BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

January 30, 2012

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

Re: BP America Production Company
Groundwater Monitoring Report
GCU # 153E, Unit C, Sec. 28, T29N, R12W, NMPM
San Juan County, New Mexico

NMOCD Administrative/Environmental Order #: 3RP-17-0

Dear Mr. von Gonten:

BP America Production Company (**BP**) has retained Blagg Engineering, Inc. (**BEI**) to conduct environmental monitoring of groundwater at the GCU # 153E.

The last formal correspondence to NMOCD was conducted with letter dated, February 1, 2011. Since then, BP has followed its NMOCD approved groundwater management plan and continues to monitor the site. No permanent closure is requested at this time.

If you have any questions concerning the enclosed documentation, please contact either myself or Jeffrey C. Blagg at (505) 632-1199. Thank you for your cooperation and assistance.

Respectfully submitted:
Blagg Engineering, Inc.

Nelson J. Velez
Staff Geologist

Attachment: Groundwater Report (2 copies)

cc: Mr. Brandon Powell, Inspection and Enforcement Supervisor, NMOCD District III Office, Aztec, NM
Mr. Jeff Peace, Environmental Advisor, BP, Farmington, NM

NJV/njv GCU 153E 01-30-12 CVL.DOC

BP AMERICA PRODUCTION CO.

GROUNDWATER REMEDIATION REPORT

GCU #153E
(C) SECTION 28, T29N, R12W, NMPM
SAN JUAN COUNTY, NEW MEXICO

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

DECEMBER 2011

PREPARED BY:
BLAGG ENGINEERING, INC.

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

BP AMERICA PRODUCTION COMPANY
GCU # 153E
NE¼ NW¼, Sec. 28, T29N, R12W

Monitor Well Sampling Dates: **02/23/11, 06/01/11, 09/29/11, 12/21/11**

Pit Closure & Background:

A site earthen dehydrator pit closure was initiated in December 1994 by removing impacted soils via excavation. Documentation for this work and subsequent groundwater monitoring data for the site was previously submitted to the New Mexico Oil Conservation Division (**NMOCD**) for review. The reporting herein is for site monitoring conducted in 2011.

Groundwater Monitor Well Sampling Procedures:

Groundwater monitor well MW #3R was purged of its well bore using a new disposable bailer, then given a sufficient amount of time to allow recovery prior to each sample collection. The groundwater samples were collected following US EPA: SW-846 protocol, were placed into laboratory supplied containers with appropriate preservative, and stored in an ice chest for express delivery to an analytical laboratory for testing under strict chain-of-custody procedures. Analytical testing for benzene, toluene, ethylbenzene, and total xylenes (**BTEX**) by US EPA Method 8021B was conducted.

Fluids generated during monitor well purging were managed by discarding into the separator below-grade tank (BGT) located on the well site. The BGT contents are eventually disposed through approved NMOCD operational procedures for removal of produced fluids.

Water Quality and Gradient Information:

Quarterly sampling of the groundwater monitor well MW #3R was conducted in 2011. A historical summary of laboratory analytical results is included within the table on the following pages and field/laboratory reports are included.

Groundwater contour maps (Figure 2 through Figure 5) reveal the relative elevations from the site wells have consistently shown an apparent southwest flow direction.

Summary and/or Recommendations:

Continued site monitoring per BP's NMOCD approved Ground Water Management Plan is recommended. Hydrocarbon impacts still remain above the New Mexico Water Quality Control Commission's groundwater standard for benzene within monitor well MW #3R. Oxygen release compound (**ORC**) filter socks were initially introduced within MW #3R on March 25, 2011. Dissolved oxygen, pH, and temperature readings were collected immediately after removal to create a baseline for future determination of continued use. The ORC filter socks were removed at a minimum of two (2) days prior to each sampling event. Currently, no definitive conclusion(s) can be ascertained as to the ORC effectiveness at this time.

