

**3R - 405**

**CLOSURE  
REQUEST**

**02 / 19 / 2010**

3R405

*BLAGG ENGINEERING, INC.*  
P.O. Box 87, Bloomfield, New Mexico 87413

February 19, 2010

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

RE: REQUEST FOR PERMANENT CLOSURE  
**BP America Production Company**  
**Remediation and Monitoring Report**  
**Chavez GC A # 1, Unit G, Sec. 3, T29N, R9W, NMPM**  
**San Juan County, New Mexico**

**NMOCD Administrative/Environmental Order #: 3RP-405-0**

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Dear Mr. von Gonten:

BP America Production Company (**BP**) has retained Blagg Engineering, Inc. (**BEI**) to conduct environmental sampling and monitoring of groundwater at the Chavez GC A # 1.

The last formal correspondence to NMOCD was conducted with letter dated, March 2, 2007. BP request permanent closure for the site.

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

Respectfully submitted:  
**Blagg Engineering, Inc.**

Nelson J. Velez  
Staff Geologist

Attachment: Remediation and Monitoring Report (2 copies)

cc: Mr. Brandon Powell, Environmental Specialist, NMOCD District III Office, Aztec, NM  
Mr. Buddy Shaw, Environmental Coordinator, BP, Farmington, NM

# **BP AMERICA PRODUCTION CO.**

## **REMEDIATION AND MONITORING REPORT**

**CHAVEZ GC A #1  
(G) SEC. 3 – T29N – R9W, 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

## REMEDIATION AND MONITORING REPORT

### CHAVEZ GC A # 1

### SW/4 NE/4, Sec. 3, T29N, R9W

<u>Soil / Groundwater Remediation Date:</u>	2/22/07 – 4/15/07
<u>Monitor Well Installation Date:</u>	8/24/07 (MW #5, #6, #7)
<u>Monitor Well Sampling Dates:</u>	10/27/06, 1/22/07, 5/22/07, 6/14/07, 8/9/07, 9/19/07, 11/20/07, 4/3/08, 6/10/08

#### Remediation Activities:

Initial groundwater impacts at this site were discovered in February 2006 following work on site equipment modifications. The first phase of the subsurface reclamation effort was completed by August 2006 with the installation of four (4) groundwater monitoring wells (*Figure 1 & 1A*) following the removal of soil impacted media via excavation. Initial water test results from the monitor wells indicated impacts were present, but at levels below or slightly above New Mexico Water Quality Control Commission (**NMWQCC**) standards for benzene, toluene, ethylbenzene, and total xylenes (**BTEX**). This data was reported and submitted to the New Mexico Oil Conservation Division (**NMOCD**) in August 2006. Quarterly monitoring of these wells was conducted through August 2007.

The aforementioned report recommended additional removal of soil impacts in the area immediately west of the well head as well as supplemental groundwater monitoring points positioned both within and down-gradient of the excavation. This second phase was initiated in April 2007 via excavation and completed in August 2007 with the installation of three (3) monitor wells (MW #5, #6, #7). These wells were then initially sampled and tested in August 2007 (*Figure 1B*). Sampling and testing of subsurface soils from the excavation perimeter was completed and bore log/monitor well completion data recorded. The laboratory reports and well data are included within this report. Subsequent quarterly sampling for these wells was conducted until June 2008.

#### Groundwater Monitor Well Sampling Procedures:

Each monitor well 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 BTEX was conducted by utilizing US EPA Method 8021B or 8260B.

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:

Sampling of the groundwater monitor wells has been ongoing since August 2006. A summary of laboratory analytical results is included within the table on the following page and field/laboratory reports are included. Quarterly monitoring of MW #5, MW #6, & MW #7 for BTEX was conducted between August 2007 and June 2008. All BTEX constituents were below NMWQCC standards or non-detectable at the stated reporting limits.

A survey of water wells within 1 mile radius of the well site was researched at the New Mexico State Engineers web site and is included within this report. Two (2) water wells closest to the source area were identified as up gradient (Chavez water well) and down gradient (Lobato water well) [see enclosed Topographic Map for specifics]. These wells were sampled, with well owner authorization, and tested for impacts per US EPA Method 8260B or 8021B. All constituents revealed non-detectable levels at the stated reporting limits. The laboratory analytical results, chain-of-custody records, and quality assurance/quality control documentation are included within this report.

Groundwater contour maps of relative water table elevations have consistently been measured to flow toward the northwest with the exception of the May 2007 sampling event revealing a due west directionality (*Figure 2 through Figure 9*).

### **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 #1 (up 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 31, 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 Chavez GC A #1 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 PRODUCTION CO. GROUNDWATER LAB RESULTS**  
SUBMITTED BY BLAGG ENGINEERING, INC.

**Chavez GC A #1  
UNIT G, SEC. 3, T29N, R9W**

REVISED DATE: June 30, 2008

FILENAME: ( Cha-2Q08.WK4 ) NJV

**BTEX EPA METHOD 8021B ( ppb )**

SAMPLE DATE	WELL NAME or No.	D.T.W. (ft)	T.D. (ft)	TDS (mg/L)	COND. umhos	pH	PRODUCT (ft)	Benzene	Toluene	Ethyl Benzene	Total Xylene
12-Aug-06	MW #1	13.86	19.50	1,670	2,100	7.74		ND	ND	ND	ND
12-Aug-06	MW #2	11.45	18.00	2,070	2,700	7.60		ND	50	220	88
27-Oct-06		12.04			3,500	7.53		5.6	ND	30	82
22-Jan-07		11.44			5,000	7.55		1.8	ND	3.6	4.8
22-May-07		11.40			3,200	7.58		1.7	ND	ND	12
12-Aug-06	MW #3	10.90	19.00	760	1,200	7.05		<b>22</b>	ND	39	420
27-Oct-06		11.49			1,400	7.00		<b>1.1</b>	ND	ND	14
22-Jan-07		10.83			1,300	7.35		<b>ND</b>	ND	ND	ND
22-May-07		10.95			1,000	7.55		<b>ND</b>	ND	ND	ND
09-Aug-07		11.66			1,500	7.27		<b>ND</b>	ND	ND	ND
12-Aug-06	MW #4	9.70	16.00	528	900	7.16		ND	ND	ND	5.3
27-Oct-06		10.70			800	7.22		ND	ND	ND	ND
22-Jan-07		10.05			900	7.35		ND	ND	ND	5.3
22-May-07		9.81			2,100	7.15		ND	ND	ND	ND
19-Sep-07	MW #5	9.49	17.35	1,300	1,200	7.00		ND	ND	ND	ND
20-Nov-07		11.01			1,200	7.28		ND	ND	ND	ND
03-Apr-08		11.04			1,200	7.12		ND	ND	ND	ND
10-Jun-08		5.64			2,000	7.40		ND	ND	ND	ND
19-Sep-07	MW #6	10.31	17.50	1,000	1,200	6.91		ND	ND	ND	ND
20-Nov-07		11.84			1,300	7.06		ND	ND	ND	ND
03-Apr-08		11.69			1,500	6.85		ND	ND	ND	ND
10-Jun-08		7.55			1,000	7.08		ND	ND	ND	ND
19-Sep-07	MW #7	9.31	17.37	6,100	4,100	6.92		ND	ND	6.3	130
20-Nov-07		10.34			4,000	7.19		ND	ND	9.3	74
03-Apr-08		10.29			3,800	6.99		ND	ND	3.5	28.4
10-Jun-08		7.69			3,500	7.26		ND	ND	1.9	10.6
"	(dup.)	"			"	"		ND	ND	2.1	10.9
NMWQCC GROUNDWATER STANDARDS								<b>10</b>	<b>750</b>	<b>750</b>	<b>620</b>

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

**GENERAL WATER QUALITY**  
**BP AMERICA PRODUCTION COMPANY**  
**CHAVEZ GC A # 1**  
**Sample Date : August 7, 2006**

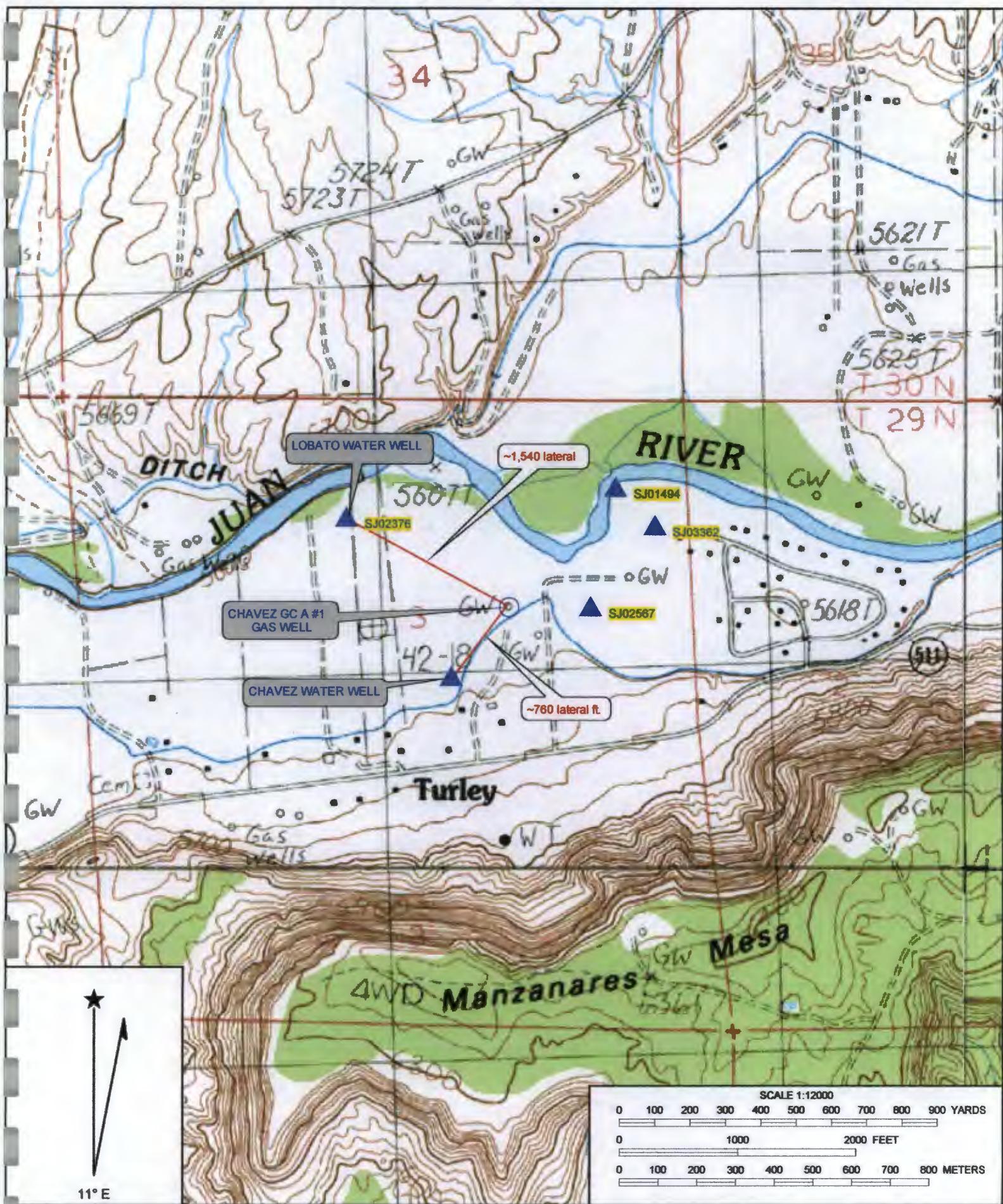
PARAMETERS	MW # 1	MW # 2	MW # 3	MW # 4	Units
LAB pH	7.78	7.78	7.19	7.29	s. u.
LAB CONDUCTIVITY @ 25 C	2,340	3,020	1,140	836	umhos / cm
TOTAL DISSOLVED SOLIDS @ 180 C	1,670	2,070	760	528	mg / L
TOTAL DISSOLVED SOLIDS (Calc)	1,680	1,950	750	530	mg / L
SODIUM ABSORPTION RATIO	16.3	10.4	3.8	1.3	ratio
TOTAL ALKALINITY AS CaCO <sub>3</sub>	520	890	416	420	mg / L
TOTAL HARDNESS AS CaCO <sub>3</sub>	172	432	285	332	mg / L
BICARBONATE as HCO <sub>3</sub>	520	890	416	420	mg / L
CARBONATE AS CO <sub>3</sub>	< 0.1	< 0.1	< 0.1	< 0.1	mg / L
HYDROXIDE AS OH	< 0.1	< 0.1	< 0.1	< 0.1	mg / L
NITRATE NITROGEN	< 0.01	< 0.01	< 0.01	< 0.01	mg / L
NITRITE NITROGEN	< 0.01	< 0.01	< 0.01	< 0.01	mg / L
CHLORIDE	9.60	40.1	16.4	18.6	mg / L
FLUORIDE	0.78	3.44	0.73	0.46	mg / L
PHOSPHATE	0.72	< 0.1	< 0.1	< 0.1	mg / L
SULFATE	780	692	230	75.0	mg / L
IRON	0.028	< 0.01	0.7	0.245	mg / L
CALCIUM	68.0	168	83	115	mg / L
MAGNESIUM	0.48	2.81	18.5	10.70	mg / L
POTASSIUM	12.8	0.68	2.10	3.94	mg / L
SODIUM	490	498	146	52.3	mg / L
CATION / ANION DIFFERENCE	0.09	0.04	0.24	0.01	

