

3R – 462

GWMR

12 / 14 / 2009

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, 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

32-462

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

☐ Initial Report ☒ Final Report

Name of Company	BP America Production Company	Contact	Jeff Peace
Address	200 Energy Court, Farmington, NM 87410	Telephone No.	(505) 326-9279
Facility Name	Lobato Gas Com A #1A	Facility Type	Active gas well 30-045-22280
Surface Owner	Ray P Jr. & Sherry Herrera	Mineral Owner	
		Lease No.	Fee

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	3	29.0N	09.0W					San Juan

Latitude 36.75752 Longitude -107.77303

**NATURE OF RELEASE**

Type of Release: Historical	Volume of Release: Unknown	Volume Recovered: 0
Source of Release: Flow lines & unknown source	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 12/14/09 - 7:00am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD Santa Fe - Mr. Glenn von Gonten	
By Whom? Jeff Blagg - Blagg Engineering, Inc.	Date and Hour: 12/14/09 - 0845 (Voice mail)	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

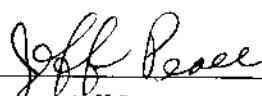
Describe Cause of Problem and Remedial Action Taken.\*

Construction crew hired to repipe/redirect flow line discovered impacted soils. Soil sampled, field screened, and lab tested in April 2008. Since impact appeared to be historical in nature, no immediate remedial action was necessary.

Describe Area Affected and Cleanup Action Taken.\*

Investigation & excavation of impacted soils completed in May 2009 (see attached site map). Groundwater monitor well installed in October 2009 (#1, #2, #3) & June 2010 (#4, #5, #6). Monitor wells sampled on 11/30/09, 2/24/10, 5/12/10, 7/20/10, 9/22/10, 10/12/10, & 12/2/10 (analytical data attached). **CLOSURE REQUESTED pursuant to 19.15.30 Section 12 (Exemptions from Abatement Plan Requirements), Subsection A, Paragraph 7.**

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: 		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jeff Peace		Approved by District Supervisor:	
Title: Environmental Advisor		Approval Date:	Expiration Date:
E-mail Address: Peace.Jeffrey@bp.com		Conditions of Approval:	
Date: 01/24/11	Phone: (505) 326-9279	Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

# **BLAGG ENGINEERING, INC.**

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

December 14, 2009

Mr. Glenn von Gonten, Senior Hydrologist  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: BP America Production Company  
Notice of Groundwater Impact  
Lobato GC A # 1A  
(D) Sec. 3 – T29N – R9W, San Juan County, NM**

Dear Mr. von Gonten:

On behalf of BP America Production Company, Blagg Engineering, Inc. (BEI) is reporting a discovery of groundwater impacts at the subject location.

BP conducted site equipment modifications in April 2008 and during this work, apparent historical release was observed at two (2) separate piping connections and near the existing steel below-grade tank (BGT). BP then selected to voluntarily reclaim impacted soils at these vicinities in May 2008. Shallow groundwater (5' below grade) was observed during the soil excavation phase.

BP directed BEI to installed groundwater monitor wells at the location at each of the three (3) identified source areas. These monitor wells were installed in November 2009 after completion of surface equipment modifications. Well water samples were collected on November 30, 2009 and submitted to Hall Environmental Laboratories in Albuquerque for testing. Analytical results (attached) indicate that one monitor well, located near the pre-existing BGT, has benzene (130 parts per billion or ppb) and total xylenes (2,600 ppb) in excess of New Mexico Water Quality Control Commission standards (10 and 620 ppb respectively).

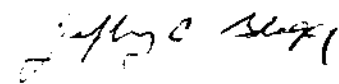
The site is located on private property approximately five (5) miles north of Blanco, New Mexico. BP intends to address the impact discovery by delineating down gradient extent, identifying potential receptors and developing a groundwater remediation plan for submission to NMOCD. At this time there is no indication that any receptor, domestic well, public well or surface water either is or may be at risk.

Mr. Brandon Powell of the NMOCD Aztec District office was notified of this impact via telephone on December 14, 2009. The private landowner will be apprised of the discovery and proposed remedial actions pursuant to the Landowner Notification Act.

If you have questions or need additional information, please contact either myself at (505)632-1199 or Mr. Buddy Shaw of BP at (505)326-9200.

Respectfully:

**Blagg Engineering, Inc.**



Jeffrey C. Blagg, P.E.  
President

cc: Brandon Powell - NMOCD Aztec  
Buddy Shaw - BP San Juan Operation Center

Attachments: C-141, Site Diagrams, Lab Reports

# BP AMERICA PROD. CO. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

LOBATO GC A # 1A

UNIT D, SEC. 3, T29N, R9W

REVISED DATE: December 10, 2010

FILENAME: ( A1A-4Q10.WK4 ) NJV

SAMPLE DATE	WELL NAME or No.	D.T.W. (ft)	T.D. (ft)	TDS (mg/L)	COND. umhos	pH	PRODUCT (ft)	BTEX EPA METHOD 8021B ( ppb )			
								Benzene	Toluene	Ethyl Benzene	Total Xylenes
30-Nov-09	MW #1	7.36	13.19		800	7.56		<b>130</b>	36	100	<b>2,600</b>
24-Feb-10		6.97			1,200	7.68		<b>61</b>	66.0	47.0	<b>790</b>
12-May-10		8.07			900	7.37		<b>13</b>	ND	25	<b>250</b>
20-Jul-10		6.63			900	7.25		<b>14</b>	2.7	5.7	<b>55</b>
22-Sep-10		6.45			900	7.30		<b>15</b>	ND	2.5	<b>22</b>
12-Oct-10		6.84			900	7.27		<b>15</b>	ND	1.9	<b>ND</b>
02-Dec-10		7.23			900	7.29		<b>8.4</b>	ND	ND	<b>5.6</b>
30-Nov-09	MW #2	7.52	12.63		900	7.39		ND	1.2	1.7	3.1
30-Nov-09	MW #3	7.01	12.53		1,000	7.63		ND	ND	ND	7.1
20-Jul-10	MW #4	6.32	14.88		900	7.31		ND	ND	ND	ND
20-Jul-10	MW #5	5.74	15.00		1,000	6.90		ND	ND	ND	ND
20-Jul-10	MW #6	5.78	15.00		1,000	7.74		ND	ND	ND	ND
NMWQCC GROUNDWATER STANDARDS								<b>10</b>	<b>750</b>	<b>750</b>	<b>620</b>

- NOTES :
- 1) RESULTS IN BOLD RED TYPE INDICATE EXCEEDING NMWQCC STANDARDS .
  - 2) RESULTS IN BOLD BLUE TYPE INDICATE BELOW NMWQCC STANDARDS AFTER PREVIOUS RESULTS IN BOLD RED TYPE EXCEEDED .
  - 3) ND INDICATES NOT DETECTED AT THE REPORTING LIMITS ( less than regulatory standards of at least a magnitude of 10 ) .
  - 4) NMWQCC INDICATES NEW MEXICO WATER QUALITY CONTROL COMMISSION.



