel well protector and padlock.

DRAWING: GUTIERREZ GC B 1 MW-5 2013-08-05.SKF | DATE: 12/17/13 | DWN BY: NJV

BLAGG ENGINEERING, INC.

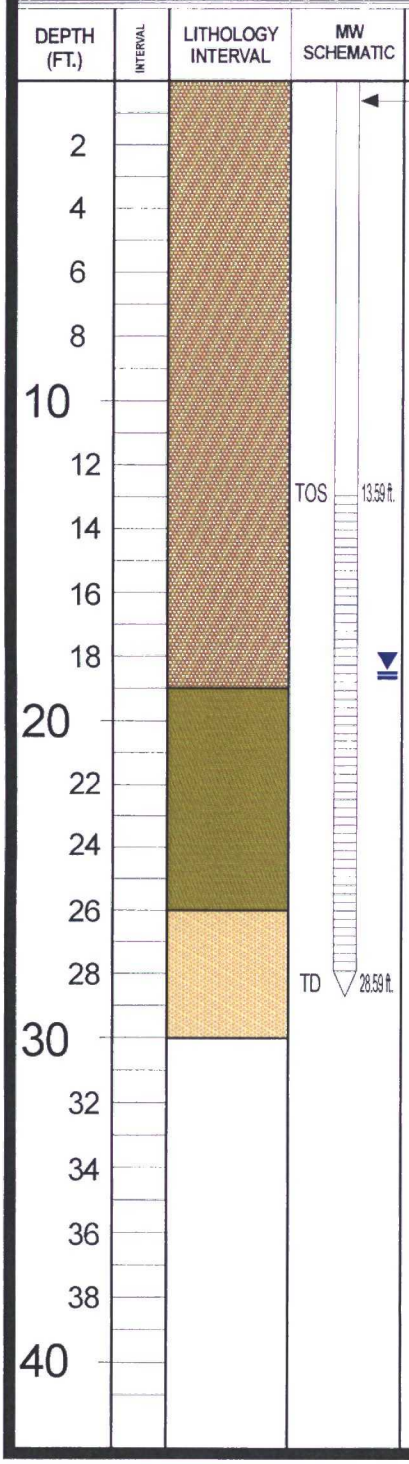
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 6

BORE / TEST HOLE REPORT

CLIENT:	BP AMERICA PRODUCTION CO.
LOCATION NAME:	GUTIERREZ GC B # 1 API # 3004508808 UNIT B, SEC. 4, T29N, R9W
CONTRACTOR:	BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (CME 75) - HOLLOW STEM AUGER
BORING LOCATION:	126 FEET, N48E FROM WELL HEAD.

BORING #.....	BH - 6
MW #.....	6
PAGE #.....	6
DATE STARTED	08/06/13
DATE FINISHED	08/06/13
OPERATOR.....	KP
LOGGED BY.....	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.50 FEET ABOVE GRADE.

DARK YELLOWISH ORANGE SAND TO SILTY SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 19.0 FEET BELOW GRADE).

GROUNDWATER ~18.36 FEET BELOW GRADE ; MEASURED 08/12/13.

PALE YELLOWISH BROWN SILTY SAND TO SILTY CLAY, COHESIVE TO SLIGHTLY PLASTIC, WET TO SATURATED, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (19.0 - 26.0 FEET BELOW GRADE).

PALE YELLOWISH ORANGE SAND AND GRAVEL, NON COHESIVE, SATURATED, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (26.0 - 30.0 FEET BELOW GRADE).

TOTAL LENTGH OF PIPING - 30.00 FEET.

NOTES: - SAND TO SILTY SAND. - SILTY SAND TO SILTY CLAY. - SAND & GRAVEL.

TOS - Top of screen of monitor well. TD - Total depth/bottom extent of monitor well.

Monitor well consist of 2 inch PVC piping - casing from 2.50 feet above grade to 13.59 feet below grade,0.020 slotted screen between 13.59 to 28.59 feet below grade, sand packed annular to 11.5 feet below grade, bentonite grout between 9.5 to 11.5 feet below grade, cuttings fill the remaining annular to grade. Secured casing top with steel well protector and padlock.

DRAWING: GUTIERREZ GC B 1 MW-6 2013-08-06.SKF | DATE: 12/17/13 | DWN BY: NJV

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : **BP AMERICA PROD. CO.**

CHAIN-OF-CUSTODY # : N / A

GUTIERREZ GC B # 1
UNIT B, SEC. 4, T29N, R9W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : August 15, 2013

Filename : Gutierrez GC B 1 mw log 08-15-13.xls

DEVELOPER / SAMPLER : N J V

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	105.50	80.28	25.22	36.61	1315	7.42	1,500	17.4	5.50
2	102.21	80.18	22.03	31.52	1530	7.16	1,900	17.8	4.75
3	101.54	80.16	21.38	31.50	1445	7.28	1,800	17.7	5.00
4	100.46	80.05	20.41	30.50	1400	7.48	2,000	17.4	5.00
5	100.05	80.04	20.01	31.28	1140	7.29	1,200	17.4	5.50
6	100.95	79.99	20.96	31.09	1225	7.32	1,500	17.8	5.00
			INSTRUMENT CALIBRATIONS =			4.01/7.00/10.00	2,800		
			DATE & TIME =			08/15/13	0630		

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

Monitor wells installed 08/02 to 08/06, 2013. Gauging & development completed on 08/12/13. Well top survey on 08/13/13. Excellent recovery in all monitor wells. No physical indication of hydrocarbons within purged water observed prior to sample collection. 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. Collected samples from all MW's for BTEX per US EPA Method 8021B & general chemistry parameters.

Top of casing MW # 1 ~ 2.50 ft., MW # 2 ~ 2.70 ft., MW # 3 ~ 2.65 ft., MW # 4 ~ 2.60 ft., MW # 5 ~ 2.55 ft., MW # 6 ~ 2.50 ft. below grade .

on-site	**11:00 AM**	temp	**79 F**
off-site	**3:00 PM**	temp	**93 F**
sky cond.		**Sunny**	
wind speed	**0 - 10**	direct.	**E - WNW**

CLIENT: BP

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

API #: 3004508808
TANK ID (if applicble): A

FIELD REPORT:

(circle one): [BGT CONFIRMATION] / RELEASE INVESTIGATION / OTHER:

PAGE #: 1 of 6

SITE INFORMATION:

SITE NAME: GUTIERREZ GC B # 1

QUAD/UNIT: B SEC: 4 TWP: 29N RNG: 9W PM: NM CNTY: SJ ST: NM

1/4 -1/4/FOOTAGE: 1,050'N / 1,846'E NW/NE LEASE TYPE: FEDERAL / STATE / [FEE] / INDIAN

LEASE #: - PROD. FORMATION: DK CONTRACTOR: ELKHORN MBF - J.SHAHAN

DATE STARTED: 05/31/12

DATE FINISHED:

ENVIRONMENTAL SPECIALIST(S): NJV

REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.758165 X 107.782619 GL ELEV.: 5,626'

		GPS COORD.:	DISTANCE/BEARING FROM W.H.:
1)	Gutierrez GC #1 well head	36.75834 X 107.78197	
2)	Western Production Tank	36.758835 X 107.782027	173.5',N5W (from #1 well head)
3)			
4)			

SAMPLING DATA:

CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL

	SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:	OVM READING (ppm)
1)	TH1 @ 10'	05/31/12	0855	8015B/8021B/300.0 (Cl)	1,809
2)	TH2 @ 9'	05/31/12	0933	8015B/8021B/300.0 (Cl)	0.0
3)	TH3 @ 10'	05/31/12	0950	8015B/8021B/300.0 (Cl)	796
4)	TH5 @ 10'	05/31/12	1016	8015B/8021B/300.0 (Cl)	0.0

SOIL DESCRIPTION:

SOIL TYPE: [SAND] / [SILTY SAND] / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER

SOIL COLOR: MODERATE BROWN TO BLACK

COHESION (ALL OTHERS): [NON COHESIVE] / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE

PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

CONSISTENCY (NON COHESIVE SOILS): [LOOSE] [FIRM] DENSE / VERY DENSE

DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

MOISTURE: DRY [SLIGHTLY MOIST] / MOIST / WET / SATURATED / SUPER SATURATED

HC ODOR DETECTED: [YES] NO EXPLANATION - STRONG WITHIN DISCOLORED SOILS ONLY.

SAMPLE TYPE: [GRAB] COMPOSITE - # OF PTS. NA

DISCOLORATION/STAINING OBSERVED: [YES] NO EXPLANATION - MEDIUM GRAY TO BLACK - TH1 between 4 - 10 ft. below grade (b.g.), west half of TH3 between 5 - 8 ft. b.g., TH4 between 1.5 - 6 ft. b.g., OLIVE GRAY - east half of TH3 approximately 9 - 10 ft. b.g. (with apparent hydrocarbon odor detected).

ANY AREAS DISPLAYING WETNESS: YES / [NO] EXPLANATION -

APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED : [YES] NO EXPLANATION : APPEARS HISTORICAL

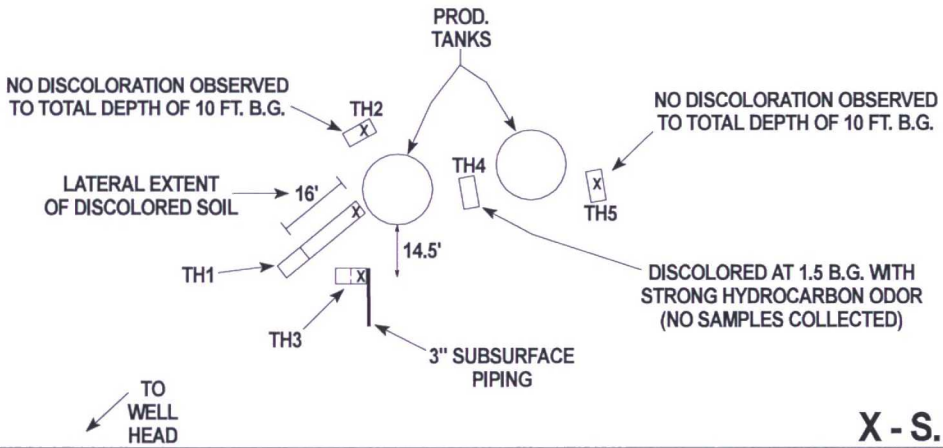
ADDITIONAL COMMENTS: TH1 @ 4.5' OVM = 1,110 ppm, DISTANCE FROM SOUTHERN BERM TO IRRIGATION DITCH APPROXIMATELY 220 FT., DEPTH TO GROUNDWATER CURRENLY UNKNOWN, BUT ESTIMATED BETWEEN 18 TO 30 FT. B.G.

SOIL IMPACT DIMENSION ESTIMATION: ? ft. X ? ft. X ? ft. EXCAVATION ESTIMATION (Cubic Yards) : ?

DEPTH TO GROUNDWATER: <50' NEAREST WATER SOURCE: <1,000' NEAREST SURFACE WATER: <1,000' NMOCD TPH CLOSURE STD: 100 ppm

SITE SKETCH

PLOT PLAN circle: attached



OVM CALIB. READ. = 52.2 ppm RF = 0.52

OVM CALIB. GAS = 100 ppm

TIME: 9:24 (am)/pm DATE: 05/31/12

MISCELL. NOTES

WO: N1410278

PO #: 75977

PK: ZSCHWLLBGT

PJ #: Z2-000690-C

Permit date(s): NA

OCD Appr. date(s): NA

Tank ID	
	BGT Sidewalls Visible: Y / N
	BGT Sidewalls Visible: Y / N
	BGT Sidewalls Visible: Y / N

Magnetic declination: 10° E

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD; T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT APPLICABLE OR NOT AVAILABLE; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM.

NOTES: GOOGLE EARTH IMAGERY DATE: 06/10/2011 ONSITE: 05/31/12

CLIENT: BP

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

API #: 3004508808
TANK ID (if applicble): NA

FIELD REPORT:

(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:
Reclamation of unknown release source near production tanks

PAGE #: 2 of 6

SITE INFORMATION:

SITE NAME: GUTIERREZ GC B # 1
DATE STARTED: 08/17/12
DATE FINISHED:
QUAD/UNIT: B SEC: 4 TWP: 29N RNG: 9W PM: NM CNTY: SJ ST: NM
1/4 -1/4/FOOTAGE: 1700'N / 1650'E NW/NE LEASE TYPE: FEDERAL / STATE / FEE / INDIAN
ENVIRONMENTAL SPECIALIST(S): NV
LEASE #: - PROD. FORMATION: DK CONTRACTOR: PAUL & SONS MBF - D. DECKER

REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.758165 X 107.782619 GL ELEV.: 5626'

		GPS COORD.:	DISTANCE/BEARING FROM W.H.:
1)	ESW	36.758821 X 107.781884	322', N42E
2)	NSW #1	36.758865 X 107.781910	329', N39E
3)	NSW #2	36.758892 X 107.781979	325', N35.25E
4)	ESW #1	36.758836 X 107.781882	326', N41.5E

SAMPLING DATA:

CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL

	SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:	OVM READING (ppm)
1)	GS-NSW#1 @ 19'	08/17/12	1017	8015, 8021, 300.0 (Chlor.)	0.0
2)	GS-NSW#2 @ 20'	08/17/12	1022	8015, 8021, 300.0 (Chlor.)	0.0
3)	GS-PB#1 @ 23'	08/21/12	0846	8015, 8021	0.0
4)	GS-ESW#1 @ 16'	08/24/12	1200	8015	0.0

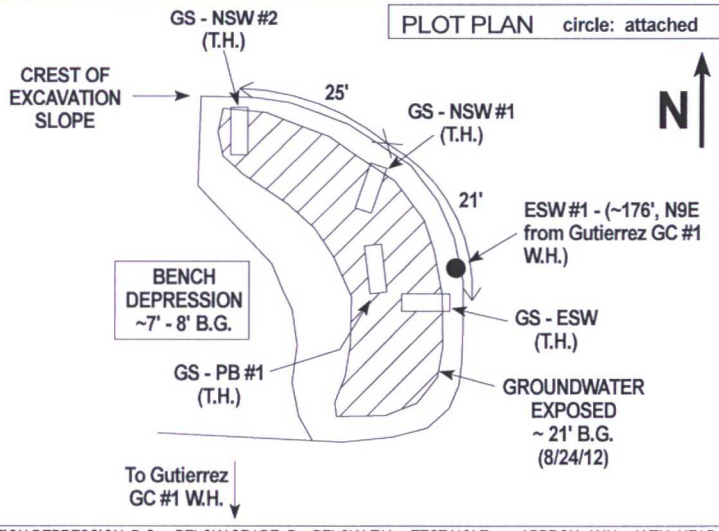
SOIL DESCRIPTION:

SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER
SOIL COLOR: MOSTLY DARK YELLOWISH ORANGE TO MODERATE BROWN
COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE
PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE
DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD
MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED
HC ODOR DETECTED: YES / NO EXPLANATION - ONLY FROM SAMPLES COLLECTED. UNKNOWN PHYSICAL ODOR WITHIN GS-NSW#1 @ 19' SAMPLE.
SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. NA
DISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION - BLACKISH LAYER WITHIN NSW#1 @ 19' (~ 1' THICK IN TRACKHOE BUCKET)

ANY AREAS DISPLAYING WETNESS: YES / NO EXPLANATION - GROUNDWATER OBSERVED @ ~ 21' BELOW GRADE.
APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED : YES / NO EXPLANATION : PREVIOUSLY DISCOVERED IN MAY 2012 (see initial field report)
ADDITIONAL COMMENTS: NSW #2 SAMPLE PT. PHYSICALLY MEASURED AT 194 FT., DUE NORTH OF GUTIERREZ GC # 1 WELL HEAD. IMPACTS APPEAR HISTORICAL IN NATURE AS STATED IN INITIAL MAY 2012 INVESTIGATION. HORIZONTAL BANDED MOISTURE STREAKS OBSERVED BETWEEN 10' - 19' BELOW GRADE EAST SIDEWALL (ESW #1).
EXCAVATION DIMENSIONS (if applicable): ____ ft. X ____ ft. X ____ ft. cubic yards excavated (if applicable): ____
DEPTH TO GROUNDWATER: ~21' NEAREST WATER SOURCE: <1,000' NEAREST SURFACE WATER: <200' NMOCD TPH CLOSURE STD: 100 ppm

SITE SKETCH

PLOT PLAN circle: attached



SAMPLE DATE: 08/17/12

SAMP. ID	OVM (ppm)	TIME
GS-ESW@ 15'	0.0	1014
GS-NSW#2@ 7'	0.0	1052

SAMPLE DATE: 08/21/12

SAMP. ID	OVM (ppm)	TIME
GS-PB #1 @ 21'	207	0826

Recalibrated OVM @ TIME 0836
Reading = 53.1 ppm.

OVM = Organic Vapor Meter
ppm = parts per million

OVM CALIB. READ. = 52.4 ppm RF = 0.52
OVM CALIB. GAS = 100 ppm
TIME: 10:43 am/pm DATE: 08/17/12

MISCELL. NOTES

WO: N15079146
PO #: 4300066178
PK:
PJ #:
OCD Appr. date(s): NA

Tank ID	Permit date(s): NA
	BGT Sidewalls Visible: Y / N
	BGT Sidewalls Visible: Y / N
	BGT Sidewalls Visible: Y / N

Magnetic declination: 10° E

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD; T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT APPLICABLE OR NOT AVAILABLE; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM.

TRAVEL NOTES: CALLOUT: ____ ONSITE: 8/15/12, 8/17/12, 8/21/12, 8/22/12, 8/24/12

CLIENT: BP

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

API #: 3004508808
TANK ID (if applicble): NA

FIELD REPORT:

(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:
Reclamation of unknown release source near production tanks

PAGE #: 3 of 6

SITE INFORMATION:

SITE NAME: GUTIERREZ GC B # 1

QUAD/UNIT: B SEC: 4 TWP: 29N RNG: 9W PM: NM CNTY: SJ ST: NM

1/4 -1/4/FOOTAGE: 1700'N / 1650'E NW/NE LEASE TYPE: FEDERAL / STATE / FEE / INDIAN

LEASE #: - PROD. FORMATION: DK CONTRACTOR: PAUL & SONS MBF - D. DECKER

DATE STARTED: 09/10/12
DATE FINISHED:
ENVIRONMENTAL SPECIALIST(S): NV

REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.758165 X 107.782619 GL ELEV.: 5626'

		GPS COORD.	DISTANCE/BEARING FROM W.H.
1)	SEC	36.758807 X 107.781849	325', N44E
2)	SEC#2	36.758743 X 107.781887	300.5', N45.5E
3)	NSW #3	36.758878 X 107.782081	304', N31E
4)			

SAMPLING DATA:

CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL

	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	LAB ANALYSIS	OVM READING (ppm)
1)	SEC@ 21'	09/05/12	1543	NA	234
2)	SEC#2 @ 21'	09/10/12	0936	NA	182
3)	SEC#2 @ 23'	09/10/12	0950	NA	12.1
4)	NSW#3 @ 21'	09/10/12	1008	NA	0.0

SOIL DESCRIPTION:

SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER

SOIL COLOR: MOSTLY DARK YELLOWISH ORANGE TO MODERATE BROWN

COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE

PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE

DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED

HC ODOR DETECTED: YES / NO EXPLANATION - ONLY FROM DISCOLORED SAMPLES COLLECTED.

SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. NA

DISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION - MOSTLY BETWEEN 18' - 21' BELOW GRADE IN SE CORNER & FURTHEST WESTERN END OF NORTH SIDWWALL (NSW#3).

ANY AREAS DISPLAYING WETNESS: YES / NO EXPLANATION - GROUNDWATER OBSERVED @ ~ 21' BELOW GRADE.

APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED : YES / NO EXPLANATION : PREVIOUSLY DISCOVERED IN MAY 2012 (see initial field report)

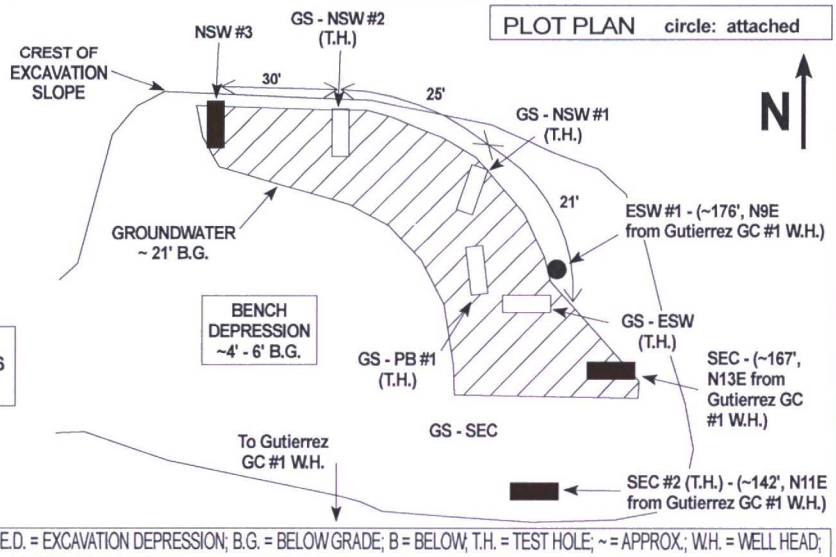
ADDITIONAL COMMENTS: CLAY AT 23' BELOW GRADE - OLIVE GRAY [GS-PB] TO MODERATE YELLOWISH BROWN [SEC#2 (T.H.)].

EXCAVATION DIMENSIONS (if applicable): ____ ft. X ____ ft. X ____ ft. cubic yards excavated (if applicable): ____

DEPTH TO GROUNDWATER: ~21' NEAREST WATER SOURCE: <1,000' NEAREST SURFACE WATER: <200' NMOCD TPH CLOSURE STD: 100 ppm

SITE SKETCH

PLOT PLAN circle: attached



SAMPLE DATE: 09/10/12
Recalibrated OVM @ TIME 1026
Reading = 53.6 ppm.

OVM = Organic Vapor Meter
ppm = parts per million

OVM CALIB. READ. = 54.0 ppm RF = 0.52
OVM CALIB. GAS = 100 ppm
TIME: 1:45 am/pm DATE: 09/04/12

MISCELL. NOTES

WO: N15079146
PO #: 4300066178
PK:
PJ #:
OCD Appr. date(s): NA

Tank ID		
	Permit date(s):	NA
	BGT Sidewalls Visible:	Y / N
	BGT Sidewalls Visible:	Y / N
	BGT Sidewalls Visible:	Y / N

Magnetic declination: 10° E

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD; T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT APPLICABLE OR NOT AVAILABLE; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM.

TRAVEL NOTES: CALLOUT: ____ ONSITE: 8/15/12, 8/17/12, 8/21/12, 8/22/12, 8/24/12, 8/29/12, 9/5/12, 9/10/12

CLIENT: BP

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

API #: 3004508808
TANK ID (if applicble): NA

FIELD REPORT:

(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:
Reclamation of unknown release source near production tanks

PAGE #: 4 of 6

SITE INFORMATION:

SITE NAME: GUTIERREZ GC B # 1

QUAD/UNIT: B SEC: 4 TWP: 29N RNG: 9W PM: NM CNTY: SJ ST: NM

1/4 -1/4/FOOTAGE: 1700'N / 1650'E NW/NE LEASE TYPE: FEDERAL / STATE / FEE / INDIAN

LEASE #: - PROD. FORMATION: DK CONTRACTOR: PAUL & SONS MBF - D. DECKER

DATE STARTED: 09/17/12
DATE FINISHED:
ENVIRONMENTAL SPECIALIST(S): NV

REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.758165 X 107.782619 GL ELEV.: 5626'

1)	NWC	GPS COORD.:	36.758881 X 107.782117	DISTANCE/BEARING FROM W.H.:	300', N29E
2)	WSW	GPS COORD.:	36.758858 X 107.782117	DISTANCE/BEARING FROM W.H.:	292', N30E
3)	SWC	GPS COORD.:	36.758773 X 107.782089	DISTANCE/BEARING FROM W.H.:	271', N35E
4)	SSW	GPS COORD.:	36.758765 X 107.782023	DISTANCE/BEARING FROM W.H.:	280', N38.5E

SAMPLING DATA:

CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL

								OVM READING (ppm)
1)	SAMPLE ID: NWC@ 20'	SAMPLE DATE:	09/17/12	SAMPLE TIME:	0925	LAB ANALYSIS:	8015, 8021	25.2
2)	SAMPLE ID: WSW @ 22'	SAMPLE DATE:	09/17/12	SAMPLE TIME:	0930	LAB ANALYSIS:	8015, 8021	20.2
3)	SAMPLE ID: SWC @ 21'	SAMPLE DATE:	09/17/12	SAMPLE TIME:	0938	LAB ANALYSIS:	8015, 8021	100.0
4)	SAMPLE ID: SSW @ 19'	SAMPLE DATE:	09/17/12	SAMPLE TIME:	0945	LAB ANALYSIS:	8015, 8021	256

SOIL DESCRIPTION:

SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER

SOIL COLOR: DARK YELLOWISH ORANGE TO BLACK

COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE

CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE

MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED

SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. NA

PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

HC ODOR DETECTED: YES / NO EXPLANATION - ONLY FROM DISCOLORED SOILS NOTED BELOW.

DISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION - MOSTLY BETWEEN 18' - 21' BELOW GRADE IN SOUTH SIDEWALL & SOUTHWEST CORNER - MEDIUM GRAY TO BLACK (PLAN ON STRIPPING OVERBURDEN TO REMOVE THIS 3' INVERVAL).

ANY AREAS DISPLAYING WETNESS: YES / NO EXPLANATION - GROUNDWATER OBSERVED @ ~ 21' BELOW GRADE.

APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED : YES / NO EXPLANATION : PREVIOUSLY DISCOVERED IN MAY 2012 (see initial field report)

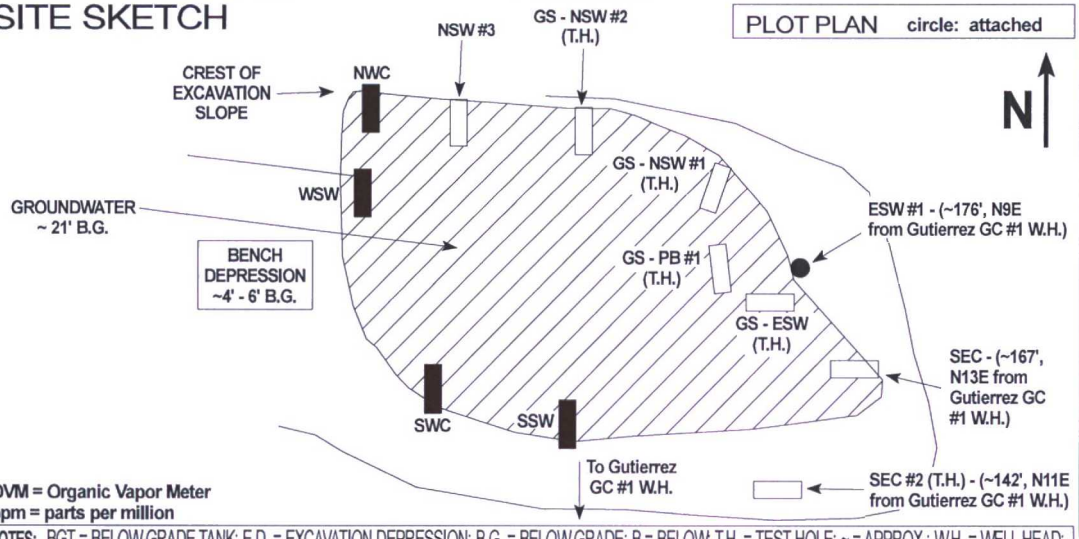
ADDITIONAL COMMENTS: CLAY AT 21' TO 22' BELOW GRADE AT WEST SIDEWALL (WSW) SAMPLE - OLIVE GRAY.

EXCAVATION DIMENSIONS (if applicable): ____ ft. X ____ ft. X ____ ft. cubic yards excavated (if applicable): ____

DEPTH TO GROUNDWATER: ~21' NEAREST WATER SOURCE: <1,000' NEAREST SURFACE WATER: <200' NMOCD TPH CLOSURE STD: 100 ppm

SITE SKETCH

PLOT PLAN circle: attached



OVM = Organic Vapor Meter
ppm = parts per million

OVM CALIB. READ. = 53.8 ppm RF = 0.52
OVM CALIB. GAS = 100 ppm
TIME: 9:57 am/pm DATE: 09/17/12

MISCELL. NOTES

WO: N15079146
PO #: 4300066178
PK:
PJ #:
OCD Appr. date(s): NA

Tank ID	Permit date(s): NA
	BGT Sidewalls Visible: Y / N
	BGT Sidewalls Visible: Y / N
	BGT Sidewalls Visible: Y / N

Magnetic declination: 10° E

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD; T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT APPLICABLE OR NOT AVAILABLE; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM.

