3R - 387

ANNUAL MONITORING REPORT

05/04/2009

3R387

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BP AMERICA PRODUCTION CO.

GROUNDWATER REMEDIATION REPORT

GCU # 194
(D) SECTION 5, T27N, R12W, NMPM
SAN JUAN COUNTY, NEW MEXICO

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

APRIL 2009

PREPARED BY:
BLAGG ENGINEERING, INC.

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

BP AMERICA PRODUCTION COMPANY
GCU # 194 - Dehydrator Pit
NW/4 NW/4, Sec. 5, T27N, R12W

Monitor Well Installation Date: 7/6/06 (MW #4)

Monitor Well Sampling Dates: 4/14/08, 6/9/08, 8/26/08

Site History:

A site dehydrator pit closure was initiated in April 2002. Potential groundwater impacts were identified within the source area from sampling and testing of the exposed groundwater via excavation. A secondary source area was discovered during installation of a groundwater monitor well (MW #3) in December 2002; and thereafter, sampling and testing verified groundwater impacts. During quarterly sampling in March 2004, free phase product was observed within MW #3 and continues to be present. Documentation of this work and subsequent groundwater monitoring data for the site have previously been submitted for New Mexico Oil Conservation Division (**NMOCD**) review. Further site delineation and limited excavation of the secondary source area was suggested within the report. The reporting herein is for site monitoring in 2008 only.

Groundwater Monitor Well Sampling Procedures:

Monitor well MW #4 was developed by hand-bailing, using new disposable bailers after installation. Prior to sample collections, MW #4 was purged approximately three (3) well bore volumes with new disposable bailers. 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 or 8260 was conducted.

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

Groundwater Quality & Flow Direction Information:

Since June 2007, monitor well MW #4 has been sampled primarily on a quarterly basis. Fluctuations above and below the New Mexico Water Quality Control Commission (**NMWQCC**) standards has been recorded. Source area monitor well MW#3 has continued to reveal the presence of free phase product. A historical summary of laboratory analytical BTEX results is included within the table on the following page. Field data sheets, laboratory reports, and laboratory quality assurance/quality control information are also included.

Groundwater contour maps of relative water table elevations have consistently been measure to flow in the north direction, parallel to the nearby Gallegos Canyon wash (Figure 2 through Figure 4).

Summary and/or Recommendations:

The well site is located in a very remote area of San Juan County. Bi-annual monitoring of MW #3 and sampling of MW #4 is currently suggested. The presence of free phase product within monitor well MW #3 indicates long term monitoring will be necessary if proactive remediation efforts are not undertaken. Shallow groundwater suggests excavation of the secondary source area will likely be the best available reclamation technology. Alternative technologies such as air sparging may be suitable for remediation of lower dissolved concentrations of BTEX and/or the secondary source area.