**GENERAL WATER QUALITY**  
**BP AMERICA PRODUCTION COMPANY**

**Lobato GC A # 1A**

Sample Date : November 30 , 2009

PARAMETERS	MW # 1 11/30/09	MW # 2 11/30/09	MW # 3 11/30/09	NMWQCC STANDARDS	Units
pH	7.56	7.39	7.63	6 - 9	s. u.
TOTAL DISSOLVED SOLIDS	823	738	849	1,000	mg / L
NITROGEN, NITRITE	ND	ND	ND	10.0	mg / L
NITROGEN , NITRATE	ND	ND	ND	10.0	mg / L
CHLORIDE	12	10	9.2	250	mg / L
FLUORIDE	0.90	0.72	0.74	1.6	mg / L
SULFATE	120	150	190	600	mg / L
IRON	2.5	1.6	1.3	1.0	mg / L

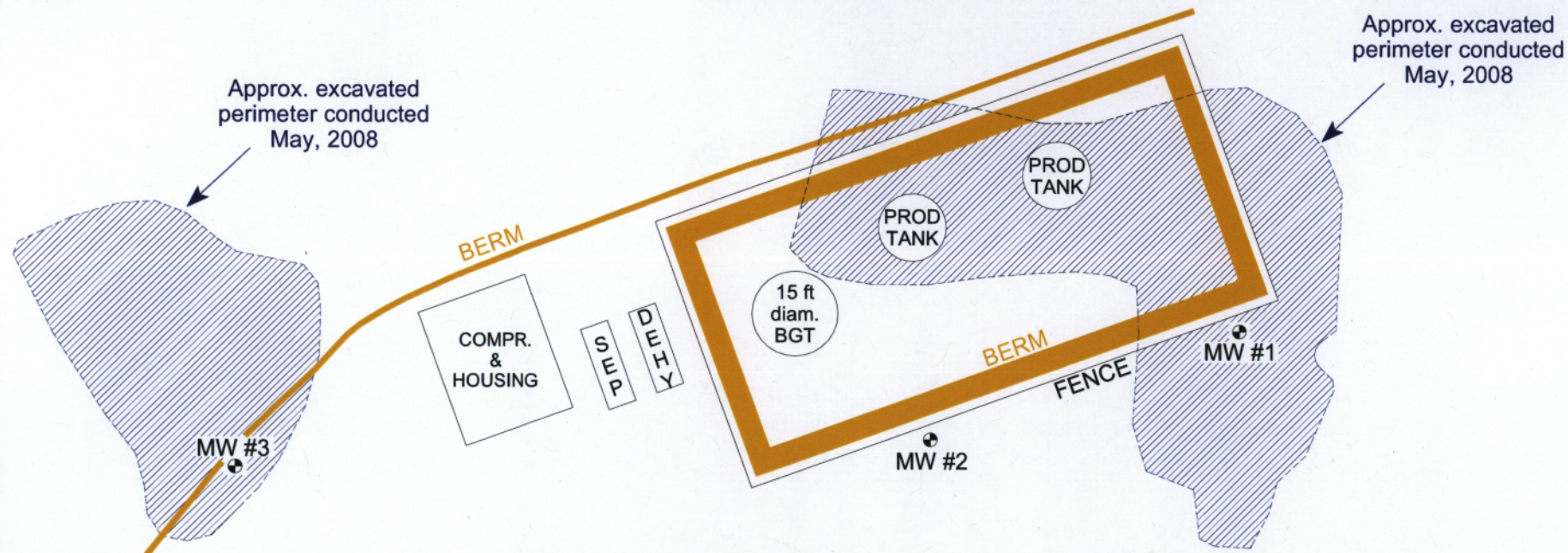
**Notes :**

- 1 ) NMWQCC - New Mexico Water Quality Control Commission .
- 2 ) s. u. - stanadard unit .
- 3 ) mg / L - milligrams per liter or otherwise known as parts per million ( ppm ) .
- 4 ) New Mexico Oil Conservation Division ( NMOCD ) recognizes the NMWQCC or background levels ( statistical equivalence ) as the standards for each site specific scenario .





# FIGURE 1



LOBATO GC A #1A  
WELL HEAD ⊕

LOBATO GC E #1E  
WELL HEAD ⊕

River flow  
direction

0 30 60 FT.

Direction to  
San Juan River

BP AMERICA PRODUCTION CO.

LOBATO GC A # 1A

NW/4 NW/4 SEC. 3, T29N, R9W

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SAMPLING

DRAWN BY: NJV

FILENAME: LOBATO GC A 1A-SM.SKF

REVISED: 04-68-10 NJV

# SITE MAP

09/09



# BLAGG ENGINEERING, INC.

## MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

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

CHAIN-OF-CUSTODY # : **N / A**

**LOBATO GC A # 1A**

LABORATORY (S) USED : **HALL ENVIRONMENTAL**

**UNIT D, SEC. 3, T29N, R9W**

Date : **November 30, 2009**

DEVELOPER / SAMPLER : **N J V**

Filename : **11-30-09.WK4**

PROJECT MANAGER : **J C B**

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	-	-	7.36	13.19	1040	7.56	800	11.8	2.75
2	-	-	7.52	12.63	1020	7.39	900	11.3	1.50
3	-	-	7.01	12.53	1005	7.63	1000	10.8	1.75

INSTRUMENT CALIBRATIONS =

4.01/7.00/10.00	2,800
11/30/09	1000

DATE & TIME =

NOTES : Volume of water purged from well prior to sampling:  $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$ .  
(i.e. 2" MW  $r = (1/12) \text{ ft}$ .  $h = 1 \text{ ft}$ .) (i.e. 4" MW  $r = (2/12) \text{ ft}$ .  $h = 1 \text{ ft}$ .)

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2".

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Top of casing MW # 1 ~ 2.95 ft. , MW # 2 ~ 2.65 ft. , MW # 3 ~ 2.53 ft. above grade .

on-site	8:30	temp	21 F
off-site	10:55	temp	34 F
sky cond.	Cloudy		
wind speed	0 - 5	direct.	E

# Hall Environmental Analysis Laboratory, Inc.

Date: 10-Dec-09

CLIENT: Blagg Engineering  
Lab Order: 0912036  
Project: Lobato GC A #1A  
Lab ID: 0912036-01

Client Sample ID: MW #1  
Collection Date: 11/30/2009 10:40:00 AM  
Date Received: 12/2/2009  
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	130	20		µg/L	20	12/9/2009 2:49:51 AM
Toluene	36	20		µg/L	20	12/9/2009 2:49:51 AM
Ethylbenzene	100	20		µg/L	20	12/9/2009 2:49:51 AM
Xylenes, Total	2600	40		µg/L	20	12/9/2009 2:49:51 AM
Surr: 4-Bromofluorobenzene	107	65.9-130		%REC	20	12/9/2009 2:49:51 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: LJB
Fluoride	0.90	0.10		mg/L	1	12/7/2009 6:28:54 PM
Chloride	12	0.10		mg/L	1	12/7/2009 6:28:54 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	12/7/2009 6:48:18 PM
Sulfate	120	10		mg/L	20	12/7/2009 7:03:43 PM
<b>EPA METHOD 8010B: DISSOLVED METALS</b>						Analyst: RAGE
Iron	2.5	0.10		mg/L	5	12/3/2009 8:25:42 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: MMS
Total Dissolved Solids	623	20.0		mg/L	1	12/7/2009 5:18:00 PM