TRAVEL NOTES: CALLOUT: ____ ONSITE: 8/15/12, 8/17/12, 8/21/12, 8/22/12, 8/24/12, 8/29/12, 9/5/12, 9/10/12, 9/17/12

CLIENT: BP

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

API #: 3004508808
TANK ID (if applicble): NA

FIELD REPORT:

(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:
Reclamation of unknown release source near production tanks

PAGE #: 5 of 6

SITE INFORMATION:

SITE NAME: GUTIERREZ GC B # 1

QUAD/UNIT: B SEC: 4 TWP: 29N RNG: 9W PM: NM CNTY: SJ ST: NM

1/4 -1/4/FOOTAGE: 1700'N / 1650'E NW/NE LEASE TYPE: FEDERAL / STATE / FEE / INDIAN

LEASE #: - PROD. FORMATION: DK CONTRACTOR: PAUL & SONS MBF - D. DECKER

DATE STARTED: 09/20/12
DATE FINISHED:
ENVIRONMENTAL SPECIALIST(S): NV

REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.758165 X 107.782619 GL ELEV.: 5626'

		GPS COORD.	DISTANCE/BEARING FROM W.H.
1)	SEC#3@ 21'	36.758741 X 107.781875	302.5', N46E
2)	SSW#2 @ 23'	36.758727 X 107.782043	265.5', N39.5E
3)	SSW#3 @ 20'	36.758723 X 107.781979	276.5', N42.5E
4)	SSW#4 @ 20'	36.758714 X 107.781917	287', N45.5E

SAMPLING DATA:

CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL

	SAMPLE ID:	SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:	OVM READING (ppm)
1)	SEC#3@ 21'	09/18/12	1044	8015, 8021	225
2)	SSW#2 @ 23'	09/20/12	0925	8015, 8021	35.6
3)	SSW#3 @ 20'	09/20/12	0939	8015, 8021	0.0
4)	SSW#4 @ 20'	09/20/12	0943	8015, 8021	217.4

SOIL DESCRIPTION:

SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER

SOIL COLOR: DARK YELLOWISH ORANGE TO BLACK

COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE

PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE

DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED

HC ODOR DETECTED: YES / NO EXPLANATION - ONLY FROM DISCOLORED SOILS NOTED BELOW.

SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. NA

DISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION - MOSTLY BETWEEN 19' - 22' BELOW GRADE IN EAST HALF OF SOUTH SIDEWALL & SOUTHEAST CORNER - MEDIUM GRAY TO BLACK.

ANY AREAS DISPLAYING WETNESS: YES / NO EXPLANATION - GROUNDWATER OBSERVED @ ~ 21' BELOW GRADE.

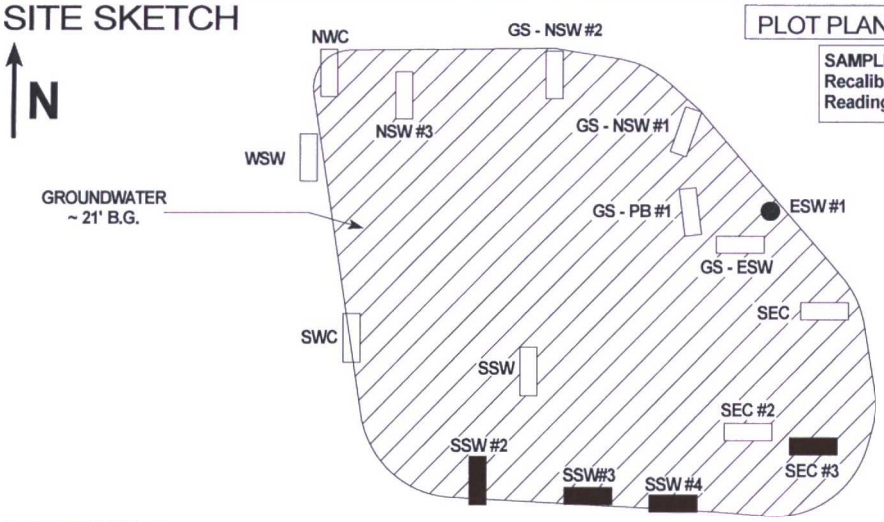
APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED : YES / NO EXPLANATION : PREVIOUSLY DISCOVERED IN MAY 2012 (see initial field report)

ADDITIONAL COMMENTS: CLAY AT 21' TO 23' BELOW GRADE AT WEST SIDEWALL (WSW) SAMPLE - OLIVE GRAY.

EXCAVATION DIMENSIONS (if applicable): ____ ft. X ____ ft. X ____ ft. cubic yards excavated (if applicable): ____

DEPTH TO GROUNDWATER: ~21' NEAREST WATER SOURCE: <1,000' NEAREST SURFACE WATER: <200' NMOCD TPH CLOSURE STD: 100 ppm

SITE SKETCH



PLOT PLAN circle: attached

SAMPLE DATE: 09/18/12
Recalibrated OVM @ TIME 1050
Reading = 53.1 ppm.

OVM CALIB. READ. = 53.4 ppm RF = 0.52
OVM CALIB. GAS = 100 ppm
TIME: 9:59 (am)/pm DATE: 09/20/12

MISCELL. NOTES

WO: N15079146
PO #: 4300066178

OVM = Organic Vapor Meter
ppm = parts per million

Magnetic declination: 10° E

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD; T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT APPLICABLE OR NOT AVAILABLE; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM.

TRAVEL NOTES: ONSITE: 8/15/12, 8/17/12, 8/21/12, 8/22/12, 8/24/12, 8/29/12, 9/5/12, 9/10/12, 9/17/12, 9/18/12, 9/20/12

CLIENT: BP

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

API #: 3004508808
TANK ID (if applicble): NA

FIELD REPORT:

(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / [OTHER:]
Reclamation of unknown release source near production tanks

PAGE #: 6 of 6

SITE INFORMATION:

SITE NAME: GUTIERREZ GC B # 1

QUAD/UNIT: B SEC: 4 TWP: 29N RNG: 9W PM: NM CNTY: SJ ST: NM

1/4 -1/4/FOOTAGE: 1700'N / 1650'E NW/NE LEASE TYPE: FEDERAL / STATE / [FEE] / INDIAN

LEASE #: - PROD. FORMATION: DK CONTRACTOR: PAUL & SONS MBF - D. DECKER

DATE STARTED: 09/26/12
DATE FINISHED:
ENVIRONMENTAL SPECIALIST(S): NV

REFERENCE POINT:

WELL HEAD (W.H.) GPS COORD.: 36.758165 X 107.782619 GL ELEV.: 5626'

1) SEC#4	GPS COORD.: 36.758650 X 107.781844	DISTANCE/BEARING FROM W.H.:	288', N52E
2)	GPS COORD.:	DISTANCE/BEARING FROM W.H.:	
3)	GPS COORD.:	DISTANCE/BEARING FROM W.H.:	
4)	GPS COORD.:	DISTANCE/BEARING FROM W.H.:	

SAMPLING DATA:

CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL

						OVM READING (ppm)
1) SAMPLE ID:	SEC#4@ 20'	SAMPLE DATE: 09/26/12	SAMPLE TIME: 1114	LAB ANALYSIS:	8015, 8021	0.0
2) SAMPLE ID:	SEC#4@ 21'	SAMPLE DATE: 09/26/12	SAMPLE TIME: 1115	LAB ANALYSIS:	8015, 8021	0.0
3) SAMPLE ID:		SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:		
4) SAMPLE ID:		SAMPLE DATE:	SAMPLE TIME:	LAB ANALYSIS:		

SOIL DESCRIPTION:

SOIL TYPE: [SAND] / [SILTY SAND] / SILT / [SILTY CLAY] / [CLAY] / GRAVEL / OTHER

SOIL COLOR: DARK YELLOWISH ORANGE TO BLACK

COHESION (ALL OTHERS): [NON COHESIVE] / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE

CONSISTENCY (NON COHESIVE SOILS): LOOSE / [FIRM] / DENSE / VERY DENSE

MOISTURE: DRY / [SLIGHTLY MOIST] / MOIST / WET / [SATURATED] / SUPER SATURATED

SAMPLE TYPE: [GRAB] / COMPOSITE - # OF PTS. NA

PLASTICITY (CLAYS): NON PLASTIC / [SLIGHTLY PLASTIC] / [COHESIVE] / MEDIUM PLASTIC / HIGHLY PLASTIC

DENSITY (COHESIVE CLAYS & SILTS): SOFT / [FIRM] / [STIFF] / VERY STIFF / HARD

HC ODOR DETECTED: YES / [NO] EXPLANATION - ONLY FROM DISCOLORED SOILS NOTED BELOW.

DISCOLORATION/STAINING OBSERVED: [YES] / NO EXPLANATION - MOSTLY BETWEEN 19' - 22' BELOW GRADE IN EAST HALF OF SOUTH SIDEWALL & SOUTHEAST CORNER - MEDIUM GRAY TO BLACK.

ANY AREAS DISPLAYING WETNESS: [YES] / NO EXPLANATION - GROUNDWATER OBSERVED @ ~ 21' BELOW GRADE.

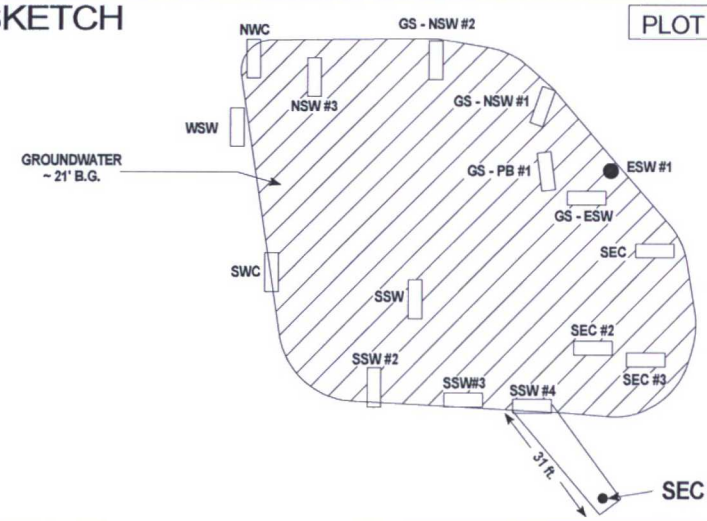
APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED : [YES] / NO EXPLANATION : PREVIOUSLY DISCOVERED IN MAY 2012 (see initial field report)

ADDITIONAL COMMENTS:

EXCAVATION DIMENSIONS (if applicable): 80 ft. X 65 ft. X 23 ft. cubic yards excavated (if applicable): ~4,500 - 5,000

DEPTH TO GROUNDWATER: ~21' NEAREST WATER SOURCE: <1,000' NEAREST SURFACE WATER: <200' NMOCD TPH CLOSURE STD: 100 ppm

SITE SKETCH



PLOT PLAN circle: attached

OVM CALIB. READ. = 52.6 ppm RF = 0.52
OVM CALIB. GAS = 100 ppm
TIME: 11:35 (am)/pm DATE: 09/26/12

MISCELL. NOTES

WO: N15079146
PO #: 4300066178

OVM = Organic Vapor Meter
ppm = parts per million

Magnetic declination: 10° E

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD; T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT APPLICABLE OR NOT AVAILABLE; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM.

TRAVEL NOTES: ONSITE: 8/15/12, 8/17/12, 8/21/12, 8/22/12, 8/24/12, 8/29/12, 9/5/12, 9/10/12, 9/17/12, 9/18/12, 9/20/12

Analytical Report
Lab Order **1206018**
Date Reported: **6/4/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1206018-001 **Matrix:** MEOH (SOIL)

Client Sample ID: TH1 @ 10' historical release
Collection Date: 5/31/2012 8:55:00 AM
Received Date: 6/1/2012 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	360	10		mg/Kg	1	6/1/2012 10:50:29 AM
Surr: DNOP	118	82.1-121		%REC	1	6/1/2012 10:50:29 AM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	58	30		mg/Kg	20	6/1/2012 11:31:51 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BDH**
Benzene	ND	0.20		mg/Kg	4	6/1/2012 2:34:48 PM
Toluene	4.1	0.20		mg/Kg	4	6/1/2012 2:34:48 PM
Ethylbenzene	5.0	0.20		mg/Kg	4	6/1/2012 2:34:48 PM
Xylenes, Total	75	10		mg/Kg	100	6/1/2012 12:33:50 PM
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%REC	4	6/1/2012 2:34:48 PM
Surr: 4-Bromofluorobenzene	148	70-130	S	%REC	4	6/1/2012 2:34:48 PM
Surr: Dibromofluoromethane	109	71.7-132		%REC	4	6/1/2012 2:34:48 PM
Surr: Toluene-d8	94.0	70-130		%REC	4	6/1/2012 2:34:48 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **BDH**
Gasoline Range Organics (GRO)	1800	500		mg/Kg	100	6/1/2012 12:33:50 PM
Surr: BFB	97.9	70-130		%REC	100	6/1/2012 12:33:50 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1206018-002 **Matrix:** MEOH (SOIL)

Client Sample ID: TH2 @ 9' historical release
Collection Date: 5/31/2012 9:33:00 AM
Received Date: 6/1/2012 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/1/2012 11:12:15 AM
Surr: DNOP	111	82.1-121		%REC	1	6/1/2012 11:12:15 AM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	ND	30		mg/Kg	20	6/1/2012 11:44:15 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BDH**
Benzene	ND	0.050		mg/Kg	1	6/1/2012 1:01:34 PM
Toluene	ND	0.050		mg/Kg	1	6/1/2012 1:01:34 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/1/2012 1:01:34 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/1/2012 1:01:34 PM
Surr: 1,2-Dichloroethane-d4	87.9	70-130		%REC	1	6/1/2012 1:01:34 PM
Surr: 4-Bromofluorobenzene	91.3	70-130		%REC	1	6/1/2012 1:01:34 PM
Surr: Dibromofluoromethane	92.5	71.7-132		%REC	1	6/1/2012 1:01:34 PM
Surr: Toluene-d8	91.5	70-130		%REC	1	6/1/2012 1:01:34 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **BDH**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/1/2012 1:01:34 PM
Surr: BFB	91.3	70-130		%REC	1	6/1/2012 1:01:34 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1206018-003
Matrix: MEOH (SOIL)
Client Sample ID: TH3 @ 10' historical release
Collection Date: 5/31/2012 9:50:00 AM
Received Date: 6/1/2012 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1100	100		mg/Kg	10	6/1/2012 12:17:39 PM
Surr: DNOP	0	82.1-121	S	%REC	10	6/1/2012 12:17:39 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	300	30		mg/Kg	20	6/1/2012 11:56:39 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BDH**
Benzene	ND	0.20		mg/Kg	4	6/1/2012 3:30:07 PM
Toluene	ND	0.20		mg/Kg	4	6/1/2012 3:30:07 PM
Ethylbenzene	0.28	0.20		mg/Kg	4	6/1/2012 3:30:07 PM
Xylenes, Total	4.6	0.40		mg/Kg	4	6/1/2012 3:30:07 PM
Surr: 1,2-Dichloroethane-d4	89.3	70-130		%REC	4	6/1/2012 3:30:07 PM
Surr: 4-Bromofluorobenzene	140	70-130	S	%REC	4	6/1/2012 3:30:07 PM
Surr: Dibromofluoromethane	91.8	71.7-132		%REC	4	6/1/2012 3:30:07 PM
Surr: Toluene-d8	91.1	70-130		%REC	4	6/1/2012 3:30:07 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **BDH**
Gasoline Range Organics (GRO)	1100	250		mg/Kg	50	6/1/2012 1:29:08 PM
Surr: BFB	98.5	70-130		%REC	50	6/1/2012 1:29:08 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1206018-004 **Matrix:** MEOH (SOIL)

