3R - 406

AGWMR

02/22/2010

3R406

BP AMERICA PRODUCTION CO.

GROUNDWATER MONITORING REPORT

MUDGE LS # 9A
(O) SEC. 3 – T31N – R11W, NMPM
SAN JUAN COUNTY, NEW MEXICO

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

PREPARED BY:
BLAGG ENGINEERING, INC.

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

FEBRUARY 2010

BP AMERICA PRODUCTION COMPANY

GROUNDWATER MONITORING REPORT
MUDGE LS # 9A
SW/4 SE/4, Sec. 3, T31N, R11W

Monitor Well Installation Date: 7/25/07 (MW #4)

Monitor Well Sampling Dates: 10/27/06, 1/23/07, 4/18/07, 7/30/07, 10/18/07, 4/15/08, 6/24/08

Site History:

Initial groundwater impacts at this site were discovered in February 2006 following work on site equipment modifications. The soil remediation effort was completed by March 2006. Three (3) groundwater monitor wells were then installed on July 5, 2006 (*Figure 1*). Initial water test results from MW #1 indicated impacts of benzene and total xylenes were slightly above New Mexico Water Quality Control Commission (NMWQCC) groundwater standards. This data was reported and submitted to the New Mexico Oil Conservation Division (NMOCD) in August 2006.

The aforementioned report recommended additional groundwater monitoring points. One (1) additional monitor well, namely MW #4, was installed in July 2007 and was positioned down gradient of MW #1. This well was initially sampled and tested in late July 2007. Bore log/monitor well completion data for MW #4 was recorded and is included within this report.

Groundwater Monitor Well Sampling Procedures:

Each monitor well sampled and tested was developed by hand-bailing, using new disposable bailers after installation. Prior to sample collections, each monitor well was purged approximately three (3) well bore volumes with new disposable bailers. The groundwater samples were collected following US EPA: SW-846 protocol, were placed into laboratory supplied containers with appropriate preservative, and stored in an ice chest for express delivery to an analytical laboratory for testing under strict chain-of-custody procedures. Analytical testing for benzene, toluene, ethylbenzene, and total xylenes (BTEX) was conducted by utilizing US EPA Method 8021B.

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

Groundwater Quality & Flow Direction Information:

Quarterly sampling of the groundwater monitor wells initiated in August 2006 and continued through June 2008. A summary of laboratory analytical results is included within the table on the following page. Quarterly monitoring of MW #1 and MW #4 for BTEX was concurrent between July 2007 and June 2008. All BTEX constituents were below NMWQCC standards or non-detectable at the stated reporting limits. Field development and sampling data are also included.

A survey of water wells within one (1) mile radius of the well site was researched at the New Mexico State Engineers web site and is included within this report. No water wells were identified (data sheet enclosed). All laboratory analytical results, chain-of-custody records, and quality assurance/quality control documentation from the quarterly sampling between October 2006 and June 2008 are included within this report.

Groundwater contour maps of relative water table elevations have consistently been measure to flow toward the southeast direction (*Figure 2 through Figure 8*).

Summary and/or Recommendations:

Hydrocarbon impacted soil and groundwater at the site appear to have been remediated via excavation of impacted soils. All site wells tested BTEX at non-detectable levels or below NMWQCC standards for groundwater for at least four (4) consecutive sampling events, except MW #3 (side gradient and background data purpose only).

Enclosed within this report is a letter that was sent to NMOCD, dated March 2, 2007. This letter was in response to NMOCD's correspondence letter, dated January 24, 2007 necessitating revision of the site workplan with numerous requirements of detail conditions. Within the response letter, a thorough explanation was given to address the workplan revision requirement as well as some of the stated conditions previously achieved and supplied within the initial "Remediation and Monitoring Report", dated August 26, 2006. The letter also stipulated that "*other proposed workplan revisions, such as inclusion of geologic cross sections, discussion of surface-water hydrology, stream flow characteristics, etc., maps indicating the location of pipelines and other pertinent features, and isopleth maps*" could also be addressed within future monitoring reports. In retrospect of the substantial reclamation effort and limited data points, it appears that the abovementioned conditions cannot or are not achievable, applicable, or pertinent for the protection of public health, welfare and the environment.

Based upon the previously submitted and enclosed documentation, permanent site closure is recommended. Following closure approval by the NMOCD, site monitor wells will be abandoned by eliminating the monitor well tops and protectors, then grouting the remaining subsurface casing and screen interval with a 5% bentonite concrete slurry.

Limitations and Closure:

The scope of services has been limited to site sampling and reporting. Work has been performed in accordance with generally accepted practices in environmental engineering and hydrogeology.

This report has been prepared for the exclusive use of BP America Production Company as it pertains to the Mudge LS #9A well site located in San Juan County, New Mexico.

Blagg Engineering, Inc. certifies that it is familiar with the investigative work at the site, site conditions and information as reported in this document.

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

SENT VIA USPS CERTIFIED #7006 0810 0003 7019 0358

March 2, 2007

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

Re: BP America Production Company
Remediation Plans for Groundwater Impact Sites
San Juan Basin, New Mexico

Dear Mr. von Gonten:

In regards to your correspondence dated January 24, 2007, concerning remediation plans for the BP America Production Company operated wells; Jaquez GC C1, Chavez GC A1 and the Mudge LS 9A, BP has retained Blagg Engineering, Inc. (BEI) to review your request for revised plans.

As outlined in your correspondence, a separate abatement plan for each impact was submitted to the New Mexico Oil Conservation Division (NMOCD) on June 2, 2006. These abatement plans were developed following the BP Groundwater Management Plan submitted to the NMOCD dated November 21, 1995, with revisions dated October 18, 1996 and May 11, 1998. It is BP's understanding that this Groundwater Management Plan and amendments, as approved by the NMOCD with correspondence dated November 29, 1995, February 7, 1997 and May 28, 1998, is sufficient.

Pursuant to the three (3) separate site specific abatement plans, there has been ongoing and substantial investigation, remedial action and reporting. This work has been documented in the following reports submitted to the NMOCD (U.S. Postal Service Certified, with copies sent to the Aztec District Office) with cover letters dated September 20, 2006:

- Remediation and Monitoring Report - Chavez GC A1 - (G) Sec. 3 T29N R9W, dated 8/31/06
- Remediation and Monitoring Report - Jaquez GC C1 - (O) Sec. 6 T29N R9W, dated 8/24/06
- Remediation and Monitoring Report - Mudge LS 9A - (O) Sec. 3 T31N R11W, dated 8/29/06

These reports provide detailed information concerning the nature of the environmental impacts, document remedial actions (i.e., excavation of impacted soils), discuss subsurface geologic characteristics, provide monitor well boring logs, well completion diagrams and site diagrams, and

include laboratory test results of soil and groundwater sampling. BP and BEI believe that the documentation provided in these reports is significant and that NMOCD's request to revise the remediation workplans should consider work completed to date.

Prior to developing new workplans for each site, BP would appreciate the NMOCD's clarification concerning specific issues for each site as outlined below:

Jaquez GC C1:

A release of less than 5 barrels of liquid from a separator was discovered at the site on January 10, 2006. The volume lost was below regulatory reporting requirements. At the time of discovery there was no impact to surface waters, however, due to the presence of very shallow groundwater at the site (at the time believed to be 2' - 3' below grade) there was concern for potential impacts to groundwater. BP was pro-active and completed excavation of any potentially impacted soils by January 13, 2006. As outlined in the June 2, 2006 abatement plan all impacted soils were removed from the site with no apparent groundwater impacts. Subsequent installation and monitoring of site groundwater monitor wells, as outlined in the September 20, 2006 "Remediation and Monitoring Report", detected no groundwater or surface water impacts. Therefore, BP requests reconsideration by the NMOCD for further development or revisions to the existing workplan.

Mudge LS 9A:

This well was originally completed in 1978 when discharges of produced fluids to unlined pits were a NMOCD authorized and accepted industry practice. Environmental impacts resulting from historical releases to an unlined production pit were discovered on February 20, 2006 during closure of the pit. The impacts at the pit were the result of historical discharges and not from a recent reportable leak, spill or other fluid loss. BP's closure of the pit was pursuant to a general pit closure plan submitted to NMOCD, pursuant to NMAC 19.15.2.50(F) with cover letter dated November 17, 2004.

Actions to investigate and remedy environmental impacts at the site have been substantial, as outlined in the original Abatement Plan dated June 2, 2006 and further documented in the "Remediation and Monitoring Report" dated August 29, 2006. The remediation report includes information concerning site geology, hydrology, the extent of impacts and suggests further actions to complete site investigation and monitoring. Since site soil contamination could be accessed and removed via excavation (including removal of approximately 7,200± cubic yards of material) determination of site hydrologic parameters such as hydraulic conductivity, transmissivity and storativity will not yield beneficial information necessary for development of future remedial actions. The source area soil impacts contributing to groundwater impacts are no longer present at the site. The site is located away from a riparian area and there are no surface waters, streams or stream sediments impacted.

The "Remediation and Monitoring Report" submitted to NMOCD includes the majority of information as requested in your proposed workplan revision, such as a description of all activities to date, a monitoring program, sampling plan, well logs, water table contour maps, summary lab data

tables, lab reports with QA/QC, waste disposition and recommendations for further action. Not included in the report was a survey of water wells within a 1 mile and this can be included in a future monitoring report. Other proposed workplan revisions, such as inclusion of geologic cross sections, maps indicating the location of pipelines and other pertinent features and isopleth maps can also be addressed by inclusion in future monitoring reports.

The original workplan proposed quarterly monitoring and annual reporting. Reporting can be provided on a quarterly basis and the next quarterly report can provide water well information and additional site maps as discussed above. Therefore, we believe this can be addressed administratively herein and generation of a new workplan is not necessary.

Chavez GC A1:

This gas well was originally completed in 1951 during an era when discharges of produced fluids to unlined pits, even in what are now environmentally sensitive areas, were a NMOCD authorized and accepted industry practice. The impacts discovered on February 13, 2006 during site equipment modifications were the result of historical discharges to various unlined pits and not from a reportable leak, spill or other fluid loss. BP enlisted the assistance of the Fee surface owner, who has extensive historical knowledge of the site, to identify the approximate location of likely various surface discharge areas that may have been present in prior years. This helped in planning site remediation via excavation. Site remediation was pursuant to a general pit closure plan submitted to NMOCD, pursuant to NMAC 19.15.2.50(F) with cover letter dated November 17, 2004.

Similar to the Jaquez GC C1 and Mudge LS 9A sites previously discussed, actions to investigate and remedy environmental impacts at the site have been substantial as outlined in the original Abatement Plan dated June 2, 2006 and further documented in the "Remediation and Monitoring Report" dated August 31, 2006. The remediation report includes information concerning site geology and hydrology and provides recommendations to complete site reclamation. Since site contamination can be accessed and removed via excavation (removal of approximately 14,000± cubic yards of soil to date) determination of additional hydrologic parameters such as hydraulic conductivity, transmissivity and storativity, in our opinion, will not yield beneficial information necessary to complete removal of impacted media. As discussed in the "Remediation and Monitoring Report", most source area soil impacts contributing to groundwater impacts have been removed and additional excavation to remove remaining soil impacts are planned.