**GENERAL WATER QUALITY**  
**BP AMERICA PRODUCTION COMPANY**  
**CHAVEZ GC A #1**

Sample Date : September 19 , 2007

PARAMETERS	MW # 5	MW # 6	MW # 7	NMWQCC STANDARDS	Units
LAB pH	7.23	7.02	7.11	6 - 9	s. u.
TOTAL DISSOLVED SOLIDS	1,300	1,000	6,100	1,000	mg / L
NITROGEN, NITRITE	ND	ND	ND	10.0	mg / L
NITROGEN , NITRATE	ND	ND	12	10.0	mg / L
CHLORIDE	19	21	410	250	mg / L
FLUORIDE	0.63	0.44	2.1	1.6	mg / L
SULFATE	410	270	3,400	600	mg / L
IRON	0.38	ND	ND	1.0	mg / L

Notes :	1 ) NMWQCC - New Mexico Water Quality Control Commission . 2 ) s. u. - stanard unit . 3 ) mg / L - milligrams per liter or otherwise known as parts per million ( ppm ) . 4 ) New Mexico Oil Conservation Division ( NMOCD ) recognizes the NMWQCC or background levels (statistical equivalence ) as the standards for each site specific scenario .
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Name: TURLEY  
Date: 1/22/2010

Chavez GC A #1 gas well & nearest water well locations  
Unit G, Sec. 3, T29N, R9W  
36.75609 / 107.76367

Hall Environmental Analysis Laboratory, Inc.

Date: 12-Mar-07

**CLIENT:** Blagg Engineering  
**Lab Order:** 0703105  
**Project:** Chavez GC A #1  
**Lab ID:** 0703105-01

**Client Sample ID:** Lobato Well  
**Collection Date:** 3/7/2007 10:10:00 AM  
**Date Received:** 3/9/2007  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						
Benzene	ND	1.0		µg/L	1	3/8/2007
Toluene	ND	1.0		µg/L	1	3/8/2007
Ethylbenzene	ND	1.0		µg/L	1	3/8/2007
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/8/2007
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/8/2007
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/8/2007
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/8/2007
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/8/2007
Naphthalene	ND	2.0		µg/L	1	3/8/2007
1-Methylnaphthalene	ND	4.0		µg/L	1	3/8/2007
2-Methylnaphthalene	ND	4.0		µg/L	1	3/8/2007
Acetone	ND	10		µg/L	1	3/8/2007
Bromobenzene	ND	1.0		µg/L	1	3/8/2007
Bromochloromethane	ND	1.0		µg/L	1	3/8/2007
Bromodichloromethane	ND	1.0		µg/L	1	3/8/2007
Bromoform	ND	1.0		µg/L	1	3/8/2007
Bromomethane	ND	2.0		µg/L	1	3/8/2007
2-Butanone	ND	10		µg/L	1	3/8/2007
Carbon disulfide	ND	10		µg/L	1	3/8/2007
Carbon Tetrachloride	ND	2.0		µg/L	1	3/8/2007
Chlorobenzene	ND	1.0		µg/L	1	3/8/2007
Chloroethane	ND	2.0		µg/L	1	3/8/2007
Chloroform	ND	1.0		µg/L	1	3/8/2007
Chloromethane	ND	1.0		µg/L	1	3/8/2007
2-Chlorotoluene	ND	1.0		µg/L	1	3/8/2007
4-Chlorotoluene	ND	1.0		µg/L	1	3/8/2007
cis-1,2-DCE	ND	1.0		µg/L	1	3/8/2007
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/8/2007
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/8/2007
Dibromochloromethane	ND	1.0		µg/L	1	3/8/2007
Dibromomethane	ND	2.0		µg/L	1	3/8/2007
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/8/2007
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/8/2007
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/8/2007
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/8/2007
1,1-Dichloroethane	ND	2.0		µg/L	1	3/8/2007
1,1-Dichloroethene	ND	1.0		µg/L	1	3/8/2007
1,2-Dichloropropane	ND	1.0		µg/L	1	3/8/2007
1,3-Dichloropropane	ND	1.0		µg/L	1	3/8/2007
2,2-Dichloropropane	ND	2.0		µg/L	1	3/8/2007
1,1-Dichloropropene	ND	1.0		µg/L	1	3/8/2007

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

Hall Environmental Analysis Laboratory, Inc.

Date: 12-Mar-07

**CLIENT:** Blagg Engineering  
**Lab Order:** 0703105  
**Project:** Chavez GC A #1  
**Lab ID:** 0703105-01

**Client Sample ID:** Lobato Well  
**Collection Date:** 3/7/2007 10:10:00 AM  
**Date Received:** 3/9/2007  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						
Hexachlorobutadiene	ND	2.0		µg/L	1	3/8/2007
2-Hexanone	ND	10		µg/L	1	3/8/2007
Isopropylbenzene	ND	1.0		µg/L	1	3/8/2007
4-Isopropyltoluene	ND	1.0		µg/L	1	3/8/2007
4-Methyl-2-pentanone	ND	10		µg/L	1	3/8/2007
Methylene Chloride	ND	3.0		µg/L	1	3/8/2007
n-Butylbenzene	ND	1.0		µg/L	1	3/8/2007
n-Propylbenzene	ND	1.0		µg/L	1	3/8/2007
sec-Butylbenzene	ND	2.0		µg/L	1	3/8/2007
Styrene	ND	1.5		µg/L	1	3/8/2007
tert-Butylbenzene	ND	1.0		µg/L	1	3/8/2007
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/8/2007
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	3/8/2007
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/8/2007
trans-1,2-DCE	ND	1.0		µg/L	1	3/8/2007
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/8/2007
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/8/2007
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/8/2007
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/8/2007
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/8/2007
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/8/2007
Trichlorofluoromethane	ND	1.0		µg/L	1	3/8/2007
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/8/2007
Vinyl chloride	ND	1.0		µg/L	1	3/8/2007
Xylenes, Total	ND	3.0		µg/L	1	3/8/2007
Surr: 1,2-Dichloroethane-d4	108	76.6-113		%REC	1	3/8/2007
Surr: 4-Bromofluorobenzene	108	77-117		%REC	1	3/8/2007
Surr: Dibromofluoromethane	102	72.3-121		%REC	1	3/8/2007
Surr: Toluene-d8	101	73-113		%REC	1	3/8/2007

**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

**Hall Environmental Analysis Laboratory, Inc.**

Date: 11-Sep-07

**CLIENT:** Blagg Engineering  
**Lab Order:** 0709050  
**Project:** Chavez GC A #1  
**Lab ID:** 0709050-01

**Client Sample ID:** Chavez Well  
**Collection Date:** 9/5/2007 3:45:00 PM  
**Date Received:** 9/6/2007  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Analyst: SMP
<b>EPA METHOD 8021B: VOLATILES</b>							
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	9/8/2007 6:50:15 AM	
Benzene	ND	1.0		µg/L	1	9/8/2007 6:50:15 AM	
Toluene	ND	1.0		µg/L	1	9/8/2007 6:50:15 AM	
Ethylbenzene	ND	1.0		µg/L	1	9/8/2007 6:50:15 AM	
Xylenes, Total	ND	2.0		µg/L	1	9/8/2007 6:50:15 AM	
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/8/2007 6:50:15 AM	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/8/2007 6:50:15 AM	
Surr: 4-Bromofluorobenzene	86.0	70.2-105		%REC	1	9/8/2007 6:50:15 AM	

**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 Analytic 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**Client: Black Engineering Inc.Address: P. O. Box 87Phone #: 505-632-1199  
Fax #: QA/QC Package:  
 Std    Level 4   

Other:

Project Name: CHAVEZ GC A #1Project #: 

Project Manager:

Sampler: Jeff BruceSample Temperature: 35

ANALYSIS REQUEST		Air Bubbles or Headspace (Y or N)
8270 (Semi-VDA)		
8260B (VDA)	X	
8081 Pesticides / PCB's (8082)		
Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )		
RCRA 8 Metals		
B310 (PNA or PAH)		
EDC (Method 8021)		
EDB (Method 504.1)		
TPH (Method 418.1)		
TPH Method 8015B (Gasoline/Diesel)		
BTEX + MTBE + TPH (Gasoline Only)		
BTEX + MTBE + TMB's (8021)		

Remarks:

Date: 3/07 Time: 11:00 Relinquished By: (Signature) Received By: (Signature) 3P107  
 Date:  Time:  Relinquished By: (Signature) Received By: (Signature) 944

**CHAIN-OF-CUSTODY RECORD**

**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**  
4901 Hawkins NE, Suite D  
Albuquerque, New Mexico 87108  
Tel. 505.345.3975 Fax 505.345.4107  
[www.hallenvironmental.com](http://www.hallenvironmental.com)

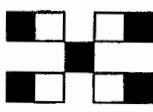
Client: Blagg Engineering, Inc.

Address: P.O. Box 87

Bloomfield, NM 87413

Other:

QA/QC Package:  
 Std  Level 4



Project #: CHAVEZ GC A#1

Project #: CHAVEZ GC A#1

Project Manager:

Jeff Blagg

Sampler: Jeff Blagg

Phone #: 505-632-1199

Fax #:

Sample Temperature: 9°

Number/Volume

Preservative

HEAL No.

HgCl<sub>2</sub>

HNO<sub>3</sub>

01091050

Date Time Matrix Sample I.D. No.

9/5/07 1545 Water Chavez Well 3 - VOA X 1

Air Bubbles or Headspace (Y or N)

8270 (Semi-VOA)

8260B (VDA)

8081 Pesticides / PCB's (8082)

RCRA 8 Metals

8310 (PNA or PAH)

EDC (Method 8021)

EDB (Method 504.1J)

TPH (Method 418.1J)

TPH Method 8015B (Gasoline Only)

BTEX + MTBE + TMB's (8021J)

BTEX + MTBE + TMB's (8021)

Remarks:

Date: 9/5/07 Time: 1715 Relinquished By: Jeff Blagg Received By: [Signature]  
Date: 9/6/07 Time: 04:45 Relinquished By: Jeff Blagg Received By: [Signature]

## QA/QC SUMMARY REPORT

**Client:** Blagg Engineering  
**Project:** Chavez GC A #1

Work Order: 0703105

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb-b		MBLK							
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	2.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	2.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	2.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	2.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	2.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

## 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

## QA/QC SUMMARY REPORT

**Client:** Blagg Engineering  
**Project:** Chavez GC A #1

**Work Order:** 0703105

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: SW8260B</b>									
Sample ID: 5mL rb-b		MBLK					Batch ID: R22784	Analysis Date:	3/8/2007
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pantanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	2.0						
Styrene	ND	µg/L	1.5						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	1.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 100ng Ics-b		LCS					Batch ID: R22784	Analysis Date:	3/8/2007
Benzene	18.51	µg/L	1.0	92.5	72.5	122			
Toluene	19.26	µg/L	1.0	96.3	73.3	112			
Chlorobenzene	18.46	µg/L	1.0	92.3	73.8	111			
1,1-Dichloroethene	20.90	µg/L	1.0	105	79.7	122			
Trichloroethene (TCE)	17.49	µg/L	1.0	87.4	69.5	114			