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit



# Hall Environmental Analysis Laboratory, Inc.

Date: 10-Dec-09

CLIENT: Blagg Engineering  
Lab Order: 0912036  
Project: Lobato GC A #1A  
Lab ID: 0912036-02

Client Sample ID: MW #2  
Collection Date: 11/30/2009 10:20:00 AM  
Date Received: 12/2/2009  
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/9/2009 11:49:54 AM
Toluene	1.2	1.0		µg/L	1	12/9/2009 11:49:54 AM
Ethylbenzene	1.7	1.0		µg/L	1	12/9/2009 11:49:54 AM
Xylenes, Total	3.1	2.0		µg/L	1	12/9/2009 11:49:54 AM
Surr: 4-Bromofluorobenzene	99.7	55.9-130		%REC	1	12/9/2009 11:49:54 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: LJB
Fluoride	0.72	0.10		mg/L	1	12/7/2009 8:13:20 PM
Chloride	10	0.10		mg/L	1	12/7/2009 8:13:20 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	12/7/2009 8:30:45 PM
Sulfate	150	10		mg/L	20	12/7/2009 8:48:09 PM
<b>EPA METHOD 6010B: DISSOLVED METALS</b>						Analyst: RAGS
Iron	1.6	0.10		mg/L	5	12/3/2009 8:28:51 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: MMS
Total Dissolved Solids	738	20.0		mg/L	1	12/7/2009 5:18:00 PM

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

**Hall Environmental Analysis Laboratory, Inc.**

Date: 10-Dec-09

**CLIENT:** Blagg Engineering  
**Lab Order:** 0912036  
**Project:** Lobato GC A #1A  
**Lab ID:** 0912036-03

**Client Sample ID:** MW #3  
**Collection Date:** 11/30/2009 10:05:00 AM  
**Date Received:** 12/2/2009  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/9/2009 12:50:29 PM
Toluene	ND	1.0		µg/L	1	12/9/2009 12:50:29 PM
Ethylbenzene	ND	1.0		µg/L	1	12/9/2009 12:50:29 PM
Xylenes, Total	7.1	2.0		µg/L	1	12/9/2009 12:50:29 PM
Surr: 4-Bromofluorobenzene	97.5	65.9-130		%REC	1	12/9/2009 12:50:29 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: LJB
Fluoride	0.74	0.10		mg/L	1	12/7/2009 9:05:34 PM
Chloride	9.2	0.10		mg/L	1	12/7/2009 9:05:34 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	12/7/2009 9:22:59 PM
Sulfate	190	10		mg/L	20	12/7/2009 9:40:24 PM
<b>EPA METHOD 6010B: DISSOLVED METALS</b>						Analyst: RAGS
Iron	1.3	0.10		mg/L	5	12/3/2009 8:32:03 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: MMS
Total Dissolved Solids	849	20.0		mg/L	1	12/7/2009 5:18:00 PM

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

# LABORATORY RECORD

Client: BLAGG ENER. / BP AMERICA

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

Phone #: (505) 632-1199

email or Fax#:

QA/QC Package:  
☒ Standard ☐ Level 4 (Full Validation)  
☐ Other \_\_\_\_\_  
☐ EDD (Type) \_\_\_\_\_

Project Name: LOBATO GC A #1A

Project #:

Project Manager: JEFF BLAGG

Sampler: NELSON VELEZ

On-site: 12/2/05

Sample temperature: 23



## 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	BTX - MTBE + TMB's (8021B)	BTX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	IRON, FERRONS (FILTERED)	TDS	NITRATE - N	Air Bubbles (Y or N)
11/30/09	1040	WATER	MW #1	2-40 ml	HCl & COOL	1	✓													
"	"	"	"	1-125 ml	HNO <sub>3</sub> & COOL	1											✓			
"	"	"	"	1-125 ml	H <sub>2</sub> SO <sub>4</sub> & COOL	1													✓	
"	"	"	"	1-250 ml	COOL	1							✓					✓		
11/30/09	1020	WATER	MW #2	2-40 ml	HCl & COOL	2	✓													
"	"	"	"	1-125 ml	HNO <sub>3</sub> & COOL	2											✓			
"	"	"	"	1-125 ml	H <sub>2</sub> SO <sub>4</sub> & COOL	2													✓	
"	"	"	"	1-250 ml	COOL	2							✓					✓		
11/30/09	1005	WATER	MW #3	2-40 ml	HCl & COOL	3	✓													
"	"	"	"	1-125 ml	HNO <sub>3</sub> & COOL	3											✓			
"	"	"	"	1-125 ml	H <sub>2</sub> SO <sub>4</sub> & COOL	3													✓	
"	"	"	"	1-250 ml	COOL	3							✓					✓		

Date: 11/30/09 Time: 1615 Relinquished by: Nelson Velez

Date: 12/2/05 Time: 9:35 Received by: [Signature]

Remarks:  
IF ANION NO<sub>3</sub> CAN NOT BE ANALYZED WITHIN 48 HRS., THEN RUN NITRATE-N / NITRITE - N

## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
Project: Lobato GC A #1A

Work Order: 0912036

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: MB		MBLK									
Batch ID:	R36463	Analysis Date:	12/7/2009 1:50:20 PM								
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.10								
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20								
Sulfate	ND	mg/L	0.50								
Sample ID: LCS		LCS									
Batch ID:	R36463	Analysis Date:	12/7/2009 2:07:46 PM								
Fluoride	0.5366	mg/L	0.10	0.5	0	107	90	110			
Chloride	5.083	mg/L	0.10	5	0	102	90	110			
Nitrate (As N)+Nitrite (As N)	3.569	mg/L	0.20	3.5	0	102	90	110			
Sulfate	10.14	mg/L	0.50	10	0	101	90	110			
Method: EPA Method 8021B: Volatiles											
Sample ID: 5ML RB		MBLK									
Batch ID:	R36483	Analysis Date:	12/8/2009 9:32:43 AM								
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 5ML RB		MBLK									
Batch ID:	R36502	Analysis Date:	12/9/2009 9:17:51 AM								
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100NG BTEX LCS		LCS									
Batch ID:	R36483	Analysis Date:	12/9/2009 5:24:05 AM								
Benzene	20.54	µg/L	1.0	20	0	103	85.9	113			
Toluene	20.85	µg/L	1.0	20	0	104	86.4	113			
Ethylbenzene	20.39	µg/L	1.0	20	0	102	83.5	118			
Xylenes, Total	80.86	µg/L	2.0	60	0	101	83.4	122			
Sample ID: 100NG BTEX LCS		LCS									
Batch ID:	R36502	Analysis Date:	12/9/2009 7:55:32 PM								
Benzene	20.36	µg/L	1.0	20	0	102	85.9	113			
Toluene	20.22	µg/L	1.0	20	0	101	86.4	113			
Ethylbenzene	19.71	µg/L	1.0	20	0	98.6	83.5	118			
Xylenes, Total	58.62	µg/L	2.0	60	0	97.7	83.4	122			
Method: EPA Method 6010B: Dissolved Metals											
Sample ID: MB		MBLK									
Batch ID:	R36425	Analysis Date:	12/3/2009 5:55:13 PM								
Cadmium	ND	mg/L	0.020								
Sample ID: LCS		LCS									
Batch ID:	R36425	Analysis Date:	12/3/2009 5:56:12 PM								
Cadmium	0.5053	mg/L	0.020	0.5	0	101	80	120			
Sample ID: LCSRR		LCS									
Batch ID:	R36425	Analysis Date:	12/3/2009 6:03:02 PM								
Cadmium	0.4999	mg/L	0.020	0.5	0	100	80	120			