BP AMERICA PROD. CO. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

GCU # 153E
UNIT C, SEC. 28, T29N, R12W

REVISED DATE: December 30, 2011
FILENAME: (15-4Q-11.WK4) NJV

								BTEX EPA METHOD 8021B (ppb)			
SAMPLE DATE	MONITOR WELL No:	D.T.W. (ft)	T.D. (ft)	TDS (ft)	COND. (umhos/cm)	pH	PRODUCT (ft)	Benzene	Toluene	Ethyl Benzene	Total Xylene
08-Mar-96	MW #1A	14.95	20.00	4,460	3,200	7.2		ND	0.73	ND	ND
12-Jan-93	MW #2A	11.50	15.83	4,460	5,700	6.6		11.5	12.1	ND	54.0
05-May-93		10.34			3,400	6.6		14.0	6.9	10.9	20.1
01-Sep-93		11.54			2,800	7.1		700	10.4	244	82.9
01-Dec-93		11.42			4,800	7.0		118	1.6	76.0	44.7
08-Mar-94		11.01			4,600	7.2		24.1	8.5	24.5	29.3
27-Jun-94		11.14			4,000	6.9		350	13.2	126	ND
21-Sep-94		11.80			3,500	6.9		328.7	13.3	140.8	1.5
16-Dec-94		11.55			3,800	7.1		6.7	9.6	1.1	8.7
15-Mar-95		11.15			4,400	6.8		1.7	5.0	ND	3.8
16-Jun-95		10.82			4,000	6.9		36.5	5.4	17.6	7.2
11-Sep-95		11.39			3,100	7.2		239	17.0	168	35.6
08-Dec-95		11.44			3,800	6.8		50.2	9.99	10.3	5.84
08-Mar-96		11.08			2,700	6.7		1.08	ND	2.71	0.87
17-Jun-96		11.30			2,700	6.9		230	10.2	77.7	32.54
25-Jun-97		10.52			2,600	6.8		522	6.6	82.6	44.6
12-Jun-98		10.59			2,400	7.3		125	7.3	22.7	44.7
28-May-99		10.05			2,700	6.8		185	47.8	44.1	73.4
26-May-00		10.10			3,500	7.0		220	ND	96	15
28-Jul-01		10.87			3,700	7.26		66	ND	24	31
11-Mar-02		10.80			4,600	6.86		ND	ND	2.1	ND
21-Jun-02		11.18			4,700	7.63		63	ND	28	29.8
30-Jun-03		10.74			2,900	6.81		41	5.3	30	36
25-Jun-04		10.78			2,900	6.81		7.6	ND	3.5	5.5
22-Dec-04		11.03			N/A	N/A		ND	ND	ND	ND
29-Mar-05		9.85			3,100	6.73		ND	ND	ND	ND
12-Jan-93	MW #3A	11.40			6,800	7.0		706,000	6,438,000	3,684,000	13,999,000
05-May-93		10.38			4,900	7.0		8,200	2,210	1,070	4,340
01-Sep-93		11.44	16.00		5,400	7.1		8,300	800	660	2,750
01-Dec-93		11.33					0.02				
08-Mar-94		11.03					0.03				
27-Jun-94							0.02				
21-Sep-94							0.01				
16-Dec-94		11.97					0.48				
28-Jun-95	WP #3B	11.73	15.00		6,500	7.4		1946.7	1734.5	434.3	3,150
11-Sep-95		12.14			8,400	7.8		752	102	427	1,386
08-Dec-95		12.15			4,800	6.2		772	70.1	208	2,070
08-Mar-96		11.78			4,000	6.1		775	156	259	2,480
17-Jun-96		11.77			4,800	6.4		764	196	184	1,515
25-Jun-97		11.25			3,400	6.3		1,940	167	143	727
12-Jun-98		11.22			3,700	6.6		276	68.4	85.3	457.8
28-May-99		11.56			3,900	6.5		178	98.0	50.5	250.3
		NMWQCC GROUNDWATER STANDARDS						10	750	750	620