The "Remediation and Monitoring Report" submitted to NMOCD includes the majority of information as requested in your proposed workplan revision, such as a description of all activities to date, monitoring program, sampling plan, well logs, water table contour maps, summary lab data tables, lab reports with QA/QC, waste disposition and recommendations for further action. Not included in the report was a survey of water wells within 1 mile and this can be included in a future monitoring report. Other proposed workplan revisions, such as inclusion of geologic cross sections, discussion of surface-water hydrology, stream flow characteristics, etc., maps indicating the location of pipelines and other pertinent features, and isopleth maps can also be addressed by inclusion in future monitoring reports.

As with the previously discussed Mudge LS 9A site, the original workplan proposed quarterly monitoring and annual reporting. Reporting can be provided on a quarterly basis and the next quarterly report can provide water well information, additional site maps and further discussion of hydrology and stream flow characteristics, etc., as discussed above. Therefore, BP believes this can be addressed administratively herein and do not believe generation of a new workplan is necessary.

Summary

We appreciate the opportunity to respond to NMOCD's concerns with respect to investigation and remediation of environmental impacts at the Jaquez GC C1, Mudge LS 9A and Chavez GC A1 well sites. We share those concerns. BP has a vested interest in bringing the sites to complete environmental compliance using the best available technologies. Excavation and removal of impacted media is a very aggressive approach and from our experience yields excellent success in environmental restoration. This method was used at all three sites. Based on soil and water quality testing information previously provided to the NMOCD in site Remediation and Monitoring reports, remedial efforts to date appear to have been highly effective.

We invite the opportunity to discuss this with you and if you have any questions or comments please contact either myself at (505)632-1199 or Mr. Larry Schlotterback of BP at (505)326-9425.

Respectfully submitted:
Blagg Engineering, Inc.

Jeffrey C. Blagg, P.E.
President

cc: Charlie Perrin - NMOCD Aztec
Larry Schlotterback - BP San Juan Op. Center

Attachments:

BP Groundwater Management Plan submitted to the NMOCD dated November 21, 1995 and Revisions dated October 18, 1996 and May 11, 1998
Revised Pit Closure Plan submitted to the NMOCD dated November 17, 2004
Correspondence dated November 29, 1995 and May 28, 1998

BP AMERICA PROD. CO. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

MUDGE LS # 9A
UNIT O, SEC. 3, T31N, R11W

REVISED DATE: June 30, 2008

FILENAME: (M9A-2Q08.WK4) NJV

SAMPLE DATE	WELL NAME or No.	D.T.W. (ft)	T.D. (ft)	TDS (mg/L)	COND. umhos	pH	PRODUCT (ft)	BTEX EPA METHOD 8021B (ppb) Benzene	Toluene	Ethyl Benzene	Total Xylene
10-Aug-06	MW #1	20.09	30.30	5,250	4,800	7.08		**44**	ND	230	**670**
27-Oct-06		19.74			4,600	7.02		**15**	ND	110	**260**
23-Jan-07		20.18			4,500	7.10		**16**	ND	130	**320**
18-Apr-07		20.19			4,300	7.08		**13**	ND	110	**280**
30-Jul-07		20.32			5,000	7.09		**3.0**	ND	29	**55**
18-Oct-07		20.67			4,500	7.21		**ND**	ND	ND	**ND**
15-Apr-08		19.47			2,700	7.08		**5.8**	ND	102	**216**
24-Jun-08		19.96			3,000	7.19		**3.6**	ND	67.3	**115**
10-Aug-06	MW #2	15.72	30.00	4,680	4,300	7.00		ND	ND	ND	ND
27-Oct-06		15.26			4,100	7.01		ND	ND	ND	ND
23-Jan-07		15.87			4,200	7.04		ND	ND	ND	ND
18-Apr-07		15.85			4,000	6.93		ND	ND	ND	ND
30-Jul-07		15.96			3,400	6.90		ND	ND	ND	ND
10-Aug-06	MW #3	17.87	30.00	5,500	4,700	7.06		ND	ND	ND	ND
30-Jul-07	MW #4	17.79	25.00		4,800	7.10		ND	ND	ND	ND
18-Oct-07		17.83			4,500	7.22		ND	ND	ND	ND
15-Apr-08		16.77			2,500	7.28		ND	ND	2.6	7.6
24-Jun-08		17.36			2,700	7.31		ND	ND	ND	ND
					NMWQCC GROUNDWATER STANDARDS			**10**	**750**	**750**	**620**

NOTES : 1) **RESULTS IN BOLD RED TYPE INDICATE EXCEEDING NMWQCC STANDARDS .**

2) **RESULTS IN BOLD BLUE TYPE INDICATE BELOW NMWQCC STANDARDS AFTER PREVIOUS RESULTS IN BOLD RED TYPE EXCEEDED .**

3) **ND INDICATES NOT DETECTED AT THE REPORTING LIMITS (less than regulatory standards of at least a magnitude of 10) .**

New Mexico Office of the State Engineer
Wells with Well Log Information

No wells found.

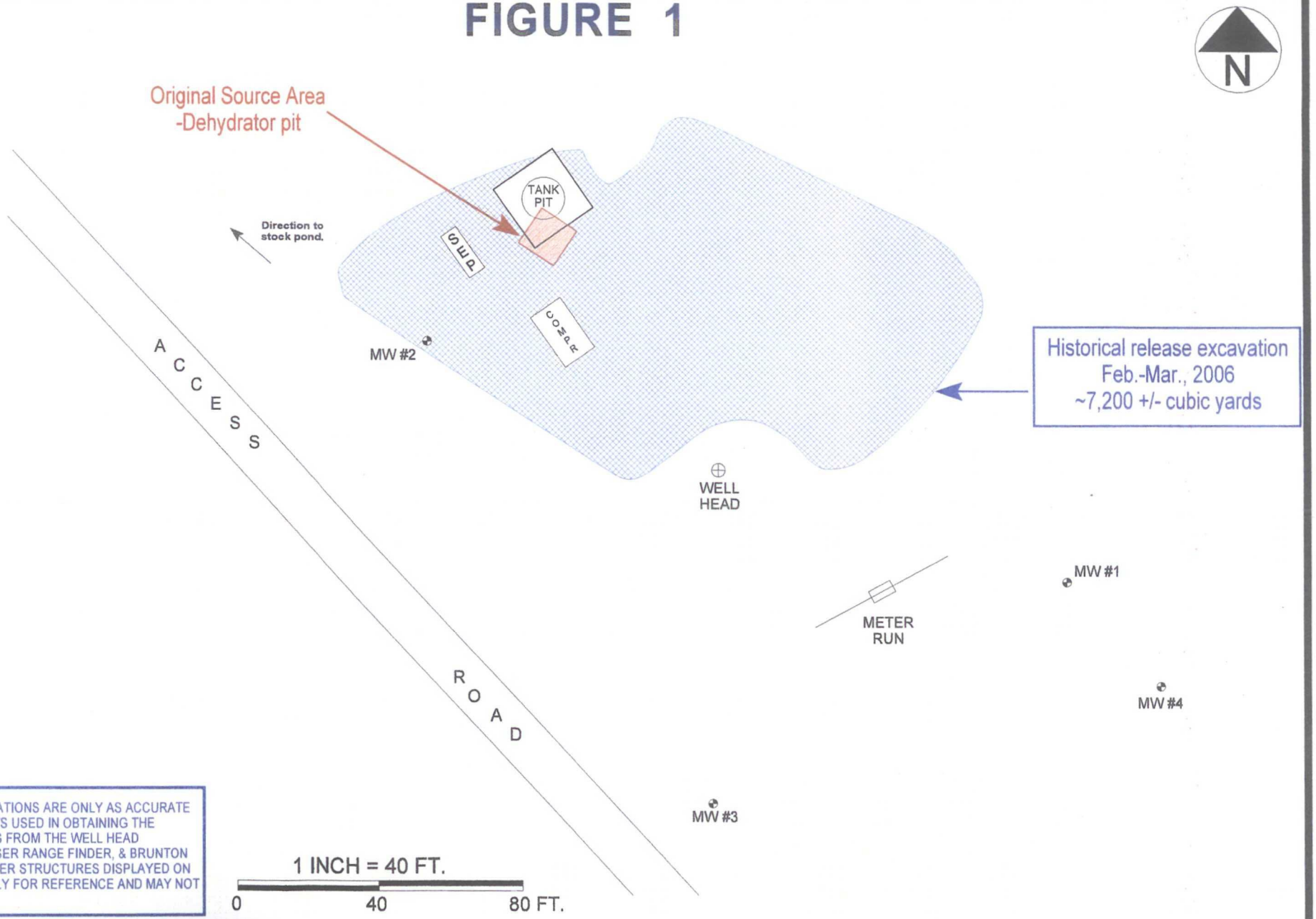
Basin/County Search:

Basin: San Juan **County:** San Juan

UTMNAD83 Radius Search (in meters):

Easting (X): 235042 **Northing (Y):** 4090428 **Radius:** 1609

FIGURE 1



BP AMERICA PRODUCTION CO.

