3R - 17

REPORTS

DATE:

Dec. 2005

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

3R0017

February 15, 2006

2006 FEB 16 PM 1 06

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

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

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 BEI correspondence concerning the above reference well site was a letter dated, March 13, 2001. Since then, BP has followed its NMOCD approved groundwater management plan and continues groundwater monitoring on an annual basis. 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 the address or phone number listed above. Thank you for your cooperation and assistance.

Respectfully submitted:
Blagg Engineering, Inc.

Nelson J. Velez
Staff Geologist

Attachment: Groundwater Report

cc: Mr. Denny Foust, Environmental Geologist, NMOCD District III Office, Aztec, NM
Mr. Don Brooks, Environmental Coordinator, BP, Farmington, NM (without lab reports)

NJV/njv

GCU 153E 02-15-06 CVL.WPD

3RP0017

BP AMERICA PRODUCTION CO.

SUPPLEMENTAL GROUNDWATER REMEDIATION REPORT

2000-2005

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

PREPARED FOR:
MR. GLENN VON GONTEN
NEW MEXICO OIL CONSERVATION DIVISION

DECEMBER 2005

PREPARED BY:
BLAGG ENGINEERING, INC.

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

BP America Production Co.
GCU # 153E - Separator & Dehydrator Pits
Ne/4 Nw/4 Sec. 28, T29N, R12W

Monitor Well Sampling Dates: 7/28/01, 3/11/02, 6/21/02, 6/30/03, 6/25/04 ,12/22/04, 3/29/05, 6/27/05

Site Historic Summary:

A site dehydrator was closed out beginning in December 1994 by removing impacted soils by excavation. Documentation for this work and subsequent groundwater monitoring data for the site have previously been submitted for New Mexico Oil Conservation review. The reporting herein is for site monitoring from March 2001 to the present.

Groundwater Monitor Well Sampling Procedures:

Groundwater samples were collected from site monitor wells (*Figure 1*) following US EPA: SW-846 protocol. Samples were collected using new disposable bailers and placed into new laboratory supplied 40 ml glass vials with teflon septa caps. The samples were preserved cool and with either mercuric chloride or hydrochloric acid and express delivered to a qualified laboratory for testing. Analytical procedures included benzene, toluene, ethyl-benzene and total xylenes **(BTEX)** per US EPA Method 8020 or 8021. Additional samples were collected into laboratory supplied containers for general water chemistry testing. Waste generated during monitor well sampling and development was disposed of utilizing the separator tank pit located on the well site.

Water Quality and Gradient Information:

Based on the enclosed site monitor well information, groundwater flow has been determined to be in the southwest direction. Groundwater gradient maps are displayed on *Figures 2 through Figure 6*. Presently only well MW #3R is reporting a contamination level in excess of New Mexico Water Quality Control Commission (NMWQCC) standards for closure. This is for the constituent benzene only. There are no known residual hydrocarbon impacts in excess of NMWQCC standards in other wells in the monitoring program.

Summary and/or Recommendations:

Continued site monitoring per the approved BP Ground Water Management Plan is recommended. Natural attenuation appears to be successfully reducing the remaining hydrocarbon impacts and additional remedial actions are not indicated.

BP AMERICA PROD. CO. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

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

REVISED DATE: DECEMBER 4, 2005
FILENAME: (15-2Q-05.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
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		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	15.83		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 4, 2005
FILENAME: (15-2Q-05.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			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
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

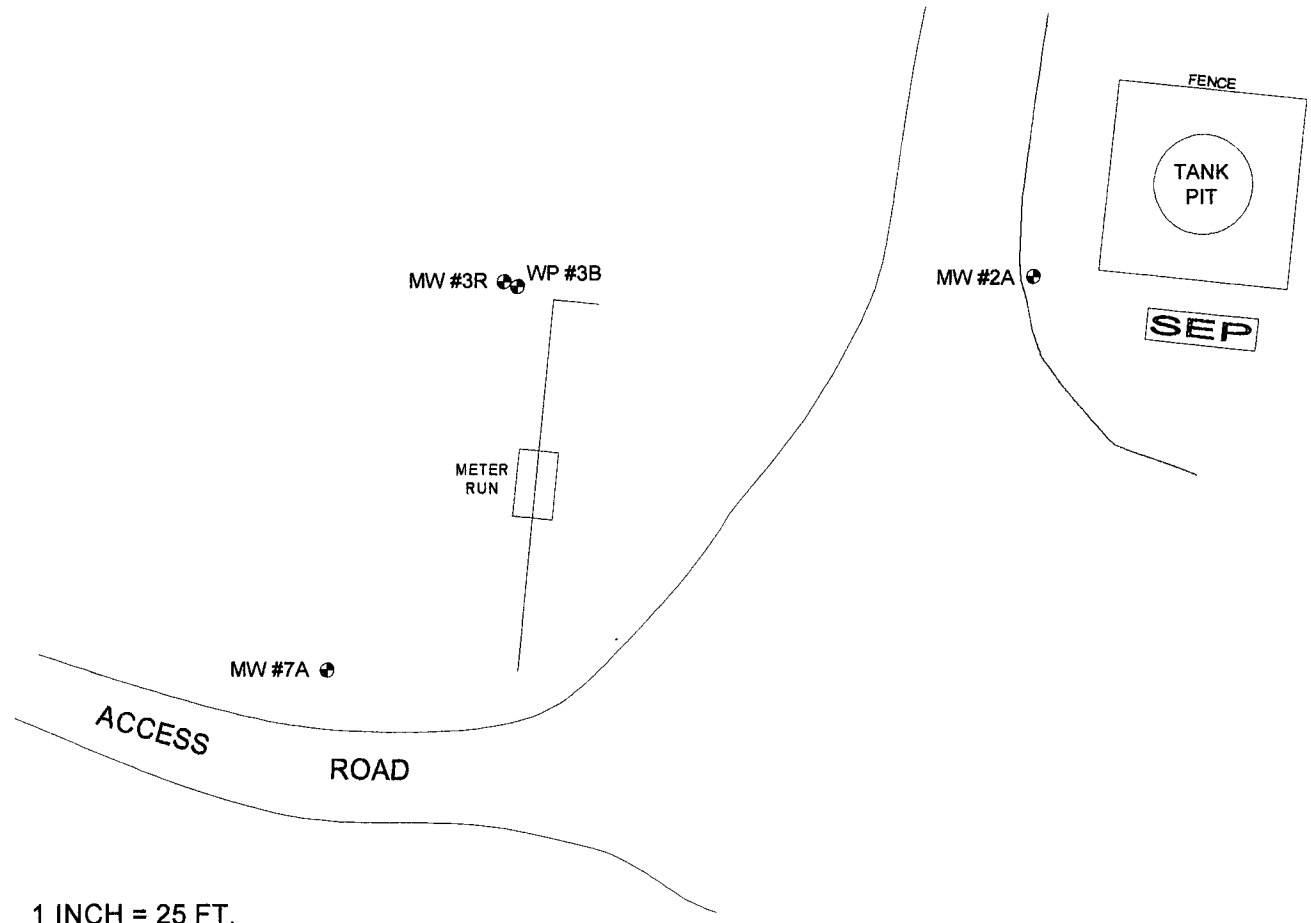
DEHYDRATOR PIT GROUNDWATER LAB RESULTS - EXCAVATED DEC. '94

(refer to pit closure field report - pit perimeter diagram)

29-Dec-94	PW1 @ GW (13')							182	1,108	96	1,744
29-Dec-94	PW2 @ GW (13')							397	2,268	228	3,382
20-Feb-95	PIT WATER							77.2	7.37	ND	381.8
17-Mar-95	PIT @ 3A							3.9	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 PROCEEDING RESULTS EXCEEDED .

FIGURE 1



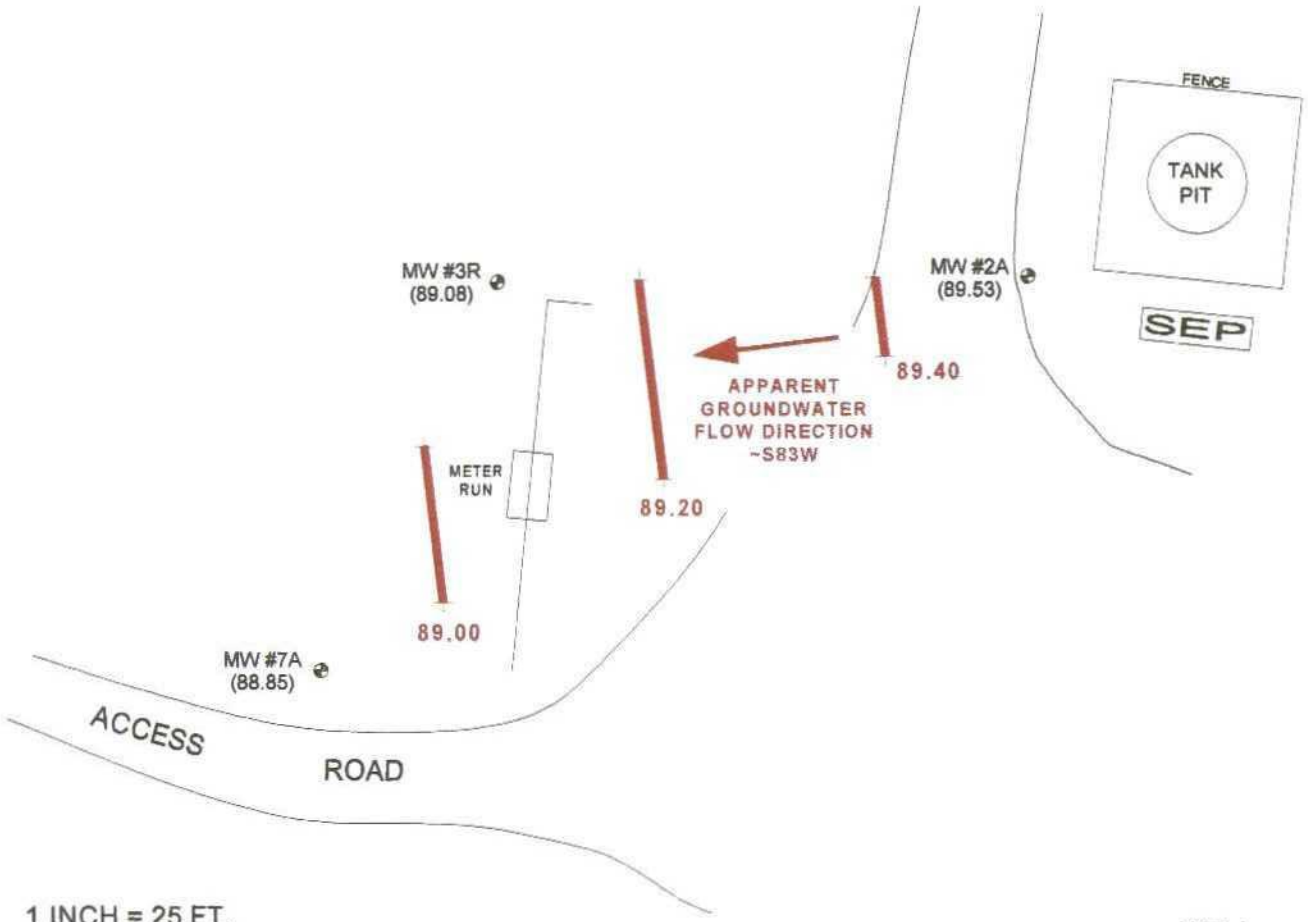
1 INCH = 25 FT.