BP AMERICA PROD. CO. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

GCU # 194 - SEPARATOR PIT
UNIT D, SEC. 5, T27N, R12W

REVISED DATE: September 11, 2008

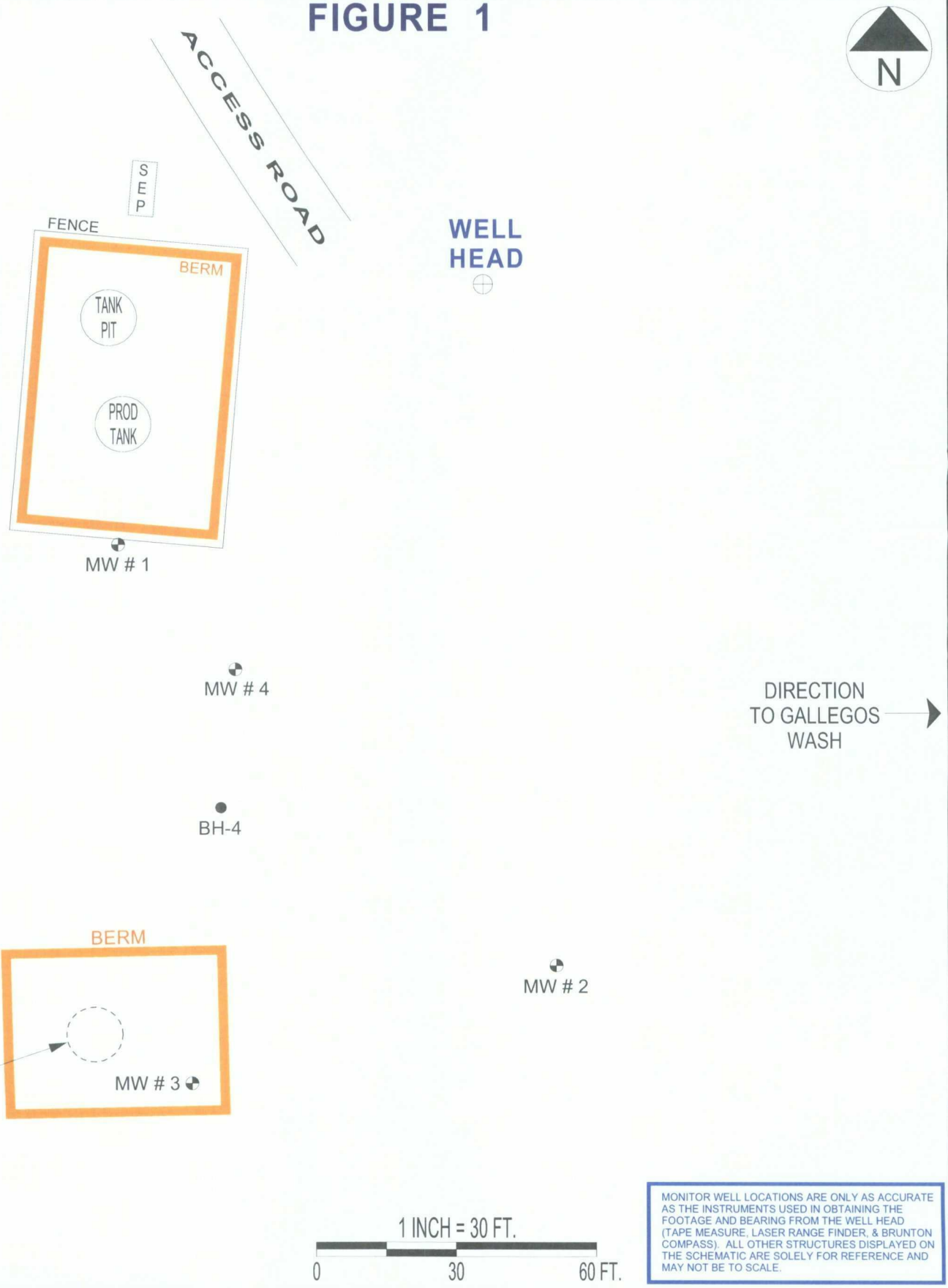
FILENAME: (194-3Q08.WK4) NJV

								BTEX EPA METHOD 8021B (ppb)			
SAMPLE DATE	WELL NAME or No.	D.T.W. (ft)	T.D. (ft)	TDS (mg/L)	COND. umhos	pH	PRODUCT (ft)	Benzene	Toluene	Ethyl Benzene	Total Xylene
23-Dec-02	MW #1	8.04	14.50	-	6,100	7.73	-	ND	ND	ND	ND
23-Dec-02	MW #2	7.84	14.50	-	7,100	7.94	-	6.8	0.5	14	8.0
24-Feb-03		7.72		-	6,900	8.03	-	5.4	ND	9.9	13
29-May-03		7.96			6,100	7.78		5.4	1.0	6.7	11
18-Aug-03		8.58			8,700	7.56		**11**	ND	17	19
18-Nov-03		8.20			7,900	7.66		**2.3**	ND	8.4	5.1
22-Mar-04		7.80			6,800	7.59		**2.1**	ND	5.8	7.6
23-Jun-04		8.43			8,000	7.49		**3.5**	ND	8.5	5.4
22-Dec-04		7.93			N/A	N/A		**ND**	ND	1.9	2.7
28-Mar-05		7.67			6,400	7.58		**ND**	ND	1.5	2.1
23-Dec-02	MW #3	8.69	14.00	-	8,800	7.80	-	**180**	34	220	**2,130**
29-May-03		8.81			7,700	7.40		**8.6**	7.6	8.5	**17**
18-Aug-03		9.46			9,500	7.25		**13**	ND	2.1	**30**
18-Nov-03		8.97			7,900	7.37		**1,800**	100	**1,300**	**13,000**
22-Mar-04							**0.01**				
23-Jun-04							**0.45**				
22-Dec-04							**0.40**				
28-Mar-05							**0.01**				
27-Jul-06							**0.04**				
25-Jun-07							**0.10**				
17-Sep-07							**0.01**				
14-Nov-07							**0.01**				
14-Apr-08							**0.12**				
09-Jun-08							**0.02**				
26-Aug-08							**0.28**				
03-Aug-06	MW #4	8.82	17.15		800	7.33		**91**	ND	130	ND
25-Jun-07		8.60			4,800	7.44		**ND**	ND	ND	ND
17-Sep-07		8.87			6,500	7.22		**ND**	ND	ND	ND
14-Nov-07		8.43			7,100	7.57		**31**	ND	26	ND
14-Apr-08		7.98			7,400	7.59		**171**	ND	**197**	ND
"	(dup.)	"			"	"		**180**	ND	**216**	ND
09-Jun-08		8.38			3,500	7.60		**128**	ND	191	ND
26-Aug-08		8.93			4,700	7.59		**68**	ND	300	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) .**