**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

## QA/QC SUMMARY REPORT

**Client:** Blagg Engineering  
**Project:** Chavez GC A #1

Work Order: 0709050

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: SW8021</b>									
<b>Sample ID: 0709050-01A MSD</b>									
Methyl tert-butyl ether (MTBE)	7.608	µg/L	2.5	91.7	51.2	138	0.0526	28	
Benzene	5.398	µg/L	1.0	96.4	85.9	113	1.04	27	
Toluene	34.99	µg/L	1.0	87.5	86.4	113	0.470	19	
Ethylbenzene	7.184	µg/L	1.0	90.9	83.5	118	0.223	10	
Xylenes, Total	42.00	µg/L	2.0	91.3	83.4	122	1.36	13	
1,2,4-Trimethylbenzene	13.20	µg/L	1.0	101	83.5	115	0.806	21	
1,3,5-Trimethylbenzene	4.162	µg/L	1.0	102	85.2	113	1.21	10	
<b>Sample ID: SML RB</b>									
		MBLK			Batch ID: R25072		Analysis Date:	9/7/2007 7:56:48 AM	
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5						
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						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
<b>Sample ID: 100NG BTEX LCS</b>									
		LCS			Batch ID: R25072		Analysis Date:	9/7/2007 8:51:01 PM	
Methyl tert-butyl ether (MTBE)	19.30	µg/L	2.5	96.5	51.2	138			
Benzene	18.69	µg/L	1.0	93.4	85.9	113			
Toluene	18.19	µg/L	1.0	91.0	86.4	113			
Ethylbenzene	18.64	µg/L	1.0	93.2	83.5	118			
Xylenes, Total	55.36	µg/L	2.0	92.3	83.4	122			
1,2,4-Trimethylbenzene	17.95	µg/L	1.0	89.8	83.5	115			
1,3,5-Trimethylbenzene	17.73	µg/L	1.0	88.6	85.2	113			
<b>Sample ID: 0709050-01A MS</b>									
		MS			Batch ID: R25072		Analysis Date:	9/8/2007 7:20:21 AM	
Methyl tert-butyl ether (MTBE)	7.612	µg/L	2.5	91.7	51.2	138			
Benzene	5.342	µg/L	1.0	95.4	85.9	113			
Toluene	34.83	µg/L	1.0	87.1	86.4	113			
Ethylbenzene	7.168	µg/L	1.0	90.7	83.5	118			
Xylenes, Total	41.43	µg/L	2.0	90.1	83.4	122			
1,2,4-Trimethylbenzene	13.09	µg/L	1.0	99.7	83.5	115			
1,3,5-Trimethylbenzene	4.112	µg/L	1.0	100	85.2	113			

**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: 3/9/2007

Work Order Number 0703105

Received by TLS

Checklist completed by

*Jamy S.*

March 9, 07

Signature

Date

Matrix

Carrier name Greyhound

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/> Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Water - Preservation labels on bottle and cap match?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
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: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG

Date and Time Received:

9/6/2007

Work Order Number 0709050

Received by ARS

Checklist completed by

*Jane Shomin* Sept 4.07  
Signature Date

Matrix

Carrier name Greyhound

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/> Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Water - Preservation labels on bottle and cap match?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Container/Temp Blank temperature?	9°	4° C ± 2 Acceptable	If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action



# New Mexico Office of the State Engineer

## Wells with Well Log Information

(quarters are 1=NW 2=NE 3=SW 4=SE)

POD Number	Sub basin	Use	County	Source	(NAD83 UTM in meters)				(in feet)					
					q	q	Sec	Twp	Rng	X	Y	Distance		
SJ 02567	DOM	SJ	Shallow	1 4 2 03	29N	09W	253488	4071372*	199	07/26/1994	06/30/2000	14	2	
SJ 01494	DOM	SJ	Shallow	2 2 03	29N	09W	253571	4071681*	410	10/22/1981	11/02/1981	12	5	
SJ 03362	DOM	SJ	Shallow	4 2 2 03	29N	09W	253670	4071580*	428	11/28/2003	12/31/2003	38	12	
SJ 03362 POD2	DOM	SJ	Shallow	4 2 2 03	29N	09W	253670	4071580*	428	08/08/2005	08/10/2005	21	6	
SJ 02946	DOM	SJ	Shallow	1 2 4 03	29N	09W	253518	4070978*	464	08/20/1999	10/20/1999	95	40	
SJ 02369 CLW	MDW	SJ	Shallow	4 2 1 03	29N	09W	252874	4071624*	480	04/20/1992	04/22/1992	11/05/1992	13	10
SJ 02376	MUL	SJ	Shallow	4 2 1 03	29N	09W	252874	4071624*	480	04/20/1992	04/22/1992	11/05/1992	13	10
SJ 03856 POD1	DOL	SJ	Shallow	2 2 4 03	29N	09W	253586	4070930	540	12/16/2008	12/24/2008	320	60	
SJ 03300	DOM	SJ	Shallow	2 2 2 03	29N	09W	253670	4071780*	550	11/25/2002	12/02/2002	21	4	
SJ 01203	DOM	SJ	Shallow	1 3 1 02	29N	09W	253678	4071351*	589	06/21/1980	06/24/1980	25	12	
SJ 01210	DOM	SJ	Shallow	1 3 1 02	29N	09W	253878	4071351*	589	07/08/1980	07/17/1980	26	10	
SJ 01430	DOM	SJ	Shallow	1 3 1 02	29N	09W	253678	4071351*	589	05/28/1981	05/29/1981	06/08/1981	24	11
SJ 01460	DOM	SJ	Shallow	1 3 1 02	29N	09W	253878	4071351*	589	08/21/1981	08/24/1981	09/08/1981	19	8
SJ 02478	DOM	SJ	Shallow	3 1 1 02	29N	09W	253665	4071558*	601	07/13/1993	07/15/1993	08/02/1993	16	8
SJ 02492	DOM	SJ	Shallow	3 1 1 02	29N	09W	253665	4071558*	601	09/16/1993	09/17/1993	08/21/1996	13	5
SJ 02677	DOM	SJ	Shallow	3 1 1 02	29N	09W	253665	4071558*	601	05/01/1996	05/01/1996	09/12/1997	21	7
SJ 03138	DOM	SJ	Shallow	1 1 1 02	29N	09W	253665	4071758*	687	04/02/2002	04/06/2002	04/15/2002	11	5
SJ 01232	DOM	SJ	Shallow	3 1 02	29N	09W	253979	4071252*	702	07/30/1980	08/01/1980	08/08/1980	25	9
SJ 03080	DOM	SJ	Shallow	3 1 02	29N	09W	253979	4071252*	702	11/25/2001	12/10/2001	12/18/2001	35	-
SJ 03843 POD1	DOL	SJ	Shallow				253731	4071982	745	04/02/2009	04/04/2009	04/16/2009	22	6

\*UTM location was derived from PLSS - see Help

1/21/10 10:58 AM

Page 1 of 3

WELLS WITH WELL LOG INFORMATION

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest)

POD Number	Sub basin	Use	County	Source	NAD83 UTM in meters)			(in feet)				
					q	q	q	X	Y	Distance	Start Date	Finish Date
SJ 01392	DOM	SJ	Shallow	2 3 1 02 29N 09W	254078	4071351*	789	05/22/1981	05/25/1981	05/27/1981	25	11
SJ 01579	DOM	SJ	Shallow	2 3 1 02 29N 09W	254078	4071351*	789	06/01/1982	06/03/1982	06/08/1982	25	12
SJ 01867	DOM	SJ	Shallow	2 3 1 02 29N 09W	254078	4071351*	789	07/23/1984	07/25/1984	08/02/1984	25	71
SJ 03003	DOM	SJ	Shallow	2 3 1 02 29N 09W	254078	4071351*	789	08/17/2000	08/20/2000	09/01/2000	19	6
SJ 03253	DOM	SJ	Shallow	2 3 1 02 29N 09W	254078	4071351*	789	04/09/2003	04/09/2003	04/16/2003	16	9
SJ 01066	DOM	SJ	Shallow	4 1 1 02 29N 09W	254065	4071558*	795	11/20/1979	11/27/1979	12/04/1979	25	10
SJ 01067	DOM	SJ	Shallow	4 1 1 02 29N 09W	254065	4071558*	795	11/27/1979	11/29/1979	12/03/1979	25	10
SJ 01183	DOM	SJ	Shallow	4 1 1 02 29N 09W	254065	4071558*	795	06/13/1980	06/16/1980	06/24/1980	24	11
SJ 02096	DOM	SJ	Shallow	4 1 1 02 29N 09W	254065	4071558*	795	10/24/1986	10/25/1986	11/10/1986	27	11
SJ 03396	DOM	SJ	Shallow	2 1 1 02 29N 09W	254065	4071758*	861	07/21/2003	07/21/2003	07/31/2003	10	4
SJ 02103	DOM	SJ	Shallow	3 1 03 29N 09W	252397	4071340*	893	12/20/1986	12/23/1986	04/13/1988	21	4
SJ 01983	DOM	SJ	Shallow	1 02 29N 09W	254180	4071453*	893	07/16/1985	07/16/1985	07/30/1985	25	3
SJ 02346	DOM	SJ	Shallow	1 02 29N 09W	254180	4071453*	893	09/15/1991	09/17/1991	03/20/1992	25	4
SJ 02347	DOM	SJ	Shallow	1 02 29N 09W	254180	4071453*	893	09/18/1991	09/21/1991	03/20/1992	25	4
SJ 02600	DOM	SJ	Shallow	3 4 1 02 29N 09W	254292	4071149*	1029	01/04/1995	01/04/1995	08/23/1996	18	8
SJ 03687 POD1	DOM	SJ	Shallow	3 4 1 02 29N 09W	254292	4071149*	1029	01/23/2006	01/24/2006	01/25/2006	18	10
SJ 03200	DOM	SJ	Shallow	1 1 3 03 29N 09W	252316	4071045*	1030	08/05/2002	08/12/2002	05/28/2003	28	13
SJ 03632	DOM	SJ	Shallow	2 2 1 02 29N 09W	254472	4071753*	1239	05/25/2005	05/25/2005	06/03/2005	27	7
SJ 01874	DOM	SJ	Shallow	02 29N 09W	254652	4071064*	1399	07/30/1984	07/31/1984	08/03/1984	28	8
SJ 02092	MUL	SJ	Shallow	4 4 3 30N 09W	252048	4072066*	1416	10/27/1986	10/28/1986	11/10/1986	32	15

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

**Record Count:** 40

**UTMNAD83 Radius Search (in meters):**

Easting (X): 253289.19

Northing (Y): 4071383

Radius: 1609

# FIGURE 1



A C C E S S

R O A D

To Hwy 611

main channel ~10 wide

WELL HEAD

Direction to San Juan River

MW #4

Irrigation ditch

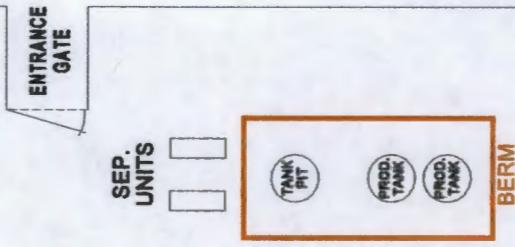
Bridge

flow direction

MW #3

1 INCH = 50 FT.

0 50 50 FT.



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

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

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

PROJECT: MW INSTALLATION  
DRAWN BY: NJV  
FILENAME: CHAVEZ GCA 1-SM.SKF  
DRAFTED: 08-02-06 NJV

SITE MAP  
08/06



# FIGURE 1A

TH3  
TH4  
TH5  
TH6  
WELL HEAD

Sample ID	Date	Matrix Type	Depth (ft)	OVM (ppm)	TPH (mg/Kg)
W	02/15/06	Soil	8	ND	ND
A	02/24/06	Soil	8	ND	8.1
B	04/26/06	Soil	7	20	ND
C	04/26/06	Soil	7	33	42
D	04/26/06	Soil	7	45	ND
E	04/26/06	Soil	7	312	480
F	05/10/06	Soil	9	133	133
G	05/17/06	Soil	8	ND	ND
H	05/17/06	Soil	8	ND	ND
I	05/19/06	Soil	8	ND	ND
J	05/26/06	Soil	8	ND	ND
TH1	04/13/06	Soil	8	310	323
TH2	04/13/06	Soil	8	146	25
TH3	04/13/06	Soil	7	175	940
TH4	04/13/06	Soil	7	27	ND
TH5	04/13/06	Soil	7	ND	ND
TH6	04/13/06	Soil	7	ND	ND

Notes:  
 OVM = Organic vapor meter.  
 TPH = Total Petroleum Hydrocarbons.  
 ppm = Parts per million.  
 mg/Kg = milligram per kilogram.  
 ND = Not detected at the reporting limit.

Note:

TPH = Total Petroleum Hydrocarbons.

ppm = Parts per million.

mg/Kg = milligram per kilogram.

ND = Not detected at the reporting limit.