0 25 50 FT.

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.

AMOCO 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: 06-13-00-SM.SKF REVISED: 12/01/05 NJV	SITE MAP 06/00

FIGURE 2
(3rd 1/4, 2001)



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Top of Well Elevation	
MW #2A	(100.40)
MW #3R	(100.80)
MW #7A	(99.72)
MW #2A (89.53)	Groundwater elevation as of 7/28/01.

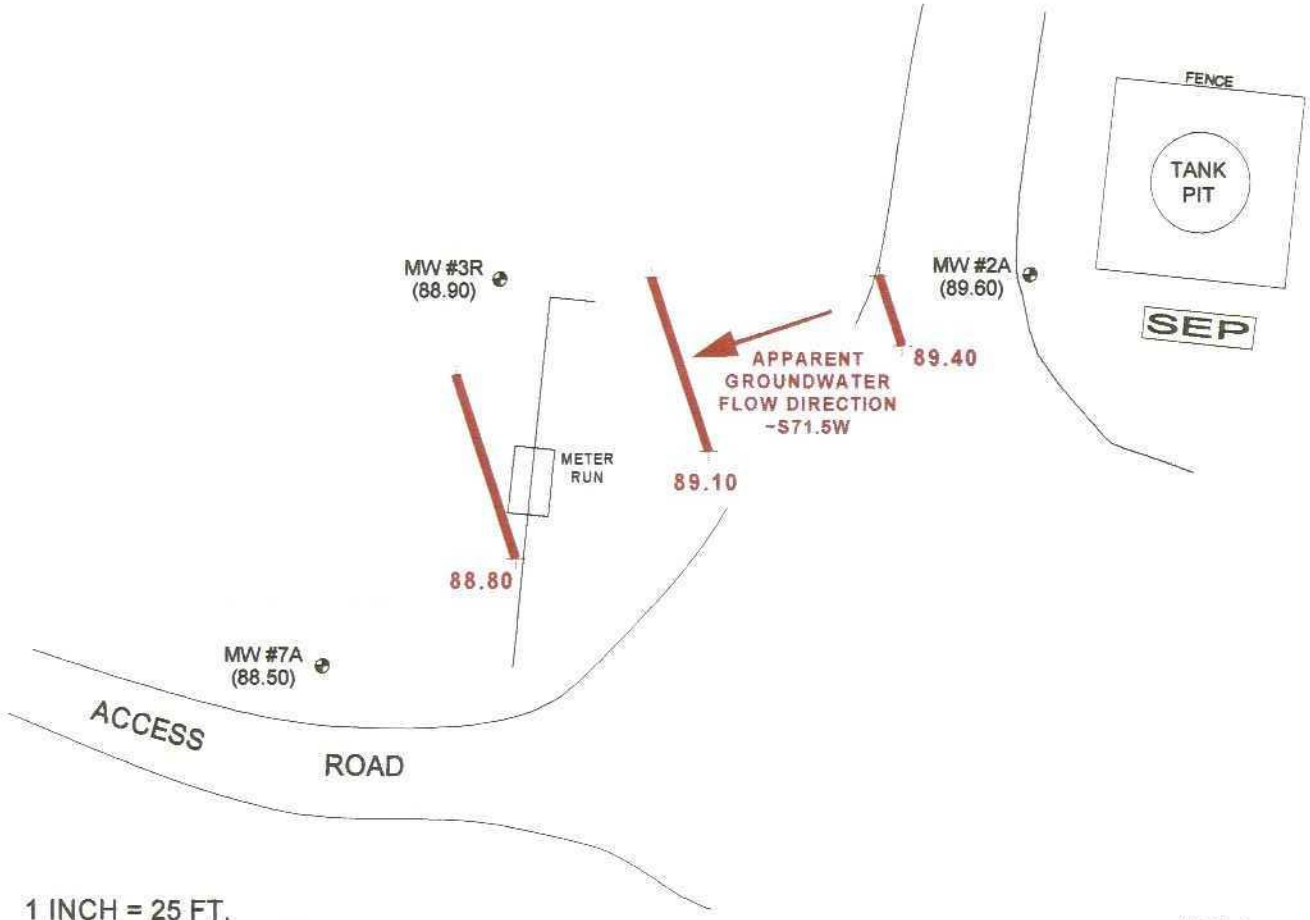
AMOCO PRODUCTION COMPANY
GCU #153E
NE/4 NW/4 SEC. 28, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO

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: 07-28-01-GW.SKF
REVISED: 12/04/05 NJV

GROUNDWATER GRADIENT MAP 07/01

FIGURE 3
(2nd 1/4, 2002)



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Top of Well Elevation	
MW #2A	(100.40)
MW #3R	(100.80)
MW #7A	(99.72)
MW #2A (89.60)	Groundwater elevation as of 5/21/02.

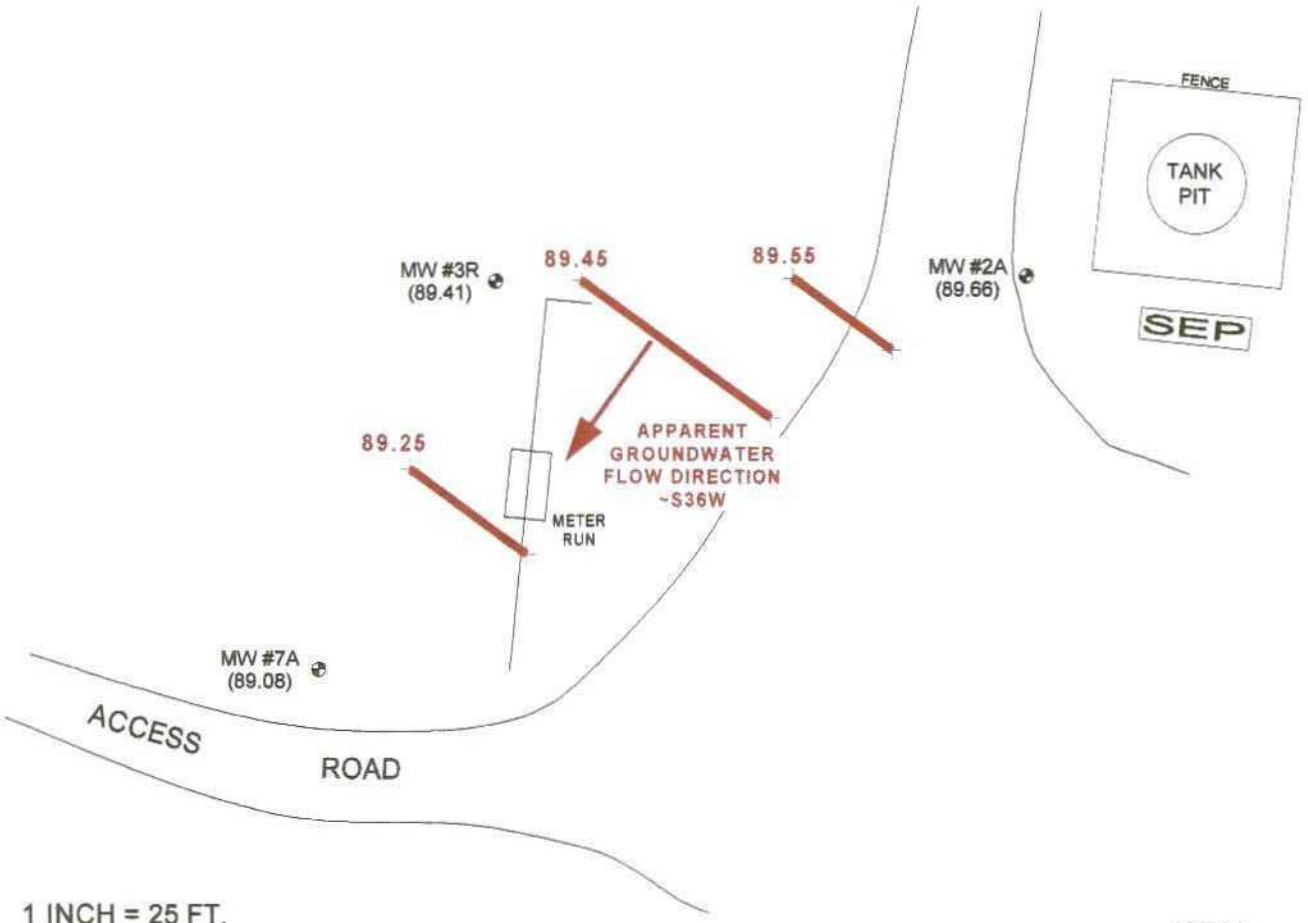
AMOCO PRODUCTION COMPANY
GCU #153E
NE/4 NW/4 SEC. 28, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO

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: 06-21-02-GW.SKF
REVISED: 12/04/05 NJV

GROUNDWATER GRADIENT MAP 06/02

FIGURE 4
(2nd 1/4, 2003)



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Top of Well Elevation	
MW #2A	(100.40)
MW #3R	(100.80)
MW #7A	(99.72)
MW #2A (89.66)	Groundwater elevation as of 6/30/03.