Client Sample ID: TH5 @ 10' historical release
Collection Date: 5/31/2012 10:16:00 AM
Received Date: 6/1/2012 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/1/2012 11:55:50 AM
Surr: DNOP	105	82.1-121		%REC	1	6/1/2012 11:55:50 AM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	ND	30		mg/Kg	20	6/1/2012 12:09:04 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BDH**
Benzene	ND	0.050		mg/Kg	1	6/1/2012 1:56:47 PM
Toluene	ND	0.050		mg/Kg	1	6/1/2012 1:56:47 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/1/2012 1:56:47 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/1/2012 1:56:47 PM
Surr: 1,2-Dichloroethane-d4	86.8	70-130		%REC	1	6/1/2012 1:56:47 PM
Surr: 4-Bromofluorobenzene	88.4	70-130		%REC	1	6/1/2012 1:56:47 PM
Surr: Dibromofluoromethane	90.4	71.7-132		%REC	1	6/1/2012 1:56:47 PM
Surr: Toluene-d8	92.6	70-130		%REC	1	6/1/2012 1:56:47 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **BDH**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/1/2012 1:56:47 PM
Surr: BFB	88.4	70-130		%REC	1	6/1/2012 1:56:47 PM

Qualifiers:

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

Analytical Report
Lab Order **1208877**
Date Reported: **8/29/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1208877-001 **Matrix:** SOIL

Client Sample ID: GS-NSW#1 @ 19'-Unknown Rel
Collection Date: 8/17/2012 10:17:00 AM
Received Date: 8/21/2012 10:31:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/23/2012 9:10:37 AM
Surr: DNOP	118	77.6-140		%REC	1	8/23/2012 9:10:37 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/23/2012 3:53:59 PM
Surr: BFB	94.8	84-116		%REC	1	8/23/2012 3:53:59 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.049		mg/Kg	1	8/23/2012 3:53:59 PM
Toluene	ND	0.049		mg/Kg	1	8/23/2012 3:53:59 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/23/2012 3:53:59 PM
Xylenes, Total	ND	0.098		mg/Kg	1	8/23/2012 3:53:59 PM
Surr: 4-Bromofluorobenzene	95.1	80-120		%REC	1	8/23/2012 3:53:59 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	1.9	1.5		mg/Kg	1	8/22/2012 1:20:09 PM

Qualifiers:

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
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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1208877-002 **Matrix:** MEOH (SOIL)

Client Sample ID: GS-NSW#2 @20' Unknown Rele
Collection Date: 8/17/2012 10:22:00 AM
Received Date: 8/21/2012 10:31:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/21/2012 12:21:10 PM
Surr: DNOP	101	77.6-140		%REC	1	8/21/2012 12:21:10 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/21/2012 12:42:03 PM
Surr: BFB	98.1	84-116		%REC	1	8/21/2012 12:42:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	8/21/2012 12:42:03 PM
Toluene	ND	0.050		mg/Kg	1	8/21/2012 12:42:03 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/21/2012 12:42:03 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/21/2012 12:42:03 PM
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	8/21/2012 12:42:03 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	33	30		mg/Kg	20	8/21/2012 2:52:46 PM

Qualifiers:

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

Analytical Report
Lab Order **1208C22**
Date Reported: **9/5/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GUTIERREZ GC B #1
Lab ID: 1208C22-001 **Matrix:** SOIL

Client Sample ID: GS-PB#1 @ 23'-unknown release
Collection Date: 8/21/2012 8:46:00 AM
Received Date: 8/28/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/30/2012 10:29:19 AM
Surr: DNOP	112	77.6-140		%REC	1	8/30/2012 10:29:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/30/2012 8:01:07 PM
Surr: BFB	98.4	84-116		%REC	1	8/30/2012 8:01:07 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.047		mg/Kg	1	8/30/2012 8:01:07 PM
Toluene	ND	0.047		mg/Kg	1	8/30/2012 8:01:07 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/30/2012 8:01:07 PM
Xylenes, Total	ND	0.095		mg/Kg	1	8/30/2012 8:01:07 PM
Surr: 4-Bromofluorobenzene	98.9	80-120		%REC	1	8/30/2012 8:01:07 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: GUTIERREZ GC B #1
Lab ID: 1208C22-002 **Matrix:** SOIL

Client Sample ID: GS-ESW#1 @ 16'-unknown relea
Collection Date: 8/24/2012 12:00:00 PM
Received Date: 8/28/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/30/2012 10:55:14 AM
Surr: DNOP	114	77.6-140		%REC	1	8/30/2012 10:55:14 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/30/2012 8:29:53 PM
Surr: BFB	97.5	84-116		%REC	1	8/30/2012 8:29:53 PM

Qualifiers:

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

Analytical Report
Lab Order **1209922**
Date Reported: **10/2/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1209922-001 **Matrix:** SOIL

Client Sample ID: NWC @ 20' - unknown release
Collection Date: 9/17/2012 9:25:00 AM
Received Date: 9/20/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/23/2012 7:06:56 PM
Surr: DNOP	99.0	77.6-140		%REC	1	9/23/2012 7:06:56 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/25/2012 2:23:50 AM
Surr: BFB	99.0	84-116		%REC	1	9/25/2012 2:23:50 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.047		mg/Kg	1	9/25/2012 2:23:50 AM
Toluene	ND	0.047		mg/Kg	1	9/25/2012 2:23:50 AM
Ethylbenzene	ND	0.047		mg/Kg	1	9/25/2012 2:23:50 AM
Xylenes, Total	ND	0.094		mg/Kg	1	9/25/2012 2:23:50 AM
Surr: 4-Bromofluorobenzene	99.4	80-120		%REC	1	9/25/2012 2:23:50 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1209922-002 **Matrix:** SOIL

Client Sample ID: WSW @ 22' - unknown release
Collection Date: 9/17/2012 9:30:00 AM
Received Date: 9/20/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/23/2012 7:32:17 PM
Surr: DNOP	104	77.6-140		%REC	1	9/23/2012 7:32:17 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/25/2012 5:07:54 PM
Surr: BFB	102	84-116		%REC	1	9/25/2012 5:07:54 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.047		mg/Kg	1	9/25/2012 5:07:54 PM
Toluene	ND	0.047		mg/Kg	1	9/25/2012 5:07:54 PM
Ethylbenzene	ND	0.047		mg/Kg	1	9/25/2012 5:07:54 PM
Xylenes, Total	ND	0.094		mg/Kg	1	9/25/2012 5:07:54 PM
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	9/25/2012 5:07:54 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1209922-003 **Matrix:** SOIL

Client Sample ID: SWC @ 21' - unknown release
Collection Date: 9/17/2012 9:38:00 AM
Received Date: 9/20/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	13	10		mg/Kg	1	9/23/2012 7:57:42 PM
Surr: DNOP	105	77.6-140		%REC	1	9/23/2012 7:57:42 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	31	9.8		mg/Kg	2	9/25/2012 5:36:40 PM
Surr: BFB	310	84-116	S	%REC	2	9/25/2012 5:36:40 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.098		mg/Kg	2	9/25/2012 5:36:40 PM
Toluene	ND	0.098		mg/Kg	2	9/25/2012 5:36:40 PM
Ethylbenzene	0.19	0.098		mg/Kg	2	9/25/2012 5:36:40 PM
Xylenes, Total	ND	0.20		mg/Kg	2	9/25/2012 5:36:40 PM
Surr: 4-Bromofluorobenzene	108	80-120		%REC	2	9/25/2012 5:36:40 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1209922-004 **Matrix:** SOIL

Client Sample ID: SSW @ 19' - unknown release
Collection Date: 9/17/2012 9:45:00 AM
Received Date: 9/20/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	2400	100		mg/Kg	10	9/24/2012 2:26:48 PM
Surr: DNOP	0	77.6-140	S	%REC	10	9/24/2012 2:26:48 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3500	490		mg/Kg	100	9/25/2012 3:50:11 AM
Surr: BFB	205	84-116	S	%REC	100	9/25/2012 3:50:11 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.5		mg/Kg	100	9/25/2012 3:50:11 AM
Toluene	14	4.9		mg/Kg	100	9/25/2012 3:50:11 AM
Ethylbenzene	25	4.9		mg/Kg	100	9/25/2012 3:50:11 AM
Xylenes, Total	330	9.8		mg/Kg	100	9/25/2012 3:50:11 AM
Surr: 4-Bromofluorobenzene	107	80-120		%REC	100	9/25/2012 3:50:11 AM

Qualifiers:

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

Analytical Report
Lab Order **1209870**
Date Reported: **9/24/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1209870-001 **Matrix:** MEOH (SOIL)

Client Sample ID: SEC #3 @21'- unknown release
Collection Date: 9/18/2012 10:44:00 AM
Received Date: 9/20/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	280	9.9		mg/Kg	1	9/21/2012 9:29:17 AM
Surr: DNOP	116	77.6-140		%REC	1	9/21/2012 9:29:17 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1700	100		mg/Kg	20	9/20/2012 12:36:06 PM
Surr: BFB	534	84-116	S	%REC	20	9/20/2012 12:36:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		mg/Kg	20	9/20/2012 12:36:06 PM
Toluene	ND	1.0		mg/Kg	20	9/20/2012 12:36:06 PM
Ethylbenzene	11	1.0		mg/Kg	20	9/20/2012 12:36:06 PM
Xylenes, Total	52	2.0		mg/Kg	20	9/20/2012 12:36:06 PM
Surr: 4-Bromofluorobenzene	128	80-120	S	%REC	20	9/20/2012 12:36:06 PM

Qualifiers:

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

Analytical Report
Lab Order **1209B22**
Date Reported: **10/3/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1209B22-001 **Matrix:** SOIL

Client Sample ID: SSW #2 @ 23'-unknown release
Collection Date: 9/20/2012 9:25:00 AM
Received Date: 9/25/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/27/2012 10:46:33 AM
Surr: DNOP	109	77.6-140		%REC	1	9/27/2012 10:46:33 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/29/2012 8:24:33 PM
Surr: BFB	99.1	84-116		%REC	1	9/29/2012 8:24:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.047		mg/Kg	1	9/29/2012 8:24:33 PM
Toluene	ND	0.047		mg/Kg	1	9/29/2012 8:24:33 PM
Ethylbenzene	ND	0.047		mg/Kg	1	9/29/2012 8:24:33 PM
Xylenes, Total	ND	0.094		mg/Kg	1	9/29/2012 8:24:33 PM
Surr: 4-Bromofluorobenzene	98.3	80-120		%REC	1	9/29/2012 8:24:33 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1209B22-002 **Matrix:** SOIL

Client Sample ID: SSW #3 @ 20'-unknown release
Collection Date: 9/20/2012 9:39:00 AM
Received Date: 9/25/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/27/2012 11:11:38 AM
Surr: DNOP	108	77.6-140		%REC	1	9/27/2012 11:11:38 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2012 8:53:21 PM
Surr: BFB	98.8	84-116		%REC	1	9/29/2012 8:53:21 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.048		mg/Kg	1	9/29/2012 8:53:21 PM
Toluene	ND	0.048		mg/Kg	1	9/29/2012 8:53:21 PM
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2012 8:53:21 PM
Xylenes, Total	ND	0.096		mg/Kg	1	9/29/2012 8:53:21 PM
Surr: 4-Bromofluorobenzene	97.9	80-120		%REC	1	9/29/2012 8:53:21 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1209B22-003 **Matrix:** SOIL

Client Sample ID: SSW #4 @ 20'-unknown release
Collection Date: 9/20/2012 9:43:00 AM
Received Date: 9/25/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	120	10		mg/Kg	1	9/27/2012 11:36:43 AM
Surr: DNOP	108	77.6-140		%REC	1	9/27/2012 11:36:43 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	390	98		mg/Kg	20	9/30/2012 1:33:20 PM
Surr: BFB	254	84-116	S	%REC	20	9/30/2012 1:33:20 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.98		mg/Kg	20	9/30/2012 1:33:20 PM
Toluene	ND	0.98		mg/Kg	20	9/30/2012 1:33:20 PM
Ethylbenzene	1.7	0.98		mg/Kg	20	9/30/2012 1:33:20 PM
Xylenes, Total	ND	2.0		mg/Kg	20	9/30/2012 1:33:20 PM
Surr: 4-Bromofluorobenzene	105	80-120		%REC	20	9/30/2012 1:33:20 PM

Qualifiers:

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

Analytical Report
Lab Order **1210004**
Date Reported: **10/9/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1210004-001 **Matrix:** SOIL

Client Sample ID: SEC #4 @ 20'-unknown release
Collection Date: 9/26/2012 11:14:00 AM
Received Date: 9/29/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/2/2012 12:12:09 PM
Surr: DNOP	109	77.6-140		%REC	1	10/2/2012 12:12:09 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/6/2012 12:34:33 AM
Surr: BFB	98.9	84-116		%REC	1	10/6/2012 12:34:33 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.047		mg/Kg	1	10/4/2012 5:26:14 PM
Toluene	ND	0.047		mg/Kg	1	10/4/2012 5:26:14 PM
Ethylbenzene	ND	0.047		mg/Kg	1	10/4/2012 5:26:14 PM
Xylenes, Total	ND	0.094		mg/Kg	1	10/4/2012 5:26:14 PM
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	10/4/2012 5:26:14 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B #1
Lab ID: 1210004-002 **Matrix:** SOIL