MUDGE LS #9A

SW/4 SE/4 SEC. 3, T31N, R11W

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW INSTALLATION

DRAWN BY: NJV

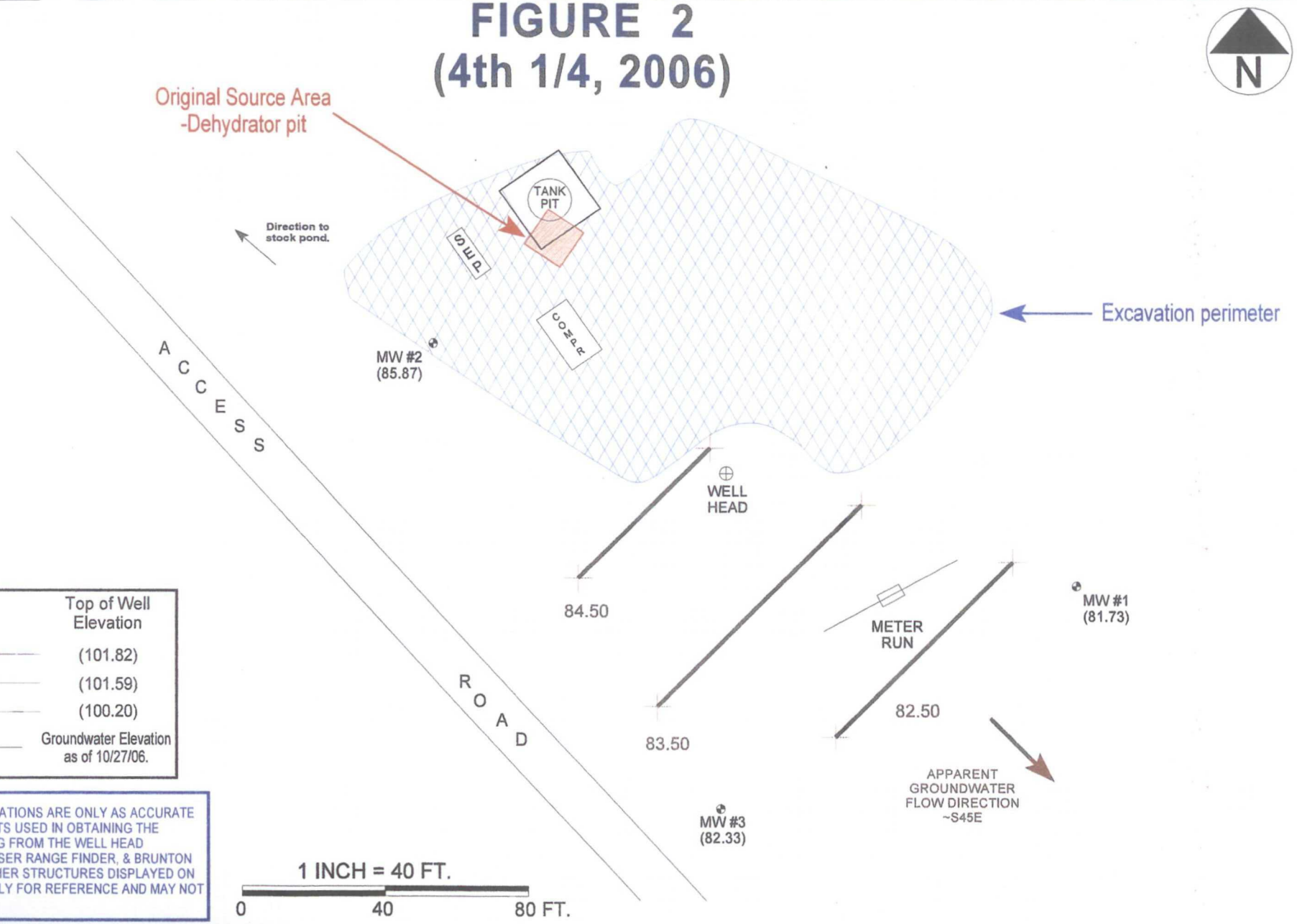
FILENAME: MUDGE LS 9A-SM3A.SKF

REVISED: 07-26-07 NJV

SITE MAP

07/07

FIGURE 2
(4th 1/4, 2006)



BP AMERICA PRODUCTION CO.

MUDGE LS #9A

SW/4 SE/4 SEC. 3, T31N, R11W

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

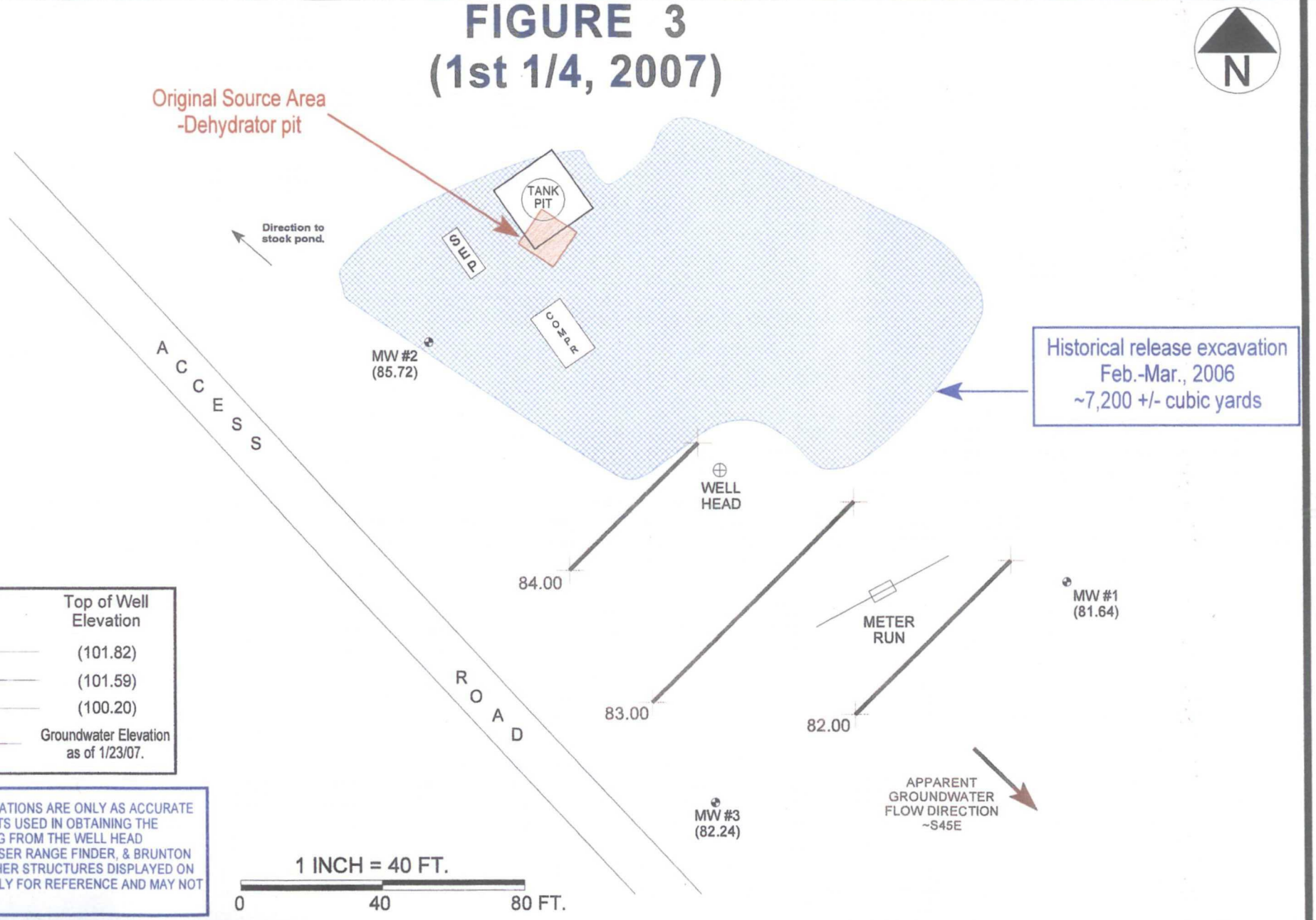
FILENAME: 10-27-06-GW.SKF

REVISED: 10-27-06 NJV

GROUNDWATER CONTOUR MAP

10/06

FIGURE 3
(1st 1/4, 2007)



BP AMERICA PRODUCTION CO.

MUDGE LS #9A

SW/4 SE/4 SEC. 3, T31N, R11W

SAN JUAN COUNTY, NEW MEXICO

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BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SAMPLING

DRAWN BY: NJV

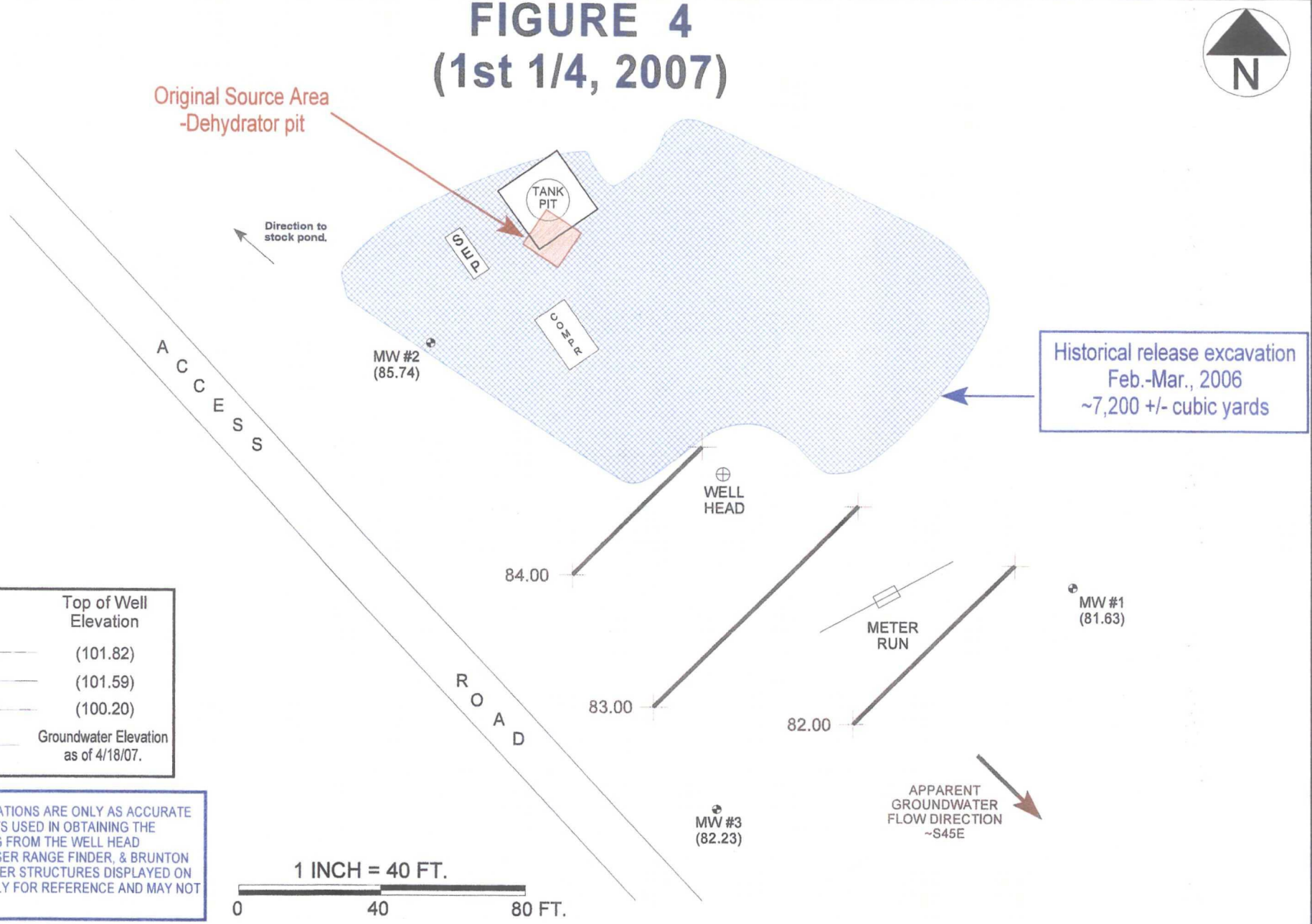
FILENAME: 01-23-07-GW.SKF

REVISED: 01-23-07 NJV

GROUNDWATER CONTOUR MAP

01/07

FIGURE 4
(1st 1/4, 2007)



BP AMERICA PRODUCTION CO.