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
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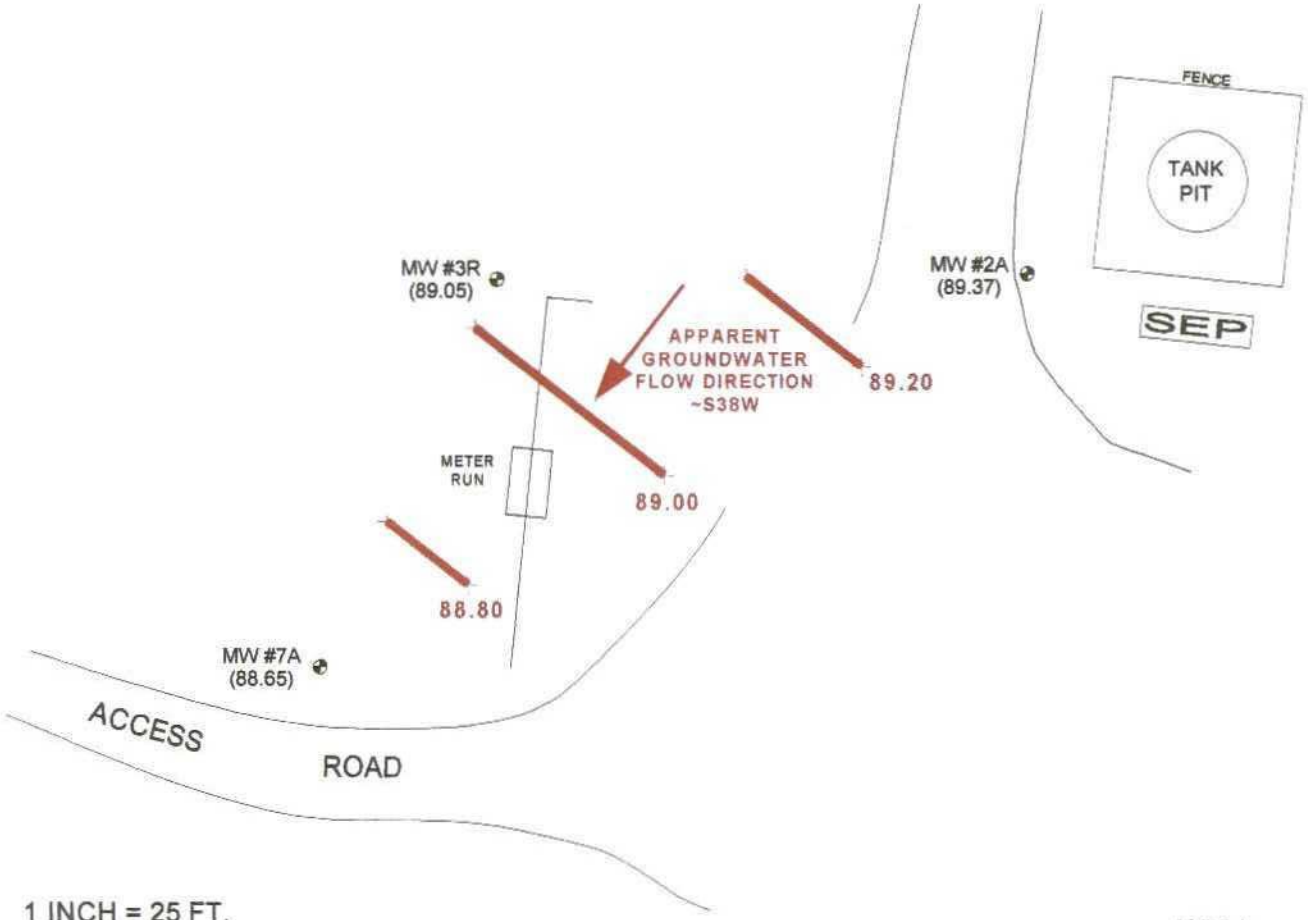
PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: 06-30-03-GW.SKF
REVISED: 12/04/05 NJV

GROUNDWATER GRADIENT MAP
06/03

FIGURE 5
(4th 1/4, 2004)



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Top of Well Elevation	
MW #2A	(100.40)
MW #3R	(100.80)
MW #7A	(99.72)
MW #2A (89.37)	Groundwater elevation as of 12/22/04.

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

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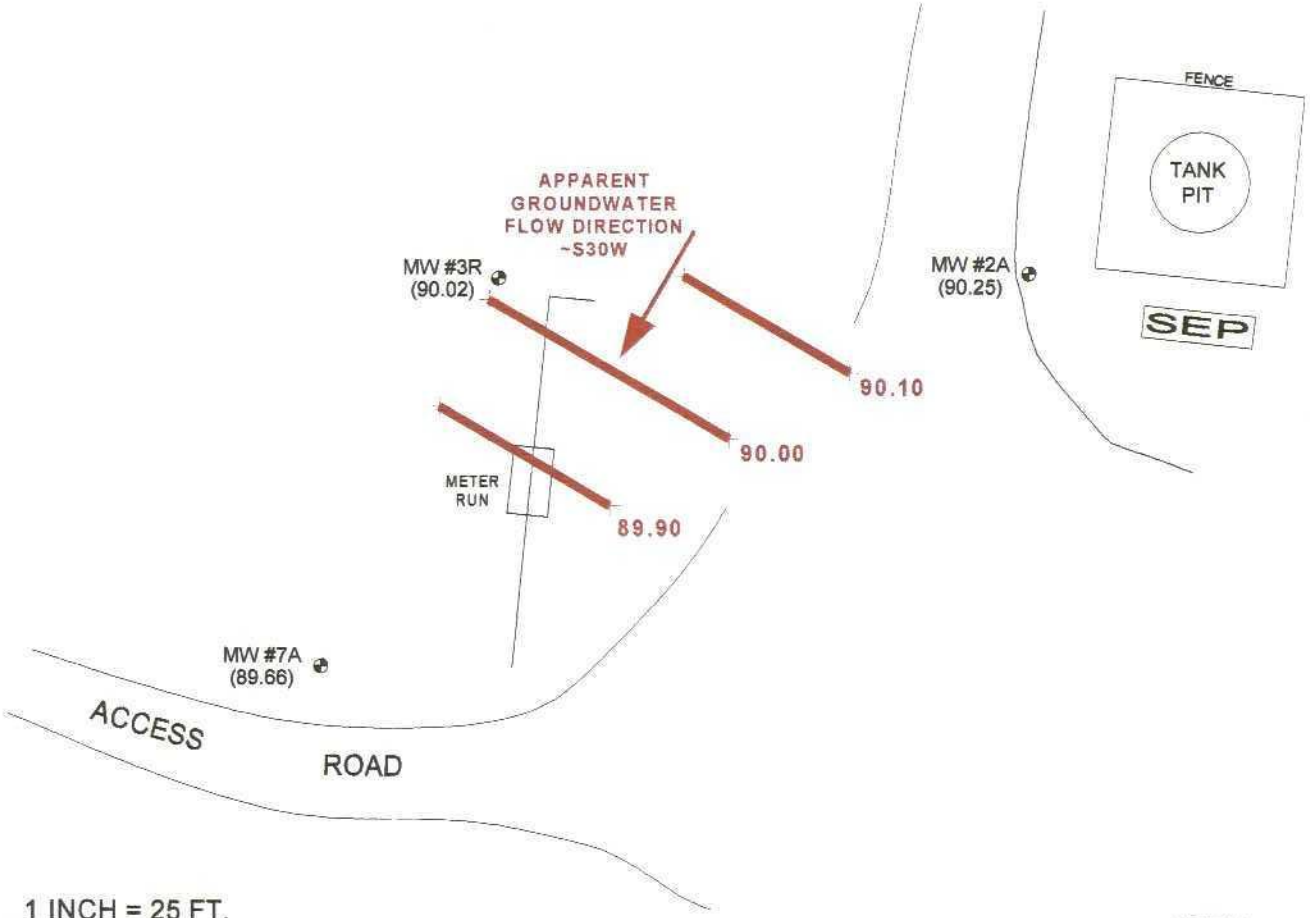
PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: 12-22-04-GW.SKF
REVISED: 12/04/05 NJV

GROUNDWATER GRADIENT MAP
12/04

FIGURE 6
(2nd 1/4, 2005)



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Top of Well Elevation	
MW #2A	(100.40)
MW #3R	(100.80)
MW #7A	(99.72)
MW #2A (90.25)	Groundwater elevation as of 6/27/05.

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: 06-27-05-GW.SKF
REVISED: 12/04/05 NJV

GROUNDWATER GRADIENT MAP 06/05

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : BP AMOCO

CHAIN-OF-CUSTODY # : 11151

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

LABORATORY (S) USED : ON - SITE TECH.

Date : July 28, 2001

SAMPLER : N J V

Filename : 07-28-01.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)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
2A	100.40	89.53	10.87	15.83	0830	7.26	3,700	2.50	-
3R	100.80	89.08	11.72	20.00	0900	7.25	8,600	2.00	-
7A	99.72	88.85	10.87	16.31	0800	7.59	8,300	2.75	-

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:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).

2 bails per foot - small teflon bailer.

3 bails per foot - 3 / 4 " teflon bailer.

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

4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 7A, good recovery in MW # 2A , fair / poor recovery in MW # 3R .

Effervescence observed during collection of MW #'s 2A & 3R samples . Collected BTEX samples from all MW 's listed above .

OFF: (505) 325-5667
FAX: (505) 327-1496

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *08-Aug-01*

Client:	Blagg Engineering	**Client Sample Info:**	GCU #153E
Work Order:	0107049	**Client Sample ID:**	MW #2A
Lab ID:	0107049-01A **Matrix:** AQUEOUS	**Collection Date:**	7/28/2001 8:30:00 AM
Project:	BP - GCU #153E	**COC Record:**	11151

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	66	5		µg/L	10	8/3/2001
Toluene	ND	5		µg/L	10	8/3/2001
Ethylbenzene	24	5		µg/L	10	8/3/2001
m,p-Xylene	31	10		µg/L	10	8/3/2001
o-Xylene	ND	5		µg/L	10	8/3/2001

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499
EMAIL: ONSITE@ONSITELTD.COM

OFF: (505) 325-5667
FAX: (505) 327-1496

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *08-Aug-01*

Client:	Blagg Engineering	**Client Sample Info:**	GCU #153E
Work Order:	0107049	**Client Sample ID:**	MW #3R
Lab ID:	0107049-02A **Matrix:** AQUEOUS	**Collection Date:**	7/28/2001 9:00:00 AM
Project:	BP - GCU #153E	**COC Record:**	11151

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	520	10		µg/L	20	8/3/2001
Toluene	35	10		µg/L	20	8/3/2001
Ethylbenzene	350	10		µg/L	20	8/3/2001
m,p-Xylene	700	20		µg/L	20	8/3/2001
o-Xylene	57	10		µg/L	20	8/3/2001

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

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FAX: (505) 327-1496

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *08-Aug-01*

Client:	Blagg Engineering	**Client Sample Info:**	GCU #153E
Work Order:	0107049	**Client Sample ID:**	MW #7A
Lab ID:	0107049-03A **Matrix:** AQUEOUS	**Collection Date:**	7/28/2001 8:00:00 AM
Project:	BP - GCU #153E	**COC Record:**	11151

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	ND	0.5		µg/L	1	8/3/2001
Toluene	ND	0.5		µg/L	1	8/3/2001
Ethylbenzene	ND	0.5		µg/L	1	8/3/2001
m,p-Xylene	ND	1		µg/L	1	8/3/2001
o-Xylene	ND	0.5		µg/L	1	8/3/2001

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

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CHAIN OF CUSTODY RECORD

1151

ON SITE TECHNOLOGIES, LTD.

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LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: 7/25/01

Page: 1 of 1

Purchase Order No.:	Project No.		
SEND INVOICE TO: Name	Jeff Black	REPORT RESULTS TO: Name	Title
Company	Black Engineering, Inc. Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No. 632-1199	Telefax No. 632-3903

PROJECT LOCATION: BP - Gem #1 SRC

SAMPLER'S SIGNATURE:

SAMPLE IDENTIFICATION	SAMPLE DATE	TIME	MATRIX	PRES.	Number of Containers	BTEX (8020)	LAB ID

ANALYSIS REQUESTED

Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Rush | 24-48 Hours | 10 Working Days | By Date

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Special Instructions / Remarks:

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

On Site Technologies, LTD.