BP AMERICA PROD. CO. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

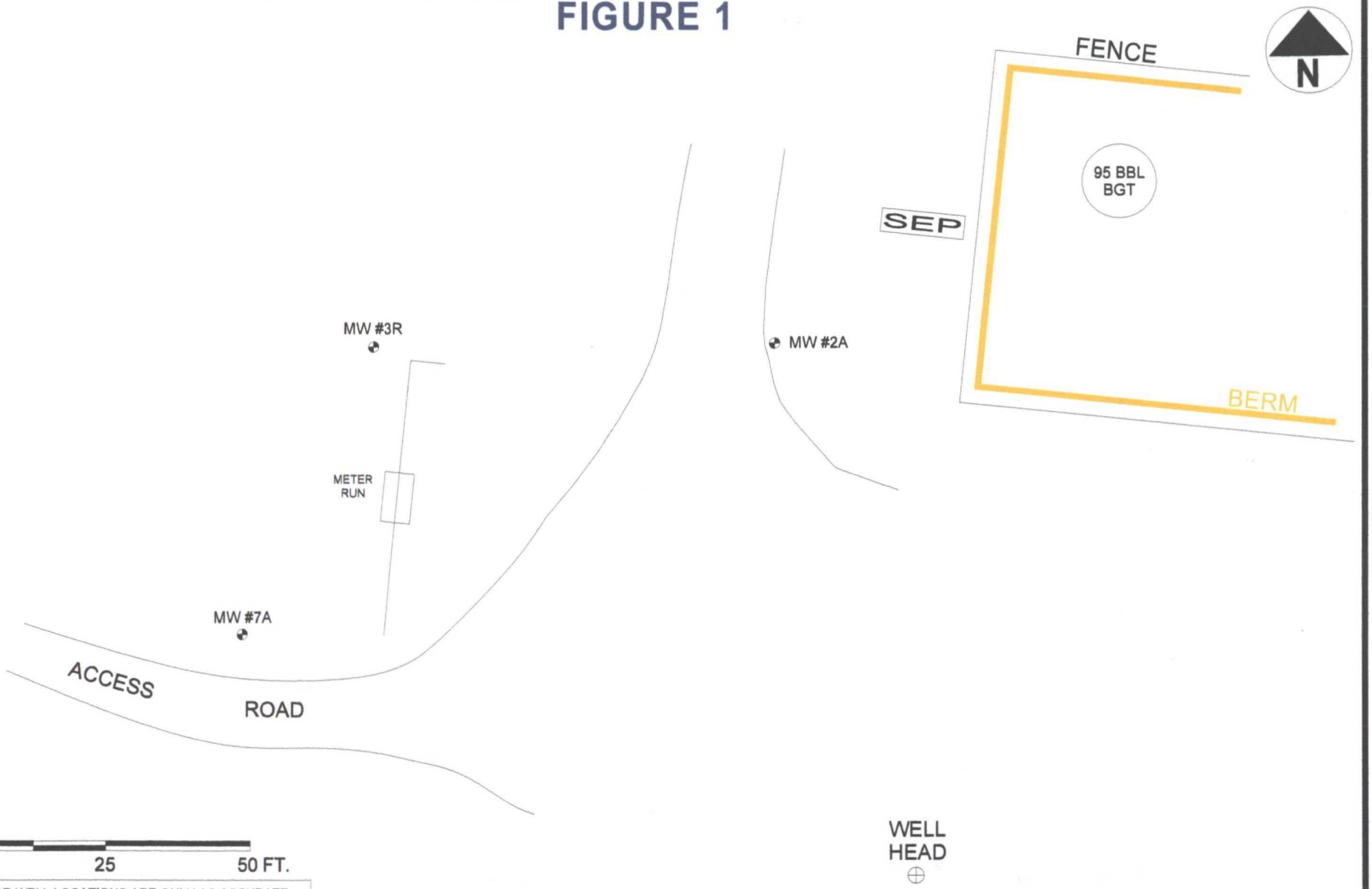
GCU # 153E
UNIT C, SEC. 28, T29N, R12W

REVISED DATE: December 30 , 2011
FILENAME: (15-4Q-11.WK4) NJV

SAMPLE DATE	MONITOR WELL No:	D.T.W. (ft)	T.D. (ft)	TDS (ft)	COND. (umhos/cm)	pH	PRODUCT (ft)	BTEX EPA METHOD 8021B (ppb) Benzene	Toluene	Ethyl Benzene	Total Xylene
13-Jun-00	MW #3R	10.88	20.00		7,600	7.0		**360**	**16**	**720**	**1,234**
28-Jul-01		11.72			8,600	7.25		**520**	**35**	**350**	**757**
11-Mar-02		11.70			9,700	7.14		**120**	**6.9**	**110**	**225**
21-Jun-02		11.90			8,800	7.69		**310**	**ND**	**300**	**551**
30-Jun-03		11.39			5,200	7.11		**300**	**ND**	**76**	**170**
25-Jun-04		10.51			5,200	7.11		**120**	**ND**	**44**	**63**
27-Jun-05		10.78			6,200	7.00		**160**	**12**	**54**	**84**
29-Jun-06		11.51			7,800	6.93		**470**	**39**	**170**	**180**
25-Jun-07		10.70			6,000	6.94		**180**	**ND**	**24**	**24**
09-Jun-08		10.66			3,300	7.24		**71.6**	**5.9**	**9.1**	**13.6**
27-Aug-08		11.47			6,000	7.37		**58**	**ND**	**4.7**	**9.3**
26-May-09		11.10			5,200	7.50		**63**	**ND**	**ND**	**ND**
28-Dec-09		11.70			5,600	7.52		**8.3**	**ND**	**ND**	**ND**
02-Mar-10		11.05			4,400	7.53		**66**	**ND**	**ND**	**ND**
10-May-10		10.57			4,700	7.49		**47**	**ND**	**ND**	**ND**
21-Jul-10		11.45			7,900	7.48		**38**	**ND**	**2.3**	**6.3**
21-Oct-10		12.18			6,400	7.15		**11**	**ND**	**1.6**	**3.3**
23-Feb-11		11.43			3,600	7.45		**3.8**	**ND**	**ND**	**2.9**
01-Jun-11		11.33			8,900	7.41		**160**	**10**	**25**	**37**
29-Sep-11		12.23			8,900	7.39		**47**	**ND**	**6.6**	**12**
21-Dec-11		11.73			6,400	7.78		**20**	**4.3**	**5.4**	**6.2**
08-Mar-96	MW #4A	10.59	13.05		3,600	7.4		ND	ND	ND	ND
08-Mar-96	MW #5A	11.75	14.04		12,300	7.8		ND	1.14	ND	ND
12-Jan-93	MW #7A	12.42			12,400	7.3		ND	0.5	ND	1.1
05-May-93		10.56			10,600	7.5		ND	ND	ND	0.5
01-Sep-93		11.90	16.60		10,700	7.5		0.2	ND	ND	0.8
08-Mar-94		11.10			16,800	7.3		ND	ND	ND	ND
27-Jun-94		11.23			13,700	7.3		ND	ND	ND	ND
21-Sep-94		12.30			13,100	7.3		0.8	1	ND	2.2
16-Dec-94		11.69			9,600	7.5		ND	ND	ND	ND
15-Mar-95		11.21			18,400	7.5		ND	ND	ND	ND
16-Jun-95		10.88			12,200	7.4		ND	ND	ND	ND
11-Sep-95		11.64			11,200	7.7		1.1	0.6	0.5	1.0
08-Dec-95		11.50			10,800	7.4		ND	ND	ND	ND
08-Mar-96		11.18			8,300	7.3		ND	ND	ND	ND
17-Jun-96		11.28			9,000	7.4		ND	ND	ND	ND
28-Jul-01		10.87			8,300	7.59		ND	ND	ND	ND
08-Mar-96	MW #11A	12.10	20.17		3,100	6.9		ND	ND	ND	ND
08-Mar-96	MW #12A	10.76	19.79		2,800	7.0		ND	ND	ND	ND
					NMWQCC GROUNDWATER STANDARDS			**10**	**750**	**750**	**620**

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.**

FIGURE 1



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (BRUNTON COMPASS AND LASER RANGE FINDER). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