Bridge

Irrigation ditch

flow direction

MW #3

MW #4

MW #5

MW #6

ENTRANCE GATE

Separator units

MW #2

TANK TPT

PROD. TANK

PROD. TANK

BERM

1 INCH = 50 FT.

100 FT.

To Hwy 611

MW #1

Direction to San Juan River

main channel ~10 wide

R O A D

A C C E S S

N

Figure 1A

Separator pit excavation  
2/10/06 - 2/15/06  
~500 +/- cubic yards

Historical release excavation  
2/16/06 - 5/26/06  
~14,000 +/- cubic yards

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

BP AMERICA PRODUCTION CO.

CHAVEZ GC A #1

SW 1/4 NE 1/4 SEC. 3, T29N, R9W  
SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.  
CONSULTING PETROLEUM / RECLAMATION SERVICES  
P.O. BOX 87  
BLOOMFIELD, NEW MEXICO 87413  
PHONE: (505) 632-1198

PROJECT: MW INSTALLATION  
DRAWN BY: NJV  
FILENAME: CHAVEZ GCA 1-SM2.SKF  
REVISED: 08-18-06 NJV  
08/06

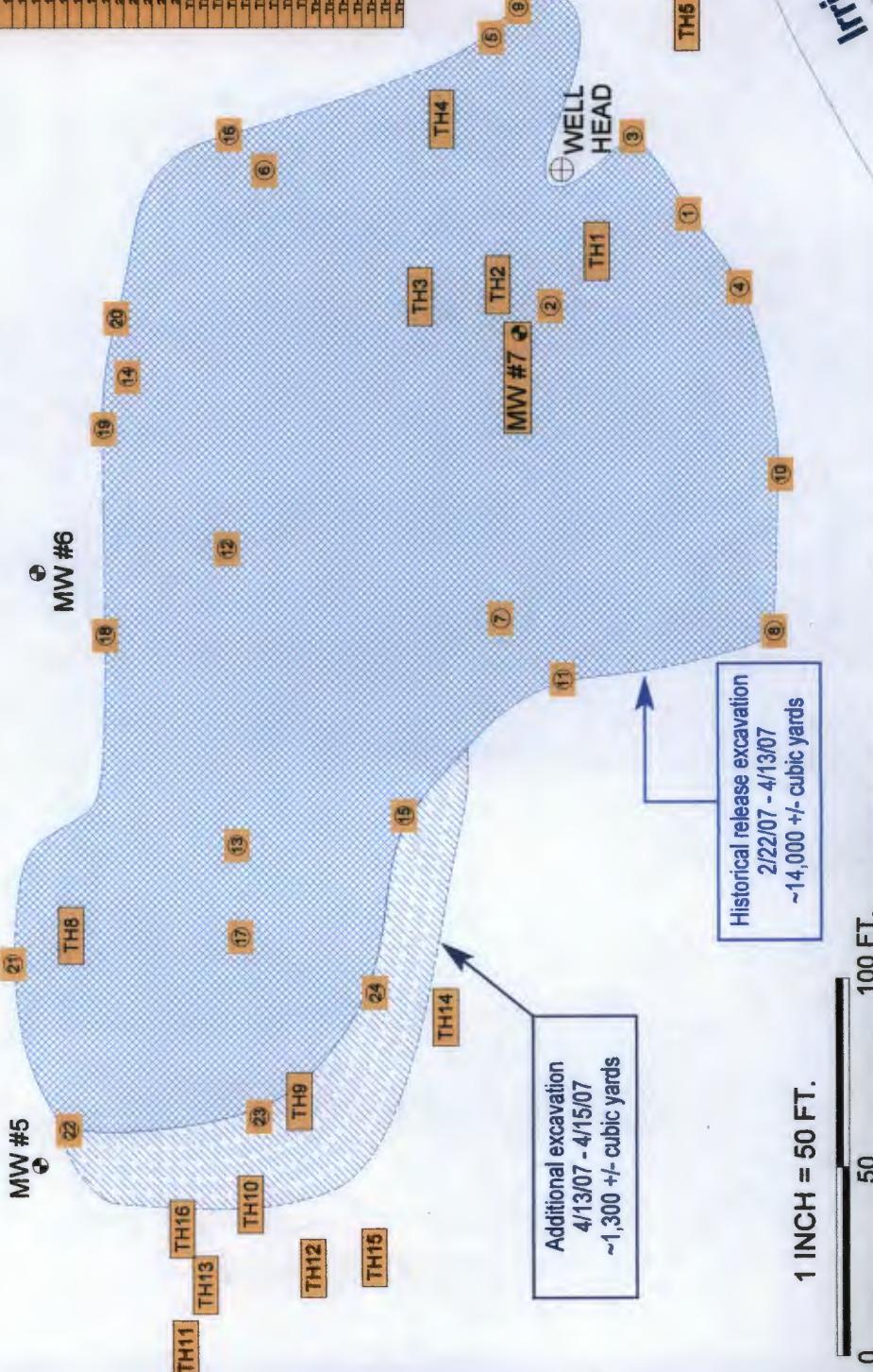
SITE  
MAP



# FIGURE 1B

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

Direction to  
San Juan River



Sample ID	Date	Matrix Type	Depth (ft.)	OVM (ppm)	TPH (ppm/Kg)	Benz (ppb)
1	02/22/07	Soil	8	3.2	0.1	21.6
2	02/22/07	Soil	7	81.4	1,680	ND
3	02/22/07	Soil	8	1.1	0.0	ND
4	02/22/07	Soil	7	0.0	0.0	8.0
5	02/22/07	Soil	7	17.6	N/A	N/A
6	02/22/07	Soil	7	27.0	N/A	N/A
7	02/22/07	Soil	7	14.4	N/A	N/A
8	02/22/07	Soil	7	10.8	N/A	N/A
9	02/22/07	Soil	9	2.4	1.0	6.9
10	02/22/07	Soil	7	2.4	0.5	21.1
11	02/22/07	Soil	8	1.6	0.0	ND
12	02/22/07	Soil	8	24.8	28.1	ND
13	02/22/07	Soil	8	11.8	5.1	23.3
14	02/22/07	Soil	8	17.8	46.0	81.8
15	02/22/07	Soil	8	18.8	10.8	8.4
16	02/22/07	Soil	8	2.3	0.0	104
17	02/22/07	Soil	8	23.8	2,360	1,840
18	02/22/07	Soil	8	28.7	89.2	2,820
19	02/22/07	Soil	8	10	4.2	ND
20	02/22/07	Soil	7	13.8	NID	N/A
21	02/22/07	Soil	8	0.6	ND	ND
22	02/22/07	Soil	8	0.6	ND	ND
23	02/22/07	Soil	8	0.6	ND	ND
24	02/22/07	Soil	8	0.6	ND	ND
TH1	04/13/07	Soil	8	31.0	52.3	1,830
TH2	04/13/07	Soil	8	1.6	2.6	ND
TH3	04/13/07	Soil	7	17.8	8.0	ND
TH4	04/13/07	Soil	7	2.7	0.0	ND
TH5	04/13/07	Soil	7	0.0	0.0	ND
TH6	04/13/07	Soil	7	0.0	0.0	ND
TH7	04/13/07	Soil	6	0.0	N/A	N/A
TH8	04/13/07	Soil	8	3.0	N/A	N/A
TH9	04/13/07	Soil	8	17.7	0.8	ND
TH10	04/13/07	Soil	8	20.0	41.1	80.8
TH11	04/13/07	Soil	8	0.6	0.0	ND
TH12	04/13/07	Soil	8	0.6	0.2	ND
TH13	04/13/07	Soil	8	0.6	0.2	ND
TH14	04/13/07	Soil	8	0.6	0.0	ND
TH15	04/13/07	Soil	8	0.6	0.0	ND
TH16	04/13/07	Soil	8	0.6	0.0	ND
TH17	04/13/07	Soil	8	0.6	0.0	ND
TH18	04/13/07	Soil	8	0.6	0.0	ND
TH19	04/13/07	Soil	8	0.6	0.0	ND
TH20	04/13/07	Soil	8	0.6	0.0	ND
TH21	04/13/07	Soil	8	0.6	0.0	ND
TH22	04/13/07	Soil	8	0.6	0.0	ND
TH23	04/13/07	Soil	8	0.6	0.0	ND
TH24	04/13/07	Soil	8	0.6	0.0	ND

Note:

OVM = Organic vapor meter.

TPH = Total Petroleum Hydrocarbons.

Benz = Benzene.

STEX = benzene, toluene, ethylbenzene, total xylenes.

ppm = Parts per million.

ppb = Parts per billion.

mg/Kg = milligram per kilogram.

ND = Not detected at the reporting limit.

N/A = Not available or applicable.

## NORTHWEST EXCAVATION SITE MAP

PROJECT: MW INSTALLATIONS  
DRAWN BY: NJV  
FILENAME: CHAVEZ GCA 1-SM3.SKF  
REVISED: 09-12-07 NJV  
PHONE: (505) 632-1199

**BLAGG ENGINEERING, INC.**  
CONSULTING PETROLEUM / RECLAMATION SERVICES  
P.O. BOX 87  
BLOOMFIELD, NEW MEXICO 87413

BP AMERICA PRODUCTION CO.  
CHAVEZ GC A #1  
SW/4 NE/4 SEC. 3, T 29N, R 9W  
SAN JUAN COUNTY, NEW MEXICO

04/07

# ENVIROTECH LABS

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client: Blagg / BP  
Sample ID: 1 @ 9'  
Laboratory Number: 40175  
Chain of Custody No: 1996  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

Project #: 94034-010  
Date Reported: 02-26-07  
Date Sampled: 02-22-07  
Date Received: 02-22-07  
Date Extracted: 02-23-07  
Date Analyzed: 02-26-07  
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.3	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.3	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996

Comments: Chavez GC A #1 North Source.

Christine Wailes  
Analyst

Ruth Waller  
Review

# ENVIROTECH LABS

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	1 @ 9'	Date Reported:	02-26-07
Laboratory Number:	40175	Date Sampled:	02-22-07
Chain of Custody:	1996	Date Received:	02-22-07
Sample Matrix:	Soil	Date Analyzed:	02-26-07
Preservative:	Cool	Date Extracted:	02-23-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	21.5	1.8
Toluene	20.0	1.7
Ethylbenzene	30.0	1.5
p,m-Xylene	130	2.2
o-Xylene	60.0	1.0
Total BTEX	262	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW 846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW 846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source.

Christie M. Waeter  
Analyst

Blair Walker  
Review

# ENVIROTECH LABS

## Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	1 @ 9'	Date Reported:	02-26-07
Lab ID#:	40175	Date Sampled:	02-22-07
Sample Matrix:	Soil	Date Received:	02-22-07
Preservative:	Cool	Date Analyzed:	02-26-07
Condition:	Cool and Intact	Chain of Custody:	1996

Parameter	Concentration (mg/Kg)
Total Chloride	8.18

Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1: North Source.

Ronni Waller  
Analyst

Christine M. Waller  
Review

# ENVIROTECH LABS

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	2 @ 7'	Date Reported:	02-26-07
Laboratory Number:	40176	Date Sampled:	02-22-07
Chain of Custody No.	1996	Date Received:	02-22-07
Sample Matrix:	Soil	Date Extracted:	02-23-07
Preservative:	Cool	Date Analyzed:	02-26-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1,120	0.2
Diesel Range (C10 - C28)	433	0.1
Total Petroleum Hydrocarbons	1,550	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B. Nonhalogenated Volatile Organics. Test Methods for Evaluating Solid Waste, SW-846. USEPA. December 1996.

Comments: Chavez GC A #1 North Source.

Christine M. Waller  
Analyst

Richard Vennell  
Review

# ENVIROTECH LABS

Environmental Testing • Laboratory Services • Consulting

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	2 @ 7'	Date Reported:	02-26-07
Laboratory Number:	40176	Date Sampled:	02-22-07
Chain of Custody:	1996	Date Received:	02-22-07
Sample Matrix:	Soil	Date Analyzed:	02 26 07
Preservative:	Cool	Date Extracted:	02-23-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	1,960	1.7
Ethylbenzene	2,640	1.5
p,m-Xylene	25,470	2.2
o-Xylene	2,960	1.0
Total BTEX	33,030	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B. Purge-and-Trap, Test Methods for Evaluating Solid Waste. SW-846. USEPA. December 1996

Method 8021B. Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste. SW-846. USEPA. December 1996.

Comments: Chavez GC A #1 North Source.