Date: *08-Aug-01*

CLIENT: Blagg Engineering
Work Order: 0107049
Project: BP - GCU #153E

QC SUMMARY REPORT
Method Blank

Sample ID: **MB1** Batch ID: **GC-1_010803** Test Code: **SW8021B** Units: **µg/L** Analysis Date **8/3/2001** Prep Date:

Client ID: **0107049** Run ID: **GC-1_010803A** SeqNo: **40173**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
m,p-Xylene	ND	1									
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.1235	0.5									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *08-Aug-01*

CLIENT: Blagg Engineering
Work Order: 0107049
Project: BP - GCU #153E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0108001-14AMS** Batch ID: **GC-1_010803** Test Code: **SW8021B** Units: **µg/L** Analysis Date **8/3/2001** Prep Date:

Client ID: **0107049** Run ID: **GC-1_010803A** SeqNo: **40174**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2408	10	800	1637	96.4%	70	130				
Ethylbenzene	1307	10	800	520.2	98.4%	70	130				
m,p-Xylene	3019	20	1600	1501	94.8%	70	130				
Methyl tert-Butyl Ether	994.9	20	800	250.7	93.0%	70	130				
o-Xylene	904.1	10	800	107.8	99.5%	70	130				
Toluene	1006	10	800	207.4	99.9%	70	130				

Sample ID: **0108001-14AMSD** Batch ID: **GC-1_010803** Test Code: **SW8021B** Units: **µg/L** Analysis Date **8/3/2001** Prep Date:

Client ID: **0107049** Run ID: **GC-1_010803A** SeqNo: **40175**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2351	10	800	1637	89.2%	70	130	2408	2.4%	8	
Ethylbenzene	1277	10	800	520.2	94.7%	70	130	1307	2.3%	7	
m,p-Xylene	2954	20	1600	1501	90.8%	70	130	3019	2.2%	7	
Methyl tert-Butyl Ether	987.4	20	800	250.7	92.1%	70	130	994.9	0.8%	6	
o-Xylene	892.8	10	800	107.8	98.1%	70	130	904.1	1.3%	6	
Toluene	990.9	10	800	207.4	97.9%	70	130	1006	1.6%	6	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *08-Aug-01*

CLIENT: Blagg Engineering
Work Order: 0107049
Project: BP - GCU #153E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS WATER** Batch ID: **GC-1_010803** Test Code: **SW8021B** Units: **µg/L** Analysis Date **8/3/2001** Prep Date:

Client ID: **0107049** Run ID: **GC-1_010803A** SeqNo: **40172**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.21	0.5	40	0	103.0%	80	120				
Ethylbenzene	41.93	0.5	40	0	104.8%	80	120				
m,p-Xylene	82.05	1	80	0	102.6%	80	120				
Methyl tert-Butyl Ether	41	1	40	0	102.5%	80	120				
o-Xylene	42.11	0.5	40	0	105.3%	80	120				
Toluene	41.62	0.5	40	0.1235	103.7%	80	120				

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *08-Aug-01*

CLIENT: Blagg Engineering
Work Order: 0107049
Project: BP - GCU #153E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1 BTEX_0107** Batch ID: **GC-1_010803** Test Code: **SW8021B** Units: **µg/L** Analysis Date **8/3/2001** Prep Date:

Client ID: **0107049** Run ID: **GC-1_010803A** SeqNo: **40169**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.77	0.5	20	0	103.8%	85	115				
Ethylbenzene	21.1	0.5	20	0	105.5%	85	115				
m,p-Xylene	41.59	1	40	0	104.0%	85	115				
Methyl tert-Butyl Ether	20.6	1	20	0	103.0%	85	115				
o-Xylene	21.1	0.5	20	0	105.5%	85	115				
Toluene	20.99	0.5	20	0	105.0%	85	115				
1,4-Difluorobenzene	113.2	0	120	0	94.4%	70	130				
4-Bromochlorobenzene	126.2	0	120	0	105.2%	70	130				
Fluorobenzene	110.8	0	120	0	92.3%	70	130				

Sample ID: **CCV2 BTEX_0107** Batch ID: **GC-1_010803** Test Code: **SW8021B** Units: **µg/L** Analysis Date **8/3/2001** Prep Date:

Client ID: **0107049** Run ID: **GC-1_010803A** SeqNo: **40170**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.99	0.5	20	0	99.9%	85	115				
Ethylbenzene	20.3	0.5	20	0	101.5%	85	115				
m,p-Xylene	40.05	1	40	0	100.1%	85	115				
Methyl tert-Butyl Ether	20.24	1	20	0	101.2%	85	115				
o-Xylene	20.47	0.5	20	0	102.4%	85	115				
Toluene	20.24	0.5	20	0	101.2%	85	115				
1,4-Difluorobenzene	112.6	0	120	0	93.8%	70	130				
4-Bromochlorobenzene	124.4	0	120	0	103.6%	70	130				
Fluorobenzene	111	0	120	0	92.5%	70	130				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0107049
Project: BP - GCU #153E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3 BTEX_0107** Batch ID: **GC-1_010803** Test Code: **SW8021B** Units: **µg/L** Analysis Date **8/3/2001** Prep Date:

Client ID: **0107049** Run ID: **GC-1_010803A** SeqNo: **40171**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.28	0.5	40	0	98.2%	85	115				
Ethylbenzene	40.07	0.5	40	0	100.2%	85	115				
m,p-Xylene	78.6	1	80	0	98.2%	85	115				
Methyl tert-Butyl Ether	39.71	1	40	0	99.3%	85	115				
o-Xylene	40.52	0.5	40	0	101.3%	85	115				
Toluene	39.84	0.5	40	0	99.6%	85	115				
1,4-Difluorobenzene	111.8	0	120	0	93.2%	70	130				
4-Bromochlorobenzene	122.3	0	120	0	101.9%	70	130				
Fluorobenzene	110.4	0	120	0	92.0%	70	130				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 08-Aug-01

CLIENT: Blagg Engineering
Work Order: 0107049
Project: BP - GCU #153E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0107048-01A	95.1	104	93.5
0107048-02A	93.3	99.4	93.7
0107049-01A	94.1	101	92.5
0107049-02A	92.3	101	91.9
0107049-03A	94.8	105	93.4
0108001-01A	94.2	105	93.3
0108001-02A	93.9	101	93.6
0108001-03A	93	103	92.4
0108001-04A	93.2	106	93
0108001-05A	94.7	105	93.4
0108001-06A	93.7	99	92.9
0108001-07A	93	102	92.5
0108001-08A	94.6	102	93.6
0108001-09A	95.1	105	93.6
0108001-10A	94.4	103	93.6
0108001-11A	94.4	103	93
0108001-12A	95.1	101	93.2
0108001-13A	94.3	102	93.3
0108001-14A	92	103	91.1
0108001-14AMS	91.9	104	90.5
0108001-14AMSD	92.2	103	90.6
0108001-15A	94	103	93.1
CCV1 BTEX_01070	94.4	105	92.3
CCV2 BTEX_01070	93.8	104	92.5
CCV3 BTEX_01070	93.2	102	92
LCS WATER	93.3	106	92.5
MB1	95.2	104	93

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	70-130
4BCBZ	=	4-Bromochlorobenzene	70-130
FLBZ	=	Fluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : BP AMOCO

CHAIN-OF-CUSTODY # : 11770

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

LABORATORY (S) USED : ON - SITE TECH.

Date : March 11, 2002

SAMPLER : N J V

Filename : 03-11-02.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)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
2A	100.40	89.60	10.80	15.83	1025	6.86	4,600	2.50	-
3R	100.80	89.10	11.70	20.00	1120	7.14	9,700	1.75	-
7A	99.72	88.77	10.95	16.31	-	-	-	-	-

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:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).
2 bails per foot - small teflon bailer.
3 bails per foot - 3 / 4 " teflon bailer.

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

4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 2A , fair / poor recovery in MW # 3R . No effervescence observed during collection of MW #'s 2A & 3R samples . Collected BTEX samples from MW # 2A & # 3R only . DTW = 12.25 ft. in MW # 3R @ Time 1118 (immediately before collecting sample) .

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ANALYTICAL REPORT

Date: *18-Mar-02*

Client:	Blagg Engineering	**Client Sample Info:**	BP - GCU #153E
Work Order:	0203016	**Client Sample ID:**	MW #2A
Lab ID:	0203016-01A **Matrix:** AQUEOUS	**Collection Date:**	03/11/2002 10:25:00 AM
Project:	BP - GCU #153E	**COC Record:**	11770

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **HNR**
Benzene	ND	0.5		µg/L	1	03/17/2002
Toluene	ND	0.5		µg/L	1	03/17/2002
Ethylbenzene	2.1	0.5		µg/L	1	03/17/2002
m,p-Xylene	ND	1		µg/L	1	03/17/2002
o-Xylene	ND	0.5		µg/L	1	03/17/2002

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

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LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *18-Mar-02*

Client:	Blagg Engineering	**Client Sample Info:**	BP - GCU #153E
Work Order:	0203016	**Client Sample ID:**	MW #3R
Lab ID:	0203016-02A **Matrix:** AQUEOUS	**Collection Date:**	03/11/2002 11:20:00 AM
Project:	BP - GCU #153E	**COC Record:**	11770

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **HNR**
Benzene	120	0.5		µg/L	1	03/17/2002
Toluene	6.9	0.5		µg/L	1	03/17/2002
Ethylbenzene	110	0.5		µg/L	1	03/17/2002
m,p-Xylene	210	1		µg/L	1	03/17/2002
o-Xylene	15	0.5		µg/L	1	03/17/2002

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

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1170

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.

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Date: 7/16/02

Page: 1 of 1

Purchase Order No.:	Project No.		
SEND INVOICE TO — Name			
Company		Dept.	
Address			
City, State, Zip			
PROJECT LOCATION:			
SAMPLER'S SIGNATURE:			

REPORT RESULTS TO		
Name		Title
Company		
Mailing Address		
City, State, Zip		
Telephone No.		Telefax No.

SAMPLE IDENTIFICATION	SAMPLE DATE	TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED	LAB ID
MW # 2R	7/16/02	1025	WATER	HCl	3	✓	020716-01A
							↓
MW # 3R	7/16/02	1120	WATER	HCl	3	✓	-02A

Relinquished by:	Date/Time 7/16/02	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:		Rush ☐ 24-48 Hours ☐ 10 Working Days ☐ By Date ☐	

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Special Instructions / Remarks:

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

On Site Technologies, LTD.