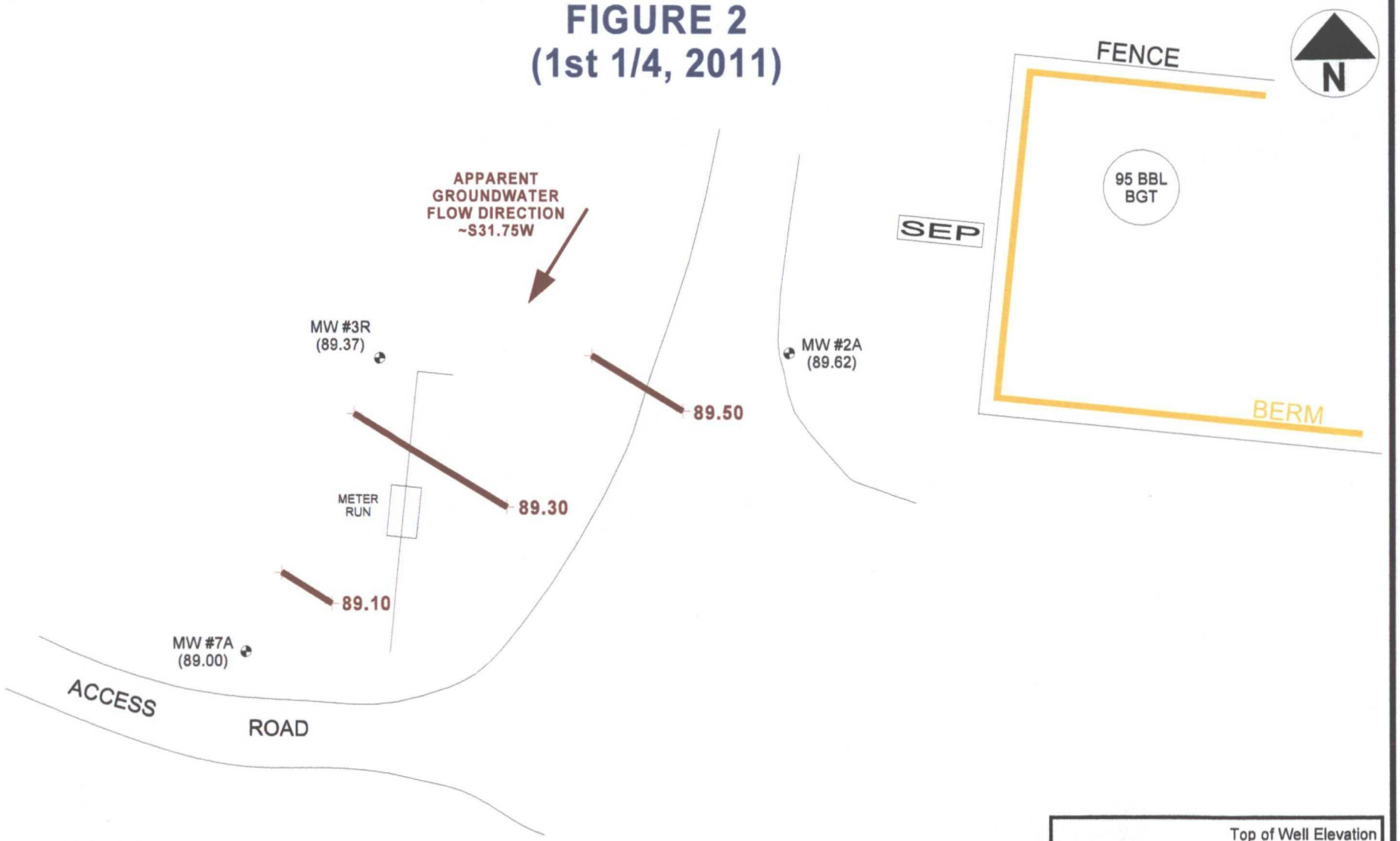
BP AMERICA PRODUCTION COMPANY
GCU #153E
NE/4 NW/4 SEC. 28, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO

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: GCU153E-SM-02-11.SKF
REVISED: 2/24/11 NJV

SITE MAP
02/11

FIGURE 2
(1st 1/4, 2011)



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Top of Well Elevation	
WELL HEAD FLANGE	(100.00)
MW #2A	(100.40)
MW #3R	(100.80)
MW #7A	(99.72)
MW #2A (89.62)	Groundwater elevation as of 02/23/11.

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NE/4 NW/4 SEC. 28, T29N, R12W
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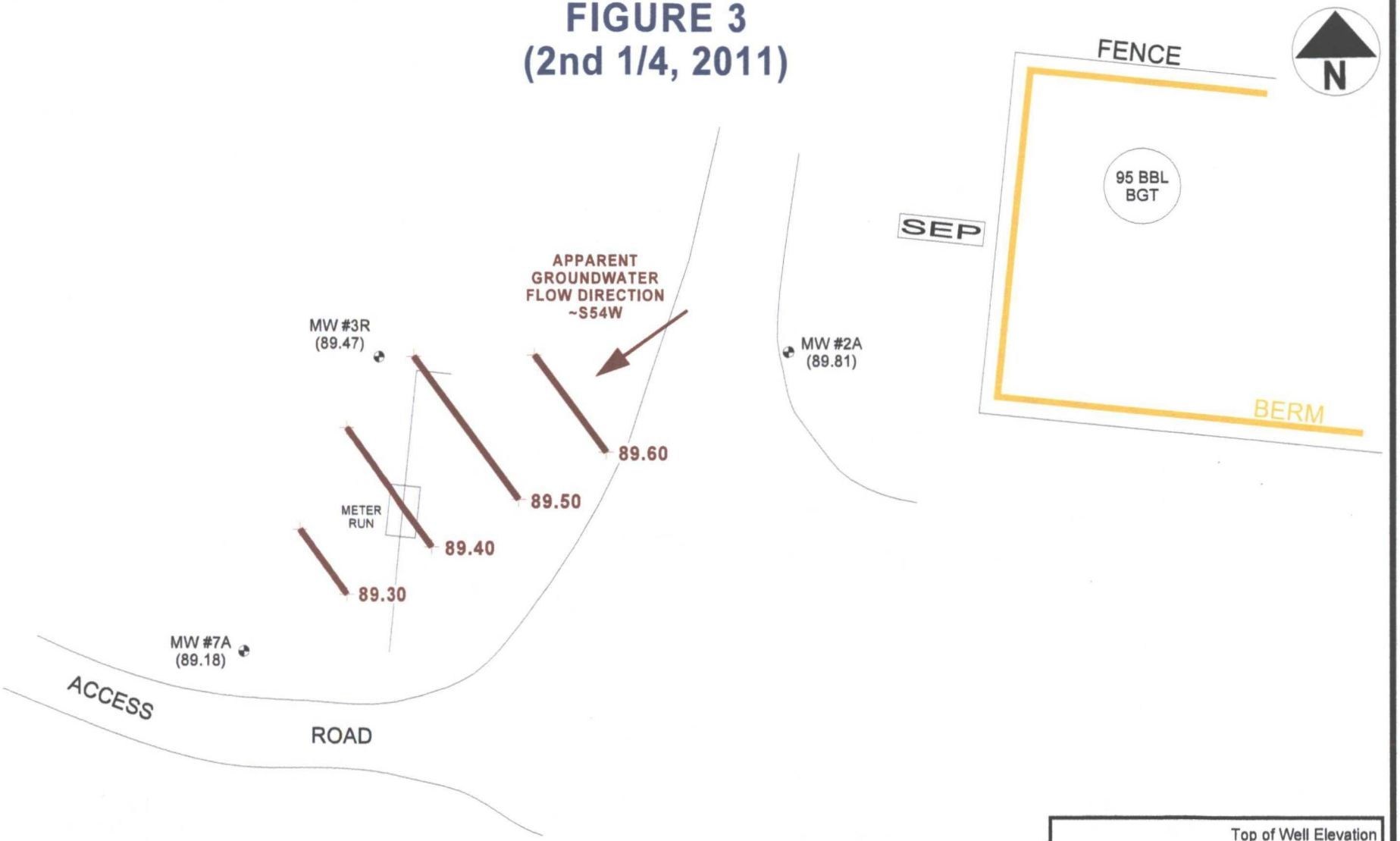
PHONE: (505) 632-1199

PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: 02-23-11-GW.SKF
REVISED: 02/24/11 NJV

GROUNDWATER GRADIENT MAP 02/11

FIGURE 3
(2nd 1/4, 2011)



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (BRUNTON COMPASS AND LASER RANGE FINDER). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

Top of Well Elevation	
WELL HEAD FLANGE	(100.00)
MW #2A	(100.40)
MW #3R	(100.80)
MW #7A	(99.72)
MW #2A (89.81)	Groundwater elevation as of 06/01/11.

BP AMERICA PRODUCTION COMPANY
GCU #153E
NE/4 NW/4 SEC. 28, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO

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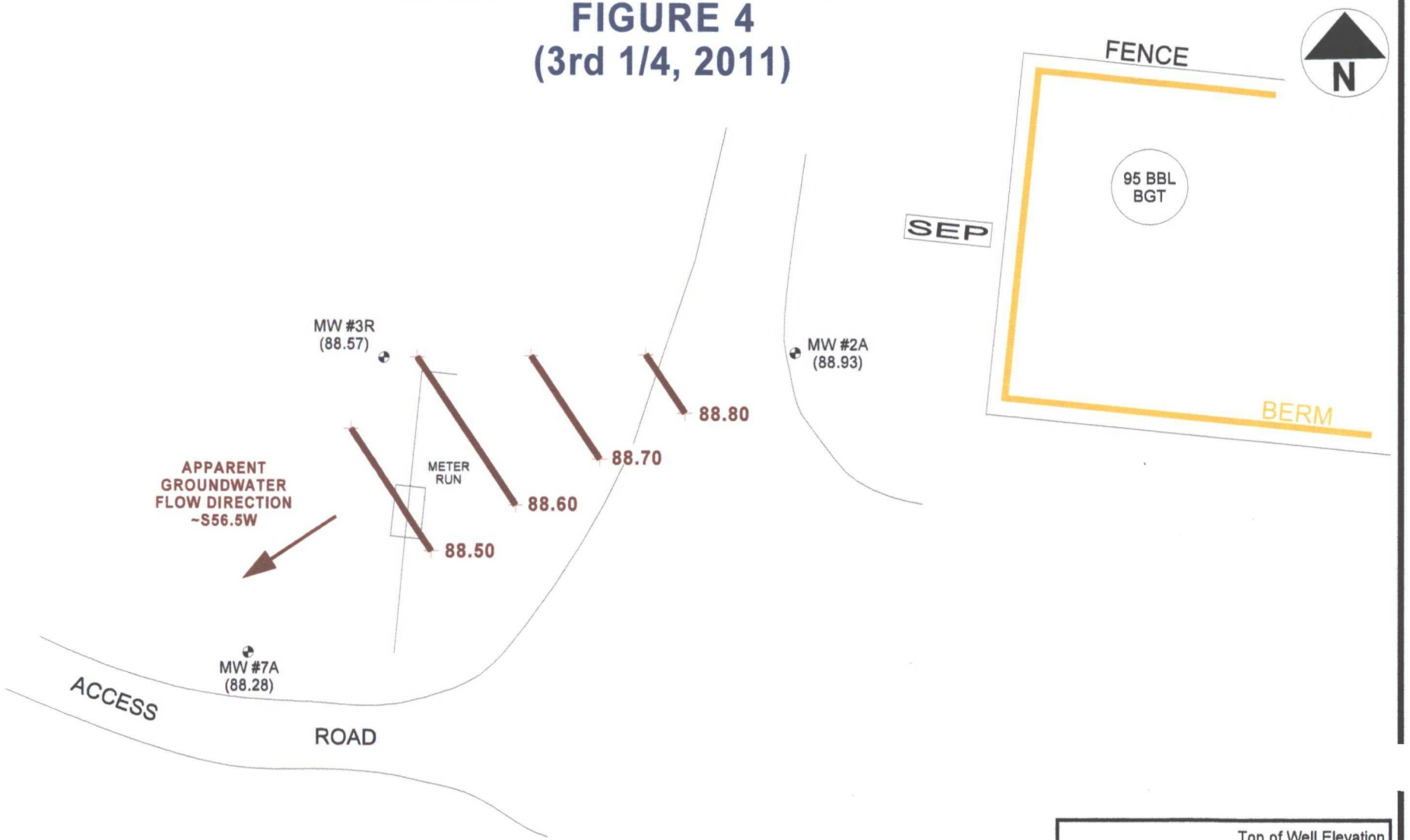
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: 06-01-11-GW.SKF
REVISED: 06/01/11 NJV

GROUNDWATER GRADIENT MAP 06/11

FIGURE 4
(3rd 1/4, 2011)



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (BRUNTON COMPASS AND LASER RANGE FINDER). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

	Top of Well Elevation
WELL HEAD FLANGE	(100.00)
MW #2A	(100.40)
MW #3R	(100.80)
MW #7A	(99.72)
MW #2A (88.93)	Groundwater elevation as of 09/29/11.