## Qualifiers:

E Estimated value  
 H Holding times for preparation or analysis exceeded  
 I Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 R RPD outside accepted recovery limits  
 S Spike recovery outside accepted recovery limits



## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
Project: Lobato GC A #1A

Work Order: 0912036

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SM2540C MOD: Total Dissolved Solids											
Sample ID: MBLK-20778		MBLK				Batch ID: 20778		Analysis Date: 12/7/2009 5:18:00 PM			
Total Dissolved Solids	ND	mg/L	20.0			Batch ID: 20778		Analysis Date: 12/7/2009 5:18:00 PM			
Sample ID: LCS1-20778		LCS									
Total Dissolved Solids	1030	mg/L	20.0	1000	14	102	80	120			

## Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
I	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

## Sample Receipt Checklist

Client Name **BLAGG**

Date Received:

12/2/2009

Work Order Number 0912036

Received by: **ARS**

Sample ID labels checked by:

*ARS*  
Initials

Checklist completed by:

Signature

*[Signature]*

12/2/09  
Date

Matrix:

Carrier name **Greyhound**

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Not Shipped ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☐

Yes ☒

No ☐

Water - Preservation labels on bottle and cap match?

Yes ☒

No ☐

N/A ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

N/A ☐

Container/Temp Blank temperature?

2.4°

<6° C Acceptable

If given sufficient time to cool.

Number of preserved  
bottles checked for  
pH:

*6*  
<2 >12 unless noted  
below.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding:

Comments:

Corrective Action

**BLAGG ENGINEERING, INC.**  
**MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA**

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

CHAIN-OF-CUSTODY # : **N / A**

**LOBATO GC A # 1A**

LABORATORY (S) USED : **HALL ENVIRONMENTAL**

**UNIT D, SEC. 3, T29N, R9W**

Date : **February 24, 2010**

DEVELOPER / SAMPLER : **N J V**

Filename : **02-24-10.WK4**

PROJECT MANAGER : **J C B**

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	-	-	6.97	13.19	1030	7.68	1,200	9.8	3.00
2	-	-	-	12.63	-	-	-	-	-
3	-	-	-	12.53	-	-	-	-	-

INSTRUMENT CALIBRATIONS =

4.01/7.00/10.00      2,800

DATE & TIME =

02/23/10      1000

NOTES : Volume of water purged from well prior to sampling:  $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$   
 (i.e. 2" MW  $r = (1/12) \text{ ft}$ .  $h = 1 \text{ ft}$ .) (i.e. 4" MW  $r = (2/12) \text{ ft}$ .  $h = 1 \text{ ft}$ .)

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2".

MW # 1 - excellent recovery , grayish brown color appearance . Collected sample for BTEX per US EPA Method 8021B from MW # 1 only .

Top of casing MW # 1 ~ 2.95 ft. , MW # 2 ~ 2.65 ft. , MW # 3 ~ 2.53 ft. above grade .

on-site	10:00	temp	27 F
off-site	10:40	temp	32 F
sky cond.	Partly cloudy		
wind speed	0 - 5	direct.	E

**Hall Environmental Analysis Laboratory, Inc.**

Date: 02-Mar-10

CLIENT: Blagg Engineering  
Lab Order: 1002516  
Project: Lobato GC A #1A  
Lab ID: 1002516-01

Client Sample ID: MW #1  
Collection Date: 2/24/2010 10:30:00 AM  
Date Received: 2/26/2010  
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	61	20		µg/L	20	3/1/2010 5:29:48 PM
Toluene	66	20		µg/L	20	3/1/2010 5:29:48 PM
Ethylbenzene	47	20		µg/L	20	3/1/2010 5:29:48 PM
Xylenes, Total	790	40		µg/L	20	3/1/2010 5:29:48 PM
Surr: 4-Bromofluorobenzene	100	65.9-130		%REC	20	3/1/2010 5:29:48 PM

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

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





## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: Lobato GC A #1A

Work Order: 1002516

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 5ML RB		MBLK				Batch ID: R37565		Analysis Date: 3/1/2010 9:25:06 AM			
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100NG BTEX LCS		LCS				Batch ID: R37565		Analysis Date: 3/2/2010 6:07:50 AM			
Benzene	22.44	µg/L	1.0	20	0	112	85.9	113			
Toluene	22.13	µg/L	1.0	20	0	111	86.4	113			
Ethylbenzene	21.98	µg/L	1.0	20	0.148	109	83.5	118			
Xylenes, Total	65.70	µg/L	2.0	60	0	110	83.4	122			

## Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

## Sample Receipt Checklist

Client Name **BLAGG**

Date Received:

2/26/2010

Work Order Number **1002516**

Received by: **TLS**

Checklist completed by:

Signature

Date

Sample ID labels checked by:

Initials

Matrix:

Carrier name **Greyhound**

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Not Shipped ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☐

Yes ☒

No ☐

Water - Preservation labels on bottle and cap match?

Yes ☐

No ☐

N/A ☒

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

**3.7°**

<6° C Acceptable

If given sufficient time to cool.

Number of preserved  
bottles checked for  
pH:

<2 >12 unless noted  
below.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding:

Comments:

Corrective Action

# BLAGG ENGINEERING, INC.

## MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

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

CHAIN-OF-CUSTODY # : **N / A**

**LOBATO GC A # 1A**

LABORATORY (S) USED : **HALL ENVIRONMENTAL**

**UNIT D, SEC. 3, T29N, R9W**

Date : **May 12, 2010**

DEVELOPER / SAMPLER : **N J V**

Filename : **05-12-10.WK4**

PROJECT MANAGER : **J C B**

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	-	-	8.07	13.19	1650	7.37	900	16.3	1.50
2	-	-	-	12.63	-	-	-	-	-
3	-	-	-	12.53	-	-	-	-	-

INSTRUMENT CALIBRATIONS =

4.01/7.00/10.00 2,800

DATE & TIME =

05/10/10 0915

NOTES : Volume of water purged from well prior to sampling:  $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$ .  
(i.e. 2" MW  $r = (1/12) \text{ ft.}$   $h = 1 \text{ ft.}$ ) (i.e. 4" MW  $r = (2/12) \text{ ft.}$   $h = 1 \text{ ft.}$ )

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

MW #1 - fair recovery , grayish brown color appearance . Bailed to total depth , then allowed well to fully recover prior to sample collection . Collected sample for BTEX per US EPA Method 8021B from MW #1 only .