Date: *18-Mar-02*

CLIENT: Blagg Engineering
Work Order: 0203016
Project: BP - GCU #153E

QC SUMMARY REPORT
Method Blank

Sample ID: **MB_020317** Batch ID: **GC-1_020317** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/17/2002** Prep Date:

Client ID: **0203016** Run ID: **GC-1_020317A** SeqNo: **48743**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	.0837	0.5									J
m,p-Xylene	ND	1									
Methyl tert-Butyl Ether	.2475	1									J
o-Xylene	ND	0.5									
Toluene	.1165	0.5									J
1,4-Difluorobenzene	104.6	0									
4-Bromochlorobenzene	114.9	0									
Fluorobenzene	105	0									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *18-Mar-02*

CLIENT: Blagg Engineering
Work Order: 0203016
Project: BP - GCU #153E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0203007-03AMS** Batch ID: **GC-1_020317** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/17/2002** Prep Date:
Client ID: **0203016** Run ID: **GC-1_020317A** SeqNo: **48744**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	48.42	0.5	40	10.27	95.4%	70	130				
Ethylbenzene	68.92	0.5	40	29.88	97.6%	70	130				
m,p-Xylene	309.5	1	80	220.2	111.6%	70	130				E
Methyl tert-Butyl Ether	39.75	1	40	0.2069	98.9%	70	130				
o-Xylene	157.9	0.5	40	116.5	103.5%	70	130				
Toluene	57.03	0.5	40	19.27	94.4%	70	130				
1,4-Difluorobenzene	104	0	110	0	94.6%	70	130				
4-Bromochlorobenzene	122.1	0	110	0	111.0%	70	130				
Fluorobenzene	104.2	0	110	0	94.7%	70	130				

Sample ID: **0203007-03AMSD** Batch ID: **GC-1_020317** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/17/2002** Prep Date:
Client ID: **0203016** Run ID: **GC-1_020317A** SeqNo: **48745**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	47.88	0.5	40	10.27	94.0%	70	130	48.42	1.1%	15	
Ethylbenzene	68.11	0.5	40	29.88	95.6%	70	130	68.92	1.2%	15	
m,p-Xylene	305.8	1	80	220.2	107.0%	70	130	309.5	1.2%	15	E
Methyl tert-Butyl Ether	40.03	1	40	0.2069	99.6%	70	130	39.75	0.7%	15	
o-Xylene	156.6	0.5	40	116.5	100.2%	70	130	157.9	0.9%	15	
Toluene	56.36	0.5	40	19.27	92.7%	70	130	57.03	1.2%	15	
1,4-Difluorobenzene	104.4	0	110	0	94.9%	70	130	0	0.0%	0	
4-Bromochlorobenzene	121.6	0	110	0	110.5%	70	130	0	0.0%	0	
Fluorobenzene	104.2	0	110	0	94.7%	70	130	0	0.0%	0	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *18-Mar-02*

CLIENT: Blagg Engineering
Work Order: 0203016
Project: BP - GCU #153E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS_020317** Batch ID: **GC-1_020317** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/17/2002** Prep Date:

Client ID: **0203016** Run ID: **GC-1_020317A** SeqNo: **48742**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.93	0.5	40	0	94.8%	80	120				
Ethylbenzene	38.98	0.5	40	0.0837	97.3%	80	120				
m,p-Xylene	77.37	1	80	0	96.7%	80	120				
Methyl tert-Butyl Ether	40.34	1	40	0.2475	100.2%	80	120				
o-Xylene	38.69	0.5	40	0	96.7%	80	120				
Toluene	37.58	0.5	40	0.1165	93.7%	80	120				
1,4-Difluorobenzene	104.2	0	110	0	94.8%	70	130				
4-Bromochlorobenzene	120.9	0	110	0	109.9%	70	130				
Fluorobenzene	104.5	0	110	0	95.0%	70	130				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *18-Mar-02*

CLIENT: Blagg Engineering
Work Order: 0203016
Project: BP - GCU #153E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1_020317** Batch ID: **GC-1_020317** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/17/2002** Prep Date:
Client ID: **0203016** Run ID: **GC-1_020317A** SeqNo: **48739**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.12	0.5	20	0	95.6%	85	115				
Ethylbenzene	21.5	0.5	20	0	107.5%	85	115				
m,p-Xylene	40.95	1	40	0	102.4%	85	115				
Methyl tert-Butyl Ether	20	1	20	0	100.0%	85	115				
o-Xylene	19.54	0.5	20	0	97.7%	85	115				
Toluene	18.96	0.5	20	0	94.8%	85	115				
1,4-Difluorobenzene	104.5	0	110	0	95.0%	70	130				
4-Bromochlorobenzene	123.2	0	110	0	112.0%	70	130				
Fluorobenzene	104.9	0	110	0	95.4%	70	130				

Sample ID: **CCV2_020317** Batch ID: **GC-1_020317** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/17/2002** Prep Date:
Client ID: **0203016** Run ID: **GC-1_020317A** SeqNo: **48740**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.74	0.5	40	0	96.8%	85	115				
Ethylbenzene	39.5	0.5	40	0	98.7%	85	115				
m,p-Xylene	78.34	1	80	0	97.9%	85	115				
Methyl tert-Butyl Ether	40.45	1	40	0	101.1%	85	115				
o-Xylene	39.14	0.5	40	0	97.9%	85	115				
Toluene	38.14	0.5	40	0	95.4%	85	115				
1,4-Difluorobenzene	104.6	0	110	0	95.1%	70	130				
4-Bromochlorobenzene	121.6	0	110	0	110.6%	70	130				
Fluorobenzene	105	0	110	0	95.5%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0203016
Project: BP - GCU #153E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3_020317** Batch ID: **GC-1_020317** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/17/2002** Prep Date:

Client ID: **0203016** Run ID: **GC-1_020317A** SeqNo: **48741**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.16	0.5	20	0	95.8%	85	115				
Ethylbenzene	19.5	0.5	20	0	97.5%	85	115				
m,p-Xylene	38.58	1	40	0	96.4%	85	115				
Methyl tert-Butyl Ether	19.98	1	20	0	99.9%	85	115				
o-Xylene	19.22	0.5	20	0	96.1%	85	115				
Toluene	18.89	0.5	20	0	94.4%	85	115				
1,4-Difluorobenzene	104.8	0	110	0	95.3%	70	130				
4-Bromochlorobenzene	121	0	110	0	110.0%	70	130				
Fluorobenzene	104.8	0	110	0	95.3%	70	130				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 18-Mar-02

CLIENT: Blagg Engineering
Work Order: 0203016
Project: BP - GCU #153E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ					
0203006-01A	96	110	96.5					
0203007-03A	95.4	110	95.6					
0203007-03AMS	94.6	111	94.7					
0203007-03AMSD	94.9	110	94.7					
0203014-01A	96.7	110	97.4					
0203014-02A	96.5	109	96.7					
0203016-01A	93.6	108	94					
0203016-02A	87.2	104	88.3					
0203021-01A	96.5	110	96.8					
0203022-01A	93.6	110	94.4					
0203022-02A	85.9	103	92					
0203022-03A	96.2	111	96.5					
0203023-01A	85.9	101	91.9					
CCV1_020317	95	112	95.4					
CCV2_020317	95.1	110	95.5					
CCV3_020317	95.3	110	95.3					
LCS_020317	94.8	110	95					
MB_020317	95.1	104	95.5					

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	70-130
4BCBZ	=	4-Bromochlorobenzene	70-130
FLBZ	=	Fluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

1

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : BP AMOCO

CHAIN-OF-CUSTODY # : 11780

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

LABORATORY (S) USED : ON - SITE TECH.

Date : June 21, 2002

SAMPLER : N J V

Filename : 06-21-02.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)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
2A	100.40	89.22	11.18	15.83	0705	7.63	4,700	2.25	-
3R	100.80	88.90	11.90	20.00	0735	7.69	8,800	1.75	-
7A	99.72	88.50	11.22	16.31	-	-	-	-	-

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:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).
2 bails per foot - small teflon bailer.
3 bails per foot - 3 / 4 " teflon bailer.

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

4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 2A , fair / poor recovery in MW # 3R . Effervescence observed during collection of MW # 3R sample . Collected BTEX samples from MW # 2A & # 3R only . DTW = 14.50 ft. in MW # 3R @ Time 0733 (immediately before collecting sample) .

OFF: (505) 325-5667
FAX: (505) 327-1496

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *10-Jul-02*

Client:	Blagg Engineering	**Client Sample Info:**	BP - GCU #153E
Work Order:	0206039	**Client Sample ID:**	MW #2A
Lab ID:	0206039-01A **Matrix:** AQUEOUS	**Collection Date:**	06/21/2002 7:05:00 AM
Project:	BP - GCU #153E	**COC Record:**	11780

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	63	0.5		µg/L	1	06/27/2002
Toluene	ND	0.5		µg/L	1	06/27/2002
Ethylbenzene	28	0.5		µg/L	1	06/27/2002
m,p-Xylene	29	1		µg/L	1	06/27/2002
o-Xylene	0.8	0.5		µg/L	1	06/27/2002

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above quantitation range
Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499
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LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *10-Jul-02*

Client:	Blagg Engineering	**Client Sample Info:**	BP - GCU #153E
Work Order:	0206039	**Client Sample ID:**	MW #3R
Lab ID:	0206039-02A **Matrix:** AQUEOUS	**Collection Date:**	06/21/2002 7:35:00 AM
Project:	BP - GCU #153E	**COC Record:**	11780

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	310	2.5		µg/L	5	06/28/2002
Toluene	ND	2.5		µg/L	5	06/28/2002
Ethylbenzene	300	2.5		µg/L	5	06/28/2002
m,p-Xylene	520	5		µg/L	5	06/28/2002
o-Xylene	31	2.5		µg/L	5	06/28/2002

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above quantitation range
Surr: - Surrogate

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1780

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: June 21, 2002

Page: 1 of 1

Purchase Order No.:	Project No.		
SEND INVOICE TO: Name: Tetf Blagg		REPORT RESULTS TO: Name: Nelson Velez	Title
Company: Blagg Engineering, Inc.	Dept.	Company: Same	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No. 632-1199	Telefax No. 632-3903

PROJECT LOCATION: BP - GCU # 159E

SAMPLER'S SIGNATURE: Nelson Velez

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	SAMPLE PRES.	Number of Containers	ANALYSIS REQUESTED: BTEX (8021)	LAB ID
MW # 2A	6/6/02	0705	WATER	HCl & Cool	2	X	206029-01A
MW # 3R	6/6/02	0755	WATER	HCl & Cool	2	X	-02A

Relinquished by: Nelson Velez	Date/Time 6/6/02 0900	Received by: Nelson Velez	Date/Time 6/6/02 0900
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Rush | 24-48 Hours | 10 Working Days | By Date

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Special Instructions / Remarks:

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

On Site Technologies, LTD.