Client Sample ID: SEC #4 @ 21'-unknown release
Collection Date: 9/26/2012 11:15:00 AM
Received Date: 9/29/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/2/2012 12:37:31 PM
Surr: DNOP	111	77.6-140		%REC	1	10/2/2012 12:37:31 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/6/2012 1:03:17 AM
Surr: BFB	112	84-116		%REC	1	10/6/2012 1:03:17 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.049		mg/Kg	1	10/4/2012 5:55:02 PM
Toluene	ND	0.049		mg/Kg	1	10/4/2012 5:55:02 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/4/2012 5:55:02 PM
Xylenes, Total	ND	0.098		mg/Kg	1	10/4/2012 5:55:02 PM
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	10/4/2012 5:55:02 PM

Qualifiers:

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

Analytical Report
Lab Order **1308729**
Date Reported: **8/27/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B#1
Lab ID: 1308729-001 **Matrix:** AQUEOUS

Client Sample ID: MW #1
Collection Date: 8/15/2013 1:15:00 PM
Received Date: 8/16/2013 10:07:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	8/19/2013 9:57:34 PM	R12735
Toluene	ND	1.0		µg/L	1	8/19/2013 9:57:34 PM	R12735
Ethylbenzene	ND	1.0		µg/L	1	8/19/2013 9:57:34 PM	R12735
Xylenes, Total	ND	2.0		µg/L	1	8/19/2013 9:57:34 PM	R12735
Surr: 4-Bromofluorobenzene	103	69.4-129		%REC	1	8/19/2013 9:57:34 PM	R12735
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Fluoride	0.85	0.10		mg/L	1	8/16/2013 11:15:46 PM	R12706
Chloride	18	10		mg/L	20	8/16/2013 11:28:11 PM	R12706
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/16/2013 11:15:46 PM	R12706
Sulfate	1700	25		mg/L	50	8/20/2013 5:11:02 PM	R12777
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JLF**	
Iron	1.8	0.10	*	mg/L	5	8/22/2013 5:06:16 PM	R12837
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	2840	200	*	mg/L	1	8/21/2013 11:35:00 AM	8911

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

Qualifiers:

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

Analytical Report
Lab Order **1308729**
Date Reported: **8/27/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B#1
Lab ID: 1308729-002 **Matrix:** AQUEOUS

Client Sample ID: MW #2
Collection Date: 8/15/2013 3:30:00 PM
Received Date: 8/16/2013 10:07:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	8/19/2013 10:27:49 PM	R12735
Toluene	ND	1.0		µg/L	1	8/19/2013 10:27:49 PM	R12735
Ethylbenzene	ND	1.0		µg/L	1	8/19/2013 10:27:49 PM	R12735
Xylenes, Total	ND	2.0		µg/L	1	8/19/2013 10:27:49 PM	R12735
Surr: 4-Bromofluorobenzene	107	69.4-129		%REC	1	8/19/2013 10:27:49 PM	R12735
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Fluoride	1.0	0.10		mg/L	1	8/16/2013 11:40:36 PM	R12706
Chloride	41	10		mg/L	20	8/16/2013 11:53:00 PM	R12706
Nitrogen, Nitrate (As N)	0.44	0.10		mg/L	1	8/16/2013 11:40:36 PM	R12706
Sulfate	2700	50		mg/L	100	8/20/2013 5:23:26 PM	R12777
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JLF**	
Iron	0.54	0.020	*	mg/L	1	8/22/2013 5:08:48 PM	R12837
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	4810	200	*	mg/L	1	8/21/2013 11:35:00 AM	8911

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

Qualifiers:

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

Analytical Report
Lab Order **1308729**
Date Reported: **8/27/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B#1
Lab ID: 1308729-003 **Matrix:** AQUEOUS

Client Sample ID: MW #3
Collection Date: 8/15/2013 2:45:00 PM
Received Date: 8/16/2013 10:07:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	8/19/2013 10:57:54 PM	R12735
Toluene	ND	1.0		µg/L	1	8/19/2013 10:57:54 PM	R12735
Ethylbenzene	5.7	1.0		µg/L	1	8/19/2013 10:57:54 PM	R12735
Xylenes, Total	42	2.0		µg/L	1	8/19/2013 10:57:54 PM	R12735
Surr: 4-Bromofluorobenzene	126	69.4-129		%REC	1	8/19/2013 10:57:54 PM	R12735
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Fluoride	1.0	0.10		mg/L	1	8/17/2013 12:05:25 AM	R12706
Chloride	47	10		mg/L	20	8/17/2013 12:17:50 AM	R12706
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/17/2013 12:05:25 AM	R12706
Sulfate	2300	50		mg/L	100	8/20/2013 6:00:40 PM	R12777
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JLF**	
Iron	13	0.40	*	mg/L	20	8/22/2013 6:47:30 PM	R12837
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	4330	200	*	mg/L	1	8/21/2013 11:35:00 AM	8911

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B#1
Lab ID: 1308729-004 **Matrix:** AQUEOUS

Client Sample ID: MW #4
Collection Date: 8/15/2013 2:00:00 PM
Received Date: 8/16/2013 10:07:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	8/19/2013 11:27:56 PM	R12735
Toluene	ND	1.0		µg/L	1	8/19/2013 11:27:56 PM	R12735
Ethylbenzene	ND	1.0		µg/L	1	8/19/2013 11:27:56 PM	R12735
Xylenes, Total	ND	2.0		µg/L	1	8/19/2013 11:27:56 PM	R12735
Surr: 4-Bromofluorobenzene	110	69.4-129		%REC	1	8/19/2013 11:27:56 PM	R12735
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Fluoride	0.93	0.10		mg/L	1	8/17/2013 12:30:14 AM	R12706
Chloride	92	10		mg/L	20	8/17/2013 12:42:39 AM	R12706
Nitrogen, Nitrate (As N)	0.25	0.10		mg/L	1	8/17/2013 12:30:14 AM	R12706
Sulfate	2900	50		mg/L	100	8/20/2013 6:13:05 PM	R12777
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JLF**	
Iron	8.1	0.20	*	mg/L	10	8/22/2013 6:49:44 PM	R12837
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	5050	200	*	mg/L	1	8/21/2013 11:35:00 AM	8911

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B#1
Lab ID: 1308729-005 **Matrix:** AQUEOUS

Client Sample ID: MW #5
Collection Date: 8/15/2013 11:40:00 AM
Received Date: 8/16/2013 10:07:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	8/19/2013 11:58:09 PM	R12735
Toluene	ND	1.0		µg/L	1	8/19/2013 11:58:09 PM	R12735
Ethylbenzene	ND	1.0		µg/L	1	8/19/2013 11:58:09 PM	R12735
Xylenes, Total	ND	2.0		µg/L	1	8/19/2013 11:58:09 PM	R12735
Surr: 4-Bromofluorobenzene	109	69.4-129		%REC	1	8/19/2013 11:58:09 PM	R12735
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Fluoride	0.53	0.10		mg/L	1	8/17/2013 12:55:04 AM	R12706
Chloride	12	0.50		mg/L	1	8/17/2013 12:55:04 AM	R12706
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/17/2013 12:55:04 AM	R12706
Sulfate	1300	25		mg/L	50	8/20/2013 6:25:30 PM	R12777
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JLF**	
Iron	1.4	0.10	*	mg/L	5	8/22/2013 5:36:42 PM	R12837
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	2420	200	*	mg/L	1	8/21/2013 11:35:00 AM	8911

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Gutierrez GC B#1
Lab ID: 1308729-006 **Matrix:** AQUEOUS

Client Sample ID: MW #6
Collection Date: 8/15/2013 12:25:00 PM
Received Date: 8/16/2013 10:07:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	8/20/2013 12:28:19 AM	R12735
Toluene	ND	1.0		µg/L	1	8/20/2013 12:28:19 AM	R12735
Ethylbenzene	ND	1.0		µg/L	1	8/20/2013 12:28:19 AM	R12735
Xylenes, Total	ND	2.0		µg/L	1	8/20/2013 12:28:19 AM	R12735
Surr: 4-Bromofluorobenzene	107	69.4-129		%REC	1	8/20/2013 12:28:19 AM	R12735
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Fluoride	0.88	0.10		mg/L	1	8/17/2013 1:44:42 AM	R12706
Chloride	18	0.50		mg/L	1	8/17/2013 1:44:42 AM	R12706
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/17/2013 1:44:42 AM	R12706
Sulfate	1800	50		mg/L	100	8/20/2013 6:37:55 PM	R12777
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JLF**	
Iron	0.85	0.020	*	mg/L	1	8/22/2013 5:39:16 PM	R12837
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	3460	200	*	mg/L	1	8/21/2013 11:35:00 AM	8911

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

Qualifiers:

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

Analytical Report
Lab Order **1601774**
Date Reported: **2/2/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jaquez GC B #3E
Lab ID: 1601774-001 **Matrix:** AQUEOUS

Client Sample ID: LP AGT Produced Water
Collection Date: 1/20/2016 12:10:00 PM
Received Date: 1/21/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Sulfate	1.2	0.50		mg/L	1	1/26/2016 3:24:11 AM	R31665
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	140	100	D	mg/L	1	1/27/2016 1:00:00 PM	23389

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

Qualifiers:

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

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush COMPLETE BY 06/01/2012

Project Name: GUTIERREZ GC B # 1

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 1 - 0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1206018	BTEX + MTBE + TMB's (8021B)	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, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
5/31/12	0855	SOIL	TH1 @ 10' - historical release	4 oz. - 1 MeOH	Cool	-001	√		√									√		√		
5/31/12	0933	SOIL	TH2 @ 9' - historical release	4 oz. - 1	Cool	-002	√		√									√		√		
5/31/12	0950	SOIL	TH3 @ 10' - historical release	4 oz. - 1	Cool	-003	√		√									√		√		
5/31/12	1016	SOIL	TH5 @ 10' - historical release	4 oz. - 1	Cool	-004	√		√									√		√		

Date	Time	Relinquished by:	Received by:	Date	Time
5/31/12	1445		Heather Woolens	5/31/12	1445
31/12	2005	Heather Woolens		06/01/12	1005

Remarks: TPH (8015B) - GRO & DRO ONLY.

BILL DIRECTLY TO BP:
Jeff Peace, 200 Energy Court, Farmington, NM 87401

Work Order: N1410278 Paykey: ZSCHWLLBGT

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush COMPLETE BY 08/21/2012

Project Name:
GUTIERREZ GC B # 1

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1208877	BTEX + MTBE + TMB's (8021B)	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, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
8/17/12	1017	SOIL	GS-NSW#1 @ 19' - unknown release	4 oz. - 1	Cool	-001	✓		✓		✓							✓		✓		
8/17/12	1022	SOIL	GS-NSW#2 @ 20' - unknown release	~~4 oz. - 1~~ MeOH Lt	Cool	-002	✓		✓									✓		✓		

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/20/12	1245			8/20/12	1700
8/20/12	1747		08/21/12		1031

Remarks: TPH (8015B) - GRO & DRO ONLY.

Send invoice to :
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, NM 87413

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

Chain-of-Custody Record

Client: **BLAGG ENGR. / BP AMERICA**

Mailing Address: **P.O. BOX 87**
BLOOMFIELD, NM 87413

Phone #: **(505) 632-1199**

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
GUTIERREZ GC B # 1

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ** NV

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1208622	BTEX + ~~MTBE + TMB's~~ (8021B)	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, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	
8/21/12	0846	SOIL	GS-PB#1 @ 23' - unknown release	4 oz. - 1	Cool	-001	✓		✓											✓		
8/24/12	1200	SOIL	GS-ESW#1 @ 16' - unknown release	4 oz. - 1	Cool	-002			✓											✓		

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/27/12	0730		Christine Walters	8/27/12	T:30
8/27/12	1720	Christine Walters		08/28/12	1000

Remarks: **TPH (8015B) - GRO & DRO ONLY.**

Send invoice to :
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, NM 87413

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

Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name:
GUTIERREZ GC B # 1

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.1 D

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1209922	BTEX + ~~MTBE + TMB's~~ (8021B)	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, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	
9/17/12	0925	SOIL	NWC @ 20' - unknown release	4 oz. - 1	Cool	-001	✓		✓											✓		
9/17/12	0930	SOIL	WSW @ 22' - unknown release	4 oz. - 1	Cool	-002	✓		✓											✓		
9/17/12	0938	SOIL	SWC @ 21' - unknown release	4 oz. - 1	Cool	-003	✓		✓											✓		
9/17/12	0945	SOIL	SSW @ 19' - unknown release	4 oz. - 1	Cool	-004	✓		✓											✓		

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/19/12	0700			9/19/12	820
9/19/12	1724			09/20/12	10:00

Remarks: TPH (8015B) - GRO & DRO ONLY.

Send invoice to :
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, NM 87413

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Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush COMPLETE BY 09/20/2012

Project Name: GUTIERREZ GC B # 1

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1209870	BTEX + MTBE + TMB's (8021B)	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, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	
9/18/12	1044	SOIL	SEC #3 @ 21' - unknown release	4 oz. - 1	Cool	-001	✓		✓											✓		

Date: 9/19/12 Time: 0700 Relinquished by: [signature]

Received by: Christine Walker Date: 9/19/12 Time: 820

Date: 9/19/12 Time: 1724 Relinquished by: Christine Walker

Received by: [signature] Date: 09/20/12 Time: 10:00

Remarks: TPH (8015B) - GRO & DRO ONLY.

Send invoice to :
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, NM 87413

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Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: GUTIERREZ GC B # 1

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1209822	BTEX + MTBE + TMB's (8021B)	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, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample
9/20/12	0925	SOIL	SSW #2 @ 23' - unknown release	4 oz. - 1	Cool	-001	✓		✓											✓	
9/20/12	0939	SOIL	SSW #3 @ 20' - unknown release	4 oz. - 1	Cool	-002	✓		✓											✓	
9/20/12	0943	SOIL	SSW #4 @ 20' - unknown release	4 oz. - 1	Cool	-003	✓		✓											✓	

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/24/12	0800		Christine Walker	9/24/12	824
9/24/12	1724	Christine Walker	Michelle Garcia	09/25/12	10:00

Remarks: TPH (8015B) - GRO & DRO ONLY.