Christine M. Walters  
Analyst

Blush Waller  
Review

# ENVIROTECH LABS

## Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	2 @ 7'	Date Reported:	02-26-07
Lab ID#:	40176	Date Sampled:	02-22-07
Sample Matrix:	Soil	Date Received:	02-22-07
Preservative:	Cool	Date Analyzed:	02-26-07
Condition:	Cool and Intact	Chain of Custody:	1996

Parameter	Concentration (mg/Kg)
Total Chloride	8.58

Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1: North Source.

Ruth Vanll  
Analyst

Christine M. Waeter  
Review

# ENVIROTECH LABS

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	3 @ 9'	Date Reported:	02-28-07
Laboratory Number:	40193	Date Sampled:	02-26-07
Chain of Custody No:	2132	Date Received:	02-27-07
Sample Matrix:	Soil	Date Extracted:	02-27-07
Preservative:	Cool	Date Analyzed:	02-28-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area.

Christine M. Wallace  
Analyst

Mark D. Vanell  
Review

# ENVIROTECH LABS

Environmental Testing • Laboratory Services • Project Support

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sampic ID:	3 @ 9'	Date Reported:	02-28-07
Laboratory Number:	40103	Date Sampled:	02-26-07
Chain of Custody:	2132	Date Received:	02-27-07
Sample Matrix:	Soil	Date Analyzed:	02-28-07
Preservative:	Cool	Date Extracted:	02-27-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	3.4	1.5
p,m-Xylene	23.5	2.2
o-Xylene	13.0	1.0
Total BTEX	39.9	

ND - Parameter not detected at the stated detection limit

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area.

Christine M. Walker  
Analyst

Robert W. Wall  
Review

# ENVIROTECH LABS

## Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	3 @ 9'	Date Reported:	02-28-07
Lab ID#:	40193	Date Sampled:	02-26-07
Sample Matrix:	Soil	Date Received:	02-27-07
Preservative:	Cool	Date Analyzed:	02-27-07
Condition:	Cool and Intact	Chain of Custody:	2132

<input type="checkbox"/> Parameter	Concentration (mg/Kg)
Total Chloride	9.0

Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1 North Source Area.

Shub Vall  
Analyst

Christine M. Webster  
Review

# ENVIROTECH LABS

Environmental Testing • Laboratory Services • Consulting

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP  
Sample ID: 4 @ 7'  
Laboratory Number: 40194  
Chain of Custody No: 2132  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

Project #: 94034-010  
Date Reported: 02-26-07  
Date Sampled: 02-26-07  
Date Received: 02-27-07  
Date Extracted: 02-27-07  
Date Analyzed: 02-28-07  
Analysis Requested: 8015 TPH

<u>Parameter</u>	<u>Concentration</u> (mg/Kg)	<u>Det.</u> <u>Limit</u> (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USFPA, December 1996.

Comments: Chavez GC A #1 North Source Area.

*Christine M. Wadens*  
Analyst

*Ruth Vanha*  
Review

# ENVIROTECH LABS

ENVIRONMENTAL ANALYSIS • EPA APPROVED • ISO 9001 CERTIFIED

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	1 @ 7'	Date Reported:	02-28-07
Laboratory Number:	40194	Date Sampled:	02-26-07
Chain of Custody:	2132	Date Received:	02-27-07
Sample Matrix:	Soil	Date Analyzed:	02-28-07
Preservative:	Cool	Date Extracted:	02-27-07
Condition:	Cool & intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	2.0	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	4.7	2.2
o-Xylene	1.3	1.0
Total BTEX	8.0	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area.

Christine M. Winters  
Analyst

Ruth Wall  
Review

# ENVIROTECH LABS

## Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	4 @ 7'	Date Reported:	02-28-07
Lab ID#:	40194	Date Sampled:	02-26-07
Sample Matrix:	Soil	Date Received:	02-27-07
Preservative:	Cool	Date Analyzed:	02-27-07
Condition:	Cool and Intact	Chain of Custody:	2132

### Parameter

### Concentration (mg/Kg)

Total Chloride	6.8
----------------	-----

Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1 North Source Area.

Bob Hall  
Analyst

Christie M. Wailes  
Review

# ENVIROTECH LABS

ENVIRONMENTAL & INDUSTRIAL LABORATORY INC.

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	9 @ 9'	Date Reported:	03-12-07
Laboratory Number:	40341	Date Sampled:	03-08-07
Chain of Custody No:	2211	Date Received:	03-08-07
Sample Matrix:	Soil	Date Extracted:	03-09-07
Preservative:	Cool	Date Analyzed:	03-12-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

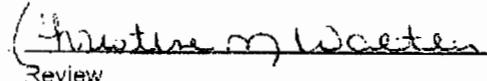
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.0	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	1.0	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

  
Sean L. Adams  
Analyst

  
Christine M. Waeter  
Review

# ENVIROTECH LABS

Environmental Testing • Consulting • Remediation • Training

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	9 @ 9'	Date Reported:	03-12-07
Laboratory Number:	40341	Date Sampled:	03-08-07
Chain of Custody:	2211	Date Received:	03-08-07
Sample Matrix:	Soil	Date Analyzed:	03-12-07
Preservative:	Cool	Date Extracted:	03-09-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	4.9	1.8
Toluene	53.5	1.7
Ethylbenzene	122	1.5
p,m-Xylene	347	2.2
o-Xylene	117	1.0
<b>Total BTEX</b>	<b>644</b>	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Dee C. Ayers  
Analyst

Christine M. Walters  
Review

# ENVIROTECH LABS

## Chloride

Client:	Blagg / BP	Project #:	94034 010
Sample ID:	9 @ 9'	Date Reported:	03-12-07
Lab ID#:	40341	Date Sampled:	03-08-07
Sample Matrix:	Soil	Date Received:	03-08-07
Preservative:	Cool	Date Analyzed:	03-12-07
Condition:	Cool and Intact	Chain of Custody:	2211

Parameter	Concentration (mg/Kg)
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Total Chloride	18.0
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Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1 North Source Area

Christine M. Waeter  
Analyst

Devin C. Aguirre  
Review

# ENVIROTECH LABS

Environmental Testing • Laboratory Services • Consulting

**EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons**

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	10 @ 7	Date Reported:	03-12-07
Laboratory Number:	40342	Date Sampled:	03-08-07
Chain of Custody No:	2211	Date Received:	03-08-07
Sample Matrix:	Soil	Date Extracted:	03-09-07
Preservative:	Cool	Date Analyzed:	03-12-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.5	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.5	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Alexis L. Alvarado  
Analyst

Christine M. Walker  
Review

# ENVIROTECH LABS

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Dlagg / BP	Project #:	94034-010
Sample ID:	10 @ 7'	Date Reported:	03-12-07
Laboratory Number:	40349	Date Sampled:	03-08-07
Chain of Custody:	2211	Date Received:	03-08-07
Sample Matrix:	Soil	Date Analyzed:	03-12-07
Preservative:	Cool	Date Extracted:	03-09-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	3.2	1.8
Toluene	24.4	1.7
Ethylbenzene	15.0	1.5
p,m-Xylene	134	2.2
o-Xylene	34.1	1.0
<b>Total BTEX</b>	<b>211</b>	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Alma P. Olivas  
Analyst

Christine M. Wadew  
Review

# ENVIROTECH LABS

## Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	10 @ 7'	Date Reported:	03-12-07
Lab ID#:	40342	Date Sampled:	03-08-07
Sample Matrix:	Soil	Date Received:	03-08-07
Preservative:	Cool	Date Analyzed:	03-12-07
Condition:	Cool and In tact	Chain of Custody:	2211

Parameter	Concentration (mg/Kg)
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Total Chloride	16.0
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Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1 North Source Area

Christine M. Waters  
Analyst

Dee C. Aguirre  
Review

# ENVIROTECH LABS

ENVIRONMENTAL ANALYSIS • CONSULTING • FIELD SERVICES

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

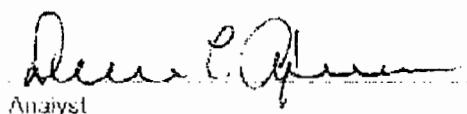
Client:	Blagg / BH	Project #:	94034-010
Sample ID:	11 @ 8'	Date Reported:	03-12-07
Laboratory Number:	40343	Date Sampled:	03-08-07
Chain of Custody No:	2211	Date Received:	03-08-07
Sample Matrix:	Soil	Date Extracted:	03-09-07
Preservative:	Cool	Date Analyzed:	03-12-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

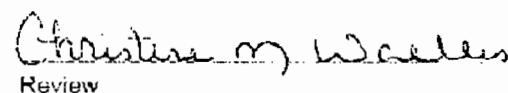
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

  
Debra L. Flores  
Analyst

  
Christine M. Wadler  
Review

# ENVIROTECH LABS

ENVIRONMENTAL FIELD AND LABORATORY SERVICES

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / DF	Project #:	91034-010
Sample ID:	11 @ 8'	Date Reported:	03-12-07
Laboratory Number:	40343	Date Sampled:	03-06-07
Chain of Custody:	2211	Date Received:	03-08-07
Sample Matrix:	Soil	Date Analyzed:	03-12-07
Preservative:	Cool	Date Extracted:	03-09-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	2.4	1.7
Ethylbenzene	6.2	1.5
p,m-Xylene	22.4	2.2
o-Xylene	11.2	1.0
<b>Total BTEX</b>	<b>42.2</b>	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Dawn P. Rogers  
Analyst

Christine M. Wailes  
Review

# ENVIROTECH LABS

## Chloride

Sample ID: 11 @ 8' Lab ID: 40343 Sample Matrix: Soil Preservative: Cool Condition: Cool and Intact

Client:	Blaigg / BP	Project #:	94034-(11)
Sample ID:	11 @ 8'	Date Reported:	03-12-07
Lab ID#:	40343	Date Sampled:	03-08-07
Sample Matrix:	Soil	Date Received:	03-08-07
Preservative:	Cool	Date Analyzed:	03-12-07
Condition:	Cool and Intact	Chain of Custody:	2211

Parameter	Concentration (mg/Kg)
Total Chloride	20.0

Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1 North Source Area

Christine m waeter  
Analyst

Shane P. Allen  
Review

# ENVIROTECH LABS

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

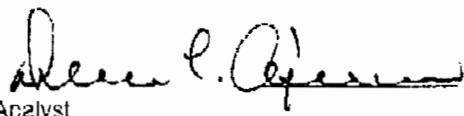
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	12 @ 8'	Date Reported:	03-15-07
Laboratory Number:	40503	Date Sampled:	03-13-07
Chain of Custody No:	2231	Date Received:	03-14-07
Sample Matrix:	Soil	Date Extracted:	03-14-07
Preservative:	Cool	Date Analyzed:	03-15-07
Condition:	Cool and Inact	Analysis Requested:	8015 TPH

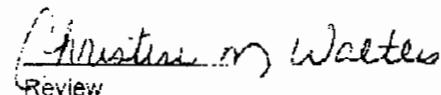
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	20.6	0.2
Diesel Range (C10 - C28)	4.5	0.1
Total Petroleum Hydrocarbons	25.1	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Clean-up

  
Debra L. Pearson  
Analyst

  
Christine M. Walters  
Review

# ENVIROTECH LABS

ENVIRONMENTAL ANALYSIS • EPA APPROVED • STATE APPROVED

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	12 @ 8'	Date Reported:	03-15-07
Laboratory Number:	40503	Date Sampled:	03-13-07
Chain of Custody:	2231	Date Received:	03-14-07
Sample Matrix:	Soil	Date Analyzed:	03-15-07
Preservative:	Cool	Date Extracted:	03-14-07
Condition:	Cont & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	110	1.7
Ethylbenzene	70.2	1.5
p,m-Xylene	390	2.2
o-Xylene	147	1.0
Total BTEX	717	

ND - Parameter not detected at the stated detection limit.