FIGURE 1



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

BP AMERICA PRODUCTION COMPANY

GCU # 194

NW/4 NW/4 SEC. 5, T27N, R12W, NMPM

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 INSTALLATION

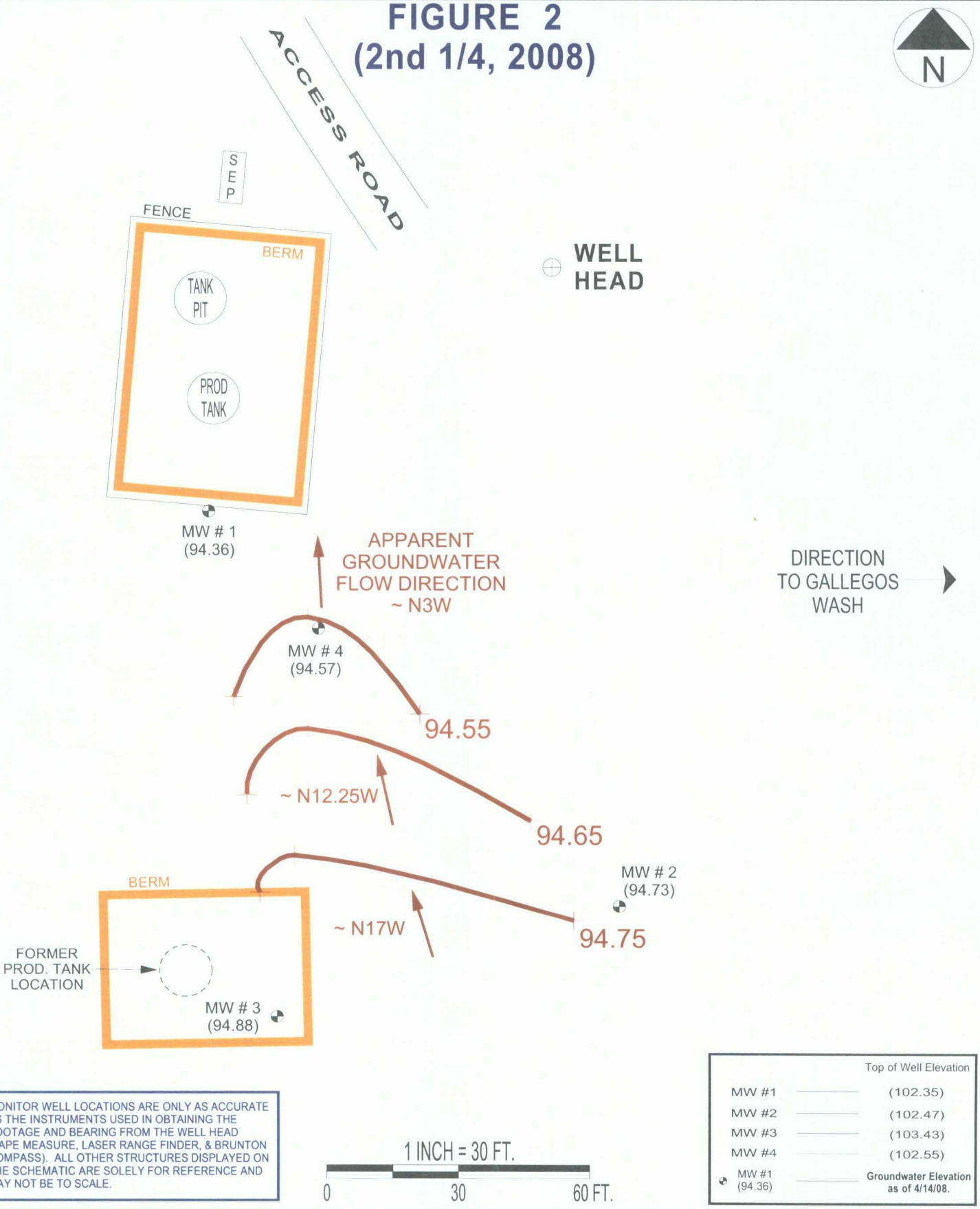
DRAWN BY: NJV

FILENAME: 07-06-06-SM2.SKF

SITE MAP

07/06

FIGURE 2
(2nd 1/4, 2008)



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

1 INCH = 30 FT.

0 30 60 FT.

	Top of Well Elevation
MW #1	(102.35)
MW #2	(102.47)
MW #3	(103.43)
MW #4	(102.55)
MW #1 (94.36)	Groundwater Elevation as of 4/14/08.