Send invoice to :
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, NM 87413

Chain-of-Custody Record

Client: **BLAGG ENGR. / BP AMERICA**

Mailing Address: **P.O. BOX 87**
BLOOMFIELD, NM 87413

Phone #: **(505) 632-1199**

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
GUTIERREZ GC B # 1

Project #:

Project Manager:
NELSON VELEZ

Sampler: **NELSON VELEZ** NV

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.8°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210004	BTEX + ~~MTBE + TMB's~~ (8021B)	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, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (300.0)		Grab sample	5 pt. composite sample	
9/26/12	1114	SOIL	SEC #4 @ 20' -	4 oz. - 1	Cool	-001	√		√											√		
			unknown release																			
9/26/12	1115	SOIL	SEC #4 @ 21' -	4 oz. - 1	Cool	-002	√		√											√		
			unknown release																			

Remarks: **TPH (8015B) - GRO & DRO ONLY.**

Send invoice to :
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, NM 87413

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/28/12	0745			9/28/12	805
Date:	Time:	Relinquished by:	Received by:	Date	Time
9/28/12	1700			9/29/12	10:00

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Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: GUTIERREZ GC B# 1

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1308729	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,~~NO3,NO2,PO4,SO4~~)	Total Dissolved Solids	Iron, Ferrous (filtered)	Nitrate N / ~~Nitrite N~~			Grab sample	5 pt. composite sample
8/15/13	1315	WATER	MW # 1	40 ml VOA - 2	HCl & Cool	-001	✓													✓	
8/15/13	1315	WATER	MW # 1	500 ml - 1	Cool									✓	✓					✓	
8/15/13	1315	WATER	MW # 1	125 ml - 1	HNO_3 & Cool											✓				✓	
8/15/13	1315	WATER	MW # 1	125 ml - 1	H_2SO_4												✓			✓	
8/15/13	1530	WATER	MW # 2	40 ml VOA - 2	HCl & Cool	-002	✓													✓	
8/15/13	1530	WATER	MW # 2	500 ml - 1	Cool									✓	✓					✓	
8/15/13	1530	WATER	MW # 2	125 ml - 1	HNO_3 & Cool											✓				✓	
8/15/13	1530	WATER	MW # 2	125 ml - 1	H_2SO_4												✓			✓	
8/15/13	1445	WATER	MW # 3	40 ml VOA - 2	HCl & Cool	-003	✓													✓	
8/15/13	1445	WATER	MW # 3	500 ml - 1	Cool									✓	✓					✓	
8/15/13	1445	WATER	MW # 3	125 ml - 1	HNO_3 & Cool											✓				✓	
8/15/13	1445	WATER	MW # 3	125 ml - 1	H_2SO_4												✓			✓	

Date	Time	Relinquished by:	Received by:	Date	Time
8/15/13	1635			8/15/13	1635
8/15/13	1721			08/16/13	1007

Remarks: pg. 1 of 2

Send invoice to :
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, NM 87413

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Chain-of-Custody Record

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
GUTIERREZ GC B# 1

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1308729	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,~~NO3,NO2,PO4,SO4~~)	Total Dissolved Solids	Iron, Ferrous (filtered)	Nitrate N / ~~Nitrite N~~			Grab sample	5 pt. composite sample	
8/15/13	1400	WATER	MW # 4	40 ml VOA - 2	HCl & Cool	-004	✓													✓		
8/15/13	1400	WATER	MW # 4	500 ml - 1	Cool									✓	✓					✓		
8/15/13	1400	WATER	MW # 4	125 ml - 1	HNO_3 & Cool											✓				✓		
8/15/13	1400	WATER	MW # 4	125 ml - 1	H_2SO_4												✓			✓		
8/15/13	1140	WATER	MW # 5	40 ml VOA - 2	HCl & Cool	-005	✓													✓		
8/15/13	1140	WATER	MW # 5	500 ml - 1	Cool									✓	✓					✓		
8/15/13	1140	WATER	MW # 5	125 ml - 1	HNO_3 & Cool											✓				✓		
8/15/13	1140	WATER	MW # 5	125 ml - 1	H_2SO_4												✓			✓		
8/15/13	1225	WATER	MW # 6	40 ml VOA - 2	HCl & Cool	-006	✓													✓		
8/15/13	1225	WATER	MW # 6	500 ml - 1	Cool									✓	✓					✓		
8/15/13	1225	WATER	MW # 6	125 ml - 1	HNO_3 & Cool											✓				✓		
8/15/13	1225	WATER	MW # 6	125 ml - 1	H_2SO_4												✓			✓		

Date: 8/15/13 Time: 1635 Relinquished by: [signature] Received by: [signature] Date Time 8/15/13 1635

Date: 8/16/13 Time: 1721 Relinquished by: [signature] Received by: [signature] Date Time 08/16/13 1007

Remarks: pg. 2 of 2

Send invoice to :
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, NM 87413

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Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client:	BLAGG ENGR. / BP AMERICA
Mailing Address:	P.O. BOX 87
	BLOOMFIELD, NM 87413
Phone #:	(505) 632-1199
Email or Fax#:	
QA/QC Package:	☑ Standard ☐ Level 4 (Full Validation)
Accreditation:	☐ NELAP ☐ Other ☐ EDD (Type)
Turn-Around Time:	☑ Standard ☐ Rush
Project Name:	JAQUEZ GC B # 3E
Project #:	
Project Manager:	NELSON VELEZ
Sampler:	NELSON VELEZ
On Ice:	☑ Yes ☐ No
Sample Temperature:	1.0

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Nitrate N / Nitrite N	Manganese	Total Iron	Iron, Ferrous (filtered)	Anion / Cation Balance	Total Dissolved Solids	Grab sample	5 pt. composite sample	Air Bubbles (Y or N)
1/20/16	1210	WATER	LP AGT PRODUCED WATER	500 ml - 1	Cool	1601774-001												√	√	√		
~~1/20/16~~	~~1210~~	~~WATER~~	~~LP AGT PRODUCED WATER~~	~~250 ml - 1~~	~~HNO_3 & Cool~~	-001											√			√		

	Time:	Relinquished by:	Received by:	Date	Time
1/20/16	1819			1/20/16	1815
1/20/16	1844			01/21/16	0815

Remarks: **Report sulfate only for anion / cation balance.**

BILL DIRECTLY TO BP:

200 Energy Court, Farmington, NM 87401 Attn.: S. Moskal

VID: VHIXONEVRM WBS Element: L1-00136-E:JAQUEZGCB3E

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206018**

04-Jun-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-2183**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **2183**	RunNo: **3153**
Prep Date: **5/31/2012**	Analysis Date: **6/1/2012**	SeqNo: **87137** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID **LCS-2183**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **2183**	RunNo: **3153**
Prep Date: **5/31/2012**	Analysis Date: **6/1/2012**	SeqNo: **87138** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.6	90	110			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206018**

04-Jun-12

Client: Blagg Engineering

Project: Gutierrez GC B #1

Sample ID **MB-2197**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **2197**	RunNo: **3139**
Prep Date: **6/1/2012**	Analysis Date: **6/1/2012**	SeqNo: **87007** 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		109	82.1	121			

Sample ID **LCS-2197**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **2197**	RunNo: **3139**
Prep Date: **6/1/2012**	Analysis Date: **6/1/2012**	SeqNo: **87008** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	78.1	52.6	130			
Surr: DNOP	4.6		5.000		92.8	82.1	121			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206018**

04-Jun-12

Client: Blagg Engineering

Project: Gutierrez GC B #1

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **R3160**	RunNo: **3160**
Prep Date:	Analysis Date: **6/1/2012**	SeqNo: **87250** Units: **mg/Kg**

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	0.42		0.5000		84.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.7	70	130			
Surr: Dibromofluoromethane	0.43		0.5000		85.5	71.7	132			
Surr: Toluene-d8	0.46		0.5000		91.9	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **R3160**	RunNo: **3160**
Prep Date:	Analysis Date: **6/1/2012**	SeqNo: **87251** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	105	70.7	123			
Toluene	0.98	0.050	1.000	0	98.0	80	120			
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		83.8	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		95.0	70	130			
Surr: Dibromofluoromethane	0.43		0.5000		86.8	71.7	132			
Surr: Toluene-d8	0.42		0.5000		84.7	70	130			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206018**

04-Jun-12

Client: Blagg Engineering

Project: Gutierrez GC B #1

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **R3160**	RunNo: **3160**
Prep Date:	Analysis Date: **6/1/2012**	SeqNo: **87267** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		97.7	70	130			

Sample ID **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R3160**	RunNo: **3160**
Prep Date:	Analysis Date: **6/1/2012**	SeqNo: **87268** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	108	85	115			
Surr: BFB	490		500.0		97.4	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1206018

Received by/date: AG 06/01/12

Logged By: Michelle Garcia 6/1/2012 10:05:00 AM Michelle Garcia

Completed By: Michelle Garcia 6/1/2012 10:14:00 AM Michelle Garcia

Reviewed By: 06/01/12

Chain of Custody

1.	Were seals intact?	Yes	No	Not Present ✔
2.	Is Chain of Custody complete?	Yes ✔	No	Not Present
3.	How was the sample delivered?	Courier		

Log In

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:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208877**

29-Aug-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-3423** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **3423** RunNo: **5004**
Prep Date: **8/21/2012** Analysis Date: **8/21/2012** SeqNo: **141603** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID **LCS-3423** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **3423** RunNo: **5004**
Prep Date: **8/21/2012** Analysis Date: **8/21/2012** SeqNo: **141604** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	90	110			

Sample ID **1208829-008AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **3423** RunNo: **5004**
Prep Date: **8/21/2012** Analysis Date: **8/21/2012** SeqNo: **141627** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	36	7.5	15.00	18.31	116	64.4	117			

Sample ID **1208829-008AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **3423** RunNo: **5004**
Prep Date: **8/21/2012** Analysis Date: **8/21/2012** SeqNo: **141628** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	31	7.5	15.00	18.31	87.4	64.4	117	13.0	20	

Sample ID **MB-3444** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **3444** RunNo: **5039**
Prep Date: **8/22/2012** Analysis Date: **8/22/2012** SeqNo: **142802** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID **LCS-3444** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **3444** RunNo: **5039**
Prep Date: **8/22/2012** Analysis Date: **8/22/2012** SeqNo: **142803** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

Sample ID **1208919-001BMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **3444** RunNo: **5039**
Prep Date: **8/22/2012** Analysis Date: **8/22/2012** SeqNo: **142810** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	15	15.00	3.992	69.5	64.4	117			

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208877**

29-Aug-12

Client: Blagg Engineering

Project: Gutierrez GC B #1

Sample ID	**1208919-001BMSD**	SampType:	**MSD**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID:	**3444**	RunNo:	**5039**					
Prep Date:	**8/22/2012**	Analysis Date:	**8/22/2012**	SeqNo:	**142811**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	15	15.00	3.992	69.7	64.4	117	0	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208877**

29-Aug-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-3411** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **3411** RunNo: **4989**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **141274** 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		112	77.6	140			

Sample ID **LCS-3411** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **3411** RunNo: **4989**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **141294** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.5	52.6	130			
Surr: DNOP	4.1		5.000		82.9	77.6	140			

Sample ID **MB-3438** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **3438** RunNo: **5017**
Prep Date: **8/22/2012** Analysis Date: **8/22/2012** SeqNo: **142066** 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		112	77.6	140			

Sample ID **LCS-3438** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **3438** RunNo: **5017**
Prep Date: **8/22/2012** Analysis Date: **8/22/2012** SeqNo: **142334** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	50.00	0	73.1	52.6	130			
Surr: DNOP	4.4		5.000		88.2	77.6	140			

Sample ID **1208857-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **3438** RunNo: **5044**
Prep Date: **8/22/2012** Analysis Date: **8/23/2012** SeqNo: **143789** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	9.9	49.70	0	78.9	57.2	146			
Surr: DNOP	4.6		4.970		93.0	77.6	140			

Sample ID **1208857-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **3438** RunNo: **5044**
Prep Date: **8/22/2012** Analysis Date: **8/23/2012** SeqNo: **143790** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	78.6	57.2	146	0.154	24.5	
Surr: DNOP	4.1		5.000		81.7	77.6	140	0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208877**

29-Aug-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-3410** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **3410** RunNo: **4995**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **142179** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.1	84	116			

Sample ID **LCS-3410** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **3410** RunNo: **4995**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **142180** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.4	74	117			
Surr: BFB	1000		1000		101	84	116			

Sample ID **1208821-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3410** RunNo: **4995**
Prep Date: **8/20/2012** Analysis Date: **8/22/2012** SeqNo: **142302** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	92	19	24.08	5.875	356	70	130			S
Surr: BFB	4300		3854		111	84	116			

Sample ID **1208821-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC** Batch ID: **3410** RunNo: **4995**
Prep Date: **8/20/2012** Analysis Date: **8/22/2012** SeqNo: **142303** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	110	19	23.67	5.875	427	70	130	15.5	22.1	S
Surr: BFB	4200		3788		112	84	116	0	0	

Sample ID **MB-3428** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **3428** RunNo: **5025**
Prep Date: **8/21/2012** Analysis Date: **8/22/2012** SeqNo: **143036** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		97.4	84	116			

Sample ID **LCS-3428** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **3428** RunNo: **5025**
Prep Date: **8/21/2012** Analysis Date: **8/22/2012** SeqNo: **143037** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.3	74	117			
Surr: BFB	1000		1000		99.9	84	116			

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208877**

29-Aug-12

Client: Blagg Engineering

Project: Gutierrez GC B #1

Sample ID **1208857-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **3428**	RunNo: **5025**
Prep Date: **8/21/2012**	Analysis Date: **8/22/2012**	SeqNo: **143040** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.49	0	92.7	70	130			
Surr: BFB	990		979.4		101	84	116			

Sample ID **1208857-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **3428**	RunNo: **5025**
Prep Date: **8/21/2012**	Analysis Date: **8/22/2012**	SeqNo: **143041** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.39	0	89.4	70	130	4.08	22.1	
Surr: BFB	1000		975.6		102	84	116	0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208877**

29-Aug-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-3410** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **3410** RunNo: **4995**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **142255** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID **LCS-3410** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **3410** RunNo: **4995**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **142267** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.050	1.000	0	99.2	76.3	117			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	77	116			
Xylenes, Total	3.1	0.10	3.000	0	104	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID **1208787-001AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC** Batch ID: **3410** RunNo: **4995**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **142299** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.047	0.9488	0	102	67.2	113			
Toluene	1.0	0.047	0.9488	0	106	62.1	116			
Ethylbenzene	1.0	0.047	0.9488	0	108	67.9	127			
Xylenes, Total	3.1	0.095	2.846	0	110	60.6	134			
Surr: 4-Bromofluorobenzene	1.0		0.9488		105	80	120			