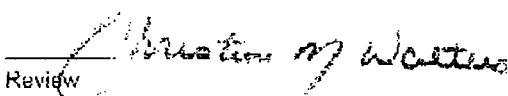
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Clean-up

  
Dennis P. Aguirre  
Analyst

  
Brian M. Walker  
Review

# ENVIROTECH LABS

## Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	12 @ 8'	Date Reported:	03-15-07
Lab ID#:	40503	Date Sampled:	03-13-07
Sample Matrix:	Soil	Date Received:	03-14-07
Preservative:	Cool	Date Analyzed:	03-15-07
Condition:	Cool and Intact	Chain of Custody:	2231

Parameter	Concentration (mg/Kg)
Total Chloride	22.0

Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1 North Source Clean-up

Matthew J. Waters  
Analyst

Deeew C. Gleeson  
Review

# ENVIROTECH LABS

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	13 @ 8'	Date Reported:	03-20-07
Laboratory Number:	40526	Date Sampled:	03-16-07
Chain of Custody No:	2249	Date Received:	03-16-07
Sample Matrix:	Soil	Date Extracted:	03-19-07
Preservative:	Cool	Date Analyzed:	03-20-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	5.1	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	5.1	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Dee L. O'Brien  
Analyst

Matthew W. Waters  
Review

# ENVIROTECH LABS

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	13 @ 8'	Date Reported:	03-20-07
Laboratory Number:	40526	Date Sampled:	03-16-07
Chain of Custody:	2249	Date Received:	03-16-07
Sample Matrix:	Soil	Date Analyzed:	03-20-07
Preservative:	Cool	Date Extracted:	03-19-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	23.4	1.8
Toluene	109	1.7
Ethylbenzene	22.0	1.5
p,m-Xylene	400	2.2
o-Xylene	99.9	1.0
<b>Total BTEX</b>	<b>654</b>	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USCPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USFPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Deeann L. Aguirre  
Analyst

(Signature) (Date)  
Review

# ENVIROTECH LABS

## Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	13 @ 8'	Date Reported:	03-20-07
Lab ID#:	40526	Date Sampled:	03-16-07
Sample Matrix:	Soil	Date Received:	03-16-07
Preservative:	Cool	Date Analyzed:	03-19-07
Condition:	Cool and Intact	Chain of Custody:	2249

Parameter	Concentration (mg/Kg)
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Total Chloride	12.2
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Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1 North Source Area

Christie M. Wooters  
Analyst

Allen P. Aguirre  
Review

# ENVIROTECH LABS

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	14 @ 8'	Date Reported:	03-20-07
Laboratory Number:	40527	Date Sampled:	03-16-07
Chain of Custody No:	2249	Date Received:	03-16-07
Sample Matrix:	Soil	Date Extracted:	03-19-07
Preservative:	Cool	Date Analyzed:	03-20-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	414	0.2
Diesel Range (C10 - C28)	35.7	0.1
Total Petroleum Hydrocarbons	450	0.2

ND Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

*Deevel L. Apesos*  
Analyst

*Christie Aguilera*  
Review

# ENVIROTECH LABS

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	14 @ 8'	Date Reported:	03-20-07
Laboratory Number:	40527	Date Sampled:	03-16-07
Chain of Custody:	2249	Date Received:	03-16-07
Sample Matrix:	Soil	Date Analyzed:	03-20-07
Preservative:	Cool	Date Extracted:	03-19-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	915	1.8
Toluene	5,060	1.7
Ethylbenzene	2,580	1.5
p,m-Xylene	7,320	2.2
o-Xylene	3,410	1.0
<b>Total BTEX</b>	<b>19,290</b>	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge and Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Dawn P. Allen  
Analysis

Christine M. Waller  
Review

# ENVIROTECH LABS

## Chloride

Client:	Blagg / BP	Project #:	94034-010
Sampic ID:	14 @ 8'	Date Reported:	03-20-07
Lab ID#:	40527	Date Sampled:	03-16-07
Sample Matrix:	Soil	Date Received:	03-16-07
Preservative:	Cool	Date Analyzed:	03-19-07
Condition:	Cool and Intact	Chain of Custody:	2249

Parameter	Concentration (mg/Kg)
Total Chloride	31.8

Reference: Standard Methods For The Examination of Water And Waste Water". 18th ed., 1992.

Comments: Chavez GC A #1 North Source Area

Huston M. Waters  
Analyst

Alecia P. Aguirre  
Review

# ENVIROTECH LABS

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client:	Blagg / BP	Project #:	94031-010
Sample ID:	15 @ 8'	Date Reported:	03-22-07
Laboratory Number:	40555	Date Sampled:	03-21-07
Chain of Custody No:	2305	Date Received:	03-21-07
Sample Matrix:	Soil	Date Extracted:	03-22-07
Preservative:	Cool	Date Analyzed:	03-22-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	7.8	0.2
Diesel Range (C10 - C28)	3.0	0.1
Total Petroleum Hydrocarbons	10.8	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996

Comments: Chavez GC A #1 North Source Area

*Deeene C. Peeler*  
Analyst

*Christine M. Walker*  
Review

# ENVIROTECH LABS

Environmental Testing • Laboratory Services • Consulting

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	15 @ 8'	Date Reported:	03-22-07
Laboratory Number:	40555	Date Sampled:	03-21-07
Chain of Custody:	2305	Date Received:	03-21-07
Sample Matrix:	Soil	Date Analyzed:	03-22-07
Preservative:	Cool	Date Extracted:	03-22-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	5.4	1.8
Toluene	31.2	1.7
Ethylbenzene	178	1.5
p,m-Xylene	309	2.2
o-Xylene	202	1.0
<b>Total BTEX</b>	<b>726</b>	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-816, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Analyst

Deer P. Apodaca

Master of Water  
Review

# ENVIROTECH LABS

## Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	15 @ 8'	Date Reported:	03-22-07
Lab ID#:	40555	Date Sampled:	03-21-07
Sample Matrix:	Soil	Date Received:	03-21-07
Preservative:	Cool	Date Analyzed:	03-22-07
Condition:	Cool and Intact	Chain of Custody:	2305

Parameter	Concentration (mg/Kg)
Total Chloride	48.6

Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1 North Source Area

Christine Martinez  
Analyst

Devin P. Aguirre  
Review

# ENVIROTECH LABS

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client: Blagg / BP  
Sample ID: 16 @ 8'  
Laboratory Number: 10556  
Chain of Custody No: 2305  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

Project #: 94034-010  
Date Reported: 03-22-07  
Date Sampled: 03-21-07  
Date Received: 03-21-07  
Date Extracted: 03-22-07  
Date Analyzed: 03-22-07  
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW 846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Debra C. Peeler  
Analyst

Christine J. Williams  
Review

# ENVIROTECH LABS

Environmental Testing • Analytical Services • Consulting

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blaigg / BP	Project #:	94034-010
Sample ID:	16 @ 8'	Date Reported:	03-22-07
Laboratory Number:	40556	Date Sampled:	03-21-07
Chain of Custody:	2305	Date Received:	03-21-07
Sample Matrix:	Soil	Date Analyzed:	03-22-07
Preservative:	Cool	Date Extracted:	03-22-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	2.7	1.8
Toluene	12.7	1.7
Ethylbenzene	16.7	1.5
p,m-Xylene	49.4	2.2
o-Xylene	22.9	1.0
Total BTEX	104	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Dawn P. Aguirre  
Analyst

Walter M. Wadsworth  
Review

# ENVIROTECH LABS

## Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	16 @ 8'	Date Reported:	03-22-07
Lab ID#:	40556	Date Sampled:	03-21-07
Sample Matrix:	Soil	Date Received:	03-21-07
Preservative:	Cool	Date Analyzed:	03-22-07
Condition:	Cool and Intact	Chain of Custody:	2305

Parameter	Concentration (mg/Kg)
Total Chloride	14.9

Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1 North Source Area

Christine M. Waeter  
Analyst

Deborah C. Apesca  
Review

# ENVIROTECH LABS

Environmental Testing • Analytical Services • Consulting

**EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons**

Client:	Blagg / BP	Project #:	94034 010
Sample ID:	17 @ 8'	Date Reported:	04-02-07
Laboratory Number:	40667	Date Sampled:	03-29-07
Chain of Custody No:	2036	Date Received:	03-30-07
Sample Matrix:	Soil	Date Extracted:	03-30-07
Preservative:	Cool	Date Analyzed:	04-02-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2,110	0.2
Diesel Range (C10 - C28)	249	0.1
Total Petroleum Hydrocarbons	2,360	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Debra C. Chapman  
Analyst

Christine M. Webster  
Review

# ENVIROTECH LABS

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	17 @ 0'	Date Reported:	04-02-07
Laboratory Number:	40667	Date Sampled:	03-29-07
Chain of Custody:	2036	Date Received:	03-30-07
Sample Matrix:	Soil	Date Analyzed:	04-02-07
Preservative:	Cool	Date Extracted:	03-30-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	1,540	1.8
Toluene	6,000	1.7
Ethylbenzene	3,020	1.5
p,m-Xylene	17,000	2.2
o-Xylene	3,950	1.0
Total BTEX	31,510	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Dee C. Opie  
Analyst

Christine M. Webster  
Review

# ENVIROTECH LABS

## Chloride

Client: Blagg / BP  
Sample ID: 17 @ 8'  
Lab ID#: 40667  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

Project #: 94034-010  
Date Reported: 03-30-07  
Date Sampled: 03-29-07  
Date Received: 03-30-07  
Date Analyzed: 03-30-07  
Chain of Custody: 2036

Parameter	Concentration (mg/Kg)
Total Chloride	52.0

Reference Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1 North Source Area

Christine M. Waters  
Analyst

Deeve L. Agnew  
Review

# ENVIROTECH LABS

ENVIRONMENTAL ANALYSIS • FIELD & LABORATORY

**EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons**

Client: Blagg / BP  
Sample ID: 18 @ 8'  
Laboratory Number: 40668  
Chain of Custody No: 2036  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

Project #: 94034-010  
Date Reported: 04-02-07  
Date Sampled: 03-29-07  
Date Received: 03-30-07  
Date Extracted: 03-30-07  
Date Analyzed: 04-02-07  
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	73.8	0.2
Diesel Range (C10 - C28)	8.4	0.1
Total Petroleum Hydrocarbons	82.2	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

*Deena P. Agnew*  
Analyst

*Christine M. Webster*  
Review

# ENVIROTECH LABS

Environmental Testing • Laboratory Services • Consulting

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Bragg / BP	Project #:	94034 010
Sample ID:	18 @ 8'	Date Reported:	04-02-07
Laboratory Number:	41668	Date Sampled:	03-29-07
Chain of Custody:	2036	Date Received:	03-30-07
Sample Matrix:	Soil	Date Analyzed:	04-02-07
Preservative:	Cool	Date Extracted:	03-30-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	110	1.8
Toluene	197	1.7
Ethylbenzene	487	1.5
p,m-Xylene	1,170	2.2
o-Xylene	653	1.0
<b>Total BTEX</b>	<b>2,620</b>	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge and Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Debra P. Aherne  
Analyst

Martine M. Waters  
Review

# ENVIROTECH LABS

## Chloride

100% ANALYTICAL ACCURACY • 100% QUALITY ASSURANCE

Client:	Blagg / RP	Project #:	94034-010
Sample ID:	18 @ 8'	Date Reported:	03-30-07
Lab ID#:	40668	Date Sampled:	03-29-07
Sample Matrix:	Soil	Date Received:	03-30-07
Preservative:	Cool	Date Analyzed:	03-30-07
Condition:	Cool and Intact	Chain of Custody:	2036

Parameter	Concentration (mg/Kg)
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Total Chloride	36.0
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Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992

Comments: Chavez GC A #1 North Source Area

Christine M. Carter  
Analyst

Deeann C. Aguirre  
Review

# ENVIROTECH LABS

Environmental Testing • Laboratory Services • Consulting

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / BP	Project #:	94034 010
Sample ID:	19 @ 8'	Date Reported:	04-02-07
Laboratory Number:	40669	Date Sampled:	03-29-07
Chain of Custody No:	2036	Date Received:	03-30-07
Sample Matrix:	Soil	Date Extracted:	03-30-07
Preservative:	Cool	Date Analyzed:	04-02-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	4.2	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	4.2	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Devin P. Flores  
Analyst

Wintine or J. Winters  
Review

# ENVIROTECH LABS

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	19 @ 8'	Date Reported:	04-02-07
Laboratory Number:	40669	Date Sampled:	03-29-07
Chain of Custody:	2036	Date Received:	03-30-07
Sample Matrix:	Soil	Date Analyzed:	04-02-07
Preservative:	Cool	Date Extracted:	03-30-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	19.8	1.7
Ethylbenzene	31.5	1.5
p,m-Xylene	143	2.2
o-Xylene	89.5	1.0
Total BTEX	284	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

deann P. Queen  
Analyst

Christine M. McArthur  
Review

# ENVIROTECH LABS

## Chloride

Environmental Testing • Laboratory Services • Consulting

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	19 @ 8'	Date Reported:	03-30-07
Lab ID#:	40660	Date Sampled:	03-29-07
Sample Matrix:	Soil	Date Received:	03-30-07
Preservative:	Cool	Date Analyzed:	03-30-07
Condition:	Cool and Intact	Chain of Custody:	2036

Parameter	Concentration (mg/Kg)
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Total Chloride	48.0
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Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Chavez GC A #1 North Source Area