BP AMERICA PRODUCTION COMPANY

GCU # 194

NW/4 NW/4 SEC. 5, T27N, R12W, NMPM

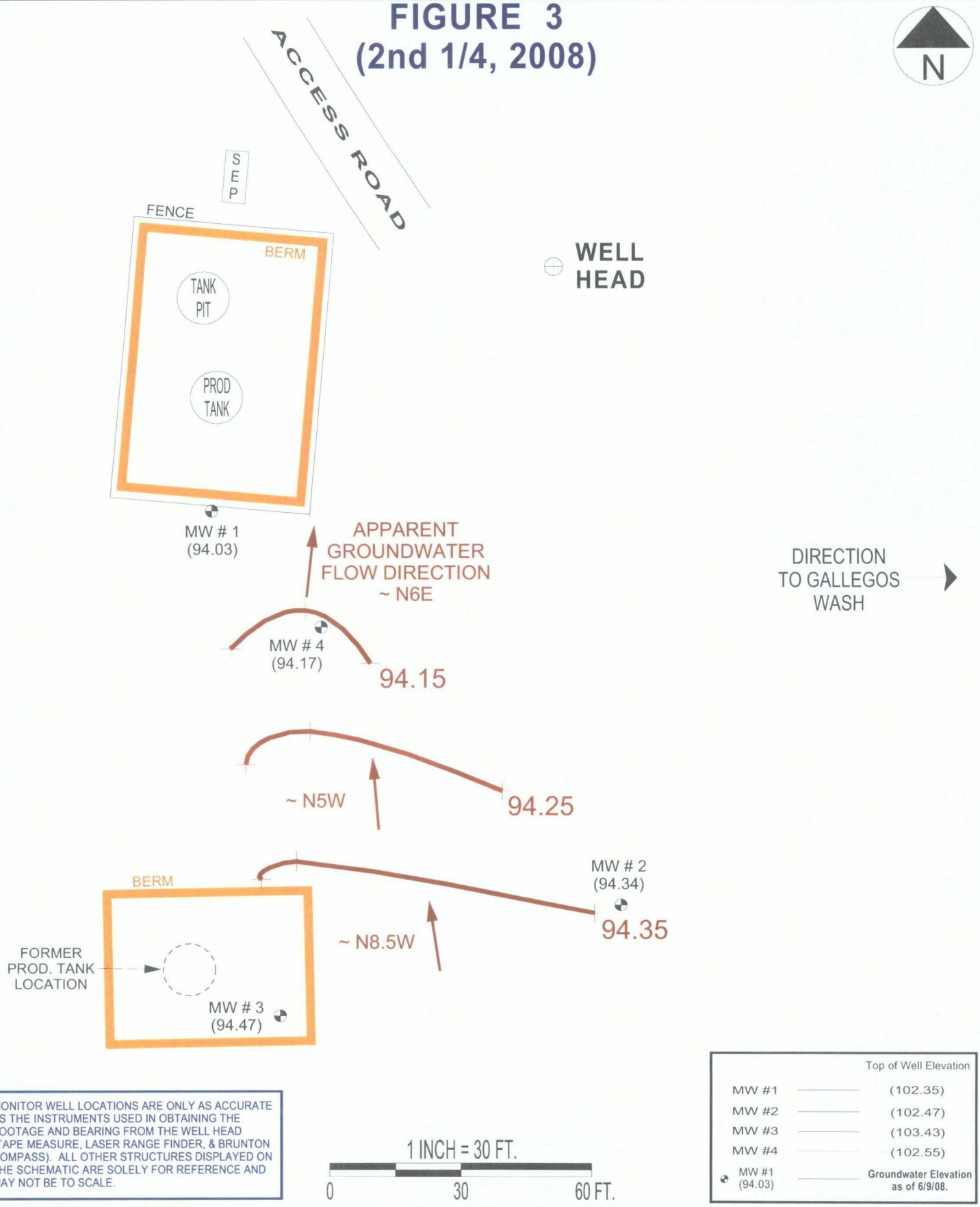
SAN JUAN COUNTY, NEW MEXICO

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: 04-14-08-GW.SKF
REVISED: 4-16-08 NJV

GROUNDWATER CONTOUR MAP
04/08

FIGURE 3
(2nd 1/4, 2008)



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

1 INCH = 30 FT.

0 30 60 FT.

	Top of Well Elevation
MW #1	(102.35)
MW #2	(102.47)
MW #3	(103.43)
MW #4	(102.55)
MW #1 (94.03)	Groundwater Elevation as of 6/9/08.

BP AMERICA PRODUCTION COMPANY

GCU # 194

NW/4 NW/4 SEC. 5, T27N, R12W, NMPM

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

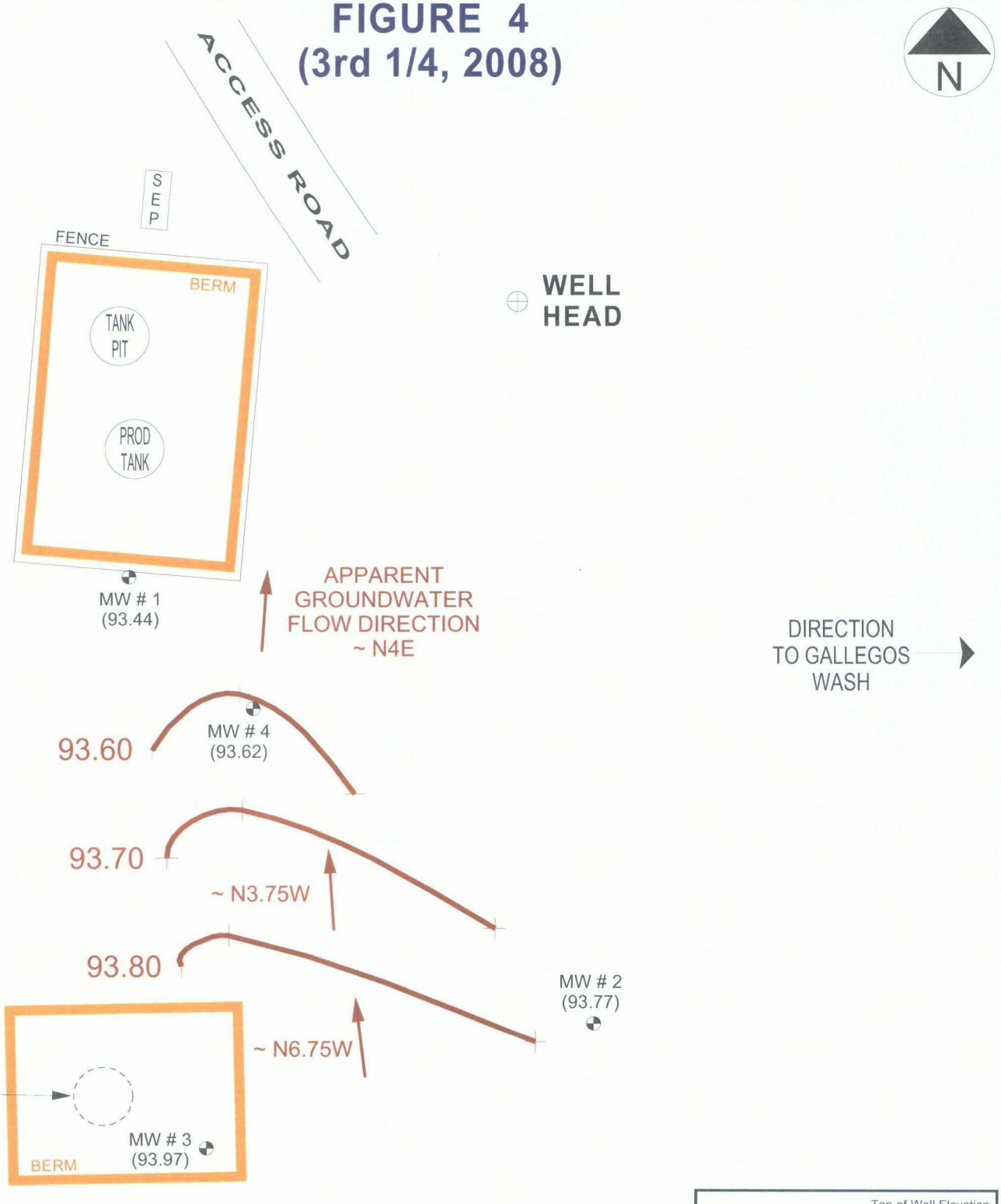
FILENAME: 06-09-08-GW.SKF

REVISED: 6-18-08 NJV

GROUNDWATER CONTOUR MAP

06/08

FIGURE 4
(3rd 1/4, 2008)