Date: *10-Jul-02*

CLIENT: Blagg Engineering
Work Order: 0206039
Project: BP - GCU #153E

QC SUMMARY REPORT

Method Blank

Sample ID: **MB_020627** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206039** Run ID: **GC-1_020627A** SeqNo: **52887**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
m,p-Xylene	ND	1									
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.1054	0.5									J
1,4-Difluorobenzene	107.6	0									
4-Bromochlorobenzene	118.6	0									
Fluorobenzene	109.7	0									

Sample ID: **MB_020628** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206039** Run ID: **GC-1_020628A** SeqNo: **52913**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
m,p-Xylene	ND	1									
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.1684	0.5									J
1,4-Difluorobenzene	109	0									
4-Bromochlorobenzene	121.8	0									
Fluorobenzene	112.8	0									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *10-Jul-02*

CLIENT: Blagg Engineering
Work Order: 0206039
Project: BP - GCU #153E

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0206041-01AMS** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206039** Run ID: **GC-1_020627A** SeqNo: **52888**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1171	5	400	769.1	100.6%	70	130				
Ethylbenzene	763.9	5	400	352.2	102.9%	70	130				
m,p-Xylene	1554	10	800	774.5	97.4%	70	130				
Methyl tert-Butyl Ether	601.3	10	400	205	99.1%	70	130				
o-Xylene	474.6	5	400	88.25	96.6%	70	130				
Toluene	597.6	5	400	204.9	98.2%	70	130				
1,4-Difluorobenzene	1065	0	1100	0	96.8%	70	130				
4-Bromochlorobenzene	1210	0	1100	0	110.0%	70	130				
Fluorobenzene	1087	0	1100	0	98.8%	70	130				

Sample ID: **0206041-01AMSD** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206039** Run ID: **GC-1_020627A** SeqNo: **52889**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1127	5	400	769.1	89.6%	70	130	1171	3.8%	15	
Ethylbenzene	735.7	5	400	352.2	95.9%	70	130	763.9	3.8%	15	
m,p-Xylene	1498	10	800	774.5	90.5%	70	130	1554	3.6%	15	
Methyl tert-Butyl Ether	591.9	10	400	205	96.7%	70	130	601.3	1.6%	15	
o-Xylene	460.1	5	400	88.25	93.0%	70	130	474.6	3.1%	15	
Toluene	574.8	5	400	204.9	92.5%	70	130	597.6	3.9%	15	
1,4-Difluorobenzene	1054	0	1100	0	95.9%	70	130	0	0.0%	0	
4-Bromochlorobenzene	1208	0	1100	0	109.8%	70	130	0	0.0%	0	
Fluorobenzene	1084	0	1100	0	98.5%	70	130	0	0.0%	0	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0206039
Project: BP - GCU #153E

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0206039-02AMS** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **MW #3R** **0206039** Run ID: **GC-1_020628A** SeqNo: **52914**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	512.8	2.5	200	312.6	100.1%	70	130				
Ethylbenzene	483.4	2.5	200	295.9	93.8%	70	130				
m,p-Xylene	897.1	5	400	517.3	94.9%	70	130				
Methyl tert-Butyl Ether	202.2	5	200	0	101.1%	70	130				
o-Xylene	221.4	2.5	200	30.64	95.4%	70	130				
Toluene	212.8	2.5	200	0.7775	106.0%	70	130				
1,4-Difluorobenzene	538.8	0	550	0	98.0%	70	130				
4-Bromochlorobenzene	614	0	550	0	111.6%	70	130				
Fluorobenzene	553.7	0	550	0	100.7%	70	130				

Sample ID: **0206039-02AMSD** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **MW #3R** **0206039** Run ID: **GC-1_020628A** SeqNo: **52915**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	495.9	2.5	200	312.6	91.6%	70	130	512.8	3.3%	15	
Ethylbenzene	466.3	2.5	200	295.9	85.2%	70	130	483.4	3.6%	15	
m,p-Xylene	866.1	5	400	517.3	87.2%	70	130	897.1	3.5%	15	
Methyl tert-Butyl Ether	197.8	5	200	0	98.9%	70	130	202.2	2.2%	15	
o-Xylene	216.8	2.5	200	30.64	93.1%	70	130	221.4	2.1%	15	
Toluene	206.5	2.5	200	0.7775	102.9%	70	130	212.8	3.0%	15	
1,4-Difluorobenzene	529.2	0	550	0	96.2%	70	130	0	0.0%	0	
4-Bromochlorobenzene	603	0	550	0	109.6%	70	130	0	0.0%	0	
Fluorobenzene	545.4	0	550	0	99.2%	70	130	0	0.0%	0	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

On Site Technologies, LTD.

Date: *10-Jul-02*

CLIENT: Blagg Engineering
Work Order: 0206039
Project: BP - GCU #153E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS_020627** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206039** Run ID: **GC-1_020627A** SeqNo: **52886**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.85	0.5	40	0	97.1%	80	120				
Ethylbenzene	39.46	0.5	40	0	98.7%	80	120				
m,p-Xylene	78.4	1	80	0	98.0%	80	120				
Methyl tert-Butyl Ether	39.58	1	40	0	99.0%	80	120				
o-Xylene	38.05	0.5	40	0	95.1%	80	120				
Toluene	37.88	0.5	40	0.1054	94.4%	80	120				
1,4-Difluorobenzene	106.6	0	110	0	97.0%	70	130				
4-Bromochlorobenzene	120.1	0	110	0	109.2%	70	130				
Fluorobenzene	108.9	0	110	0	99.0%	70	130				

Sample ID: **LCS_020628** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206039** Run ID: **GC-1_020628A** SeqNo: **52912**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.44	0.5	40	0	98.6%	80	120				
Ethylbenzene	39.99	0.5	40	0	100.0%	80	120				
m,p-Xylene	79.19	1	80	0	99.0%	80	120				
Methyl tert-Butyl Ether	38.46	1	40	0	96.1%	80	120				
o-Xylene	38.22	0.5	40	0	95.6%	80	120				
Toluene	38.31	0.5	40	0.1684	95.4%	80	120				
1,4-Difluorobenzene	108.3	0	110	0	98.4%	70	130				
4-Bromochlorobenzene	122	0	110	0	110.9%	70	130				
Fluorobenzene	111.3	0	110	0	101.2%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

On Site Technologies, LTD.

Date: *10-Jul-02*

CLIENT: Blagg Engineering
Work Order: 0206039
Project: BP - GCU #153E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1_020627** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206039** Run ID: **GC-1_020627A** SeqNo: **52883**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.08	0.5	20	0	100.4%	85	115				
Ethylbenzene	20.33	0.5	20	0	101.6%	85	115				
m,p-Xylene	40.7	1	40	0	101.7%	85	115				
Methyl tert-Butyl Ether	19.9	1	20	0	99.5%	85	115				
o-Xylene	19.56	0.5	20	0	97.8%	85	115				
Toluene	19.51	0.5	20	0	97.5%	85	115				
1,4-Difluorobenzene	106.7	0	110	0	97.0%	70	130				
4-Bromochlorobenzene	117.7	0	110	0	107.0%	70	130				
Fluorobenzene	109.6	0	110	0	99.6%	70	130				

Sample ID: **CCV2_020627** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206039** Run ID: **GC-1_020627A** SeqNo: **52884**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.17	0.5	20	0	95.9%	85	115				
Ethylbenzene	19.37	0.5	20	0	96.9%	85	115				
m,p-Xylene	38.18	1	40	0	95.4%	85	115				
Methyl tert-Butyl Ether	18.95	1	20	0	94.7%	85	115				
o-Xylene	18.69	0.5	20	0	93.5%	85	115				
Toluene	18.54	0.5	20	0	92.7%	85	115				
1,4-Difluorobenzene	109.1	0	110	0	99.2%	70	130				
4-Bromochlorobenzene	123.6	0	110	0	112.4%	70	130				
Fluorobenzene	111.7	0	110	0	101.6%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: Blagg Engineering
Work Order: 0206039
Project: BP - GCU #153E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3_020627** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206039** Run ID: **GC-1_020627A** SeqNo: **52885**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.74	0.5	40	0	96.8%	85	115				
Ethylbenzene	38.89	0.5	40	0	97.2%	85	115				
m,p-Xylene	76.38	1	80	0	95.5%	85	115				
Methyl tert-Butyl Ether	38.49	1	40	0	96.2%	85	115				
o-Xylene	37.42	0.5	40	0	93.5%	85	115				
Toluene	37.56	0.5	40	0	93.9%	85	115				
1,4-Difluorobenzene	107.9	0	110	0	98.1%	70	130				
4-Bromochlorobenzene	119.1	0	110	0	108.3%	70	130				
Fluorobenzene	111.5	0	110	0	101.4%	70	130				

Sample ID: **CCV1_020628** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206039** Run ID: **GC-1_020628A** SeqNo: **52911**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.37	0.5	20	0	101.9%	85	115				
Ethylbenzene	20.56	0.5	20	0	102.8%	85	115				
m,p-Xylene	40.47	1	40	0	101.2%	85	115				
Methyl tert-Butyl Ether	19.98	1	20	0	99.9%	85	115				
o-Xylene	19.67	0.5	20	0	98.4%	85	115				
Toluene	19.69	0.5	20	0	98.5%	85	115				
1,4-Difluorobenzene	108.4	0	110	0	98.5%	70	130				
4-Bromochlorobenzene	121.5	0	110	0	110.4%	70	130				
Fluorobenzene	111.6	0	110	0	101.5%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0206039
Project: BP - GCU #153E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV2_020628** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206039** Run ID: **GC-1_020628A** SeqNo: **52909**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.06	0.5	20	0	100.3%	85	115				
Ethylbenzene	20.13	0.5	20	0	100.6%	85	115				
m,p-Xylene	39.24	1	40	0	98.1%	85	115				
Methyl tert-Butyl Ether	20.31	1	20	0	101.5%	85	115				
o-Xylene	19.37	0.5	20	0	96.8%	85	115				
Toluene	19.38	0.5	20	0	96.9%	85	115				
1,4-Difluorobenzene	108.7	0	110	0	98.8%	70	130				
4-Bromochlorobenzene	118.9	0	110	0	108.1%	70	130				
Fluorobenzene	111.8	0	110	0	101.7%	70	130				

Sample ID: **CCV3_020628** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206039** Run ID: **GC-1_020628A** SeqNo: **52910**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.19	0.5	40	0	95.5%	85	115				
Ethylbenzene	38.83	0.5	40	0	97.1%	85	115				
m,p-Xylene	75.68	1	80	0	94.6%	85	115				
Methyl tert-Butyl Ether	38.62	1	40	0	96.5%	85	115				
o-Xylene	37.34	0.5	40	0	93.4%	85	115				
Toluene	37.3	0.5	40	0	93.2%	85	115				
1,4-Difluorobenzene	108.5	0	110	0	98.6%	70	130				
4-Bromochlorobenzene	116.4	0	110	0	105.8%	70	130				
Fluorobenzene	112.3	0	110	0	102.1%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 10-Jul-02

CLIENT: Blagg Engineering
Work Order: 0206039
Project: BP - GCU #153E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0206028-01A	88	100	105
0206029-01A	99.2	109	102
0206030-01A	90.1	103	102
0206030-02A	99.4	111	102
0206030-03A	96.5	111	100
0206031-01A	99.4	110	102
0206031-02A	98.4	110	102
0206031-03A	98.2	111	101
0206031-04A	92.1	107	95.5
0206039-01A	91.8	112	95.2
0206039-02A	96.5	108	99.6
0206039-02AMS	98	112	101
0206039-02AMSD	96.2	110	99.2
0206041-01A	96.6	110	99
0206041-01AMS	96.8	110	98.8
0206041-01AMSD	95.8	110	98.5
0206041-02A	98.1	112	101
0206048-01A	97.7	109	101
0206049-01A	97.6	106	100
0206049-02A	95.9	107	99.7
0206050-01A	95.5	109	98.7
0206050-02A	99.5	113	102
0206051-01A	99.2	111	102
0206052-01A	96.3	106	100
0206054-02A	101	100	96.8
0206054-03A	95.5	109	98.3
0206054-04A	95.4	109	98.2

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	70-130
4BCBZ	=	4-Bromochlorobenzene	70-130
FLBZ	=	Fluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

CLIENT:	Blagg Engineering
Work Order:	0206039
Project:	BP - GCU #153E
Test No:	SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0206057-01A	99.5	107	102
0206057-02A	99.2	106	103
0206057-03A	99.6	106	103
0206057-04A	99.7	106	103
0206057-05A	99.4	105	103
0206057-06A	99.1	106	103
0206057-07A	99.3	108	102
0206057-08A	99.3	108	103
0206061-01A	95.4	100	102
CCV1_020627	97	107	99.6
CCV1_020628	98.5	110	102
CCV2_020627	99.2	112	102
CCV2_020628	98.8	108	102
CCV3_020627	98.1	108	101
CCV3_020628	98.6	106	102
LCS_020627	97	109	99
LCS_020628	98.4	111	101
MB_020627	97.8	108	99.8
MB_020628	99.1	111	102

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	70-130
4BCBZ	=	4-Bromochlorobenzene	70-130
FLBZ	=	Fluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

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 30, 2003**

SAMPLER : N J V

Filename : **06-30-03.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	89.66	10.74	15.83	0735	6.81	2,900	19.6	2.50
3R	100.80	89.41	11.39	20.00	0745	7.11	5,200	18.6	1.75
7A	99.72	89.08	10.64	16.31	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	06/30/03	07:30		

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 ".