Christine M. Waddell  
Analyst

Dee P. Green  
Review

# ENVIROTECH LABS

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client: Blagg / BP  
Sample ID: 20 @ 7'  
Laboratory Number: 40732  
Chain of Custody No: 2420  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

Project #: 94034-010  
Date Reported: 04-06-07  
Date Sampled: 04-04-07  
Date Received: 04-04-07  
Date Extracted: 04-05-07  
Date Analyzed: 04-06-07  
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW 846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

*Dee C. O'Brien*  
Analyst

*Christine M. Walters*  
Review

# ENVIROTECH LABS

ENVIRONMENTAL MONITORING & ANALYSIS

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034 010
Sample ID:	20 @ 7'	Date Reported:	04-06-07
Laboratory Number:	40732	Date Sampled:	04-04-07
Chain of Custody:	2420	Date Received:	04-01-07
Sample Matrix:	Soil	Date Analyzed:	04-06-07
Preservative:	Cool	Date Extracted:	04-05-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	3.7	1.7
Ethylbenzene	14.2	1.5
p,m-Xylene	42.9	2.2
o-Xylene	34.0	1.0
<b>Total BTEX</b>	<b>94.8</b>	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

*Dee C. Aguirre*  
Analyst

*Christine M. Walker*  
Review

# ENVIROTECH LABS

ENVIRONMENTAL & INDUSTRIAL ANALYTICAL LABORATORY

**EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons**

Client: Blagg / BP  
Sample ID: 21 @ 8'-9'  
Laboratory Number: 41025  
Chain of Custody No.: 2482  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and intact

Project #: 94034-010  
Date Reported: 04-16-07  
Date Sampled: 04-12-07  
Date Received: 04-13-07  
Date Extracted: 04-13-07  
Date Analyzed: 04-16-07  
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Area

Dee C. Apesos  
Analyst

Christine M. Webster  
Review

# ENVIROTECH LABS

ENVIRONMENTAL ANALYSIS • EPA APPROVED • ISO 9001 CERTIFIED

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	21 @ 6'-9'	Date Reported:	04-16-07
Laboratory Number:	41025	Date Sampled:	04-12-07
Chain of Custody:	2482	Date Received:	04-13-07
Sample Matrix:	Soil	Date Analyzed:	04-16-07
Preservative:	Cool	Date Extracted:	04-13-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	2.1	1.8
Toluene	4.4	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	2.9	2.2
o-Xylene	1.1	1.0
Total BTEX	10.5	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Area

Debra C. Aguirre  
Analyst

Chavez GC A #1 North Area  
Review

# ENVIROTECH LABS

Environmental Analytical Laboratory • Certified Testing Services

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client: Blagg / BP  
Sample ID: 22 @ 0'-8'  
Laboratory Number: 41026  
Chain of Custody No: 2482  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

Project #: 94034-010  
Date Reported: 04-16-07  
Date Sampled: 04-12-07  
Date Received: 04-13-07  
Date Extracted: 04-13-07  
Date Analyzed: 04-16-07  
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Area

Dee C. Spencer  
Analyst

Christine M. Walker  
Review

# ENVIROTECH LABS

ENVIRONMENTAL & INDUSTRIAL LABORATORY

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	22 @ 8'-9'	Date Reported:	04-16-07
Laboratory Number:	41026	Date Sampled:	04-12-07
Chain of Custody:	2482	Date Received:	04-13-07
Sample Matrix:	Soil	Date Analyzed:	04-16-07
Preservative:	Cool	Date Extracted:	04-13-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	3.5	1.8
Toluene	9.3	1.7
Ethylbenzene	8.4	1.5
p,m-Xylene	28.8	2.2
o-Xylene	16.4	1.0
<b>Total BTEX</b>	<b>66.4</b>	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW 846, USEPA, December 1996.

Comments: Chavez GC A #1 North Area

Alexis P. Aguirre  
Analyst

Christine M. Wadsworth  
Review

# ENVIROTECH LABS

Environmental Testing • Laboratory Services • Consulting

**EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons**

Client: Blagg / BP  
Sample ID: TH #9  
Laboratory Number: 40733  
Chain of Custody No: 2420  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

Project #: 94034-010  
Date Reported: 04-06-07  
Date Sampled: 04-04-07  
Date Received: 04-04-07  
Date Extracted: 04-05-07  
Date Analyzed: 04-06-07  
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.8	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.8	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Alecia C. Gleason  
Analyst

Christopher Walters  
Review

# ENVIROTECH LABS

Environmental Testing • Laboratory Services • Project Management

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	TH #9	Date Reported:	04-06-07
Laboratory Number:	40733	Date Sampled:	04-04-07
Chain of Custody:	2420	Date Received:	04-04-07
Sample Matrix:	Soil	Date Analyzed:	04-06-07
Preservative:	Cool	Date Extracted:	04-05-07
Condition:	Cool & In tact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	15.0	1.8
Toluene	70.6	1.7
Ethylbenzene	119	1.5
p,m-Xylene	225	2.2
o-Xylene	109	1.0
<b>Total BTEX</b>	<b>539</b>	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Dee C. Adesew  
Analyst

Christine M. Waeter  
Review

# ENVIROTECH LABS

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	TII #10	Date Reported:	04-06-07
Laboratory Number:	40734	Date Sampled:	04-04-07
Chain of Custody No:	2420	Date Received:	04-04-07
Sample Matrix:	Soil	Date Extracted:	04-05-07
Preservative:	Cool	Date Analyzed:	04-06-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	390	0.2
Diesel Range (C10 - C28)	20.8	0.1
Total Petroleum Hydrocarbons	411	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Aleen P. Olsen  
Analyst

Christine Arguello  
Review

# ENVIROTECH LABS

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	TII #10	Date Reported:	04-06-07
Laboratory Number:	40734	Date Sampled:	04-04-07
Chain of Custody:	2420	Date Received:	04-04-07
Sample Matrix:	Soil	Date Analyzed:	04-06-07
Preservative:	Cool	Date Extracted:	04-05-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	86.9	1.8
Toluene	1,330	1.7
Ethylbenzene	1,170	1.5
p,m-Xylene	3,180	2.2
o-Xylene	1,327	1.0
Total BTEX	7,090	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Source Area

Dee C. Apodaca  
Analyst

Christie M. Wootton  
Review

# ENVIROTECH LABS

AN ISO 9001:2000 CERTIFIED ANALYTICAL LABORATORY

**EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons**

Client: Blagg / BP  
Sample ID: TH #12 @ 8'-9'  
Laboratory Number: 41027  
Chain of Custody No: 2482  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

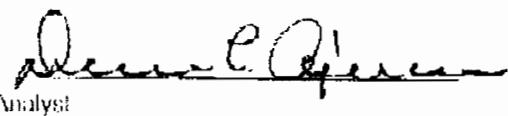
Project #: 94034-010  
Date Reported: 04-16-07  
Date Sampled: 04-12-07  
Date Received: 04-13-07  
Date Extracted: 04-13-07  
Date Analyzed: 04-16-07  
Analysis Requested: 8015 TPH

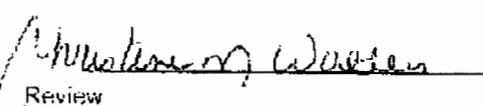
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Area

  
Analyst

  
Review

# ENVIROTECH LABS

ENVIRONMENTAL ANALYSIS • CHEMICAL ANALYSIS

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	TH #12 8' 9'	Date Reported:	04 16 07
Laboratory Number:	41027	Date Sampled:	04-12-07
Chain of Custody:	2102	Date Received:	04-13-07
Sample Matrix:	Soil	Date Analyzed:	04 16 07
Preservative:	Cool	Date Extracted:	04-13-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Area

Analyst

*Debra C. Aguirre*

*Christopher Walker*  
Review

# ENVIROTECH LABS

ENVIRONMENTAL ANALYSIS & CONSULTING SERVICES

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client: Blagg / BP  
Sample ID: TH #13 @ 3'-9'  
Laboratory Number: 11028  
Chain of Custody No: 2482  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

Project #: 94034-010  
Date Reported: 04-16-07  
Date Sampled: 04-12-07  
Date Received: 04-13-07  
Date Extracted: 04-13-07  
Date Analyzed: 04-16-07  
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Area

Analyst

*Denee C. Green*

*Christopher J. Webster*  
Review

# ENVIROTECH LABS

ENVIRONMENTAL & INDUSTRIAL ANALYTICAL SERVICES

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	TH #13 8'-9'	Date Reported:	04-16-07
Laboratory Number:	41028	Date Sampled:	04-12-07
Chain of Custody:	2462	Date Received:	04-13-07
Sample Matrix:	Soil	Date Analyzed:	04-16-07
Preservative:	Cool	Date Extracted:	04-13-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 8030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Area

Analyst

Review

# ENVIROTECH LABS

ENVIRONMENTAL & INDUSTRIAL LABORATORY

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client: Blagg / BP  
Sample ID: TH #14 @ 8'-9'  
Laboratory Number: 41029  
Chain of Custody No: 2482  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

Project #: 94034-010  
Date Reported: 04-16-07  
Date Sampled: 04-12-07  
Date Received: 04-13-07  
Date Extracted: 04-13-07  
Date Analyzed: 04-16-07  
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Area

Dean P. Givens  
Analyst

Christine M. Wadsworth  
Review

# ENVIROTECH LABS

AN ENVIRONMENTAL CONSULTING & ANALYTICAL LABORATORY

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	IH #14 8'-9'	Date Reported:	04-16-07
Laboratory Number:	41029	Date Sampled:	04-12-07
Chain of Custody:	2482	Date Received:	04-13-07
Sample Matrix:	Soil	Date Analyzed:	04-16-07
Preservative:	Cool	Date Extracted:	04-13-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	6.7	1.8
Toluene	11.1	1.7
Ethylbenzene	13.9	1.5
p,m-Xylene	45.4	2.2
o-Xylene	19.1	1.0
Total BTEX	96.2	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Chavez GC A #1 North Area

Dee P. Reiter  
Analyst

Christine M. Waters  
Review

# CHAIN OF CUSTODY RECORD

Project Location				ANALYSIS / PARAMETERS															
Client / Project Name BLAES	Project No. 94034 - 010	Client No.		Sample Date		Sample Time		Lab Number		Sample Matrix		No. of Contaminants		Normal Source		Remarks			
Sampler: JEFF Blaue				① @ 9'	2-32-07	0955	40175	Soil	11	1	x	x	x	1	x	x	x	x	
				② @ 7'	1015	"	40176												
Relinquished by: (Signature)												2/22/07	Received by: (Signature)	Date	Time				
Relinquished by: (Signature)												2/22/07	<i>Mark Blaue</i>	1557	1557				
Relinquished by: (Signature)												2/22/07	<i>Mark Blaue</i>	1557	1557				
Received by: (Signature)												Envirotech Inc.		Sample Receipt					
Received by: (Signature)														Received Intact	Y				
Received by: (Signature)														Cool - Ice/Blue Ice	N				
Received by: (Signature)															N/A				

# CHAIN OF CUSTODY RECORD

Client / Project Name <i>Farmington, NM</i>	Project Location		ANALYSIS / PARAMETERS											
	Client No.	Sample No.	Lab Number	Matrix	Sample	Time	Containers	Comments	Remarks					
<i>Project #1</i>	94034 - 010	40341	soil	1	X	X	-							
<i>Sampler:</i>	10	40342	soil	1	X	X	X							
<i>Sample No./ Identification</i>	11	40343	soil	1	X	X	X							
<i>Relinquished by:</i> (Signature)	<i>Master m Wholes</i>										Date	Time		
<i>Relinquished by:</i> (Signature)	<i>Received by:</i> (Signature) Received by: (Signature)										3/9/07	1642		
<i>Received by:</i> (Signature)	<i>Received by:</i> (Signature)										Sample Receipt			
<b>ENVIROTECH Inc.</b>												<i>Received Intact</i>	<i>Cool - Ice/Blue Ice</i>	<i>N/A</i>
												<i>Y</i>	<i>N</i>	<i>C</i>