Top of casing MW #1 ~ 2.95 ft. , MW #2 ~ 2.65 ft. , MW #3 ~ 2.53 ft. above grade .

on-site	4:26	temp	60 F
off-site	4:57	temp	60 F
sky cond.	Sunny		
wind speed	5 -10 G 20	direct.	NW - W



**Hall Environmental Analysis Laboratory, Inc.**

Date: 25-May-10

**CLIENT:** Blagg Engineering  
**Lab Order:** 1005384  
**Project:** Lobato GC A #1A  
**Lab ID:** 1005384-01

**Client Sample ID:** MW #1  
**Collection Date:** 5/12/2010 4:50:00 PM  
**Date Received:** 5/14/2010  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8280: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	13	10		µg/L	10	5/24/2010 9:23:12 PM
Toluene	ND	10		µg/L	10	5/24/2010 9:23:12 PM
Ethylbenzene	25	10		µg/L	10	5/24/2010 9:23:12 PM
Xylenes, Total	250	20		µg/L	10	5/24/2010 9:23:12 PM
Surr: 4-Bromofluorobenzene	100	60.1-133		%REC	10	5/24/2010 9:23:12 PM

**Qualifiers:**

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

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

Client: BLAGE ENGR. / BP AMERICA

Mailing Address: P.O. Box 87  
BLVD. NM 87413

Phone #: 505 632-1199

email or Fax#:

**QA/QC Package:**

☒ Standard ☐ Level 4 (Full Validation)

## Accreditation

☐ NELAP      ☐ Other

☐ EDD (Type)

**gūn-Āvūnu Time:**

☒ Standard      ☐ Rush

Project Name:

LOBATO GC A #1A

Project #:

**Project Manager:**

JEFF BLATT

Sampler: NELSON VELAZ

\_\_\_\_\_

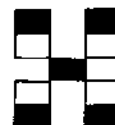
THE UNIVERSITY OF CHICAGO

[illegible]

Date: 1/13/10	Time: 1530	Relinquished by: [Signature]
Date:	Time:	Relinquished by:

Received by:	Date	Time
<i>[Signature]</i>	9:00	5/14/10
Received by:	Date	Time

Remarks:



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]

## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: Lobato GC A #1A

Work Order: 1005384

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: EPA Method 8260: Volatiles Short List</b>											
<b>Sample ID: 5mL rb</b>		<b>MBLK</b>		<b>Batch ID: R38881</b>		<b>Analysis Date: 5/24/2010 11:59:38 AM</b>					
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
<b>Sample ID: 100ng lcs</b>		<b>LCS</b>		<b>Batch ID: R38881</b>		<b>Analysis Date: 5/24/2010 12:56:02 PM</b>					
Benzene	21.58	µg/L	1.0	20	0	108	82.4	116			
Toluene	23.39	µg/L	1.0	20	0	117	89.5	123			

## Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

## Sample Receipt Checklist

Client Name **BLAGG**

Date Received:

5/14/2010

Work Order Number 1005384

Received by: ARS

Checklist completed by:

Signature

Date

Sample ID labels checked by:

Initials

Matrix:

Carrier name: Greyhound

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Not Shipped ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☐

Yes ☒

No ☐

Water - Preservation labels on bottle and cap match?

Yes ☐

No ☐

N/A ☒

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

2.6°

<6° C Acceptable

If given sufficient time to cool.

Number of preserved  
bottles checked for  
pH:

<2 >12 unless noted  
below.

COMMENTS:

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

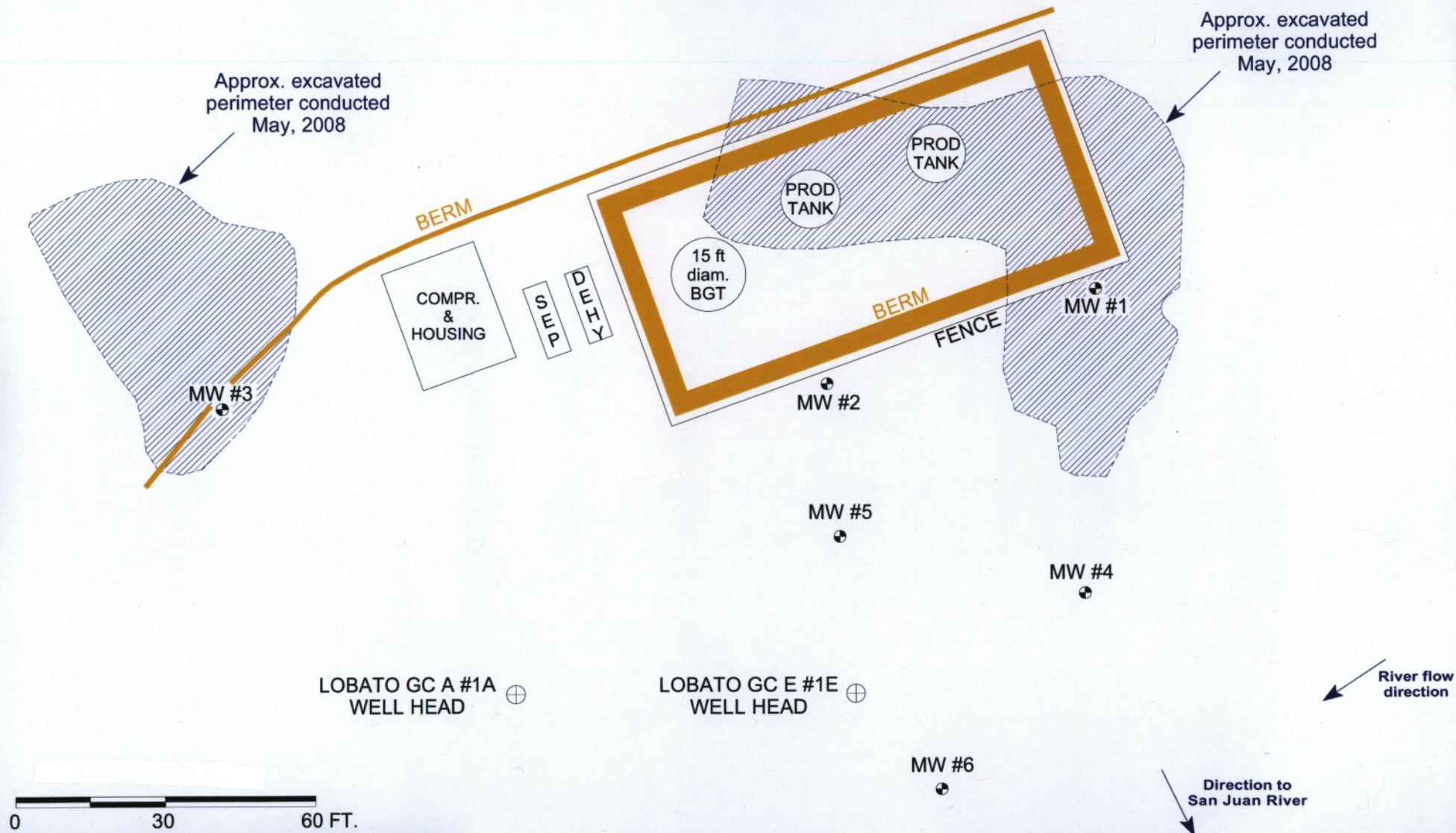
Comments: \_\_\_\_\_

Corrective Action





# FIGURE 2



BP AMERICA PRODUCTION CO.  
LOBATO GC A # 1A  
NW/4 NW/4 SEC. 3, T29N, R9W  
SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.  
CONSULTING PETROLEUM / RECLAMATION SERVICES  
P.O. BOX 87  
BLOOMFIELD, NEW MEXICO 87413  
PHONE: (505) 632-1199