BP AMERICA PRODUCTION COMPANY
GCU #153E
NE/4 NW/4 SEC. 28, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO

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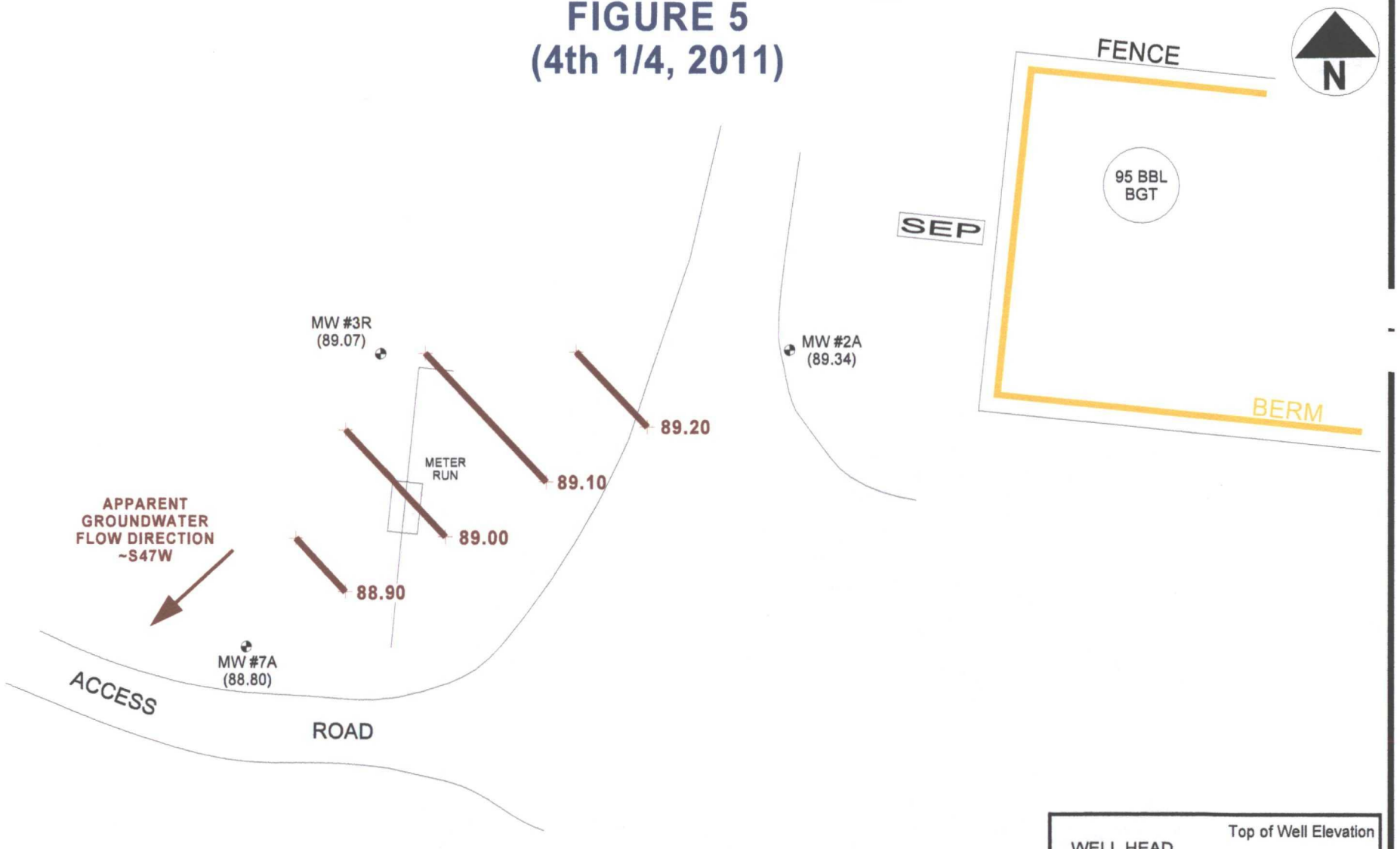
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: 09-29-11-GW.SKF
REVISED: 09/30/11 NJV

GROUNDWATER GRADIENT MAP 09/11

FIGURE 5
(4th 1/4, 2011)



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (BRUNTON COMPASS AND LASER RANGE FINDER). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

	Top of Well Elevation
WELL HEAD FLANGE	(100.00)
MW #2A	(100.40)
MW #3R	(100.80)
MW #7A	(99.72)
MW #2A (89.34)	Groundwater elevation as of 12/21/11.

BP AMERICA PRODUCTION COMPANY
GCU #153E
NE/4 NW/4 SEC. 28, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO

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PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: 12-21-11-GW.SKF
REVISED: 12/21/11 NJV

GROUNDWATER GRADIENT MAP 12/11

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

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

GCU # 153E
UNIT C, SEC. 28, T29N, R12W

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

Date : **February 23, 2011** **SAMPLER :** N J V

Filename : **02-23-11.WK4** **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.)
2A	100.40	89.62	10.78	15.83	-	-	-	-	-
3R	100.80	89.37	11.43	20.00	1040	7.45	3,600	12.3	2.00
7A	99.72	89.00	10.72	16.31	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	02/22/2011	1010

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 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Poor / fair recovery in MW # 3R . Bailed MW # 3R to total depth , then allowed recovery to approx. 13.00 ft. prior to collecting sample . Collected sample for BTEX per US EPA Method 8021B from from MW # 3R only .

on-site	**9:47**	temp	**37 F**
off-site	**10:53**	temp	**43 F**
sky cond.	**Sunny**		
wind speed	**0 - 10**	direct.	**E**

Hall Environmental Analysis Laboratory, Inc.