MUDGE LS #9A

SW/4 SE/4 SEC. 3, T31N, R11W

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SAMPLING

DRAWN BY: NJV

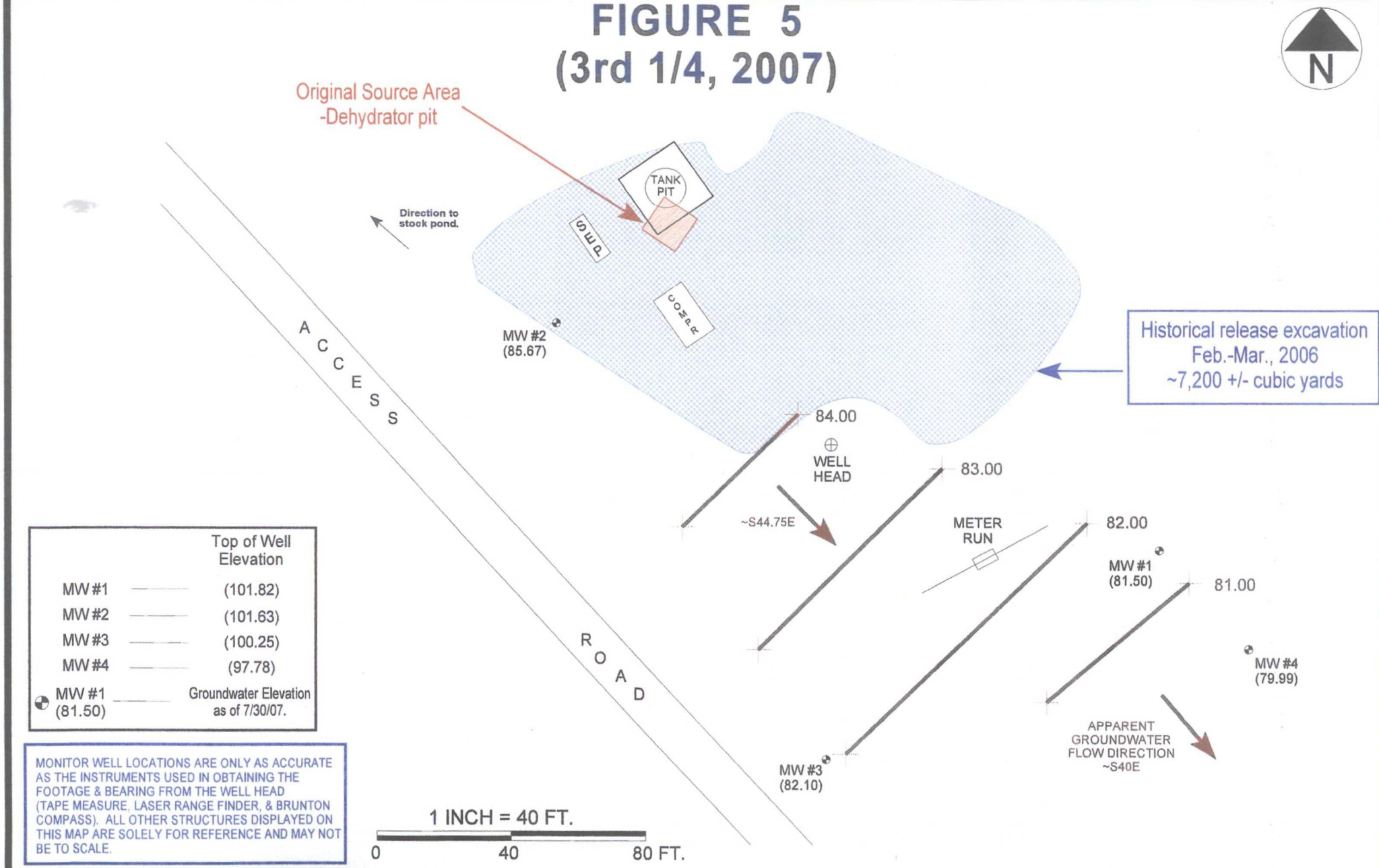
FILENAME: 04-18-07-GW.SKF

REVISED: 04-18-07 NJV

GROUNDWATER CONTOUR MAP

04/07

FIGURE 5
(3rd 1/4, 2007)



BP AMERICA PRODUCTION CO.

MUDGE LS #9A

SW/4 SE/4 SEC. 3, T31N, R11W

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

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BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SAMPLING

DRAWN BY: NJV

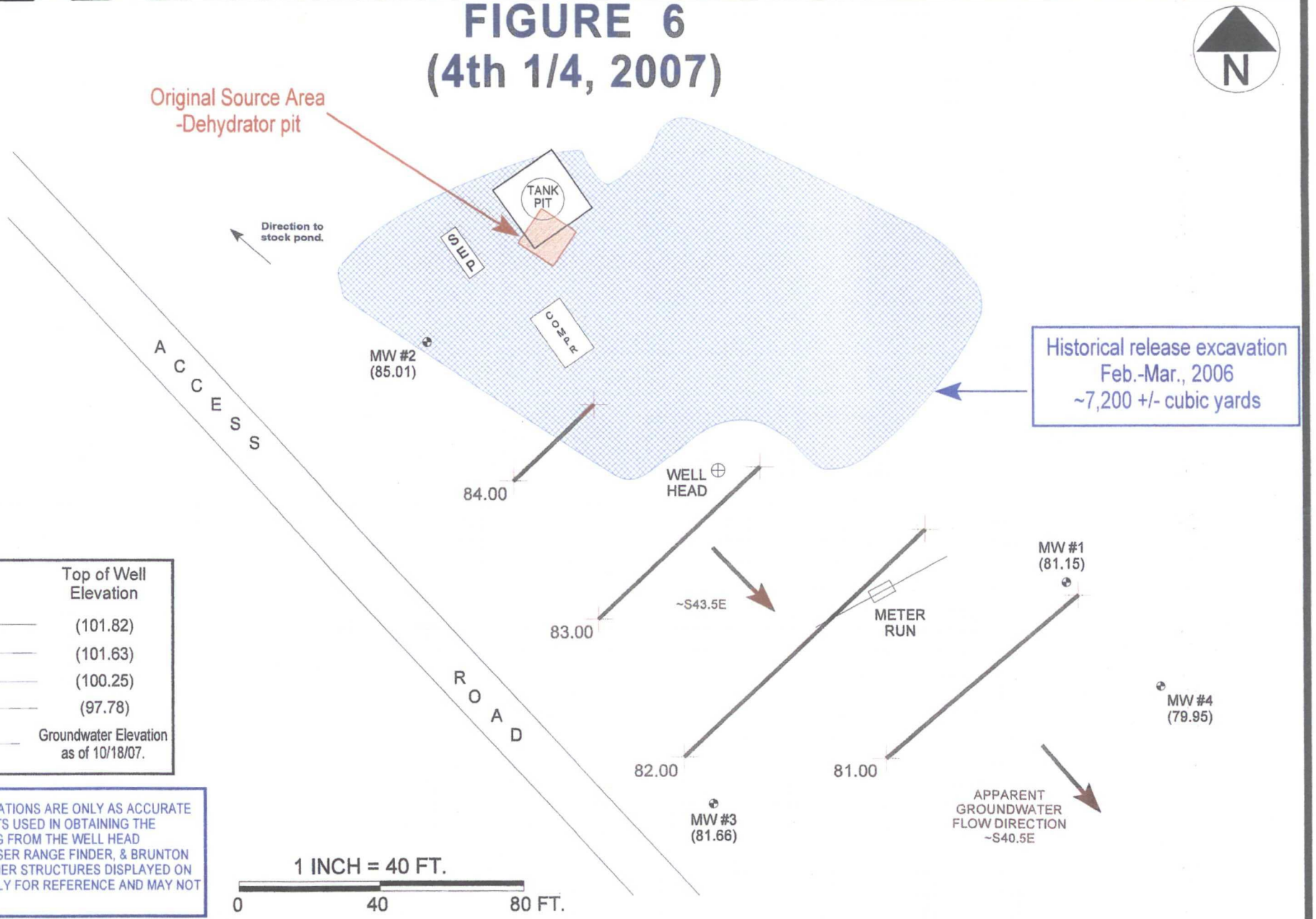
FILENAME: 07-30-07-GW.SKF

REVISED: 07-30-07 NJV

GROUNDWATER CONTOUR MAP

07/07

FIGURE 6
(4th 1/4, 2007)



BP AMERICA PRODUCTION CO.

MUDGE LS #9A

SW/4 SE/4 SEC. 3, T31N, R11W

SAN JUAN COUNTY, NEW MEXICO

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BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SAMPLING

DRAWN BY: NJV

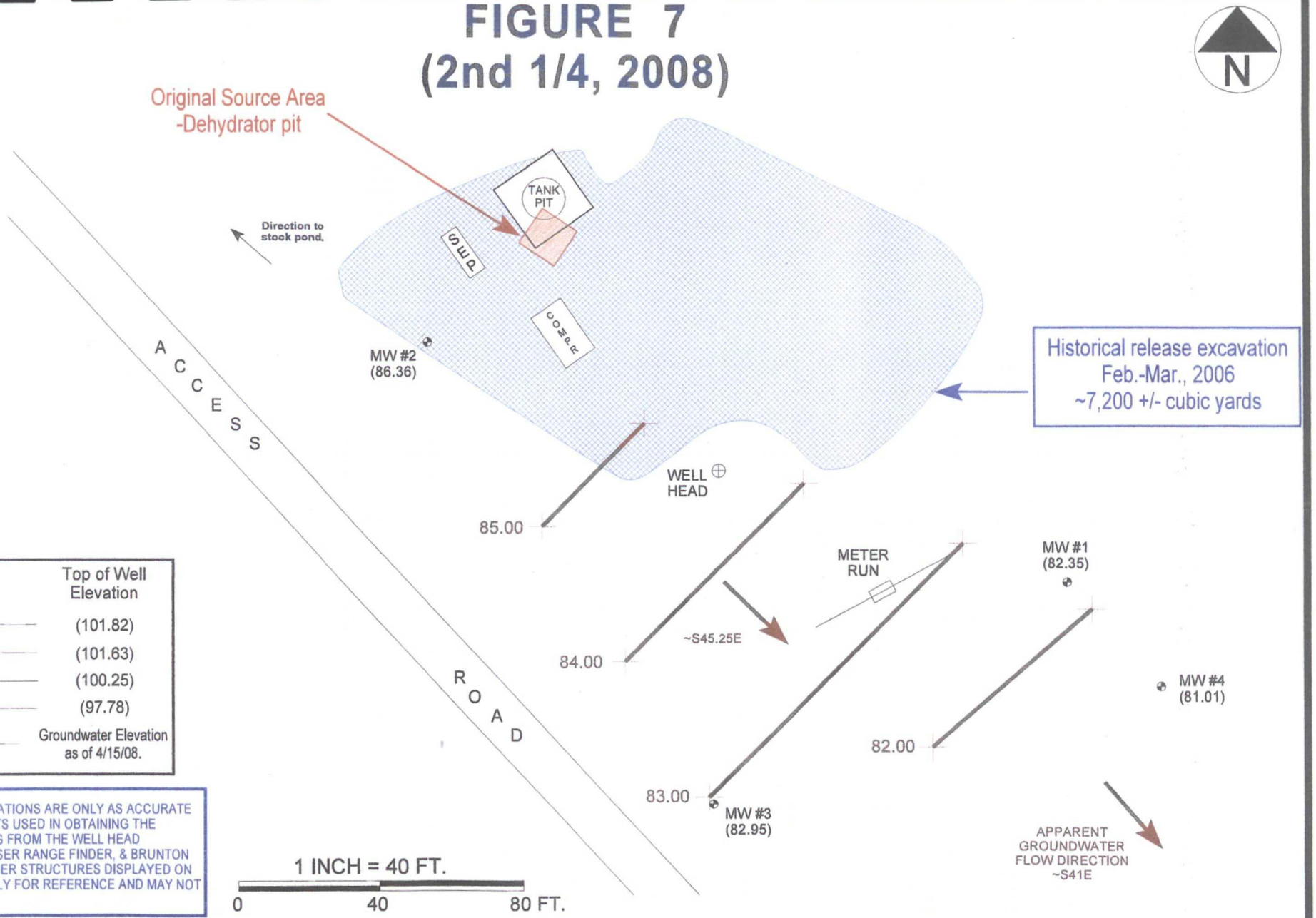
FILENAME: 10-18-07-GW.SKF

REVISED: 10-18-07 NJV

GROUNDWATER CONTOUR MAP

10/07

FIGURE 7
(2nd 1/4, 2008)



BP AMERICA PRODUCTION CO.