PROJECT: MW SAMPLING  
DRAWN BY: NJV  
FILENAME: LOBATO GC A 1A-SM2.SKF  
REVISED: 07-20-10 NJV

**SITE  
MAP**  
07/10



# BLAGG ENGINEERING, INC.

## MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

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

CHAIN-OF-CUSTODY # : **N / A**

**LOBATO GC A # 1A**

LABORATORY (S) USED : **HALL ENVIRONMENTAL**

**UNIT D, SEC. 3, T29N, R9W**

Date : **July 20, 2010**

DEVELOPER / SAMPLER : **N J V**

Filename : **07-20-10.WK4**

PROJECT MANAGER : **J C B**

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	103.31	96.68	6.63	13.19	1250	7.25	900	23.3	3.25
2	103.51	96.70	6.81	12.63	-	-	-	-	-
3	103.37	97.10	6.27	12.53	-	-	-	-	-
4	102.95	96.63	6.32	14.88	1215	7.31	900	26.8	4.25
5	102.43	96.69	5.74	15.00	1145	6.9	1000	25.8	4.5
6	102.63	96.85	5.78	15.00	1115	7.74	1000	26.6	4.5

INSTRUMENT CALIBRATIONS =

4.01/7.00/10.00	2,800
07/20/10	0800

DATE & TIME =

NOTES : Volume of water purged from well prior to sampling:  $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$   
(i.e. 2" MW  $r = (1/12) \text{ ft.}$   $h = 1 \text{ ft.}$ ) (i.e. 4" MW  $r = (2/12) \text{ ft.}$   $h = 1 \text{ ft.}$ )

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in all MW 's sampled . MW # 1 - grayish brown in appearance , MW # 4 , # 5 , # 6 - olive gray color . No sheen observed from any MW 's developed . Collected sample for BTEX per US EPA Method 8021B from MW # 1 , # 4 , # 5 , & # 6 .

Top of casing MW # 1 ~ 2.95 ft. , MW # 2 ~ 2.65 ft. , MW # 3 ~ 2.53 ft. , MW # 4 ~ 2.80 ft. , MW # 5 ~ 2.80 ft. , MW # 6 ~ 2.80 ft. above grade .

on-site	10:51	temp	82 F
off-site	1:00	temp	86 F
sky cond.	Cloudy		
wind speed	0 - 5	direct.	S

# Hall Environmental Analysis Laboratory, Inc.

Date: 04-Aug-10

**CLIENT:** Blagg Engineering  
**Project:** Lobato GC A #1A

**Lab Order:** 1007846

**Lab ID:** 1007846-01

**Collection Date:** 7/20/2010 12:50:00 PM

**Client Sample ID:** MW #1

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	14	1.0		µg/L	1	8/2/2010 11:42:09 AM
Toluene	2.7	1.0		µg/L	1	8/2/2010 11:42:09 AM
Ethylbenzene	5.7	1.0		µg/L	1	8/2/2010 11:42:09 AM
Xylenes, Total	55	2.0		µg/L	1	8/2/2010 11:42:09 AM
Surr: 4-Bromofluorobenzene	108	65.9-130		%REC	1	8/2/2010 11:42:09 AM

**Lab ID:** 1007846-02

**Collection Date:** 7/20/2010 12:15:00 PM

**Client Sample ID:** MW #4

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/30/2010 3:47:28 PM
Toluene	ND	1.0		µg/L	1	7/30/2010 3:47:28 PM
Ethylbenzene	ND	1.0		µg/L	1	7/30/2010 3:47:28 PM
Xylenes, Total	ND	2.0		µg/L	1	7/30/2010 3:47:28 PM
Surr: 4-Bromofluorobenzene	97.1	65.9-130		%REC	1	7/30/2010 3:47:28 PM

**Lab ID:** 1007846-03

**Collection Date:** 7/20/2010 11:45:00 AM

**Client Sample ID:** MW #5

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/30/2010 4:17:50 PM
Toluene	ND	1.0		µg/L	1	7/30/2010 4:17:50 PM
Ethylbenzene	ND	1.0		µg/L	1	7/30/2010 4:17:50 PM
Xylenes, Total	ND	2.0		µg/L	1	7/30/2010 4:17:50 PM
Surr: 4-Bromofluorobenzene	101	65.9-130		%REC	1	7/30/2010 4:17:50 PM

**Lab ID:** 1007846-04

**Collection Date:** 7/20/2010 11:15:00 AM

**Client Sample ID:** MW #6

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/30/2010 4:48:07 PM
Toluene	ND	1.0		µg/L	1	7/30/2010 4:48:07 PM
Ethylbenzene	ND	1.0		µg/L	1	7/30/2010 4:48:07 PM
Xylenes, Total	ND	2.0		µg/L	1	7/30/2010 4:48:07 PM
Surr: 4-Bromofluorobenzene	107	65.9-130		%REC	1	7/30/2010 4:48:07 PM

**Qualifiers:**

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

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

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.

## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: Lobato GC A #1A

Work Order: 1007846

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 6ML RB		MBLK									
						Batch ID: R40133	Analysis Date: 7/30/2010 9:20:23 AM				
Benzene	ND	µg/L	1.0								
oluene	ND	µg/L	1.0								
ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100NG BTEX LCS		LCS									
						Batch ID: R40133	Analysis Date: 7/30/2010 7:50:21 PM				
benzene	18.83	µg/L	1.0	20	0	94.2	87.9	121			
Toluene	18.38	µg/L	1.0	20	0	91.9	83	124			
ethylbenzene	18.23	µg/L	1.0	20	0	91.2	81.7	122			
xylenes, Total	55.63	µg/L	2.0	60	0	92.7	85.6	121			

## Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits



# Hall Environmental Analysis Laboratory, Inc.

## Sample Receipt Checklist

Client Name **BLAGG**

Date Received:

7/23/2010

Work Order Number **1007846**

Received by: **TLS**

Checklist completed by:

Signature

Date

Sample ID labels checked by:

Initials

Matrix:

Carrier name: Greyhound

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Not Shipped ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☐

Yes ☒

No ☐

Water - Preservation labels on bottle and cap match?

Yes ☐

No ☐

N/A ☒

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

0.7°

<6° C Acceptable

If given sufficient time to cool.

Number of preserved  
bottles checked for  
pH:

<2 >12 unless noted  
below.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding:

Comments:

Corrective Action



# BLAGG ENGINEERING, INC.

## MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

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

CHAIN-OF-CUSTODY # : **N / A**

**LOBATO GC A # 1A**

LABORATORY (S) USED : **HALL ENVIRONMENTAL**

**UNIT D, SEC. 3, T29N, R9W**

Date : **Sept. 22, 2010**

DEVELOPER / SAMPLER : **N J V**

Filename : **09-22-10.WK4**

PROJECT MANAGER : **J C B**

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			6.45	13.19	0745	7.3	900	19.2	3.25
2			6.81	12.63	-	-	-	-	-
3			6.27	12.53	-	-	-	-	-
4			6.32	14.88	-	-	-	-	-
5			5.74	15.00	-	-	-	-	-
6			5.78	15.00	-	-	-	-	-

INSTRUMENT CALIBRATIONS =

4.01/7.00/10.00	2,800
09/22/10	0735

DATE & TIME =

NOTES : Volume of water purged from well prior to sampling:  $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$ .  
(i.e. 2" MW  $r = (1/12) \text{ ft}$ .  $h = 1 \text{ ft}$ .) (i.e. 4" MW  $r = (2/12) \text{ ft}$ .  $h = 1 \text{ ft}$ .)