Sample ID **1208787-001AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC** Batch ID: **3410** RunNo: **4995**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **142300** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.047	0.9346	0	102	67.2	113	1.51	14.3	
Toluene	1.0	0.047	0.9346	0	108	62.1	116	0.335	15.9	
Ethylbenzene	1.1	0.047	0.9346	0	113	67.9	127	3.07	14.4	
Xylenes, Total	3.2	0.093	2.804	0	113	60.6	134	1.67	12.6	
Surr: 4-Bromofluorobenzene	0.99		0.9346		105	80	120	0	0	

Qualifiers:

- 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
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208877**

29-Aug-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-3428**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **3428**	RunNo: **5025**
Prep Date: **8/21/2012**	Analysis Date: **8/22/2012**	SeqNo: **143050** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID **LCS-3428**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **3428**	RunNo: **5025**
Prep Date: **8/21/2012**	Analysis Date: **8/22/2012**	SeqNo: **143051** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.050	1.000	0	96.2	76.3	117			
Toluene	0.99	0.050	1.000	0	98.9	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.7	77	116			
Xylenes, Total	3.0	0.10	3.000	0	101	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Qualifiers:

- 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
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208877**

29-Aug-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **mb-3410** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **3410** RunNo: **5021**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **142159** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.3	70	130			
Surr: 4-Bromofluorobenzene	0.41		0.5000		81.7	70	130			
Surr: Dibromofluoromethane	0.40		0.5000		80.9	70	130			
Surr: Toluene-d8	0.40		0.5000		79.1	70	130			

Sample ID **lcs-3410** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **3410** RunNo: **5021**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **142161** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.9	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.5000		84.0	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		88.1	70	130			
Surr: Toluene-d8	0.39		0.5000		78.9	70	130			

Sample ID **1208821-002ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **3410** RunNo: **5021**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **142162** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.44		0.4859		89.7	70	130			
Surr: 4-Bromofluorobenzene	0.40		0.4859		83.0	70	130			
Surr: Dibromofluoromethane	0.43		0.4859		87.9	70	130			
Surr: Toluene-d8	0.37		0.4859		76.1	70	130			

Sample ID **1208821-002amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **3410** RunNo: **5021**
Prep Date: **8/20/2012** Analysis Date: **8/21/2012** SeqNo: **142163** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.42		0.4583		92.3	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.39		0.4583		84.8	70	130	0	0	
Surr: Dibromofluoromethane	0.41		0.4583		89.5	70	130	0	0	
Surr: Toluene-d8	0.35		0.4583		77.3	70	130	0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1208877

Received by/date: 08/21/12

Logged By: Ashley Gallegos 8/21/2012 10:31:00 AM

Completed By: Ashley Gallegos 8/21/2012 10:43:35 AM

Reviewed By: 08/21/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

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 ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208C22**

05-Sep-12

Client: Blagg Engineering
Project: GUTIERREZ GC B #1

Sample ID: **MB-3536** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **3536** RunNo: **5191**
Prep Date: **8/29/2012** Analysis Date: **8/30/2012** SeqNo: **147637** 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		111	77.6	140			

Sample ID: **LCS-3536** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **3536** RunNo: **5191**
Prep Date: **8/29/2012** Analysis Date: **8/30/2012** SeqNo: **147697** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	10	50.00	0	71.0	52.6	130			
Surr: DNOP	4.3		5.000		85.5	77.6	140			

Sample ID: **1208C19-001AMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **3536** RunNo: **5191**
Prep Date: **8/29/2012** Analysis Date: **8/30/2012** SeqNo: **147930** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	9.8	49.02	0	73.5	57.2	146			
Surr: DNOP	4.4		4.902		90.6	77.6	140			

Sample ID: **1208C19-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **3536** RunNo: **5191**
Prep Date: **8/29/2012** Analysis Date: **8/30/2012** SeqNo: **147968** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	9.7	48.54	0	75.9	57.2	146	2.21	24.5	
Surr: DNOP	4.3		4.854		88.6	77.6	140	0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208C22**

05-Sep-12

Client: Blagg Engineering
Project: GUTIERREZ GC B #1

Sample ID: **MB-3529**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **3529**	RunNo: **5215**
Prep Date: **8/29/2012**	Analysis Date: **8/30/2012**	SeqNo: **148958** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		97.8	84	116			

Sample ID: **LCS-3529**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **3529**	RunNo: **5215**
Prep Date: **8/29/2012**	Analysis Date: **8/30/2012**	SeqNo: **148959** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.3	74	117			
Surr: BFB	1000		1000		101	84	116			

Qualifiers:

- 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
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208C22**

05-Sep-12

Client: Blagg Engineering

Project: GUTIERREZ GC B #1

Sample ID: **MB-3529** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **3529** RunNo: **5215**

Prep Date: **8/29/2012** Analysis Date: **8/30/2012** SeqNo: **148983** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: **LCS-3529** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **3529** RunNo: **5215**

Prep Date: **8/29/2012** Analysis Date: **8/30/2012** SeqNo: **148984** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.050	1.000	0	95.9	76.3	117			
Toluene	0.98	0.050	1.000	0	97.6	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	77	116			
Xylenes, Total	3.1	0.10	3.000	0	102	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID: **1208C19-001AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **BatchQC** Batch ID: **3529** RunNo: **5215**

Prep Date: **8/29/2012** Analysis Date: **8/30/2012** SeqNo: **148988** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.047	0.9363	0	106	67.2	113			
Toluene	1.0	0.047	0.9363	0	111	62.1	116			
Ethylbenzene	1.1	0.047	0.9363	0.003486	116	67.9	127			
Xylenes, Total	3.3	0.094	2.809	0	117	60.6	134			
Surr: 4-Bromofluorobenzene	0.98		0.9363		105	80	120			

Sample ID: **1208C19-001AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **BatchQC** Batch ID: **3529** RunNo: **5215**

Prep Date: **8/29/2012** Analysis Date: **8/30/2012** SeqNo: **148989** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.048	0.9653	0	107	67.2	113	4.13	14.3	
Toluene	1.1	0.048	0.9653	0	111	62.1	116	2.16	15.9	
Ethylbenzene	1.1	0.048	0.9653	0.003486	113	67.9	127	0.732	14.4	
Xylenes, Total	3.3	0.097	2.896	0	115	60.6	134	1.15	12.6	
Surr: 4-Bromofluorobenzene	1.0		0.9653		105	80	120	0	0	

Qualifiers:

- 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
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208C22**

05-Sep-12

Client: Blagg Engineering
Project: GUTIERREZ GC B #1

Sample ID: **1208c20-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **3529** RunNo: **5213**
Prep Date: **8/29/2012** Analysis Date: **8/31/2012** SeqNo: **148801** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.41		0.4950		82.0	70	130			
Surr: 4-Bromofluorobenzene	0.40		0.4950		81.5	70	130			
Surr: Dibromofluoromethane	0.46		0.4950		93.0	70	130			
Surr: Toluene-d8	0.35		0.4950		71.4	70	130			

Sample ID: **1208c20-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **3529** RunNo: **5213**
Prep Date: **8/29/2012** Analysis Date: **8/31/2012** SeqNo: **148804** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.40		0.4912		82.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.39		0.4912		79.8	70	130	0	0	
Surr: Dibromofluoromethane	0.44		0.4912		88.9	70	130	0	0	
Surr: Toluene-d8	0.37		0.4912		76.0	70	130	0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208C22**

05-Sep-12

Client: Blagg Engineering
Project: GUTIERREZ GC B #1

Sample ID: **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **R5213** RunNo: **5213**
Prep Date: Analysis Date: **8/30/2012** SeqNo: **148266** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	8.2		10.00		81.6	70	130			
Surr: 4-Bromofluorobenzene	8.4		10.00		84.3	70	130			
Surr: Dibromofluoromethane	7.9		10.00		79.5	70	130			
Surr: Toluene-d8	8.5		10.00		84.7	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **R5213** RunNo: **5213**
Prep Date: Analysis Date: **8/30/2012** SeqNo: **148267** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	8.5		10.00		84.6	70	130			
Surr: 4-Bromofluorobenzene	8.6		10.00		85.8	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.3	70	130			
Surr: Toluene-d8	8.2		10.00		82.5	70	130			

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208C22**

05-Sep-12

Client: Blagg Engineering
Project: GUTIERREZ GC B #1

Sample ID: **1208a02-003a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R5213** RunNo: **5213**
Prep Date: Analysis Date: **8/30/2012** SeqNo: **148677** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	8.5		10.00		85.4	70	130			
Surr: 4-Bromofluorobenzene	8.2		10.00		82.1	70	130			
Surr: Dibromofluoromethane	8.1		10.00		81.3	70	130			
Surr: Toluene-d8	8.4		10.00		84.3	70	130			

Sample ID: **1208a02-003a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R5213** RunNo: **5213**
Prep Date: Analysis Date: **8/30/2012** SeqNo: **148678** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	8.6		10.00		86.4	70	130	0	0	
Surr: Dibromofluoromethane	9.1		10.00		91.5	70	130	0	0	
Surr: Toluene-d8	8.4		10.00		84.1	70	130	0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1208C22

Received by/date: AG 08/28/12

Logged By: Anne Thorne 8/28/2012 10:00:00 AM Anne Thorne

Completed By: Anne Thorne 8/28/2012 Anne Thorne

Reviewed By: IO 08/28/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

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 ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209870**

24-Sep-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-3843**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3843**	RunNo: **5660**
Prep Date: **9/20/2012**	Analysis Date: **9/21/2012**	SeqNo: **162084** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		106	77.6	140			

Sample ID **MB-3853**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3853**	RunNo: **5660**
Prep Date: **9/20/2012**	Analysis Date: **9/21/2012**	SeqNo: **162085** 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		107	77.6	140			

Sample ID **LCS-3843**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3843**	RunNo: **5660**
Prep Date: **9/20/2012**	Analysis Date: **9/21/2012**	SeqNo: **162086** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		89.0	77.6	140			

Sample ID **LCS-3853**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3853**	RunNo: **5660**
Prep Date: **9/20/2012**	Analysis Date: **9/21/2012**	SeqNo: **162087** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.2	52.6	130			
Surr: DNOP	4.2		5.000		84.9	77.6	140			

Sample ID **MB-3852**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3852**	RunNo: **5660**
Prep Date: **9/20/2012**	Analysis Date: **9/21/2012**	SeqNo: **163485** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		120	77.6	140			

Sample ID **LCS-3852**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3852**	RunNo: **5660**
Prep Date: **9/20/2012**	Analysis Date: **9/21/2012**	SeqNo: **163486** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.8	77.6	140			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209870**

24-Sep-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-3891**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3891**	RunNo: **5709**
Prep Date: **9/24/2012**	Analysis Date: **9/24/2012**	SeqNo: **164194** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		108	77.6	140			

Sample ID **LCS-3891**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3891**	RunNo: **5709**
Prep Date: **9/24/2012**	Analysis Date: **9/24/2012**	SeqNo: **164208** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.7	77.6	140			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209870**

24-Sep-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **R5667**	RunNo: **5667**
Prep Date:	Analysis Date: **9/20/2012**	SeqNo: **162320** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	84	116			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R5667**	RunNo: **5667**
Prep Date:	Analysis Date: **9/20/2012**	SeqNo: **162321** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	74	117			
Surr: BFB	1100		1000		105	84	116			

Sample ID **MB-3832**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **3832**	RunNo: **5667**
Prep Date: **9/19/2012**	Analysis Date: **9/20/2012**	SeqNo: **162327** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		100	84	116			

Sample ID **LCS-3832**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **3832**	RunNo: **5667**
Prep Date: **9/19/2012**	Analysis Date: **9/20/2012**	SeqNo: **162328** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		105	84	116			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209870**

24-Sep-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **R5667** RunNo: **5667**
Prep Date: Analysis Date: **9/20/2012** SeqNo: **162348** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	80	120			

Sample ID **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **R5667** RunNo: **5667**
Prep Date: Analysis Date: **9/20/2012** SeqNo: **162349** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.050	1.000	0	95.9	76.3	117			
Toluene	0.97	0.050	1.000	0	97.0	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.2	77	116			
Xylenes, Total	3.0	0.10	3.000	0	98.6	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID **MB-3832** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **3832** RunNo: **5667**
Prep Date: **9/19/2012** Analysis Date: **9/20/2012** SeqNo: **162351** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID **LCS-3832** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **3832** RunNo: **5667**
Prep Date: **9/19/2012** Analysis Date: **9/20/2012** SeqNo: **162352** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		107	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1209870

Received by/date: AG 09/20/12

Logged By: **Michelle Garcia** 9/20/2012 10:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 9/20/2012 10:07:34 AM Michelle Garcia

Reviewed By: 09/20/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

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 ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209922**

02-Oct-12

Client: Blagg Engineering

Project: Gutierrez GC B #1

Sample ID **MB-3882**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3882**	RunNo: **5697**
Prep Date: **9/22/2012**	Analysis Date: **9/23/2012**	SeqNo: **163829** 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		109	77.6	140			

Sample ID **LCS-3882**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3882**	RunNo: **5697**
Prep Date: **9/22/2012**	Analysis Date: **9/23/2012**	SeqNo: **163830** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	10	50.00	0	69.6	52.6	130			
Surr: DNOP	4.7		5.000		93.5	77.6	140			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209922**

02-Oct-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-3879** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **3879** RunNo: **5692**
Prep Date: **9/21/2012** Analysis Date: **9/22/2012** SeqNo: **163520** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.2	84	116			

Sample ID **LCS-3879** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **3879** RunNo: **5692**
Prep Date: **9/21/2012** Analysis Date: **9/22/2012** SeqNo: **163521** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.2	74	117			
Surr: BFB	1000		1000		101	84	116			

Sample ID **MB-3881** SampType: **MBLK** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS** Batch ID: **3881** RunNo: **5824**
Prep Date: **9/22/2012** Analysis Date: **9/27/2012** SeqNo: **167530** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		99.3	84	116			

Sample ID **LCS-3881** SampType: **LCS** TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS** Batch ID: **3881** RunNo: **5824**
Prep Date: **9/22/2012** Analysis Date: **9/27/2012** SeqNo: **167531** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	84	116			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209922**

02-Oct-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-3879** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **3879** RunNo: **5692**
Prep Date: **9/21/2012** Analysis Date: **9/22/2012** SeqNo: **163543** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.9	80	120			

Sample ID **LCS-3879** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **3879** RunNo: **5692**
Prep Date: **9/21/2012** Analysis Date: **9/22/2012** SeqNo: **163544** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.050	1.000	0	96.0	76.3	117			
Toluene	0.97	0.050	1.000	0	97.3	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.6	77	116			
Xylenes, Total	3.0	0.10	3.000	0	99.3	76.7	117			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID **MB-3881** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **3881** RunNo: **5783**
Prep Date: **9/22/2012** Analysis Date: **9/26/2012** SeqNo: **166796** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		99.7	80	120			