MUDGE LS #9A

SW/4 SE/4 SEC. 3, T31N, R11W

SAN JUAN COUNTY, NEW MEXICO

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CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SAMPLING

DRAWN BY: NJV

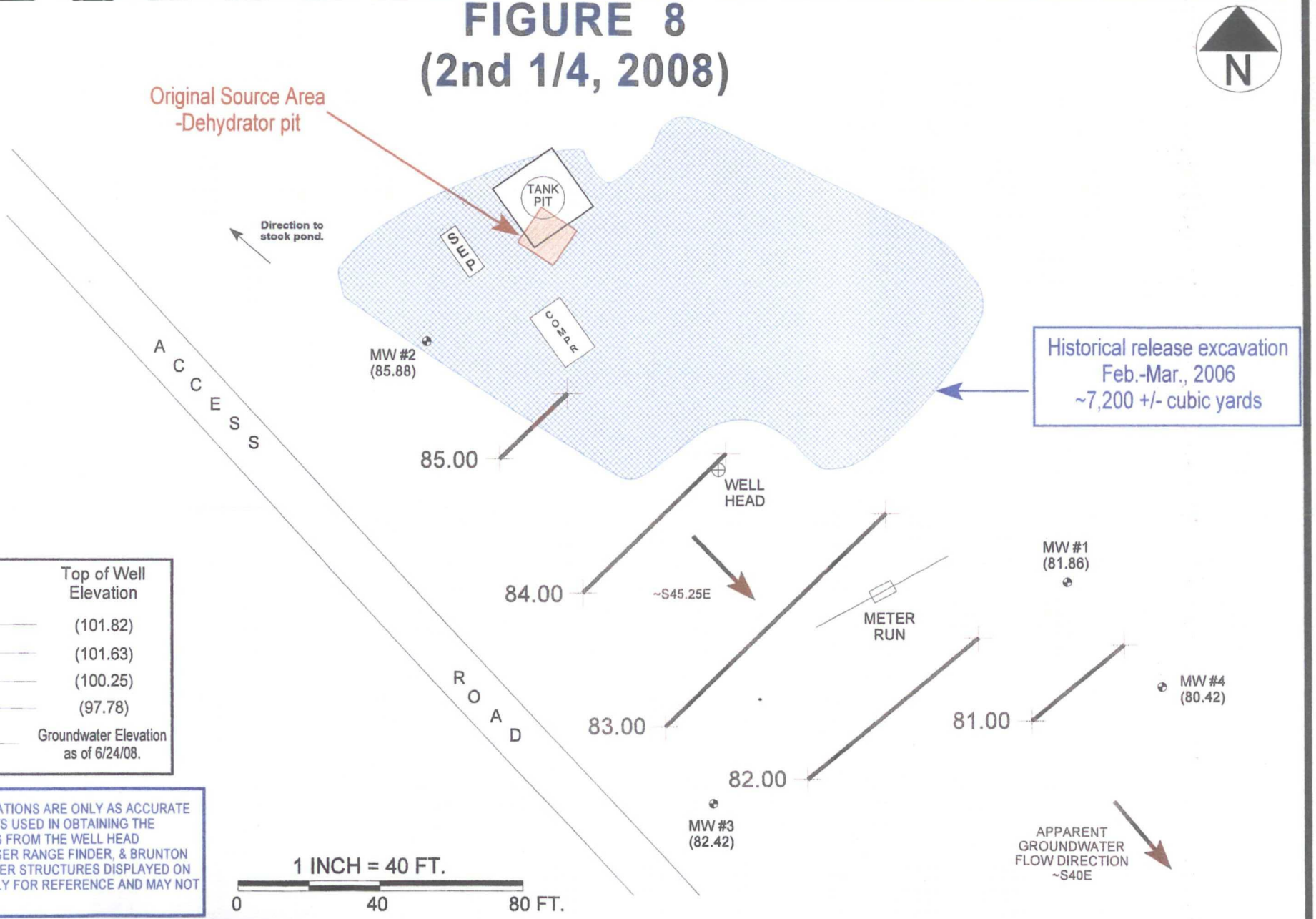
FILENAME: 04-15-08-GW.SKF

REVISED: 04-17-08 NJV

GROUNDWATER CONTOUR MAP

04/08

FIGURE 8
(2nd 1/4, 2008)



BP AMERICA PRODUCTION CO.

MUDGE LS #9A

SW/4 SE/4 SEC. 3, T31N, R11W

SAN JUAN COUNTY, NEW MEXICO

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P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SAMPLING

DRAWN BY: NJV

FILENAME: 06-24-08-GW.SKF

REVISED: 06-27-08 NJV

GROUNDWATER CONTOUR MAP

06/08

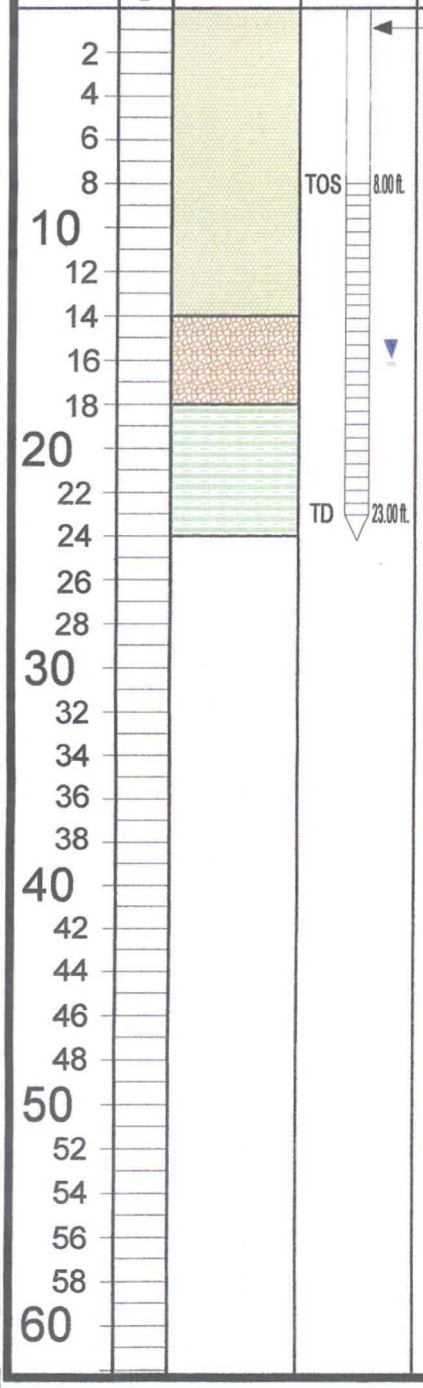
BLAGG ENGINEERING, Inc.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW #4

BORE / TEST HOLE REPORT

CLIENT:	BP AMERICA PRODUCTION COMPANY
LOCATION NAME:	MUDGE LS # 9A UNIT O, SEC. 3, T31N, R11W
CONTRACTOR:	BLAGG ENGINEERING, INC. / ENVIROTECH, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (CME 75)
BORING LOCATION:	137.5 FEET, S63.75E FROM WELL HEAD.

BORING #.....	BH - 4
MW #.....	4
PAGE #.....	4
DATE STARTED	7/25/07
DATE FINISHED	7/25/07
OPERATOR.....	DP
PREPARED BY	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.00 FEET ABOVE GRADE.

MODERATE ORANGE SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT HYDRO-CARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 14.0 FT. BELOW GRADE).

DARK YELLOWISH BROWN SAND WITH MINOR AMOUNT OF GRAVEL, NON COHESIVE, SLIGHTLY MOIST TO MOIST, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS, (14.0 - 17.0 FT. BELOW GRADE).

DEPTH TO WATER APPROX. 16.08 FT. FROM GROUND SURFACE MEASURED ON 7/26/07.

OLIVE GRAY CLAY PHASING INTO BLUE SHALE, COHESIVE TO MEDIUM PLASTIC, SLIGHTLY MOIST PHASING INTO DRY, FIRM TO DENSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (17.0 - 24.0 FT. BELOW GRADE).

NOTES:
- SAND.
- SAND WITH GRAVEL.
- CLAY PHASING TO SHALE.

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

Monitor well consist of 2 inch PVC piping - casing from 2.00 ft. above grade to 8.00 ft. below grade, 0.010 slotted screen between 8.00 to 23.00 ft. below grade, sand packed annular to 6.0 ft. below grade, bentonite grout between 0.0 to 6.00 ft. below grade. Well protector emcompassing above grade casing and secured with padlock.

DRAWING: MUDGE LS 9A BH4-MW4. SKF | DATE: 7/26/07 | DWN BY: NJV

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT &/OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

MUDGE LS # 9A
UNIT O, SEC. 3, T31N, R11W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : October 27, 2006

SAMPLER : N J V

Filename : 10-27-06.WK4

PROJECT MANAGER : J C B

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	101.82	82.08	19.74	30.30	0920	7.02	4,600	14.7	5.25
2	101.59	86.33	15.26	30.00	0850	7.01	4,100	12.2	7.25
3	100.20	82.70	17.50	30.00	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	10/27/06	0845		

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 both MW's. MW # 1 - blackish in appearance with HC odor detected physically, MW # 2 - murky brown in appearance with no apparent HC odor detected physically. Collected samples from both MW's for BTEX analysis.

Top of casings : MW # 1 ~ 3.00 ft., MW # 2 ~ 2.20 ft., MW # 3 ~ 2.00 ft. above grade.

Hall Environmental Analysis Laboratory, Inc.