Date: *03-Mar-11*

CLIENT:	Blagg Engineering	**Client Sample ID:**	MW #3R
Lab Order:	1102777	**Collection Date:**	2/23/2011 10:40:00 AM
Project:	GCU #153E	**Date Received:**	2/24/2011
Lab ID:	1102777-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	3.8	1.0		µg/L	1	3/1/2011 6:27:28 PM
Toluene	ND	1.0		µg/L	1	3/1/2011 6:27:28 PM
Ethylbenzene	ND	1.0		µg/L	1	3/1/2011 6:27:28 PM
Xylenes, Total	2.9	2.0		µg/L	1	3/1/2011 6:27:28 PM
Surr: 4-Bromofluorobenzene	105	81.3-151		%REC	1	3/1/2011 6:27:28 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Chain-of-Custody 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)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name:
GCU #153E

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 6°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. 1105371	Analysis Request: 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,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
2/23/11	1040	WATER	MW #3R	40ml-2	HCl & COOL	-1	✓															

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/23/11	1450		Christine Walters	2/23/11	1450
2/23/11	1600	Christine Walters		2/24/11	1019

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: GCU #153E **Work Order:** 1102777

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:	**R43890**	Analysis Date:		3/1/2011 8:56:15 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:	**R43890**	Analysis Date:		3/1/2011 7:58:00 PM	
Benzene	21.25	µg/L	1.0	20	0	106	93.4	120			
Toluene	21.86	µg/L	1.0	20	0	109	96.2	122			
Ethylbenzene	21.90	µg/L	1.0	20	0	109	95	121			
Xylenes, Total	66.25	µg/L	2.0	60	0	110	97.6	122			
Sample ID: 100NG BTEX LCSD		*LCSD*				Batch ID:	**R43890**	Analysis Date:		3/1/2011 8:28:08 PM	
Benzene	20.68	µg/L	1.0	20	0	103	93.4	120	2.74	10.1	
Toluene	21.28	µg/L	1.0	20	0	106	96.2	122	2.69	14.3	
Ethylbenzene	21.17	µg/L	1.0	20	0	106	95	121	3.40	15.5	
Xylenes, Total	64.27	µg/L	2.0	60	0	107	97.6	122	3.02	10.4	

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: 2/24/2011

Work Order Number 1102777 | Received by: AMG

Checklist completed by: Signature 2/24/11 Date | Sample ID labels checked by: MG 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?	6.4°	*<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**

GCU # 153E
UNIT C, SEC. 28, T29N, R12W

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

Date : **June 1, 2011** **SAMPLER :** N J V

Filename : **06-01-11.WK4** **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.)
2A	100.40	89.81	10.59	15.83	-	-	-	-	-
3R	100.80	89.47	11.33	20.00	1050	7.41	8,900	18.4	2.00
7A	99.72	89.18	10.54	16.31	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	05/31/2011	0855

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 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Poor / fair recovery in MW # 3R . Bailed MW # 3R to total depth , then allowed recovery to approx. 12.00 ft. prior to collecting sample . Collected sample for BTEX per US EPA Method 8021B from from MW # 3R only .

on-site	**9:50**	temp	**73 F**
off-site	**11:00**	temp	**80 F**
sky cond.	**Mostly cloudy**		
wind speed	**0 - 10**	direct.	**SE**

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Jun-11*

Analytical Report

CLIENT:	Blagg Engineering	**Client Sample ID:**	MW #3R
Lab Order:	1106167	**Collection Date:**	6/1/2011 10:50:00 AM
Project:	GCU #153E	**Date Received:**	6/3/2011
Lab ID:	1106167-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	160	5.0		µg/L	5	6/8/2011 7:11:00 PM
Toluene	10	1.0		µg/L	1	6/7/2011 12:34:47 AM
Ethylbenzene	25	1.0		µg/L	1	6/7/2011 12:34:47 AM
Xylenes, Total	37	2.0		µg/L	1	6/7/2011 12:34:47 AM
Surr: 4-Bromofluorobenzene	122	96.8-145		%REC	5	6/8/2011 7:11:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

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: GCU #153E

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperatures: 1 C°

HEAL No. 1106167

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.	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)			5 pt. composite sample	Air Bubbles (Y or N)
6/1/11	1050	WATER	MW #3R	40 ml VOA - 2	HCl & Cool	-1	✓															

Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:
6/2/11	1200		Christine Walters	6/2/11	1200	BILL DIRECTLY TO BP: Jeff Peace, 200 Energy Court, Farmington, NM 87401
Date:	Time:	Relinquished by:	Received by:	Date	Time	Work Order: N1261901 Paykey: ZPEACJDENV
6/2/11	1600			6/3/11	0940	Project #: SR - J0032

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: GCU #153E **Work Order:** 1106167

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: R45761**		**Analysis Date: 6/6/2011 9:07:53 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: R45808**		**Analysis Date: 6/8/2011 10:01:27 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: R45761**		**Analysis Date: 6/6/2011 11:31:42 AM**			
Benzene	20.26	µg/L	1.0	20	0	101	93.4	120			
Toluene	20.49	µg/L	1.0	20	0	102	96.2	122			
Ethylbenzene	20.51	µg/L	1.0	20	0	103	95	121			
Xylenes, Total	61.59	µg/L	2.0	60	0	103	97.6	122			
Sample ID: 100NG BTEX LCS		*LCS*				**Batch ID: R45808**		**Analysis Date: 6/8/2011 12:26:07 PM**			
Benzene	18.42	µg/L	1.0	20	0	92.1	80	120			
Toluene	18.66	µg/L	1.0	20	0	93.3	80	120			
Ethylbenzene	18.82	µg/L	1.0	20	0	94.1	80	120			
Xylenes, Total	56.36	µg/L	2.0	60	0	93.9	80	120			

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: 6/3/2011

Work Order Number 1106167 | Received by: AMG

Checklist completed by: Signature 6/3/11 Date | Sample ID labels checked by: VMS 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 ☐		Number of preserved bottles checked for pH:
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 ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	1.6°	*<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**

GCU # 153E
UNIT C, SEC. 28, T29N, R12W

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

Date : **September 29, 2011** **SAMPLER :** N J V

Filename : **09-29-11.WK4** **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.)
2A	100.40	88.93	11.47	15.83	-	-	-	-	-
3R	100.80	88.57	12.23	20.00	1120	7.39	8,900	20.4	1.50
7A	99.72	88.28	11.44	16.31	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	09/28/2011	1030

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 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Poor / fair recovery in MW # 3R . Bailed MW # 3R to total depth , then allowed recovery to approx. 13.00 ft. prior to collecting sample . Collected sample for BTEX per US EPA Method 8021B from from MW # 3R only .