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2".

Excellent recovery in all MW's sampled. MW #1 - grayish brown in appearance, MW #4, #5, #6 - olive gray color. No sheen observed from any MW's developed. Collected sample for BTEX per US EPA Method 8021B from MW #1, #4, #5, & #6.

Top of casing MW #1 ~ 2.95 ft., MW #2 ~ 2.65 ft., MW #3 ~ 2.53 ft., MW #4 ~ 2.80 ft., MW #5 ~ 2.80 ft., MW #6 ~ 2.80 ft. above grade.

on-site	10:51	temp	82 F
off-site	1:00	temp	86 F
sky cond.	Cloudy		
wind speed	0 - 5	direct.	S

**Hall Environmental Analysis Laboratory, Inc.**

Date: 01-Oct-10

**CLIENT:** Blagg Engineering**Client Sample ID:** MW #1**Lab Order:** 1009A31**Collection Date:** 9/22/2010 7:45:00 AM**Project:** Lobato GC A #1A**Date Received:** 9/23/2010**Lab ID:** 1009A31-01**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	15	1.0		µg/L	1	9/30/2010 3:26:20 AM
Toluene	ND	1.0		µg/L	1	9/30/2010 3:26:20 AM
Ethylbenzene	2.5	1.0		µg/L	1	9/30/2010 3:26:20 AM
Xylenes, Total	22	2.0		µg/L	1	9/30/2010 3:26:20 AM
Surr: 4-Bromofluorobenzene	104	83.6-151		%REC	1	9/30/2010 3:26:20 AM

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

NC Non-Chlorinated

PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

Client: BLAGE ENER. / BP AMERICA

Mailing Address: P.O. Box 87

BLFD., 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:**

LOBATO GC A #1A

Project #:

**Project Manager:**

Jeff Babb

Sampler: Nelson Velez


Sample Temperature

Date	Time	Matrix	Sample Request ID
------	------	--------	-------------------

Container  
Type and #Preservative  
Type

1/22/00	0745	WATER	MW #1	40ml - 2	HCl & COO!
---------	------	-------	-------	----------	---------------

Date:	Time:	Relinquished by:
10/10/10	1540	[Signature]
Date:	Time:	Relinquished by:

Received by:	Date	Time
	9/28/0	1040
Received by:	Date	Time

Remarks:



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

	<	BTEX + MTBE + TMB's (8021g)
		BTEX + MTBE + TPH (Gas only)
		TPH Method 8015B (Gas/Diesel)
		TPH (Method 418.1)
		EDB (Method 504.1)
		8310 (PNA or PAH)
		RCRA 8 Metals
		Anions ( $F, Cl, NO_3, PO_4, SO_4$ )
		8081 Pesticides / 8082 PCB's
		8260B (VOA)
		8270 (Semi-VOA)
		Air Bubbles (Y or N)

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This concept or notation of this agreement is not intended to be construed as a warranty of accuracy or reliability.



## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: Lobato GC A #1A

Work Order: 1009A31

Analyte	Result	Units	PQL	SPK Val	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 5ML RB		MBLK				Batch ID: R41264		Analysis Date: 9/29/2010 9:16:56 AM			
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100NG BTEX LCS-B		LCS				Batch ID: R41264		Analysis Date: 9/30/2010 5:28:09 AM			
Benzene	19.11	µg/L	1.0	20	0	95.5	84.7	118			
Toluene	16.98	µg/L	1.0	20	0	84.9	82	123			
Ethylbenzene	17.48	µg/L	1.0	20	0	87.4	83	118			
Xylenes, Total	53.99	µg/L	2.0	60	0	90.0	85.4	119			

## Qualifiers:

E Estimated value  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
 NC Non-Chlorinated  
 R RPD outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

## Sample Receipt Checklist

Client Name **BLAGG**

Work Order Number **1009A31**

Date Received:

9/23/2010

Received by: **TLS**

Sample ID labels checked by:

Initials

Checklist completed by:

Signature

Date

Matrix:

Carrier name Client drop-off

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Not Shipped ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☐

Yes ☒

No ☐

Water - Preservation labels on bottle and cap match?

Yes ☐

No ☐

N/A ☒

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Number of preserved  
bottles checked for  
pH:

<2 >12 unless noted  
below.

Container/Temp Blank temperature?

2.7°

<6° C Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding:

Comments:

Corrective Action

# BLAGG ENGINEERING, INC.

## MONITOR WELL DEVELOPMENT & /OR SAMPLING DATA

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

CHAIN-OF-CUSTODY # : **N / A**

**LOBATO GC A # 1A**

LABORATORY (S) USED : **HALL ENVIRONMENTAL**

**UNIT D, SEC. 3, T29N, R9W**

Date : **October 12, 2010**

DEVELOPER / SAMPLER : **N J V**

Filename : **10-12-10.WK4**

PROJECT MANAGER : **J C B**

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	103.31	96.47	6.84	13.19	1320	7.27	900	22.4	3.25
2	103.51	96.50	7.01	12.63	-	-	-	-	-
3	103.37	97.17	6.2	12.53	-	-	-	-	-
4	102.95	96.36	6.59	14.88	-	-	-	-	-
5	102.43	96.48	5.95	15.00	-	-	-	-	-
6	102.63	96.78	5.85	15.00	-	-	-	-	-

INSTRUMENT CALIBRATIONS =

4.01/7.00/10.00	2,800
10/12/10	0810

DATE & TIME =

NOTES : Volume of water purged from well prior to sampling:  $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$ .  
(i.e. 2" MW  $r = (1/12) \text{ ft.}$   $h = 1 \text{ ft.}$ ) (i.e. 4" MW  $r = (2/12) \text{ ft.}$   $h = 1 \text{ ft.}$ )

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW #1. MW #1 - grayish brown in appearance, no sheen observed within purged / developed water. Collected sample for BTEX per US EPA Method 8021B from MW #1 only.