Date: *03-Nov-06*

CLIENT: Blagg Engineering
Project: Mudge LS #9A
Lab Order: 0610362

Lab ID: 0610362-01 **Collection Date:** 10/27/2006 9:20:00 AM
Client Sample ID: MW #1 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	15	5.0		µg/L	5	11/2/2006 11:07:22 AM
Toluene	ND	5.0		µg/L	5	11/2/2006 11:07:22 AM
Ethylbenzene	110	5.0		µg/L	5	11/2/2006 11:07:22 AM
Xylenes, Total	260	15		µg/L	5	11/2/2006 11:07:22 AM
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	11/2/2006 11:07:22 AM
Surr: 4-Bromofluorobenzene	91.6	72.2-125		%REC	5	11/2/2006 11:07:22 AM

Lab ID: 0610362-02 **Collection Date:** 10/27/2006 8:50:00 AM
Client Sample ID: MW #2 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	11/2/2006 11:38:15 AM
Toluene	ND	1.0		µg/L	1	11/2/2006 11:38:15 AM
Ethylbenzene	ND	1.0		µg/L	1	11/2/2006 11:38:15 AM
Xylenes, Total	ND	3.0		µg/L	1	11/2/2006 11:38:15 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/2/2006 11:38:15 AM
Surr: 4-Bromofluorobenzene	86.1	72.2-125		%REC	1	11/2/2006 11:38:15 AM

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

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
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 #: 632-1199
Fax #:

Project Name: MUDGE LS #9A
Project #: NV
Project Manager: JCB
Sampler: NV
Sample Temperature: 10

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
10/27/06	0920	WATER	MW #1	2-40 ml	✓			0610702 -1
10/27/06	0850	WATER	MW #2	2-40 ml	✓			-2

ANALYSIS REQUEST

(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)	
10/30/06	0645			10/31/06 0937
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks:

QA/QC SUMMARY REPORT

Client: Blagg Engineering
Project: Mudge LS #9A **Work Order:** 0610362

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R21272**	Analysis Date:		11/2/2006 8:24:59 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R21272**	Analysis Date:		11/2/2006 8:13:35 PM
Benzene	18.71	µg/L	1.0	93.6	85	115			
Toluene	18.92	µg/L	1.0	94.6	85	118			
Ethylbenzene	18.78	µg/L	1.0	91.3	85	116			
Xylenes, Total	37.98	µg/L	3.0	91.3	85	119			
1,3,5-Trimethylbenzene	18.36	µg/L	1.0	89.6	85	123			
Sample ID: 100NG BTEX LCSD		*LCSD*			Batch ID:	**R21272**	Analysis Date:		11/2/2006 8:43:34 PM
Benzene	18.94	µg/L	1.0	94.7	85	115	1.18	27	
Toluene	19.35	µg/L	1.0	96.7	85	118	2.23	19	
Ethylbenzene	19.05	µg/L	1.0	92.6	85	116	1.45	10	
Xylenes, Total	39.18	µg/L	3.0	94.3	85	119	3.11	13	
1,3,5-Trimethylbenzene	18.65	µg/L	1.0	91.0	85	123	1.53	10	

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG | Date and Time Received: 10/31/2006

Work Order Number 0610362 | Received by AT

Checklist completed by _____ 10/31/06
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?	1°	*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

MUDGE LS # 9A
UNIT O, SEC. 3, T31N, R11W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **January 23, 2007** **SAMPLER :** N J V

Filename : **01-23-07.WK4** **PROJECT MANAGER :** J C B

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	101.82	81.64	20.18	30.30	1000	7.10	4,500	15.5	5.00
2	101.59	85.72	15.87	30.00	0920	7.04	4,200	10.1	7.00
3	100.20	82.24	17.96	30.00	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	01/22/07	1115		

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 both MW's. MW # 1 - blackish in appearance with HC odor detected physically, MW # 2 - murky brown in appearance with no apparent HC odor detected physically. Collected samples from both MW's for BTEX analysis.

Top of casings : MW # 1 ~ 3.00 ft., MW # 2 ~ 2.20 ft., MW # 3 ~ 2.00 ft. above grade.

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Jan-07*

CLIENT: Blagg Engineering
Project: Mudge LS #9A
Lab Order: 0701273

Lab ID: 0701273-01 **Collection Date:** 1/23/2007 10:00:00 AM
Client Sample ID: MW#1 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: LMM
Benzene	16	5.0		µg/L	5	1/25/2007 6:32:02 PM
Toluene	ND	5.0		µg/L	5	1/25/2007 6:32:02 PM
Ethylbenzene	130	5.0		µg/L	5	1/25/2007 6:32:02 PM
Xylenes, Total	320	15		µg/L	5	1/25/2007 6:32:02 PM
Surr: 4-Bromofluorobenzene	96.6	70.2-105		%REC	5	1/25/2007 6:32:02 PM

Lab ID: 0701273-02 **Collection Date:** 1/23/2007 9:20:00 AM
Client Sample ID: MW#2 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: LMM
Benzene	ND	1.0		µg/L	1	1/25/2007 7:02:03 PM
Toluene	ND	1.0		µg/L	1	1/25/2007 7:02:03 PM
Ethylbenzene	ND	1.0		µg/L	1	1/25/2007 7:02:03 PM
Xylenes, Total	ND	3.0		µg/L	1	1/25/2007 7:02:03 PM
Surr: 4-Bromofluorobenzene	94.8	70.2-105		%REC	1	1/25/2007 7:02:03 PM

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

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
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 ENER. / BP AMERICA
Address: P.O. BOX 87
BLFD., NM 87413
Phone #: 632-1199
Fax #:

Project Name: MUDGE LS #9A
Project #:
Project Manager: NV/JCB
Sampler: NV
Sample Temperature: 1°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No.
1/23/07	1000	WATER	MW #1	2-40ml	✓		0701273 1
1/23/07	0920	WATER	MW #2	2-40ml	✓		2

ANALYSIS REQUEST

(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)	
1/23/07	1100			1-24-07 0943
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks:

QA/QC SUMMARY REPORT

Client: Blagg Engineering
Project: Mudge LS #9A
Work Order: 0701273

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 5ML RB		*MBLK*			Batch ID: **R22273**		Analysis Date:	1/25/2007 10:22:32 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID: **R22273**		Analysis Date:	1/25/2007 11:53:06 AM	
Benzene	18.42	µg/L	1.0	92.1	85.9	113			
Toluene	19.07	µg/L	1.0	95.4	86.4	113			
Ethylbenzene	19.19	µg/L	1.0	96.0	83.5	118			
Xylenes, Total	57.65	µg/L	3.0	96.1	83.4	122			

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG | Date and Time Received: 1/24/2007

Work Order Number 0701273 | Received by GLS

Checklist completed by D Schlupp (Signature) 1-24-07 (Date)

Matrix | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - *Preservation labels on bottle and cap match?*	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	1°	*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

MUDGE LS # 9A
UNIT O, SEC. 3, T31N, R11W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **April 18, 2007** **SAMPLER :** N J V

Filename : **04-18-07.WK4** **PROJECT MANAGER :** J C B

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	101.82	81.63	20.19	30.30	1145	7.08	4,300	21.1	5.00
2	101.59	85.74	15.85	30.00	1110	6.93	4,000	18.7	7.00
3	100.20	82.23	17.97	30.00	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	04/18/07	0940		

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 both MW's. MW # 1 - blackish in appearance with HC odor detected physically, MW # 2 - murky brown in appearance with no apparent HC odor detected physically. Collected samples from both MW's for BTEX analysis.

Top of casings : MW # 1 ~ 3.00 ft., MW # 2 ~ 2.20 ft., MW # 3 ~ 2.00 ft. above grade.

Hall Environmental Analysis Laboratory, Inc.

Date: *20-Apr-07*

CLIENT: Blagg Engineering
Project: Mudge LS #9A

Lab Order: 0704289

Lab ID: 0704289-01 **Collection Date:** 4/18/2007 11:45:00 AM
Client Sample ID: MW #1 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	13	5.0		µg/L	5	4/20/2007 3:35:48 AM
Toluene	ND	5.0		µg/L	5	4/20/2007 3:35:48 AM
Ethylbenzene	110	5.0		µg/L	5	4/20/2007 3:35:48 AM
Xylenes, Total	260	10		µg/L	5	4/20/2007 3:35:48 AM
Surr: 4-Bromofluorobenzene	88.2	70.2-105		%REC	5	4/20/2007 3:35:48 AM

Lab ID: 0704289-02 **Collection Date:** 4/18/2007 11:10:00 AM
Client Sample ID: MW #2 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	4/20/2007 4:06:01 AM
Toluene	ND	1.0		µg/L	1	4/20/2007 4:06:01 AM
Ethylbenzene	ND	1.0		µg/L	1	4/20/2007 4:06:01 AM
Xylenes, Total	ND	2.0		µg/L	1	4/20/2007 4:06:01 AM
Surr: 4-Bromofluorobenzene	86.6	70.2-105		%REC	1	4/20/2007 4:06:01 AM

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

CHAIN-OF-CUSTODY RECORD

QA/QC Package: Std ☐ Level 4 ☐ Other: _____

Client: BLAGG ENER. / BP AMERICA

Project Name: MUDGE LS #9A

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

Project #:

Project Manager: JCB

Phone #: 632-1199

Sampler: NV

Fax #:

Sample Temperature: 5°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No.
4/18/07	1145	WATER	MW #1	2-40ml	✓		0704299 -1
4/18/07	1110	WATER	MW #2	2-40ml	✓		-2

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	
4/18/07	1325			4/19/07 919
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

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

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)
✓																
✓																

Remarks:

QA/QC SUMMARY REPORT

Client: Blagg Engineering
Project: Mudge LS #9A **Work Order:** 0704289

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	R23300	Analysis Date:		4/19/2007 9:01:54 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 5ML RB-II		*MBLK*			Batch ID:	R23300	Analysis Date:		4/19/2007 4:48:56 PM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	R23300	Analysis Date:		4/19/2007 4:18:49 PM
Benzene	19.38	µg/L	1.0	96.9	85.9	113			
Toluene	19.56	µg/L	1.0	97.8	86.4	113			
Ethylbenzene	19.78	µg/L	1.0	98.9	83.5	118			
Xylenes, Total	59.03	µg/L	2.0	98.4	83.4	122			
Sample ID: 100NG BTEX LCS-II		*LCS*			Batch ID:	R23300	Analysis Date:		4/19/2007 5:49:00 PM
Benzene	19.10	µg/L	1.0	95.5	85.9	113			
Toluene	19.36	µg/L	1.0	96.8	86.4	113			
Ethylbenzene	19.69	µg/L	1.0	98.4	83.5	118			
Xylenes, Total	58.77	µg/L	2.0	98.0	83.4	122			
Sample ID: 100NG BTEX LCSD		*LCSD*			Batch ID:	R23300	Analysis Date:		4/20/2007 6:08:56 AM
Benzene	19.66	µg/L	1.0	98.3	85.9	113	1.41	27	
Toluene	19.95	µg/L	1.0	99.8	86.4	113	1.97	19	
Ethylbenzene	20.36	µg/L	1.0	102	83.5	118	2.89	10	
Xylenes, Total	60.67	µg/L	2.0	101	83.4	122	2.74	13	

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG | Date and Time Received: 4/19/2007

Work Order Number 0704289 | Received by TLS

Checklist completed by Signature [signature] Date 4-19-07

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	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

MUDGE LS # 9A
UNIT O, SEC. 3, T31N, R11W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : July 30, 2007

SAMPLER : N J V

Filename : 07-30-07.WK4

PROJECT MANAGER : J C B

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	101.82	81.50	20.32	30.30	1045	7.09	5,000	20.6	5.00
2	101.63	85.67	15.96	30.00	0930	6.90	3,400	18.4	7.00
3	100.25	82.10	18.15	30.00	-	-	-	-	-
4	97.78	79.99	17.79	25.00	1015	7.10	4,800	23.1	3.50
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	07/23/07	0620		

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 # 1 , # 2 , & # 4 . Collected BTEX samples from MW # 1 , # 2 , & # 4 .
HC odor detected physically within purged water from MW 1 (blackish tint in appearance) .
Resurveyed on 7 / 30 / 07 with JCB .