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

1 INCH = 30 FT.

0 30 60 FT.

	Top of Well Elevation
MW #1	(102.35)
MW #2	(102.47)
MW #3	(103.43)
MW #4	(102.55)
MW #1 (93.44)	Groundwater Elevation as of 8/26/08.

BP AMERICA PRODUCTION COMPANY

GCU # 194

NW/4 NW/4 SEC. 5, T27N, R12W, NMPM

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: 08-26-08-GW.SKF
REVISED: 8-26-08 NJV

GROUNDWATER CONTOUR MAP
08/08

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : 156392

GCU # 194 - SEPARATOR PIT
UNIT D, SEC. 5, T27N, R12W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **April 14, 2008**

SAMPLER : N J V

Filename : **04-14-08.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.)
1	102.35	94.36	7.99	14.50	-	-	-	-	-
2	102.47	94.73	7.74	14.50	-	-	-	-	-
3	103.43	94.88 *	8.55	15.00	-	-	-	-	-
	DEPTH TO PRODUCT (FT.) =		8.51	DEPTH TO WATER (FT.) =		8.63	PRODUCT THICKNESS (FT.) =		0.12
4	102.55	94.57	7.98	17.15	1150	7.59	7,400	19.2	4.50
					INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800		
					DATE & TIME =	04/14/08	0800		

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 ".

*** INDICATES PRODUCT SPECIFIC GRAVITY ASSUMED TO = 0.65 .**

Product thickness measured with disposable bailer .

Excellent recovery in MW # 4 . Murky brown in appearance . Collected sample from MW # 4 for BTEX analysis only . Duplicate sample collected from MW # 4 and labeled on chain of custody as MW # 14 (time on COCR = 1115) .

Top of casing MW # 1 ~ 2.40 ft., MW # 2 ~ 2.55 ft., MW # 3 ~ 2.40 ft., MW # 4 ~ 2.60 ft. above grade .

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(913)599-5665

ANALYTICAL RESULTS

Project: GCU #194
Pace Project No.: 6038710

Sample: MW #4 **Lab ID: 6038710001** Collected: 04/14/08 11:50 Received: 04/16/08 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**171**	ug/L	1.0	1		04/18/08 17:33	71-43-2	
Ethylbenzene	**197**	ug/L	1.0	1		04/18/08 17:33	100-41-4	
Toluene	ND	ug/L	1.0	1		04/18/08 17:33	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		04/18/08 17:33	1330-20-7	
Dibromofluoromethane (S)	96	%	85-114	1		04/18/08 17:33	1868-53-7	
Toluene-d8 (S)	105	%	82-114	1		04/18/08 17:33	2037-26-5	
4-Bromofluorobenzene (S)	96	%	85-119	1		04/18/08 17:33	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	81-118	1		04/18/08 17:33	17060-07-0	
Preservation pH	**1.0**		1.0	1		04/18/08 17:33		

156392

Page 1 of 1

Chain of Custody Record

Project Name: GCU #194
BP BU/AR Region/Enfos Segment: SAN JUAN OC SOUTH
State or Lead Regulatory Agency: NMOCD/BLM/NEPA
Requested Due Date (mm/dd/yy): 4/28/08

On-site Time:	10:50	Temp:	66 °F
Off-site Time:	11:12	Temp:	71 °F
Sky Conditions:	SUNNY		
Meteorological Events:			
Wind Speed:	0-5	Direction:	WEST

Lab Name: PACE ANALYTICAL	BP/AR Facility No.: WR 192509	Consultant/Contractor: BLAGG / URS
Address: 9608 LORET BLVD. LENEXA, KS 66219	BP/AR Facility Address:	Address: 110 N. FOURTH ST. BLOOMFIELD, NM 87413
Lab PM: MARY JANE WALLS	Site Lat/Long:	Consultant/Contractor Project No.: 41008749
Tele/Fax: (913) 599-5665 FAX: (913) 599-1759	California Global ID No.:	Consultant/Contractor PM: NELSON VELEZ
BP/AR PM Contact: MIKE WHELAP, PG	Enfos Project No.: 0018R	Tele/Fax: (505) 632-1199 FAX: (505) 632-3903
Address: 501 WESTLAKE PARK BLVD. Rm. 2.8.144B HOUSTON, TX 77079	Provision or RCOP (circle one)	Report Type & QC Level: STANDARD
Tele/Fax: (281) 366-7485 FAX: (281) 366-7094	Phase/WBS:	E-mail EDD To: blagg-njvc@yahoo.com
	Sub Phase/Task:	Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)
	Cost Element: 01	