Sample ID **LCS-3881** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **3881** RunNo: **5783**
Prep Date: **9/22/2012** Analysis Date: **9/26/2012** SeqNo: **166797** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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

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

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1209922

Received by/date: AG 09/20/12

Logged By: **Lindsay Mangin** 9/20/2012 10:00:00 AM

Completed By: **Lindsay Mangin** 9/21/2012 9:00:29 AM

Reviewed By: JO 09/21/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

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 ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B22**

03-Oct-12

Client: Blagg Engineering

Project: Gutierrez GC B #1

Sample ID **MB-3948**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3948**	RunNo: **5796**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166783** 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		108	77.6	140			

Sample ID **LCS-3948**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3948**	RunNo: **5796**
Prep Date: **9/26/2012**	Analysis Date: **9/27/2012**	SeqNo: **166784** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.8	52.6	130			
Surr: DNOP	4.8		5.000		96.0	77.6	140			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B22**

03-Oct-12

Client: Blagg Engineering

Project: Gutierrez GC B #1

Sample ID **MB-3940**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168217** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.4	84	116			

Sample ID **LCS-3940**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168218** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.8	74	117			
Surr: BFB	1000		1000		105	84	116			

Sample ID **MB-3969**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **3969**	RunNo: **5856**
Prep Date: **9/27/2012**	Analysis Date: **9/29/2012**	SeqNo: **168356** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		98.4	84	116			

Sample ID **LCS-3969**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **3969**	RunNo: **5856**
Prep Date: **9/27/2012**	Analysis Date: **9/29/2012**	SeqNo: **168357** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	84	116			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B22**

03-Oct-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-3940** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **3940** RunNo: **5841**
Prep Date: **9/26/2012** Analysis Date: **9/29/2012** SeqNo: **168236** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		98.1	80	120			

Sample ID **LCS-3940** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **3940** RunNo: **5841**
Prep Date: **9/26/2012** Analysis Date: **9/29/2012** SeqNo: **168237** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.050	1.000	0	89.6	76.3	117			
Toluene	0.89	0.050	1.000	0	89.1	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.8	77	116			
Xylenes, Total	2.7	0.10	3.000	0	91.4	76.7	117			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID **MB-3969** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **3969** RunNo: **5856**
Prep Date: **9/27/2012** Analysis Date: **9/29/2012** SeqNo: **168386** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99		1.000		98.6	80	120			

Sample ID **LCS-3969** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **3969** RunNo: **5856**
Prep Date: **9/27/2012** Analysis Date: **9/29/2012** SeqNo: **168387** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B22**

03-Oct-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **mb-3940** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **3940** RunNo: **5874**
Prep Date: **9/26/2012** Analysis Date: **9/30/2012** SeqNo: **169090** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.2	70	130			
Surr: 4-Bromofluorobenzene	0.38		0.5000		75.8	70	130			
Surr: Dibromofluoromethane	0.36		0.5000		71.4	70	130			
Surr: Toluene-d8	0.36		0.5000		72.9	70	130			

Sample ID **lcs-3940** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **3940** RunNo: **5874**
Prep Date: **9/26/2012** Analysis Date: **9/30/2012** SeqNo: **169092** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.3	70	130			
Surr: 4-Bromofluorobenzene	0.38		0.5000		76.1	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.37		0.5000		73.5	70	130			

Sample ID **mb-3969** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS** Batch ID: **3969** RunNo: **5909**
Prep Date: **9/27/2012** Analysis Date: **10/1/2012** SeqNo: **170213** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		84.7	70	130			
Surr: 4-Bromofluorobenzene	0.40		0.5000		79.5	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: Toluene-d8	0.35		0.5000		71.0	70	130			

Sample ID **lcs-3969** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS** Batch ID: **3969** RunNo: **5909**
Prep Date: **9/27/2012** Analysis Date: **10/1/2012** SeqNo: **170214** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.3	70	130			
Surr: 4-Bromofluorobenzene	0.39		0.5000		78.8	70	130			
Surr: Dibromofluoromethane	0.40		0.5000		79.2	70	130			
Surr: Toluene-d8	0.36		0.5000		72.3	70	130			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209B22**

03-Oct-12

Client: Blagg Engineering

Project: Gutierrez GC B #1

Sample ID **mb-3881**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **3881**	RunNo: **5909**
Prep Date: **9/22/2012**	Analysis Date: **10/1/2012**	SeqNo: **170206** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.3	70	130			
Surr: 4-Bromofluorobenzene	0.38		0.5000		76.7	70	130			
Surr: Dibromofluoromethane	0.41		0.5000		81.2	70	130			
Surr: Toluene-d8	0.36		0.5000		72.6	70	130			

Sample ID **LCS-3881**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **3881**	RunNo: **5909**
Prep Date: **9/22/2012**	Analysis Date: **10/1/2012**	SeqNo: **170207** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.6	70	130			
Surr: 4-Bromofluorobenzene	0.39		0.5000		78.4	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.37		0.5000		73.2	70	130			

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **BLAGG** Work Order Number: **1209B22**

Received by/date: MG 09/25/12

Logged By: **Lindsay Mangin** 9/25/2012 10:00:00 AM

Completed By: **Lindsay Mangin** 9/25/2012 3:29:21 PM

Reviewed By: 09/26/12

Chain of Custody

1. Were seals intact?	Yes	No	Not Present ✔
2. Is Chain of Custody complete?	Yes ✔	No	Not Present
3. How was the sample delivered?	Courier		

Log In

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:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1210004**

09-Oct-12

Client: Blagg Engineering

Project: Gutierrez GC B #1

Sample ID **MB-4019**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **4019**	RunNo: **5904**
Prep Date: **10/1/2012**	Analysis Date: **10/2/2012**	SeqNo: **170131** 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			

Sample ID **LCS-4019**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **4019**	RunNo: **5904**
Prep Date: **10/1/2012**	Analysis Date: **10/2/2012**	SeqNo: **170132** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.2	52.6	130			
Surr: DNOP	4.4		5.000		88.0	77.6	140			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1210004**

09-Oct-12

Client: Blagg Engineering
Project: Gutierrez GC B #1

Sample ID **MB-4015**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **4015**	RunNo: **6019**
Prep Date: **10/1/2012**	Analysis Date: **10/5/2012**	SeqNo: **173412** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		100	84	116			

Sample ID **LCS-4015**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **4015**	RunNo: **6019**
Prep Date: **10/1/2012**	Analysis Date: **10/5/2012**	SeqNo: **173413** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	74	117			
Surr: BFB	1000		1000		103	84	116			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1210004**

09-Oct-12

Client: Blagg Engineering

Project: Gutierrez GC B #1

Sample ID **MB-4015**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **4015**	RunNo: **5980**
Prep Date: **10/1/2012**	Analysis Date: **10/4/2012**	SeqNo: **172741** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID **LCS-4015**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **4015**	RunNo: **5980**
Prep Date: **10/1/2012**	Analysis Date: **10/4/2012**	SeqNo: **172742** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	76.3	117			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.1	0.050	1.000	0	105	77	116			
Xylenes, Total	3.2	0.10	3.000	0	105	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 8710S
TEL: 505-345-3975 FAX: 505-345-410?
Website: www.hallenvironmental.con

Sample Log-In Check List

Client Name: BLAGG Work Order Number: 1210004

Received by/date: AF 09/29/12

Logged By: **Lindsay Mangin** 9/29/2012 10:00:00 AM

Completed By: **Lindsay Mangin** 10/1/2012 4:58:12 AM

Reviewed By: 10/01/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

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 ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no; notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1308729**

27-Aug-13

Client: Blagg Engineering
Project: Gutierrez GC B#1

Sample ID **MB**	SampType: **MBLK**			TestCode: **EPA Method 200.7: Dissolved Metals**						
Client ID: **PBW**	Batch ID: **R12837**			RunNo: **12837**						
Prep Date:	Analysis Date: **8/22/2013**			SeqNo: **365905**		Units: **mg/L**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS**	SampType: **LCS**			TestCode: **EPA Method 200.7: Dissolved Metals**						
Client ID: **LCSW**	Batch ID: **R12837**			RunNo: **12837**						
Prep Date:	Analysis Date: **8/22/2013**			SeqNo: **365906**		Units: **mg/L**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.50	0.020	0.5000	0	99.9	85	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1308729**

27-Aug-13

Client: Blagg Engineering
Project: Gutierrez GC B#1

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R12706**	RunNo: **12706**
Prep Date:	Analysis Date: **8/16/2013**	SeqNo: **361749** 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								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R12706**	RunNo: **12706**
Prep Date:	Analysis Date: **8/16/2013**	SeqNo: **361750** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	96.0	90	110			
Chloride	4.6	0.50	5.000	0	92.7	90	110			
Nitrogen, Nitrate (As N)	2.3	0.10	2.500	0	93.4	90	110			

Sample ID **1308730-001AMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **R12706**	RunNo: **12706**
Prep Date:	Analysis Date: **8/16/2013**	SeqNo: **361766** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.3	0.10	0.5000	0.7902	93.0	76.9	114			
Chloride	9.2	0.50	5.000	4.141	101	89.9	119			

Sample ID **1308730-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **R12706**	RunNo: **12706**
Prep Date:	Analysis Date: **8/16/2013**	SeqNo: **361767** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.3	0.10	0.5000	0.7902	95.2	76.9	114	0.865	20	
Chloride	9.2	0.50	5.000	4.141	102	89.9	119	0.342	20	

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R12777**	RunNo: **12777**
Prep Date:	Analysis Date: **8/20/2013**	SeqNo: **364260** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1308729**

27-Aug-13

Client: Blagg Engineering
Project: Gutierrez GC B#1

Sample ID **LCS**	SampType: **LCS**		TestCode: **EPA Method 300.0: Anions**		
Client ID: **LCSW**	Batch ID: **R12777**		RunNo: **12777**		
Prep Date:	Analysis Date: **8/20/2013**		SeqNo: **364261**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.3	0.50	10.00	0	93.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1308729**

27-Aug-13

Client: Blagg Engineering
Project: Gutierrez GC B#1

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R12735**	RunNo: **12735**
Prep Date:	Analysis Date: **8/19/2013**	SeqNo: **362592** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	21		20.00		105	69.4	129			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R12735**	RunNo: **12735**
Prep Date:	Analysis Date: **8/19/2013**	SeqNo: **362593** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.9	80	120			
Toluene	20	1.0	20.00	0	99.8	80	120			
Ethylbenzene	20	1.0	20.00	0	99.3	80	120			
Xylenes, Total	60	2.0	60.00	0	99.9	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		106	69.4	129			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1308729**

27-Aug-13

Client: Blagg Engineering
Project: Gutierrez GC B#1

Sample ID **MB-8911**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **8911**	RunNo: **12778**
Prep Date: **8/19/2013**	Analysis Date: **8/21/2013**	SeqNo: **364355** 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-8911**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **8911**	RunNo: **12778**
Prep Date: **8/19/2013**	Analysis Date: **8/21/2013**	SeqNo: **364356** 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			

Sample ID **1308716-009AMS**	SampType: **MS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **BatchQC**	Batch ID: **8911**	RunNo: **12778**
Prep Date: **8/19/2013**	Analysis Date: **8/21/2013**	SeqNo: **364363** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	4920	40.0	2000	2840	104	80	120			

Sample ID **1308716-009AMSD**	SampType: **MSD**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **BatchQC**	Batch ID: **8911**	RunNo: **12778**
Prep Date: **8/19/2013**	Analysis Date: **8/21/2013**	SeqNo: **364364** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	4940	40.0	2000	2840	105	80	120	0.324	5	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: BLAGG | Work Order Number: 1308729 | RcptNo: 1

Received by/date: 08/16/13

Logged By: Ashley Gallegos 8/16/2013 10:07:00 AM

Completed By: Ashley Gallegos 8/16/2013 2:20:58 PM

Reviewed By: IO 08/19/13

Chain of Custody

1. Custody seals intact on sample bottles?	Yes	No	Not Present ✔
2. Is Chain of Custody complete?	Yes ✔	No	Not Present
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ✔	No	NA
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ✔	No	NA
6. Sample(s) in proper container(s)?	Yes ✔	No	
7. Sufficient sample volume for indicated test(s)?	Yes ✔	No	
8. Are samples (except VOA and ONG) properly preserved?	Yes ✔	No	
9. Was preservative added to bottles?	Yes	No ✔	NA
10. VOA vials have zero headspace?	Yes ✔	No	No VOA Vials
11. Were any sample containers received broken?	Yes	No ✔	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ✔	No	# of preserved bottles checked for pH: 12 (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ✔	No	Adjusted? No
14. Is it clear what analyses were requested?	Yes ✔	No	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✔	No	Checked by: MJ

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes | No | NA ✔

Person Notified: _____ Date: _____

By Whom: _____ Via: eMail | Phone | Fax | In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1601774**

02-Feb-16

Client: Blagg Engineering
Project: Jaquez GC B #3E

Sample ID **MB-A**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **A31652**	RunNo: **31652**
Prep Date:	Analysis Date: **1/25/2016**	SeqNo: **968461** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS-A**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **A31652**	RunNo: **31652**
Prep Date:	Analysis Date: **1/25/2016**	SeqNo: **968462** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.50	0.020	0.5000	0	99.2	85	115			

Sample ID **LLLCS-A**	SampType: **LCSLL**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **A31652**	RunNo: **31652**
Prep Date:	Analysis Date: **1/25/2016**	SeqNo: **968463** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020	0.02000	0	82.8	50	150			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1601774**

02-Feb-16

Client: Blagg Engineering
Project: Jaquez GC B #3E

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R31665**	RunNo: **31665**
Prep Date:	Analysis Date: **1/25/2016**	SeqNo: **969035** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R31665**	RunNo: **31665**
Prep Date:	Analysis Date: **1/25/2016**	SeqNo: **969036** 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			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1601774**

02-Feb-16

Client: Blagg Engineering
Project: Jaquez GC B #3E

Sample ID **MB-23389**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **23389**	RunNo: **31711**
Prep Date: **1/25/2016**	Analysis Date: **1/27/2016**	SeqNo: **970440** 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-23389**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **23389**	RunNo: **31711**
Prep Date: **1/25/2016**	Analysis Date: **1/27/2016**	SeqNo: **970441** 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG | Work Order Number: 1601774 | RcptNo: 1

Received by/date: JA 01/21/16

Logged By: Michelle Garcia 1/21/2016 8:15:00 AM Michelle Garcia

Completed By: Michelle Garcia 1/21/2016 9:24:00 AM Michelle Garcia

Reviewed By: 01/21/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: 1 (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? No
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: MG

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

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