Top of casings : MW # 1 ~ 3.00 ft. , MW # 2 ~ 2.20 ft. , MW # 3 ~ 2.00 ft. , MW # 4 ~ 2.00 ft. above grade .

Hall Environmental Analysis Laboratory, Inc.

Date: *07-Aug-07*

CLIENT: Blagg Engineering
Project: Mudge LS #9A

Lab Order: 0707410

Lab ID: 0707410-01 **Collection Date:** 7/30/2007 10:45:00 AM
Client Sample ID: MW #1 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: LMM
Benzene	3.0	1.0		µg/L	1	8/6/2007 12:45:05 PM
Toluene	ND	1.0		µg/L	1	8/6/2007 12:45:05 PM
Ethylbenzene	29	1.0		µg/L	1	8/6/2007 12:45:05 PM
Xylenes, Total	55	2.0		µg/L	1	8/6/2007 12:45:05 PM
Surr: 4-Bromofluorobenzene	102	70.2-105		%REC	1	8/6/2007 12:45:05 PM

Lab ID: 0707410-02 **Collection Date:** 7/30/2007 9:30:00 AM
Client Sample ID: MW #2 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: LMM
Benzene	ND	1.0		µg/L	1	8/3/2007 5:53:38 PM
Toluene	ND	1.0		µg/L	1	8/3/2007 5:53:38 PM
Ethylbenzene	ND	1.0		µg/L	1	8/3/2007 5:53:38 PM
Xylenes, Total	ND	2.0		µg/L	1	8/3/2007 5:53:38 PM
Surr: 4-Bromofluorobenzene	88.7	70.2-105		%REC	1	8/3/2007 5:53:38 PM

Lab ID: 0707410-03 **Collection Date:** 7/30/2007 10:15:00 AM
Client Sample ID: MW #4 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: LMM
Benzene	ND	1.0		µg/L	1	8/3/2007 6:23:41 PM
Toluene	ND	1.0		µg/L	1	8/3/2007 6:23:41 PM
Ethylbenzene	ND	1.0		µg/L	1	8/3/2007 6:23:41 PM
Xylenes, Total	ND	2.0		µg/L	1	8/3/2007 6:23:41 PM
Surr: 4-Bromofluorobenzene	91.5	70.2-105		%REC	1	8/3/2007 6:23:41 PM

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

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
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 ENER./BP AMERICA
Address: P.O. BOX 87
BLFD., NM 87413
Phone #: 632-1199
Fax #:

Project Name: MUDGE LS #9A
Project #:
Project Manager: J-B
Sampler: NV
Sample Temperature: 6°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
7/30/07	1045	WATER	MW #1	2-40ml	✓			07073410 1
7/30/07	0930	WATER	MW #2	2-40ml	✓			2
7/30/07	1015	WATER	MW #4	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)
7/30/07	1545		14:04 7/31/07
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

QA/QC SUMMARY REPORT

Client: Blagg Engineering
Project: Mudge LS #9A **Work Order:** 0707410

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 5ML RB		*MBLK*			Batch ID: **R24644**		Analysis Date:	8/3/2007 11:47:54 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 5ML RB		*MBLK*			Batch ID: **R24661**		Analysis Date:	8/6/2007 10:14:40 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID: **R24644**		Analysis Date:	8/3/2007 1:18:18 PM	
Benzene	20.84	µg/L	1.0	104	85.9	113			
Toluene	21.62	µg/L	1.0	108	86.4	113			
Ethylbenzene	22.22	µg/L	1.0	111	83.5	118			
Xylenes, Total	66.99	µg/L	2.0	111	83.4	122			
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID: **R24661**		Analysis Date:	8/6/2007 11:45:02 AM	
Benzene	19.66	µg/L	1.0	98.3	85.9	113			
Toluene	19.61	µg/L	1.0	98.1	86.4	113			
Ethylbenzene	19.96	µg/L	1.0	99.8	83.5	118			
Xylenes, Total	59.86	µg/L	2.0	99.8	83.4	122			

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG

Date and Time Received: 7/31/2007

Work Order Number 0707410

Received by ARS

Checklist completed by  7/31/07
Signature Date

Matrix

Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	6°	*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

MUDGE LS # 9A
UNIT O, SEC. 3, T31N, R11W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **October 18, 2007** **SAMPLER :** N J V

Filename : **10-18-07.WK4** **PROJECT MANAGER :** J C B

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	101.82	81.15	20.67	30.30	1020	7.21	4,500	12.9	4.75
2	101.63	85.01	16.62	30.00	-	-	-	-	-
3	100.25	81.66	18.59	30.00	-	-	-	-	-
4	97.78	79.95	17.83	25.00	0935	7.22	4,500	12.6	3.50
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	10/18/07	0930		

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 # 1 & # 4. Collected BTEX samples from MW # 1 & # 4 only.

Top of casings : MW # 1 ~ 3.00 ft., MW # 2 ~ 2.20 ft., MW # 3 ~ 2.00 ft., MW # 4 ~ 2.00 ft. above grade.

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Oct-07*

CLIENT: Blagg Engineering
Project: Mudge LS #9A
Lab Order: 0710406

Lab ID: 0710406-01 **Collection Date:** 10/18/2007 10:20:00 AM
Client Sample ID: MW #1 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	10/25/2007 2:20:49 PM
Toluene	ND	1.0		µg/L	1	10/25/2007 2:20:49 PM
Ethylbenzene	ND	1.0		µg/L	1	10/25/2007 2:20:49 PM
Xylenes, Total	ND	2.0		µg/L	1	10/25/2007 2:20:49 PM
Surr: 4-Bromofluorobenzene	98.5	70.2-105		%REC	1	10/25/2007 2:20:49 PM

Lab ID: 0710406-02 **Collection Date:** 10/18/2007 9:35:00 AM
Client Sample ID: MW #4 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	10/25/2007 3:21:02 PM
Toluene	ND	1.0		µg/L	1	10/25/2007 3:21:02 PM
Ethylbenzene	ND	1.0		µg/L	1	10/25/2007 3:21:02 PM
Xylenes, Total	ND	2.0		µg/L	1	10/25/2007 3:21:02 PM
Surr: 4-Bromofluorobenzene	95.8	70.2-105		%REC	1	10/25/2007 3:21:02 PM

Qualifiers:

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

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: BLAGG ENER. / BP AMERICA
Address: P.O. BOX 87
BLFD., NM 87413
Phone #: 632-1199
Fax #:

Project Name: MUDGE LS #9A
Project #: 90
Project Manager: JCB
Sampler: NV
Sample Temperature: 2°

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	Preservative	HEAL No.
10/18/07	1020	WATER	MW #1	2-40ml	✓			0710406 1
10/18/07	0935	WATER	MW #4	2-40ml	✓			2

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)	Date:	Time:
10/18/07	1635	Nelson Velez	Tonya Shomin	10/19/07	945
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)		

Remarks:

QA/QC SUMMARY REPOR

Client: Blagg Engineering
Project: Mudge LS #9A **Work Order:** 0710406

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 5ML RB		*MBLK*			Batch ID: **R25753**		Analysis Date:	10/25/2007 9:04:56 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID: **R25753**		Analysis Date:	10/25/2007 9:56:16 PM	
Benzene	20.83	µg/L	1.0	104	85.9	113			
Toluene	19.91	µg/L	1.0	99.5	86.4	113			
Ethylbenzene	19.69	µg/L	1.0	98.5	83.5	118			
Xylenes, Total	58.64	µg/L	2.0	97.7	83.4	122			

Qualifiers:

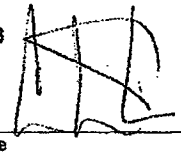
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **BLAGG** Date and Time Received: **10/19/2007**

Work Order Number **0710406** Received by **TLS**

Checklist completed b  Signature 10/19/07 Date

Matrix Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	2°	*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 # :** 156396

MUDGE LS # 9A
UNIT O, SEC. 3, T31N, R11W

LABORATORY (S) USED : PACE ANALYTICAL

Date : **April 15, 2008** **SAMPLER :** N J V

Filename : **04-15-08.WK4** **PROJECT MANAGER :** N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	101.82	82.35	19.47	30.30	1255	7.08	2,700	20.4	5.25
2	101.63	86.36	15.27	30.00	-	-	-	-	-
3	100.25	82.95	17.30	30.00	-	-	-	-	-
4	97.78	81.01	16.77	25.00	1238	7.28	2,500	21.9	4.00

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	04/14/08	0800

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)
Ideally a minimum of three (3) wellbore volumes:
2.00 " well diameter = 0.49 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 1 & # 4. Collected BTEX samples from MW # 1 & # 4 only.