Lab Bottle Order No: 15752

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: BTEX 8021	Requested Analysis: BTEX/TPH	Requested Analysis: BTEX/Oxy/TPH	Requested Analysis: EPA 8260	Requested Analysis: EPA 8270	Sample Point Lat/Long and Comments
																			603871D
1	MW # 4	1150	4/14/08		✓			3				✓					✓		3(DEAH)
2	MW # 14	1115	4/14/08		✓			3				✓					✓		002
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Sampler's Name: NELSON VELEZ	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: BLAGG ENGINEERING, INC.	Nelson Velez	4/15/08	1540		4/16	830
Shipment Date: APRIL 15, 2008						
Shipment Method: FED EX OVERNITE						
Shipment Tracking No: 499434872 6						

Special Instructions: REPORT BTEX CONSTITUENTS ONLY. SAN JUAN COUNTY, NM

Custody Seals In Place Yes X No ___ Temp Blank Yes ___ No X Cooler Temperature on Receipt 6.7 °F/C Trip Blank Yes X No ___

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(913)599-5665

SAMPLE SUMMARY

Project: GCU #194
Pace Project No.: 6038710

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6038710001	**MW #4**	Water	04/14/08 11:50	04/16/08 08:30
6038710002	**MW #14**	Water	04/14/08 11:15	04/16/08 08:30

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SAMPLE ANALYTE COUNT

Project: GCU #194
Pace Project No.: 6038710

Lab ID	Sample ID	Method	Analysts	Analytes Reported
6038710001	**MW #4**	EPA 8260	GEZ	9
6038710002	**MW #14**	EPA 8260	GEZ	9

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PROJECT NARRATIVE

Project: GCU #194
Pace Project No.: 6038710

Method: **EPA 8260**
Description: 8260 MSV UST, Water
Client: BP-Blagg Engineering
Date: April 23, 2008

General Information:
2 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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(913)599-5665

ANALYTICAL RESULTS

Project: GCU #194
Pace Project No.: 6038710

Sample: MW #14 **Lab ID: 6038710002** Collected: 04/14/08 11:15 Received: 04/16/08 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**180**	ug/L	1.0	1		04/18/08 17:50	71-43-2	
Ethylbenzene	**216**	ug/L	1.0	1		04/18/08 17:50	100-41-4	
Toluene	ND	ug/L	1.0	1		04/18/08 17:50	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		04/18/08 17:50	1330-20-7	
Dibromofluoromethane (S)	92	%	85-114	1		04/18/08 17:50	1868-53-7	
Toluene-d8 (S)	111	%	82-114	1		04/18/08 17:50	2037-26-5	
4-Bromofluorobenzene (S)	111	%	85-119	1		04/18/08 17:50	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	81-118	1		04/18/08 17:50	17060-07-0	
Preservation pH	**1.0**		1.0	1		04/18/08 17:50		

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QUALITY CONTROL DATA

Project: GCU #194
Pace Project No.: 6038710

QC Batch: MSV/14089
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 6038710001, 6038710002

METHOD BLANK: 314296
Associated Lab Samples: 6038710001, 6038710002

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Benzene	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	3.0	
1,2-Dichloroethane-d4 (S)	%	97	81-118	
4-Bromofluorobenzene (S)	%	92	85-119	
Dibromofluoromethane (S)	%	101	85-114	
Toluene-d8 (S)	%	101	82-114	

LABORATORY CONTROL SAMPLE: 314297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	10.7	107	87-117	
Ethylbenzene	ug/L	10	11.1	111	84-123	
Toluene	ug/L	10	11.0	110	81-124	
Xylene (Total)	ug/L	30	32.4	108	83-125	
1,2-Dichloroethane-d4 (S)	%			95	81-118	
4-Bromofluorobenzene (S)	%			95	85-119	
Dibromofluoromethane (S)	%			99	85-114	
Toluene-d8 (S)	%			103	82-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 314298 314299

Parameter	Units	6038782001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	10	10	10.3	9.7	101	96	30-162	6	22	
Ethylbenzene	ug/L	ND	10	10	9.3	9.8	92	96	37-154	4	18	
Toluene	ug/L	ND	10	10	9.8	10.6	93	101	49-143	8	20	
Xylene (Total)	ug/L	ND	30	30	28.9	30.2	91	96	32-154	4	15	
1,2-Dichloroethane-d4 (S)	%						113	115	81-118			
4-Bromofluorobenzene (S)	%						95	100	85-119			
Dibromofluoromethane (S)	%						106	108	85-114			
Toluene-d8 (S)	%						97	101	82-114			
Preservation pH		1.0			1.0	1.0				0		

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QUALIFIERS

Project: GCU #194
Pace Project No.: 6038710

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GCU #194
Pace Project No.: 6038710

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
6038710001	**MW #4**	EPA 8260	MSV/14089		
6038710002	**MW #14**	EPA 8260	MSV/14089		

Sample Condition Upon Receipt

Pace Analytical

Client Name: BP BLAGG

Project # 6038710

Optional
Proj. Due Date:
Proj. Name: 4/28/08

6LU #194

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer Used T-168 / T-169 **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 0.7 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C **Comments:**

Date and Initials of person examining contents: BW 4/16

S: 1511 E: 1522

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☑No ☐N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: (VOA) coliform, TOC, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☑Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 031708		LC

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW 4/17/08 **Date:** _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

GCU # 194 - SEPARATOR PIT
UNIT D, SEC. 5, T27N, R12W

LABORATORY (S) USED : PACE ANALYTICAL

Date : **June 9, 2008**

SAMPLER : N J V

Filename : **06-09-08.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.)
1	102.35	94.03	8.32	14.50	-	-	-	-	-
2	102.47	94.34	8.13	14.50	-	-	-	-	-
3	103.43	93.47 *	9.96	15.00	-	-	-	-	-
	DEPTH TO PRODUCT (FT.) =		9.97	DEPTH TO WATER (FT.) =		9.95	PRODUCT THICKNESS (FT.) =		0.02
4	102.55	94.17	8.38	17.15	0710	7.60	3,500	11.6	4.25
					INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800		
					DATE & TIME =	06/09/08	0700		

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 ".