Inserted 3 new ORC filter socks within MW # 3R water column after sample collection .

on-site	**10:30**	temp	**68 F**
off-site	**11:40**	temp	**76 F**
sky cond.	**Sunny**		
wind speed	**0 - 5**	direct.	**SE**

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Oct-11*

Analytical Report

CLIENT:	Blagg Engineering	**Client Sample ID:**	MW # 3R
Lab Order:	1109C36	**Collection Date:**	9/29/2011 11:20:00 AM
Project:	GCU #153E	**Date Received:**	9/30/2011
Lab ID:	1109C36-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	47	5.0		µg/L	5	10/6/2011 7:15:16 PM
Toluene	ND	5.0		µg/L	5	10/6/2011 7:15:16 PM
Ethylbenzene	6.6	5.0		µg/L	5	10/6/2011 7:15:16 PM
Xylenes, Total	12	10		µg/L	5	10/6/2011 7:15:16 PM
Surr: 4-Bromofluorobenzene	92.6	76.5-115		%REC	5	10/6/2011 7:15:16 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

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:
GCU # 153E

Project #:

Project Manager:
NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.7

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.	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)				Air Bubbles (Y or N)
9/29/11	1120	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	1109C36 -1	✓															

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/29/11	1320			9/29/11	1320
9/29/11	1545			9/30/11	1300

Remarks:

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

Work Order: N1261901 Paykey: ZPEACJDENV

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: GCU #153E **Work Order:** 1109C36

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:	**R48262**	Analysis Date:	10/6/2011 10:14:00 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:	**R48262**	Analysis Date:	10/6/2011 12:44:44 PM		
Benzene	20.09	µg/L	1.0	20	0	100	80	120			
Toluene	20.37	µg/L	1.0	20	0	102	80	120			
Ethylbenzene	20.06	µg/L	1.0	20	0	100	80	120			
Xylenes, Total	60.62	µg/L	2.0	60	0	101	80	120			

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: **9/30/2011**

Work Order Number **1109C36** Received by: **AMF**

Checklist completed by: Signature Date **9/30/11** 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		Number of preserved bottles checked for pH:
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 ✔	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**4.7°**	*<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**

GCU # 153E
UNIT C, SEC. 28, T29N, R12W

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

Date : **December 21, 2011** **SAMPLER :** N J V

Filename : **12-21-11.WK4** **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.)
2A	100.40	89.34	11.06	15.83	-	-	-	-	-
3R	100.80	89.07	11.73	20.00	1230	7.78	6,400	13.9	2.00
7A	99.72	88.80	10.92	16.31	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	12/21/2011	1100

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 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Poor / fair recovery in MW # 3R . Bailed MW # 3R to total depth , then allowed recovery to approx. 13.00 ft. prior to collecting sample . Collected sample for BTEX per US EPA Method 8021B from from MW # 3R only .

Inserted 3 new ORC filter socks within MW # 3R water column after sample collection .

on-site	**12:54**	temp	**36 F**
off-site	**12:45**	temp	**36 F**
sky cond.	**Mostly cloudy**		
wind speed	**0 - 5**	direct.	**calm**

Hall Environmental Analysis Laboratory, Inc.

Date: *29-Dec-11*

Analytical Report

CLIENT:	Blagg Engineering	**Client Sample ID:**	MW #3R
Lab Order:	1112953	**Collection Date:**	12/21/2011 12:30:00 PM
Project:	GCU #153E	**Date Received:**	12/22/2011
Lab ID:	1112953-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	20	1.0		µg/L	1	12/28/2011 1:59:36 AM
Toluene	4.3	1.0		µg/L	1	12/28/2011 1:59:36 AM
Ethylbenzene	5.4	1.0		µg/L	1	12/28/2011 1:59:36 AM
Xylenes, Total	6.2	2.0		µg/L	1	12/28/2011 1:59:36 AM
Surr: 4-Bromofluorobenzene	168	76.5-115	S	%REC	1	12/28/2011 1:59:36 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

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: GCU # 153E

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. 1112953	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)				Air Bubbles (Y or N)
12/21/11	1230	WATER	MW # 3R	40 ml VOA - 2	HCl & Cool	-1	✓															

Date	Time	Relinquished by:	Received by:	Date	Time
12/22/11	1505			12/22/11	1505
12/22/11	1645			12/22/11	1445

Remarks:

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

Work Order: N1261901 Paykey: ZPEACJDENV

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: GCU #153E **Work Order:** 1112953

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: R49831**		**Analysis Date: 12/27/2011 1:01:00 PM**			
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: R49831**		**Analysis Date: 12/27/2011 1:29:51 PM**			
Benzene	19.22	µg/L	1.0	20	0	96.1	80	120			
Toluene	19.14	µg/L	1.0	20	0	95.7	80	120			
Ethylbenzene	19.94	µg/L	1.0	20	0	99.7	80	120			
Xylenes, Total	58.84	µg/L	2.0	60	0	98.1	78.6	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: 12/22/2011

Work Order Number 1112953 | Received by: AMG

Checklist completed by: Signature 12/22/11 Date | Sample ID labels checked by: Initials

Matrix: | Carrier name: Courier

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 ☐		Number of preserved bottles checked for pH:
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 ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**1.0°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____