Top of casings : MW # 1 ~ 3.00 ft., MW # 2 ~ 2.20 ft., MW # 3 ~ 2.00 ft., MW # 4 ~ 2.00 ft. above grade.

on-site	12:04	temp	76 F
off-site	1:08	temp	77 F
sky cond.	sunny		
wind speed	0-5	direct.	West

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: MUDGE LS #9A
Pace Project No.: 6038714

Sample: MW #1 **Lab ID: 6038714001** Collected: 04/15/08 12:55 Received: 04/16/08 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**5.8**	ug/L	5.0	5		04/22/08 07:29	71-43-2	
Ethylbenzene	**102**	ug/L	5.0	5		04/22/08 07:29	100-41-4	
Toluene	ND	ug/L	5.0	5		04/22/08 07:29	108-88-3	
Xylene (Total)	**216**	ug/L	15.0	5		04/22/08 07:29	1330-20-7	
Dibromofluoromethane (S)	102	%	85-114	5		04/22/08 07:29	1868-53-7	
Toluene-d8 (S)	102	%	82-114	5		04/22/08 07:29	2037-26-5	
4-Bromofluorobenzene (S)	98	%	85-119	5		04/22/08 07:29	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	81-118	5		04/22/08 07:29	17060-07-0	
Preservation pH	**1.0**		1.0	5		04/22/08 07:29		

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ANALYTICAL RESULTS

Project: MUDGE LS #9A
Pace Project No.: 6038714

Sample: MW #4 **Lab ID: 6038714002** Collected: 04/15/08 12:38 Received: 04/16/08 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		04/18/08 19:17	71-43-2	
Ethylbenzene	**2.6**	ug/L	1.0	1		04/18/08 19:17	100-41-4	
Toluene	ND	ug/L	1.0	1		04/18/08 19:17	108-88-3	
Xylene (Total)	**7.6**	ug/L	3.0	1		04/18/08 19:17	1330-20-7	
Dibromofluoromethane (S)	100	%	85-114	1		04/18/08 19:17	1868-53-7	
Toluene-d8 (S)	100	%	82-114	1		04/18/08 19:17	2037-26-5	
4-Bromofluorobenzene (S)	106	%	85-119	1		04/18/08 19:17	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	81-118	1		04/18/08 19:17	17060-07-0	
Preservation pH	**1.0**		1.0	1		04/18/08 19:17		

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Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: MUDGE LS #9A
Pace Project No.: 6038714

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6038714001	**MW #1**	Water	04/15/08 12:55	04/16/08 08:30
6038714002	**MW #4**	Water	04/15/08 12:38	04/16/08 08:30

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SAMPLE ANALYTE COUNT

Project: MUDGE LS #9A
Pace Project No.: 6038714

Lab ID	Sample ID	Method	Analysts	Analytes Reported
6038714001	**MW #1**	EPA 8260	AJA	9
6038714002	**MW #4**	EPA 8260	GEZ	9

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PROJECT NARRATIVE

Project: MUDGE LS #9A
Pace Project No.: 6038714

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

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

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

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

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

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

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

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

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

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

QC Batch: MSV/14124

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

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

Additional Comments:

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

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QUALITY CONTROL DATA

Project: MUDGE LS #9A
Pace Project No.: 6038714

QC Batch: MSV/14089
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 6038714002

METHOD BLANK: 314296
Associated Lab Samples: 6038714002

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

LABORATORY CONTROL SAMPLE: 314297

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 314298 314299

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

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QUALITY CONTROL DATA

Project: MUDGE LS #9A
Pace Project No.: 6038714

QC Batch: MSV/14124
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 6038714001

METHOD BLANK: 315205
Associated Lab Samples: 6038714001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Benzene	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	3.0	
1,2-Dichloroethane-d4 (S)	%	102	81-118	
4-Bromofluorobenzene (S)	%	98	85-119	
Dibromofluoromethane (S)	%	100	85-114	
Toluene-d8 (S)	%	100	82-114	

LABORATORY CONTROL SAMPLE: 315206

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	9.4	94	87-117	
Ethylbenzene	ug/L	10	9.5	95	84-123	
Toluene	ug/L	10	9.5	95	81-124	
Xylene (Total)	ug/L	30	29.4	98	83-125	
1,2-Dichloroethane-d4 (S)	%			101	81-118	
4-Bromofluorobenzene (S)	%			98	85-119	
Dibromofluoromethane (S)	%			100	85-114	
Toluene-d8 (S)	%			100	82-114	

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QUALIFIERS

Project: MUDGE LS #9A
Pace Project No.: 6038714

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

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

BATCH QUALIFIERS

Batch: MSV/14124

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MUDGE LS #9A
Pace Project No.: 6038714

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
6038714002	**MW #4**	EPA 8260	MSV/14089		
6038714001	**MW #1**	EPA 8260	MSV/14124		

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

MUDGE LS # 9A
UNIT O, SEC. 3, T31N, R11W

LABORATORY (S) USED : PACE ANALYTICAL

Date : June 24, 2008

SAMPLER : N J V

Filename : 06-24-08.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	101.82	81.86	19.96	30.30	0902	7.19	3,000	17.6	5.00
2	101.63	85.88	15.75	30.00	-	-	-	-	-
3	100.25	82.42	17.83	30.00	-	-	-	-	-
4	97.78	80.42	17.36	25.00	0855	7.31	2,700	18.0	3.75

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	2,800
DATE & TIME =	06/23/08	0634

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 # 1 & # 4 . Collected samples for BTEX per US EPA Method 8260 from MW # 1 & # 4 only .

Top of casings : MW # 1 ~ 3.00 ft. , MW # 2 ~ 2.20 ft. , MW # 3 ~ 2.00 ft. , MW # 4 ~ 2.00 ft. above grade .

on-site	7:45	temp	72 F
off-site	9:20	temp	77 F
sky cond.	partly cloudy		
wind speed	0-5	direct.	NE

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ANALYTICAL RESULTS

Project: MUDGE LS 9A
Pace Project No.: 6042424

Sample: MW #1 **Lab ID: 6042424001** Collected: 06/24/08 09:02 Received: 06/25/08 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**3.6**	ug/L	1.0	1		06/27/08 14:16	71-43-2	
Ethylbenzene	**67.3**	ug/L	1.0	1		06/27/08 14:16	100-41-4	
Toluene	ND	ug/L	1.0	1		06/27/08 14:16	108-88-3	
Xylene (Total)	**115**	ug/L	3.0	1		06/27/08 14:16	1330-20-7	
Dibromofluoromethane (S)	92	%	85-114	1		06/27/08 14:16	1868-53-7	
Toluene-d8 (S)	106	%	82-114	1		06/27/08 14:16	2037-26-5	
4-Bromofluorobenzene (S)	88	%	85-119	1		06/27/08 14:16	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	81-118	1		06/27/08 14:16	17060-07-0	
Preservation pH	**1.0**		1.0	1		06/27/08 14:16		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MUDGE LS 9A
Pace Project No.: 6042424

Sample: MW #4 **Lab ID: 6042424002** Collected: 06/24/08 08:55 Received: 06/25/08 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		06/27/08 14:32	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/27/08 14:32	100-41-4	
Toluene	ND	ug/L	1.0	1		06/27/08 14:32	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/27/08 14:32	1330-20-7	
Dibromofluoromethane (S)	95	%	85-114	1		06/27/08 14:32	1868-53-7	
Toluene-d8 (S)	103	%	82-114	1		06/27/08 14:32	2037-26-5	
4-Bromofluorobenzene (S)	101	%	85-119	1		06/27/08 14:32	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	81-118	1		06/27/08 14:32	17060-07-0	
Preservation pH	**1.0**		1.0	1		06/27/08 14:32		

Page 1 of 1

Atlantic Richfield Company

A BP affiliated company

Chain of Custody Record

Project Name: MUDGE LS 9A
BP BU/AR Region/Enfos Segment: SJOC SOUTH
State or Lead Regulatory Agency: NMOCD / BLM
Requested Due Date (mm/dd/yy): 7/1/08

On-site Time:	7:45	Temp:	72 °F
Off-site Time:	9:20	Temp:	77 °F
Sky Conditions:	SUNNY		
Meteorological Events:			
Wind Speed:	0-5	Direction:	NE

Lab Name: Pace Analytical Services, Inc.	BP/AR Facility No.:	Consultant/Contractor: Blagg/URS
Address: 9609 Loiret Blvd	BP/AR Facility Address:	Address: 110 N. Forth St.
Lenexa, KS 66219	Site Lat/Long:	Bloomfield, NM 87413
Lab PM: MJ Walls	California Global ID No.:	Consultant/Contractor Project No.:
Tele/Fax: 913-563-1401	Enfos Project No.: 00199-0002	Consultant/Contractor PM: Nelson Velez
BP/AR EMB: Mike Whelan	Provision or OOC (circle one)	Tele: (505) 632-1199 Fax: (505) 632-3903
Address: 501 Westlake Park Blvd.	Phase/WBS:	Report Type & QC Level: STD
Rm28, 144B Houston, TX 77079	Sub Phase/Task:	E-Mail EDD To: blagg-njv@yahoo.com
Tele: (281) 366-7485 Fax: (281) 366-7094	Cost Element:	Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)

Lab Bottle Order No: 17711

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: BTEX (8260)	Requested Analysis: 300.0 (CL, SO4)	Sample Point Lat/Long and Comments
1	MW #1	0902	6/24/08		✓			3				✓		✓	300.0 (CL, SO4)	604424 001
2	MW #4	0855	6/24/08		✓			3				✓		✓	↓	002
3																
4																
5																
6																
7																
8																
9																
10																

Sampler's Name: NELSON VELEZ	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: BLAGG ENG., INC.	Nelson Velez	6/24/08	1645		6/25	900
Shipment Date: 6/24/08						
Shipment Method: FED. EX.						
Shipment Tracking No: 8643 6004 9420						

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

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 3.5 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP COC Rev. 5 10/11/2006

Sample Condition Upon Receipt

Pace Analytical

Client Name: BP BLAGG

Project # 6042424

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

Tracking #: ON COC

Optional
Proj. Due Date:
Proj. Name: 7/8

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

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

Thermometer Used: T-169 / T-170 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 3.5 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: BW 6/25

Temp should be above freezing to 6°C

Comments: S: 1006 E 1015

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW 6/26/08 Date: _____

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

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SAMPLE SUMMARY

Project: MUDGE LS 9A
Pace Project No.: 6042424

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6042424001	**MW #1**	Water	06/24/08 09:02	06/25/08 09:00
6042424002	**MW #4**	Water	06/24/08 08:55	06/25/08 09:00

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SAMPLE ANALYTE COUNT

Project: MUDGE LS 9A
Pace Project No.: 6042424

Lab ID	Sample ID	Method	Analysts	Analytes Reported
6042424001	**MW #1**	EPA 8260	JKL	9
6042424002	**MW #4**	EPA 8260	JKL	9

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PROJECT NARRATIVE

Project: MUDGE LS 9A
Pace Project No.: 6042424

Method: **EPA 8260**
Description: 8260 MSV UST, Water
Client: BP-Blagg Engineering
Date: July 01, 2008

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

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

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

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

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

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

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

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

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

QC Batch: MSV/15397

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

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

Additional Comments:

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

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QUALITY CONTROL DATA

Project: MUDGE LS 9A
Pace Project No.: 6042424

QC Batch: MSV/15397 — Analysis Method: EPA 8260
QC Batch Method: EPA 8260 — Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 6042424001, 6042424002

METHOD BLANK: 344792
Associated Lab Samples: 6042424001, 6042424002

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Benzene	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	3.0	
1,2-Dichloroethane-d4 (S)	%	93	81-118	
4-Bromofluorobenzene (S)	%	106	85-119	
Dibromofluoromethane (S)	%	95	85-114	
Toluene-d8 (S)	%	104	82-114	

LABORATORY CONTROL SAMPLE: 344793

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	8.9	89	87-117	
Ethylbenzene	ug/L	10	9.8	98	84-123	
Toluene	ug/L	10	9.5	95	81-124	
Xylene (Total)	ug/L	30	28.3	94	83-125	
1,2-Dichloroethane-d4 (S)	%			94	81-118	
4-Bromofluorobenzene (S)	%			96	85-119	
Dibromofluoromethane (S)	%			94	85-114	
Toluene-d8 (S)	%			101	82-114	

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QUALIFIERS

Project: MUDGE LS 9A
Pace Project No.: 6042424

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

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

BATCH QUALIFIERS

Batch: MSV/15397

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MUDGE LS 9A
Pace Project No.: 6042424

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
6042424001	**MW #1**	EPA 8260	MSV/15397		
6042424002	**MW #4**	EPA 8260	MSV/15397		