Excellent recovery in MW # 2A , fair / poor recovery in MW # 3R . No effervescence observed during collection of MW # 3R sample . Collected BTEX samples from MW # 2A & # 3R only . DTW = 14.65 ft. in MW # 3R @ Time 0742 (immediately before collecting sample) .

Hall Environmental Analysis Laboratory

Date: *14-Jul-03*

CLIENT: Blagg Engineering
Project: GCU #153 E
Lab Order: 0306212

Lab ID: 0306212-01
Collection Date: 6/30/2003 7:35:00 AM
Client Sample ID: MW #2A
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	41	2.5		µg/L	5	7/10/2003 5:21:47 PM
Toluene	5.3	2.5		µg/L	5	7/10/2003 5:21:47 PM
Ethylbenzene	30	2.5		µg/L	5	7/10/2003 5:21:47 PM
Xylenes, Total	36	2.5		µg/L	5	7/10/2003 5:21:47 PM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	5	7/10/2003 5:21:47 PM

Lab ID: 0306212-02
Collection Date: 6/30/2003 7:45:00 AM
Client Sample ID: MW #3R
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	300	20		µg/L	40	7/10/2003 5:55:01 PM
Toluene	ND	20		µg/L	40	7/10/2003 5:55:01 PM
Ethylbenzene	76	20		µg/L	40	7/10/2003 5:55:01 PM
Xylenes, Total	170	20		µg/L	40	7/10/2003 5:55:01 PM
Surr: 4-Bromofluorobenzene	102	74-118		%REC	40	7/10/2003 5:55:01 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CHAIN-OF-CUSTODY RECORD

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite A
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: BLAGG/ BP AMERICA	Project Name: GCU #153E
Address: P.O. BOX 87 BLFD. NM 87413	Project #:
	Project Manager: NELSON VELEZ
Phone #: 505-632-1199	Sampler: NELSON VELEZ
Fax #: 505-632-3903	Samples Cold?: ~ ☒ Yes ☐ No

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HCl	Preservative	HEAL No.	(BTEX + MTBE + TMB's (8021B))	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B MOD (Gas/Diesel)	TPH (Method 418.1)	Volatiles Full List (8021)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Cations (Na, K, Ca, Mg)	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260 (VOA)	8270 (Semi-VOA)			Air Bubbles or Headspace (Y or N)
6/30/03	0735	WATER	MW #2A	2-40ml	✓			0306212-1	✓																
6/30/03	0745	WATER	MW #3R	2-40ml	✓			2	✓																

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	Remarks:
6/30/03	0825	Nelson Vel	Laura Thorne 1656	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Hall Environmental Analysis Laboratory

Date: *14-Jul-03*

CLIENT: Blagg Engineering
Work Order: 0306212
Project: GCU #153 E

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R8822** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/10/2003 4:36:31 AM** Prep Date

Client ID: Run ID: **PIDFID_030709A** SeqNo: **199184**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
Xylenes, Total	ND	0.50									
Surr: 4-Bromofluorobenzene	19.16	0	20	0	95.8	74	118	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *14-Jul-03*

CLIENT: Blagg Engineering
Work Order: 0306212
Project: GCU #153 E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX Std 100ng** Batch ID: **R8822** Test Code: **SW8021** Units: **mg/Kg** Analysis Date **7/10/2003 1:59:46 AM** Prep Date

Client ID: Run ID: **PIDFID_030709A** SeqNo: **199219**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.992	0.10	2	0	99.6	65	132	0			
Benzene	1	0.025	1	0	100	77	122	0			
Toluene	1	0.025	1	0	100	81	115	0			
Ethylbenzene	1	0.025	1	0	100	84	117	0			
Xylenes, Total	3	0.025	3	0	100	84	116	0			

Sample ID **BTEX Std 100ng** Batch ID: **R8822** Test Code: **SW8021** Units: **mg/Kg** Analysis Date **7/11/2003 12:22:31 AM** Prep Date

Client ID: Run ID: **PIDFID_030709A** SeqNo: **199221**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	2.022	0.10	2	0	101	65	132	1.992	1.52	28	
Benzene	1.035	0.025	1	0	104	77	122	1	3.47	27	
Toluene	1.032	0.025	1	0	103	81	115	1	3.17	19	
Ethylbenzene	0.9935	0.025	1	0	99.4	84	117	1	0.659	10	
Xylenes, Total	3.04	0.025	3	0	101	84	116	3	1.33	13	

Sample ID **BTEX Std 100ng** Batch ID: **R8822** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/10/2003 1:59:46 AM** Prep Date

Client ID: Run ID: **PIDFID_030709A** SeqNo: **199192**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20	0.50	20	0	100	81.3	121	0			
Toluene	20	0.50	20	0	100	84.9	118	0			
Ethylbenzene	20	0.50	20	0	100	53.8	149	0			
Xylenes, Total	60.01	0.50	60	0	100	83.1	122	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name **BLAGG** Date and Time Receive **6/30/03**

Work Order Number **0306212** Received by AT

Checklist completed by _____ 6/30/03
Signature Date

Matrix: Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
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 - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Container/Temp Blank temperature? **2°** *4° C ± 2 Acceptable*

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 25, 2004

SAMPLER : N J V

Filename : 06-25-04.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	0735	6.81	2,900	19.6	2.50
3R	100.80	90.29	10.51	20.00	0745	7.11	5,200	18.6	1.75
7A	99.72	88.79	10.93	16.31	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	06/30/03	07:30		

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 ".

Excellent recovery in MW # 2A , fair / poor recovery in MW # 3R . No effervescence observed during collection of MW # 3R sample . Collected BTEX samples from MW # 2A & # 3R only . DTW = 15.30 ft. in MW # 3R @ time of sampling .

Hall Environmental Analysis Laboratory

Date: *07-Jul-04*

CLIENT: Blagg Engineering
Project: GCU Lease
Lab Order: 0406258

Lab ID: 0406258-04
Client Sample ID: MW#2A-GCU#153E
Collection Date: 6/24/2004 7:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	7.6	0.50		µg/L	1	7/6/2004 2:25:44 PM
Toluene	ND	0.50		µg/L	1	7/6/2004 2:25:44 PM
Ethylbenzene	3.5	0.50		µg/L	1	7/6/2004 2:25:44 PM
Xylenes, Total	5.5	0.50		µg/L	1	7/6/2004 2:25:44 PM
Surr: 4-Bromofluorobenzene	105	74-118		%REC	1	7/6/2004 2:25:44 PM

Lab ID: 0406258-05
Client Sample ID: MW#3R-GCU#153E
Collection Date: 6/24/2004 7:10:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	120	2.5		µg/L	5	7/6/2004 2:57:12 PM
Toluene	ND	2.5		µg/L	5	7/6/2004 2:57:12 PM
Ethylbenzene	44	2.5		µg/L	5	7/6/2004 2:57:12 PM
Xylenes, Total	63	2.5		µg/L	5	7/6/2004 2:57:12 PM
Surr: 4-Bromofluorobenzene	105	74-118		%REC	5	7/6/2004 2:57:12 PM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

CHAIN-OF-CUSTODY RECORD

Accreditation Applied:
NELAC ☐ USACE ☐
Other: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: BLAGG / BP AMERICA
Project Name: GCU LEASE
Address: P.O. BOX 87 BLFD., NM 87413
Project #: nr
Project Manager: NJV
Phone #: 505-632-1199
Sampler: NJV
Fax #: 505-632-3903
Sample Temperature: 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
6/25/04	0700	WATER	MW #2A - GCU #153E	2-40ml	✓			-4	✓																
6/25/04	0710	WATER	MW #3R - GCU #153E	2-40ml	✓			-5	✓																

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
6/25/04	0855		6/25/04 1721
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

Hall Environmental Analysis Laboratory

Date: *07-Jul-04*

CLIENT: Blagg Engineering
Work Order: 0406258
Project: GCU Lease

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R12337** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/2/2004 10:11:05 AM** Prep Date

Client ID: Run ID: **PIDFID_040702A** SeqNo: **283891**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.72	0	20	0	98.6	74	118	0			

Sample ID **Reagent Blank 5m** Batch ID: **R12361** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/6/2004 8:15:07 AM** Prep Date

Client ID: Run ID: **PIDFID_040706A** SeqNo: **284457**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.14	0	20	0	95.7	74	118	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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Hall Environmental Analysis Laboratory

Date: *07-Jul-04*

CLIENT: Blagg Engineering
Work Order: 0406258
Project: GCU Lease

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **BTEX std 100ng** Batch ID: **R12337** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/2/2004 11:11:40 AM** Prep Date

Client ID: Run ID: **PIDFID_040702A** SeqNo: **283917**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.22	0.5	20	0	101	81.3	121	0			
Toluene	19.3	0.5	20	0	96.5	84.9	118	0			
Ethylbenzene	18.75	0.5	20	0	93.8	53.8	149	0			
Xylenes, Total	55.59	0.5	60	0	92.7	83.1	122	0			

Sample ID **BTEX std 100ng** Batch ID: **R12361** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/6/2004 3:28:52 PM** Prep Date

Client ID: Run ID: **PIDFID_040706A** SeqNo: **284461**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.76	0.5	20	0	104	81.3	121	0			
Toluene	20.87	0.5	20	0	104	84.9	118	0			
Ethylbenzene	21.37	0.5	20	0	107	53.8	149	0			
Xylenes, Total	63.32	0.5	60	0	106	83.1	122	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name BLAGG | Date and Time Received: 6/25/2004

Work Order Number 0406258 | Received by AT

Checklist completed by _____ 6/25/04
Signature | 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 - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 3° *4° C ± 2 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 22, 2004

SAMPLER : N J V

Filename : 12-22-04.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	89.37	11.03	15.83	1400	-	-	-	2.50
3R	100.80	89.05	11.75	20.00	-	-	-	-	-
7A	99.72	88.65	11.07	16.31	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =				
					DATE & TIME =				

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 ".

Excellent recovery in MW # 2A . Collected BTEX sample from MW # 2A only .