* **INDICATES PRODUCT SPECIFIC GRAVITY ASSUMED TO = 0.65 .**

Excellent recovery in MW # 4 . Murky brown in appearance . Collected sample from MW # 4 for BTEX analysis only .

Top of casing MW # 1 ~ 2.40 ft. , MW # 2 ~ 2.55 ft. , MW # 3 ~ 2.40 ft. , MW # 4 ~ 2.60 ft. above grade .

on-site	6:33	temp	43
off-site	7:33	temp	46
sky cond.	sunny		
wind speed	0-5	direct.	East

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ANALYTICAL RESULTS

Project: GCU 194
Pace Project No.: 6041669

Sample: MW#4 **Lab ID: 6041669001** Collected: 06/07/08 07:10 Received: 06/11/08 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**128**	ug/L	1.0	1		06/14/08 05:02	71-43-2	
Ethylbenzene	**191**	ug/L	1.0	1		06/14/08 05:02	100-41-4	
Toluene	ND	ug/L	1.0	1		06/14/08 05:02	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/14/08 05:02	1330-20-7	
Dibromofluoromethane (S)	98	%	85-114	1		06/14/08 05:02	1868-53-7	
Toluene-d8 (S)	100	%	82-114	1		06/14/08 05:02	2037-26-5	
4-Bromofluorobenzene (S)	111	%	85-119	1		06/14/08 05:02	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	81-118	1		06/14/08 05:02	17060-07-0	
Preservation pH	**1.0**		1.0	1		06/14/08 05:02		

Atlantic Richfield Company

A BP affiliated company

Chain of Custody Record

Project Name: GCU 194
BP BU/AR Region/Enfos Segment: SJOC SOUTH
State or Lead Regulatory Agency: NMOCD / NEPA / BLM
Requested Due Date (mm/dd/yy): 6/20/08

On-site Time:	6:33	Temp:	43 °F
Off-site Time:	7:33	Temp:	46 °F
Sky Conditions:	SUNNY		
Meteorological Events:			
Wind Speed:	0-5	Direction:	EAST

Lab Name: **Pace Analytical Services, Inc.**	BP/AR Facility No.:	Consultant/Contractor: **Blagg/URS**
Address: **9609 Loiret Blvd**	BP/AR Facility Address:	Address: **110 N. Forth St.**
Lenexa, KS 66219	Site Lat/Long:	**Bloomfield, NM 87413**
Lab PM: **MJ Walls**	California Global ID No.:	Consultant/Contractor Project No.:
Tele/Fax: **913-563-1401**	Enfos Project No.: 0018R-0001	Consultant/Contractor PM: **Nelson Velez**
BP/AR EMB: **Mike Whelan**	Provision or OOC (circle one)	Tele: **(505) 632-1199** Fax: **(505) 632-3903**
Address: **501 Westlake Park Blvd.**	Phase/WBS:	Report Type & QC Level: **STD**
Rm28, 144B Houston, TX 77079	Sub Phase/Task:	E-Mail EDD To: **blagg-njv@yahoo.com**
Tele: **(281) 366-7485** Fax: **(281) 366-7094**	Cost Element:	Invoice to: Consultant or BP or Atlantic Richfield Co (circle one)

Lab Bottle Order No: 17708

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: BTEX (8260)	Sample Point Lat/Long and Comments
1	MW #4	0710	6/3/08		✓		001	3				✓		✓	3(DEPTH)
2															
3															
4															
5															
6															
7															
8															
9															
10															

6041669

Sample Point Lat/Long and Comments

Sampler's Name:	NELSON VELEZ				
Sampler's Company:	BLAGG ENER, INC.				
Shipment Date:	JUNE 10, 2008				
Shipment Method:	FED. EX.				
Shipment Tracking No:	499434868 2				

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
	6/10/08	1540		6/11	910

Special Instructions: REPORT BTEX CONSTITUENTS ONLY. SAN JUAN COUNTY, NM

Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 5.2 °F (C) | Trip Blank: (Yes) / No | MS/MSD Sample Submitted: Yes / (No)

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SAMPLE SUMMARY

Project: GCU 194
Pace Project No.: 6041669

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6041669001	**MW#4**	Water	06/07/08 07:10	06/11/08 09:10

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SAMPLE ANALYTE COUNT

Project: GCU 194
Pace Project No.: 6041669

Lab ID	Sample ID	Method	Analysts	Analytes Reported
6041669001	**MW#4**	EPA 8260	JTK	9

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PROJECT NARRATIVE

Project: GCU 194
Pace Project No.: 6041669

Method: **EPA 8260**
Description: 8260 MSV UST, Water
Client: BP-Blagg Engineering
Date: June 24, 2008

General Information:
1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/15178

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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QUALITY CONTROL DATA

Project: GCU 194
Pace Project No.: 6041669

QC Batch: MSV/15178
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 6041669001

METHOD BLANK: 340016
Associated Lab Samples: 6041669001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Benzene	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	3.0	
1,2-Dichloroethane-d4 (S)	%	98	81-118	
4-Bromofluorobenzene (S)	%	108	85-119	
Dibromofluoromethane (S)	%	94	85-114	
Toluene-d8 (S)	%	100	82-114	