Top of casing MW #1 ~ 2.95 ft., MW #2 ~ 2.65 ft., MW #3 ~ 2.53 ft., MW #4 ~ 2.80 ft., MW #5 ~ 2.80 ft., MW #6 ~ 2.80 ft. above grade.

on-site	12:42	temp	66 F
off-site	1:30	temp	69 F
sky cond.	Cloudy		
wind speed	0 - 5	direct.	calm



**Hall Environmental Analysis Laboratory, Inc.**

Date: 25-Oct-10

**CLIENT:** Blagg Engineering  
**Lab Order:** 1010605  
**Project:** Lobato GC A #1A  
**Lab ID:** 1010605-01

**Client Sample ID:** MW#1  
**Collection Date:** 10/12/2010 1:20:00 PM  
**Date Received:** 10/13/2010  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	15	1.0		µg/L	1	10/19/2010 3:54:20 AM
Toluene	ND	1.0		µg/L	1	10/19/2010 3:54:20 AM
Ethylbenzene	1.9	1.0		µg/L	1	10/19/2010 3:54:20 AM
Xylenes, Total	12	2.0		µg/L	1	10/19/2010 3:54:20 AM
Surr: 4-Bromofluorobenzene	121	81.3-151		%REC	1	10/19/2010 3:54:20 AM

**Qualifiers:**

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

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



## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: Lobato GC A #1A

Work Order: 1010605

Analyte	Result	Units	PQL	SPK Val	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	---------	---------	------	----------	-----------	------	----------	------

Method: EPA Method 8021B: Volatiles

Sample ID: 5ML RB

MBLK

Batch ID: R41614 Analysis Date: 10/18/2010 9:37:01 AM

Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Aromatics, Total	ND	µg/L	2.0								

Sample ID: 100NG BTEX LCS

LCS

Batch ID: R41614 Analysis Date: 10/18/2010 1:10:34 PM

Benzene	19.57	µg/L	1.0	20	0.16	97.1	84.7	118			
Toluene	19.27	µg/L	1.0	20	0.196	95.4	82	123			
Ethylbenzene	19.30	µg/L	1.0	20	0.276	95.1	83	118			
Aromatics, Total	58.89	µg/L	2.0	60	0	98.2	85.4	119			

## Qualifiers:

Estimated value

H Holding times for preparation or analysis exceeded

Analyte detected below quantitation limits

NC Non-Chlorinated



# Hall Environmental Analysis Laboratory, Inc.

## Sample Receipt Checklist

Client Name **BLAGG**

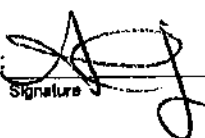
Date Received:

10/13/2010

Work Order Number **1010605**

Received by: **MLW**

Checklist completed by:

  
Signature

10/13/10  
Date

Sample ID labels checked by:

Initials

Matrix:

Carrier name: Priority US Mail

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Number of preserved bottles checked for pH:
Water - Preservation labels on bottle and cap match?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	<2 >12 unless noted below.
Container/Tamp Blank temperature?	<b>2.1°</b>	<6° C Acceptable If given sufficient time to cool.		

COMMENTS:

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

# BLAGG ENGINEERING, INC.

## MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

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

CHAIN-OF-CUSTODY # : **N / A**

**LOBATO GC A # 1A**

LABORATORY (S) USED : **HALL ENVIRONMENTAL**

**UNIT D, SEC. 3, T29N, R9W**

Date : **December 2, 2010**

DEVELOPER / SAMPLER : **N J V**

Filename : **12-02-10.WK4**

PROJECT MANAGER : **J C B**

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	103.31	-	7.23	13.19	0940	7.29	900	12.1	3.00
2	103.51	-	-	12.63	-	-	-	-	-
3	103.37	-	-	12.53	-	-	-	-	-
4	102.95	-	-	14.88	-	-	-	-	-
5	102.43	-	-	15.00	-	-	-	-	-
6	102.63	-	-	15.00	-	-	-	-	-

INSTRUMENT CALIBRATIONS =

4.01/7.00/10.00

2,800

DATE & TIME =

10/02/10

0930

NOTES : Volume of water purged from well prior to sampling:  $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$ .  
(i.e. 2" MW  $r = (1/12) \text{ ft.}$   $h = 1 \text{ ft.}$ ) (i.e. 4" MW  $r = (2/12) \text{ ft.}$   $h = 1 \text{ ft.}$ )

Ideally a minimum of three (3) wellbore volumes:

2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2".

Excellent recovery in MW #1. MW #1 - grayish brown in appearance, no sheen observed within purged / developed water. Collected sample for BTEX per US EPA Method 8021B from MW #1 only.

Top of casing MW #1 ~ 2.95 ft., MW #2 ~ 2.65 ft., MW #3 ~ 2.53 ft., MW #4 ~ 2.80 ft., MW #5 ~ 2.80 ft., MW #6 ~ 2.80 ft. above grade.

on-site	8:55	temp	28 F
off-site	10:38	temp	39 F
sky cond.	Sunny		
wind speed	0 - 5	direct.	calm

**Hall Environmental Analysis Laboratory, Inc.**

Date: 09-Dec-10

**CLIENT:** Blagg Engineering  
**Lab Order:** 1012146  
**Project:** Lobato GC A #1A  
**Lab ID:** 1012146-01

**Client Sample ID:** MW #1  
**Collection Date:** 12/2/2010 9:40:00 AM  
**Date Received:** 12/3/2010  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						
Benzene	8.4	1.0		µg/L	1	Analyst: NSB 12/8/2010 4:28:08 PM
Toluene	ND	1.0		µg/L	1	12/8/2010 4:28:08 PM
Ethylbenzene	ND	1.0		µg/L	1	12/8/2010 4:28:08 PM
Xylenes, Total	5.6	2.0		µg/L	1	12/8/2010 4:28:08 PM
Surr: 4-Bromofluorobenzene	120	81.3-151		%REC	1	12/8/2010 4:28:08 PM

**Qualifiers:**

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

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



Client: BLAGG ENGR. / BP AMERICA

Client: BLAGG ENGR. / BP AMERICA

Mailing Address: P. O. BOX 87  
BLFO. 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: LOBATO GC A #1A

Project #:

Project Manager: JEFF BLAGE

Sampler: NELSON VELEZ

On Ice ☒ Yes ☐ No

Sample Temperature (°C) 17.5

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	Lab Use
4/2/10	0940	WATER	MW #1	2-40ml	HCl & cool	1012410

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/10	1545	[Signature]	[Signature]	2/10	1015
Date:	Time:	Relinquished by:	Received by:	Date	Time

Black	White	Black
White	Black	White
Black	White	Black

## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]

Remarks:

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.

## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: Lobato GC A #1A

Work Order: 1012146

Analyte	Result	Units	PQL	SPK Val	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 5ML RB		MBLK				Batch ID: R42565		Analysis Date:		12/8/2010 9:54:01 AM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100NG BTEX LCS-B		LCS				Batch ID: R42565		Analysis Date:		12/8/2010 2:25:19 PM	
Benzene	20.94	µg/L	1.0	20	0	105	84.7	118			
Toluene	21.69	µg/L	1.0	20	0	108	82	123			
Ethylbenzene	21.77	µg/L	1.0	20	0	109	83	118			
Xylenes, Total	66.85	µg/L	2.0	60	0	111	85.4	119			

## Qualifiers:

E Estimated value  
 Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
 NC Non-Chlorinated  
 R RPD outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

## Sample Receipt Checklist

Client Name **BLAGG**

Date Received:

12/3/2010

Work Order Number **1012146**

Received by: **LNH**

Checklist completed by:

Signature

Date

Sample ID labels checked by:

Initials

Matrix:

Carrier name: Priority US Mail

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Number of preserved bottles checked for pH:
Water - Preservation labels on bottle and cap match?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	<2 >12 unless noted below.
Container/Temp Blank temperature?	<b>6.0°</b>	<6° C Acceptable If given sufficient time to cool.		

COMMENTS:

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_