Hall Environmental Analysis Laboratory

Date: *03-Jan-05*

CLIENT: Blagg Engineering
Project: GCU Lease

Lab Order: 0412231

Lab ID: 0412231-03
Client Sample ID: MW#2A-GCU #153E

Collection Date: 12/22/2004 2:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: KTM
Benzene	ND	1.0		µg/L	1	12/28/2004
Toluene	ND	1.0		µg/L	1	12/28/2004
Ethylbenzene	ND	1.0		µg/L	1	12/28/2004
Xylenes, Total	ND	1.0		µg/L	1	12/28/2004
Surr: 4-Bromofluorobenzene	91.3	76.2-122		%REC	1	12/28/2004

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CHAIN-OF-CUSTODY RECORD

Accreditation Applied:
NELAC ☐ USACE ☐
Other: _____

Client: BLAGG ENER. / BP AMERICA

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

Phone #: 505-632-1199

Fax #: 505-632-3903

Project Name: GCU LEASE

Project #:

Project Manager: NJV

Sampler: NJV

Sample Temperature: 4°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No.	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
12/22/04	1400	WATER	MW #2A - GCU #153E	2-40ml	✓		3	✓																

Remarks:

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	Date	Time
12/23/04	0830			12/23/04	1630

Hall Environmental Analysis Laboratory

Date: *03-Jan-05*

CLIENT: Blagg Engineering
Work Order: 0412231
Project: GCU Lease

QC SUMMARY REPORT
Method Blank

Sample ID 5mL rb	Batch ID: R14158	Test Code: SW8260B	Units: µg/L	Analysis Date 12/28/2004	Prep Date
Client ID:		Run ID: THOR_041228A		SeqNo: 329216	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Xylenes, Total	ND	1									
Surr: 4-Bromofluorobenzene	9.466	0	10	0	94.7	76.2	122	0			

Sample ID 5mL rb	Batch ID: R14177	Test Code: SW8260B	Units: µg/L	Analysis Date 12/29/2004	Prep Date
Client ID:		Run ID: THOR_041229A		SeqNo: 329660	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Xylenes, Total	ND	1									
Surr: 4-Bromofluorobenzene	9.58	0	10	0	95.8	76.2	122	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0412231
Project: GCU Lease

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **100ng lcs** Batch ID: **R14158** Test Code: **SW8260B** Units: **µg/L** Analysis Date **12/28/2004** Prep Date

Client ID: Run ID: **THOR_041228A** SeqNo: **329219**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	23.06	1	20	0	115	76.6	123	0			
Toluene	21.54	1	20	0	108	77	121	0			

Sample ID **100ng lcs** Batch ID: **R14177** Test Code: **SW8260B** Units: **µg/L** Analysis Date **12/29/2004** Prep Date

Client ID: Run ID: **THOR_041229A** SeqNo: **329664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.19	1	20	0	111	76.6	123	0			
Toluene	21.01	1	20	0	105	77	121	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name BLAGG | Date and Time Received: 12/23/2004

Work Order Number 0412231 | Received by AT

Checklist completed by _____ 12/23/04
Signature | 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 - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	4°	*4° C ± 2 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 : March 29, 2005

SAMPLER : N J V

Filename : 03-29-05.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	90.55	9.85	15.83	0730	6.73	3100	10.2	3.00
3R	100.80	90.32	10.48	20.00	-	-	-	-	-
7A	99.72	89.76	9.96	16.31	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	7.00	2,800
DATE & TIME =	03/28/05	1255

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 ".

Excellent recovery in MW # 2A . Collected BTEX sample from MW # 2A only .

Hall Environmental Analysis Laboratory

Date: *04-Apr-05*

CLIENT: Blagg Engineering
Project: GCU Lease

Lab Order: 0503265

Lab ID: 0503265-03
Client Sample ID: MW#2A GCU #153E

Collection Date: 3/29/2005 7:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	4/1/2005 12:11:39 PM
Toluene	ND	0.50		µg/L	1	4/1/2005 12:11:39 PM
Ethylbenzene	ND	0.50		µg/L	1	4/1/2005 12:11:39 PM
Xylenes, Total	ND	0.50		µg/L	1	4/1/2005 12:11:39 PM
Surr: 4-Bromofluorobenzene	104	83.3-121		%REC	1	4/1/2005 12:11:39 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CHAIN-OF-CUSTODY RECORD

Accreditation Applied:
NELAC ☐ USACE ☐
Other: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: BLAGG ENGR. / BP AMERICA
Project Name: GCU LEASE
Address: P.O. BOX 87
BLFD., NM 87413
Project #: nv
Project Manager: NJV
Phone #: 505-632-1199
Sampler: NJV
Fax #: 505-632-3903
Sample Temperature: 5°C

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No.	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles or Headspace (Y or N)
							0503265-1													
							-2													
3/29/05	0730	WATER	MW #2A - GCU #153E	2-40ml	✓		-3	✓												

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
3/29/05	0915		3/29/05 1715
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

CLIENT: Blagg Engineering
Work Order: 0503265
Project: GCU Lease

QC SUMMARY REPORT
Method Blank

Sample ID Reagent Blank 5m Batch ID: R14984 Test Code: SW8021 Units: µg/L Analysis Date 4/1/2005 9:03:48 AM Prep Date

Client ID: Run ID: PIDFID_050401A SeqNo: 348595

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.49	0	20	0	97.5	83.3	121	0			

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

J

Hall Environmental Analysis Laboratory

Date: *04-Apr-05*

CLIENT: Blagg Engineering
Work Order: 0503265
Project: GCU Lease

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0503265-02a ms** Batch ID: **R14984** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/1/2005 5:45:26 PM** Prep Date

Client ID: **MW#2 GCU #194** Run ID: **PIDFID_050401A** SeqNo: **348625**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.18	0.5	20	0.4414	104	88.7	114	0			
Toluene	20.37	0.5	20	0.2268	101	89.3	112	0			
Ethylbenzene	23.46	0.5	20	1.487	110	88.6	113	0			
Xylenes, Total	64.53	0.5	60	2.118	104	89.4	112	0			
Surr: 4-Bromofluorobenzene	24.97	0	24	0	104	83.3	121	0			

Sample ID **0503265-02a msd** Batch ID: **R14984** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/1/2005 6:15:44 PM** Prep Date

Client ID: **MW#2 GCU #194** Run ID: **PIDFID_050401A** SeqNo: **348631**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.65	0.5	20	0.4414	101	88.7	114	21.18	2.56	27	
Toluene	20.75	0.5	20	0.2268	103	89.3	112	20.37	1.84	19	
Ethylbenzene	23.19	0.5	20	1.487	109	88.6	113	23.46	1.17	10	
Xylenes, Total	61.73	0.5	60	2.118	99.3	89.4	112	64.53	4.44	13	
Surr: 4-Bromofluorobenzene	25.22	0	24	0	105	83.3	121	24.97	0.989	0	

3 / 5

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *04-Apr-05*

CLIENT: Blagg Engineering
Work Order: 0503265
Project: GCU Lease

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID BTEX lcs 100ng | Batch ID: R14984 | Test Code: SW8021 | Units: µg/L | Analysis Date 4/1/2005 5:15:08 PM | Prep Date

Client ID: | Run ID: PIDFID_050401A | SeqNo: 348644

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.81	0.5	20	0	99.0	88.7	114	0			
Toluene	20.39	0.5	20	0	102	89.3	112	0			
Ethylbenzene	20.77	0.5	20	0	104	88.6	113	0			
Xylenes, Total	59.76	0.5	60	0	99.6	89.4	112	0			

Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name BLAGG | Date and Time Received: 3/29/2005

Work Order Number 0503265 | Received by AT

Checklist completed by _____ 3/29/05
Signature | 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 - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 5° *4° C ± 2 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 : June 27, 2005

SAMPLER : N J V

Filename : 06-27-05.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	90.25	10.15	15.83	-	-	-	-	-
3R	100.80	90.02	10.78	20.00	0830	7.00	6,200	17.6	2.00
7A	99.72	89.66	10.06	16.31	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	06/23/05	0630		

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

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

Comments or note well diameter if not standard 2 ".

Poor / fair recovery in MW # 3R . Collected BTEX sample from MW # 3R only .

Hall Environmental Analysis Laboratory

Date: *05-Jul-05*

CLIENT: Blagg Engineering
Project: GCU LEASE

Lab Order: 0506255

Lab ID: 0506255-03
Client Sample ID: MW-3R GCU#153E

Collection Date: 6/27/2005 8:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	160	5.0		µg/L	10	6/30/2005 12:45:20 PM
Toluene	12	5.0		µg/L	10	6/30/2005 12:45:20 PM
Ethylbenzene	54	5.0		µg/L	10	6/30/2005 12:45:20 PM
Xylenes, Total	84	5.0		µg/L	10	6/30/2005 12:45:20 PM
Surr: 4-Bromofluorobenzene	98.6	83.3-121		%REC	10	6/30/2005 12:45:20 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CHAIN-OF-CUSTODY RECORD

Accreditation Applied:
NELAC ☐ USACE ☐
Other: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: BLAGG ENGR. / BP AMERICA
Address: P.O. BOX 87 BLFD., NM 87413
Phone #: (505) 632-1199
Fax #: (505) 632-3903

Project Name: ECU LEASE
Project #: 9N
Project Manager: NV
Sampler: NV
Sample Temperature: 2°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0506259
6/27/05	0830	WATER	MW #3R – ECU #153E	2-40ml	✓			-3

BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
✓																

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
6/27/05	0835	Melissa Vn	Natasha Peth 6/27/05 1605
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

CLIENT: Blagg Engineering
Work Order: 0506255
Project: GCU LEASE

QC SUMMARY REPORT

Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R15847** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/29/2005 10:41:34 AM** Prep Date

Client ID: Run ID: **PIDFID_050629A** SeqNo: **375749**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	18.31	0	20	0	91.6	83.3	121	0			

Sample ID **Reagent Blank 5m** Batch ID: **R15863** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/30/2005 10:30:22 AM** Prep Date

Client ID: Run ID: **PIDFID_050630A** SeqNo: **376231**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	17.44	0	20	0	87.2	83.3	121	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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Hall Environmental Analysis Laboratory

Date: *05-Jul-05*

CLIENT: Blagg Engineering
Work Order: 0506255
Project: GCU LEASE

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX LCS 100ng** Batch ID: **R15847** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/29/2005 1:30:53 PM** Prep Date

Client ID: Run ID: **PIDFID_050629A** SeqNo: **375788**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.22	0.5	20	0	96.1	88.7	114	0			
Toluene	19.77	0.5	20	0	98.9	89.3	112	0			
Ethylbenzene	19.48	0.5	20	0	97.4	88.6	113	0			
Xylenes, Total	59.2	0.5	60	0	98.7	89.4	112	0			

Sample ID **BTEX LCS 100ng** Batch ID: **R15863** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/30/2005 12:03:37 PM** Prep Date

Client ID: Run ID: **PIDFID_050630A** SeqNo: **376239**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.58	0.5	20	0	92.9	88.7	114	0			
Toluene	18.93	0.5	20	0	94.6	89.3	112	0			
Ethylbenzene	18.79	0.5	20	0	93.9	88.6	113	0			
Xylenes, Total	57.41	0.5	60	0	95.7	89.4	112	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name BLAGG | Date and Time Received: 6/27/2005

Work Order Number 0506255 | Received by NMP

Checklist completed by _____ (Signature) 6-27-05 (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 - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	2°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____