LABORATORY CONTROL SAMPLE: 340017

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	11.3	113	87-117	
Ethylbenzene	ug/L	10	11.0	110	84-123	
Toluene	ug/L	10	10.8	108	81-124	
Xylene (Total)	ug/L	30	33.6	112	83-125	
1,2-Dichloroethane-d4 (S)	%			94	81-118	
4-Bromofluorobenzene (S)	%			105	85-119	
Dibromofluoromethane (S)	%			96	85-114	
Toluene-d8 (S)	%			100	82-114	

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QUALIFIERS

Project: GCU 194
Pace Project No.: 6041669

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

BATCH QUALIFIERS

Batch: MSV/15178

[1] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GCU 194
Pace Project No.: 6041669

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
6041669001	**MW#4**	EPA 8260	MSV/15178		

Sample Condition Upon Receipt

Pace Analytical

Client Name: BP BLAGG

Project # 60041669

Optional
Proj. Due Date:
Proj. Name:

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 8643 6005 2346

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer Used T-169 / T-179 **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 5.2 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: BW 6/11
S: 1010 E: 1015

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☑No ☐N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: (VOA), coliform, TOC, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☑Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 051208		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: JMW 6/12/08 **Date:** _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

GCU # 194 - SEPARATOR PIT
UNIT D, SEC. 5, T27N, R12W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **August 26, 2008**

SAMPLER : N J V

Filename : **08-26-08.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.)
1	102.35	93.44	8.91	14.50	-	-	-	-	-
2	102.47	93.77	8.70	14.50	-	-	-	-	-
3	103.43	93.97 *	9.46	15.00	-	-	-	-	-
	DEPTH TO PRODUCT (FT.) =		9.36	DEPTH TO WATER (FT.) =		9.64	PRODUCT THICKNESS (FT.) =		0.28
4	102.55	93.62	8.93	17.15	0750	7.57	4,700	18.7	4.00
					INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800		
					DATE & TIME =	08/25/08	0730		

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 ".

* **INDICATES PRODUCT SPECIFIC GRAVITY ASSUMED TO = 0.65 .**

Excellent recovery in MW # 4 . Murky brown in appearance . Collected sample from MW # 4 for BTEX analysis only .

Top of casing MW # 1 ~ 2.40 ft., MW # 2 ~ 2.55 ft., MW # 3 ~ 2.40 ft., MW # 4 ~ 2.60 ft. above grade .

on-site	7:16	temp	65
off-site	8:05	temp	68
sky cond.	Partly cloudy		
wind speed	0-5	direct.	East

Hall Environmental Analysis Laboratory, Inc.

Date: *09-Sep-08*

CLIENT:	Blagg Engineering	**Client Sample ID:**	MW #4
Lab Order:	0808451	**Collection Date:**	8/26/2008 7:50:00 AM
Project:	GCU #194	**Date Received:**	8/28/2008
Lab ID:	0808451-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	68	5.0		µg/L	5	9/8/2008 1:56:12 PM
Toluene	ND	1.0		µg/L	1	9/6/2008 1:10:56 PM
Ethylbenzene	300	5.0		µg/L	5	9/8/2008 1:56:12 PM
Xylenes, Total	ND	2.0		µg/L	1	9/6/2008 1:10:56 PM
Surr: 4-Bromofluorobenzene	115	65.9-130		%REC	1	9/6/2008 1:10:56 PM

Qualifiers:

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

Chain-of-Custody Record

Client: BLAGG ENER. / BP AMERICA

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

Phone #: 632-1199

email or Fax#:

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

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: GCU #194

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 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	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)	EDC (Method 8260)	8310 (PNA or PAH)	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)
8/26/08	0750	MW #4	2-40ml	HCl	0808451 1	✓														

Date: 8/27/08 Time: 1530 Relinquished by: Nelson V

Received by: 8/28/08 1035

Date: Time: Relinquished by:

Received by:

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 #194 **Work Order:** 0808451

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R30092**	Analysis Date:		9/5/2008 9:01:25 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: B		*MBLK*			Batch ID:	**R30121**	Analysis Date:		9/8/2008 11:06:35 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:	**R30092**	Analysis Date:		9/6/2008 5:56:41 PM
Benzene	17.37	µg/L	1.0	86.9	85.9	113			
Toluene	16.25	µg/L	1.0	81.2	86.4	113			S
Ethylbenzene	17.54	µg/L	1.0	87.7	83.5	118			
Xylenes, Total	52.19	µg/L	2.0	87.0	83.4	122			
Sample ID: 100NG BTEX LCSD		*LCSD*			Batch ID:	**R30092**	Analysis Date:		9/6/2008 6:27:14 PM
Benzene	17.39	µg/L	1.0	87.0	85.9	113	0.115	27	
Toluene	16.48	µg/L	1.0	82.4	86.4	113	1.39	19	S
Ethylbenzene	17.67	µg/L	1.0	88.4	83.5	118	0.738	10	
Xylenes, Total	52.43	µg/L	2.0	87.4	83.4	122	0.455	13	

Qualifiers:

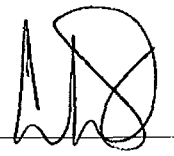
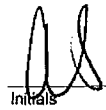
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG | Date Received: 8/28/2008

Work Order Number 0808451 | Received by: AT

Checklist completed by:  Signature 8/28/08 Date | Sample ID labels checked by:  Initials

Matrix: | Carrier name UPS

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?	1°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____