# CHAIN OF CUSTODY RECORD

2236

Client / Project Name <i>EnviroTech Inc.</i>		Project Location <i>CIAUVEZ GC A #1</i>		ANALYSIS / PARAMETERS					
Sampler: <i>J. S. G.</i>	Client No. <i>CIAUVEZ GC A #1</i>	Sample Date <i>3/14/07</i>	Sample Time <i>15:00</i>	Lab Number <i>40503</i>	Sample Matrix <i>SOC1</i>	No. of Containers <i>2</i>	Container# <i>1 2</i>	Sample ID <i>7021 7022 7023 7024 7025 7026</i>	Remarks <i>No cont Surface Cleaned</i>
<hr/>									
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Relinquished by: (Signature) <i>Daff</i>	Date <i>3/14/07</i>	Time <i>0721</i>	Received by: (Signature) <i>John E. O'Brien</i>	Date <i>3/14/07</i>	Time <i>0721</i>	Received by: (Signature) <i>John E. O'Brien</i>			
Relinquished by: (Signature) <i>Daff</i>			Received by: (Signature) <i>John E. O'Brien</i>			Received by: (Signature) <i>John E. O'Brien</i>			
Relinquished by: (Signature) <i>Daff</i>			Received by: (Signature) <i>John E. O'Brien</i>			Received by: (Signature) <i>John E. O'Brien</i>			
						Sample Receipt			
						Y    N    N/A			
Received Intact						X			
Cool - Ice/Blue Ice						X			

5796 U.S. Highway 64  
Farmington, New Mexico 87401  
(505) 632-0615

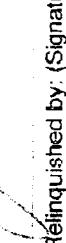
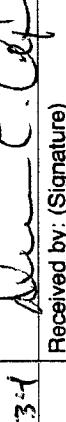
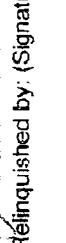
# CHAIN OF CUSTODY RECORD

2249

Client / Project Name <b>BLAIS/BP</b>			Project Location <b>CHAVEZ GC A # 1</b>			ANALYSIS / PARAMETERS																																																
Sampler: <b>JEFF Blais</b>			Client No. <b>94034-010</b>			Remarks <b>North Source Area</b>																																																
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	# of Containers	1	X	X	X	X	X	X	X	X	X	X	X	X																																				
(13) @ 8'	3/16/07	1200	40526	Soil	1	X	X	X	X	X	X	X	X	X	X	X	X	X																																				
(14) @ 8'	"	1210	40527	"	1	X	X	X	X	X	X	X	X	X	X	X	X	X																																				
Relinquished by: (Signature) <i>Jeff Blais</i>			Date <b>3/16/07</b>			Time <b>1500</b>			Received by: (Signature) <i>Jeff Blais</i>			Date <b>3/16/07</b>			Time <b>1507</b>																																							
Relinquished by: (Signature) <i>Jeff Blais</i>			Date <b>3/16/07</b>			Time <b>1507</b>			Received by: (Signature) <i>Jeff Blais</i>			Date <b>3/16/07</b>			Time <b>1507</b>																																							
Relinquished by: (Signature)			Date			Time			Received by: (Signature)			Date			Time																																							
<b>ENVIROTECH Inc.</b>																																																						
<b>5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615</b>																																																						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="width: 33%;">Sample Receipt</th> <th colspan="3" style="width: 33%;">Received Intact</th> <th colspan="3" style="width: 33%;">N/A</th> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <th>Cool - Ice/Blue Ice</th> <th>Received Intact</th> <th>N/A</th> <th>Cool - Ice/Blue Ice</th> <th>Received Intact</th> <th>N/A</th> <th>Cool - Ice/Blue Ice</th> <th>Received Intact</th> <th>N/A</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>																			Sample Receipt			Received Intact			N/A			<input checked="" type="checkbox"/>	Cool - Ice/Blue Ice	Received Intact	N/A	Cool - Ice/Blue Ice	Received Intact	N/A	Cool - Ice/Blue Ice	Received Intact	N/A																	
Sample Receipt			Received Intact			N/A																																																
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Cool - Ice/Blue Ice	Received Intact	N/A	Cool - Ice/Blue Ice	Received Intact	N/A	Cool - Ice/Blue Ice	Received Intact	N/A																																														
San Juan reproduction 578-129																																																						

2305

# CHAIN OF CUSTODY RECORD

Client / Project Name 		Project Location CHAVEZ GC A #1		ANALYSIS / PARAMETERS			
Sampler:	Client No.	Lab Number	Sample Matrix	No. of Containers	1	2	Remarks
	94034 - 010			1	X	X	
Sample No./ Identification	Sample Time	40555	Soil	1	X	X	
	1117	40556	"	1	X	X	
							
							
							
							
							
							
							
							
Relinquished by: (Signature) 	Date 3/21/07	Time 12:34	Received by: (Signature) 	Date 3/21/07	Time 12:34	Received by: (Signature) 	
Relinquished by: (Signature) 			Received by: (Signature)				
<b>ENVROTECH INC.</b>				Sample Receipt			
				Y	N	N/A	
				Received Intact	X		
				Cool - Ice/Blue Ice	X		

# CHAIN OF CUSTODY RECORD

2036

Client / Project Name <b>Blue/BP</b>				Project Location <b>CHAVEZ GC A #1</b>				ANALYSIS / PARAMETERS				Remarks				
Sampler: <b>Jeff Biagi</b>		Client No. <b>94034 - 010</b>		Sample Date Time		Lab Number Matrix		Containers # of		Analyst ID		Comments				
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix				1	x	x	x					
(17) 2' 8"	3/29/07	1205	Hole #7	Soil				1	x	x	x					
(18) 2' 8"	"	1211	Hole #8					1	x	x	x					
(19) 2' 8"	"	1218	Hole #9					1	x	x	x					
Relinquished by: (Signature) <b>Jeffrey</b>				Date <b>3/30/07</b>	Time <b>0652</b>	Received by: (Signature) <b>Debra L. Agius</b>	Date <b>3/30/07</b>	Time <b>0612</b>								
Relinquished by: (Signature)						Received by: (Signature)										
Relinquished by: (Signature)						Received by: (Signature)										
<b>ENVIROTECH Inc.</b>																
<b>5796 U.S. Highway 64</b> <b>Farmington, New Mexico 87401</b> <b>(505) 632-0615</b>								Sample Receipt								
								Received Intact		Y		N		N/A		
								Cool - Ice/Blue Ice		X		X		X		

# CHAIN OF CUSTODY RECORD

2420

Client / Project Name Bragg/BSP		Project Location CHAVES GC A # 1		ANALYSIS / PARAMETERS									
Sampler: JEFF Bragg		Client No. 94034-010		Remarks <i>North Source Area</i>									
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers		Analysis		Receiving				
② E 7	4/4/07	08558	40732	Soil	1	X	X	1	X	X			
TH #9	"	0910	40733	"	1	X	X	1	X	"			
TH #10	"	0914	40734	"	1	X	X	1	X	"			
Relinquished by: (Signature) <i>Jeff Bragg</i>				Date 4/4/07		Time 1405		Received by: (Signature) <i>Jillene P. Open</i>		Date 4/4/07		Time 1405	
Relinquished by: (Signature)													
Relinquished by: (Signature)													
Relinquished by: (Signature)													
Relinquished by: (Signature)													
Envirotech Inc.								Sample Receipt					
								Y N N/A					
								Received Intact		<input checked="" type="checkbox"/>			
								Cool - Ice/Blue Ice		<input checked="" type="checkbox"/>			

# CHAIN OF CUSTODY RECORD

Project Location				ANALYSIS / PARAMETERS										
Client / Project Name	Sample No./Identification	Date	Sample Time	Lab Number	Sample Matrix	Container(s)	No. of	Remarks	Date	Time				
Bailey/BP	C-8-9'	4/13/07	1415	41025	SOIL	X	X	NORTH AREA						
	2200-9'	"	1420	41026	"	X	X							
	#TR12C9-9'	"	1440	41027	"	X	X							
	TH#13C8-9'	"	1459	41028	"	X	X							
	TH#14C8-9'	"	0825	41029	"	X	X							
Relinquished by: (Signature) <i>Jeff Baile</i> 4/13/07											Date	Time		
Relinquished by: (Signature) <i>Jeff Baile</i> 4/13/07											Received by (Signature) <i>John D. Johnson</i>	Date	Time	
Relinquished by: (Signature) <i>Jeff Baile</i> 4/13/07											Received by (Signature) <i>John D. Johnson</i>	Date	Time	
											Sample Receipt	Y	N	N/A
											Received Intact	X		
											Cool - Ice/Blue Ice	X		

San Juan Application 579-129

# ENVIROTECH LABS

EPA Method 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

## Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	02 26 07 QA/QC	Date Reported:	02-26-07
Laboratory Number:	40174	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-26-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	07-11-05	1.3013E+003	1.3026E+003	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	1.4456E+003	1.4485E+003	0.20%	0 - 15%

### Blank Conc. (mg/L - mg/Kg)

Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

### Duplicate Conc. (mg/Kg)

Gasoline Range C5 - C10	Sample	Duplicate	% Difference	Accept. Range
47.9	47.6	0.6%	0 - 30%	
Diesel Range C10 - C28	122	121	0.6%	0 - 30%

### Spike Conc. (mg/Kg)

Gasoline Range C5 - C10	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
47.9	250	297	99.8%	75 - 125%	
Diesel Range C10 - C28	122	250	372	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996

Comments: QA/QC for Samples 40174 - 40180 and 40182

Christine M. Weeler  
Analyst

Ruth Van Allen  
Review

# ENVIROTECH LABS

EPA Method 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

## Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	02-28-07 CA/QC	Date Reported:	02-28-07
Laboratory Number:	40191	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-28-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	07-11-05	1.6567E-003	1.6583E-003	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	1.8753E+003	1.8791E-003	0.20%	0 - 15%

### Blank Conc. (mg/L - mg/Kg)

	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

### Duplicate Conc. (mg/Kg)

	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	1.0	1.0	0.0%	0 - 30%
Diesel Range C10 - C28	4.6	4.5	2.2%	0 - 30%

### Spike Conc. (mg/Kg)

	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	1.0	250	249	99.2%	75 - 125%
Diesel Range C10 - C28	4.6	250	245	96.1%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 40191, 40193 - 40194 and 40210.

*Christine M. Wailes*  
Analyst

*Blair Vanell*  
Review

# ENVIROTECH LABS

ANALYTICAL REPORT FORM 40340

EPA Method 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	03-12-07 QA/QC	Date Reported:	03-12-07
Laboratory Number:	40340	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-12-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	07-11-05	1.0013E+003	1.0023E+003	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	1.0014E+003	1.0034E+003	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

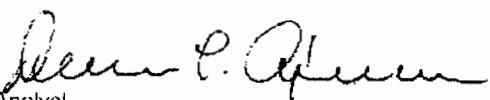
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	98.9	98.4	0.5%	0 - 30%
Diesel Range C10 - C28	524	521	0.6%	0 - 30%

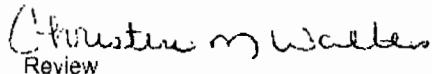
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	98.9	250	348	99.7%	75 - 125%
Diesel Range C10 - C28	524	250	773	99.9%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 40340 - 40343

  
Sean P. Queen  
Analyst

  
Christine M. Walker  
Review

# ENVIROTECH LABS

ENVIRONMENTAL ANALYSIS & CONSULTING SERVICES

**EPA Method 8015 Modified**  
**Nonhalogenated Volatile Organics**  
**Total Petroleum Hydrocarbons**

**Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	03-15-07 QA/QC	Date Reported:	03-15-07
Laboratory Number:	40502	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-15-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	07-11-05	9.9997E-002	1.0010E+003	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	1.0037E-003	1.0057E+003	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	13.2	13.1	0.8%	0 - 30%

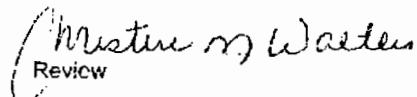
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	249	99.6%	75 - 125%
Diesel Range C10 - C28	13.2	250	262	99.6%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 40502 - 40503, 40505 - 40507

  
Debra C. Queen  
Analyst

  
Christine M. Walter  
Review

# ENVIROTECH LABS

Environmental Testing Services • Analytical Laboratory • Quality Assurance

**EPA Method 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons**

**Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	03-20-07 QA/QC	Date Reported:	03-20-07
Laboratory Number:	40525	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-20-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	07-11-05	9.9802E+002	9.9902E+002	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	1.0017E+003	1.0037E+003	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

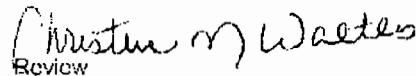
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 40525 - 40533, 40538

  
Dennis C. Green  
Analyst

  
Christine M. Walters  
Review

# ENVIROTECH LABS

EPA Method 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

## Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	03-22-07 QA/QC	Date Reported:	03-22-07
Laboratory Number:	40550	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-22-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	07-11-05	9.9712E+002	9.9812L+002	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	1.0016E+003	1.0036E+003	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	0.5	0.5	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	0.5	250	250	99.8%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USFPA, December 1996.

Comments: QA/QC for Samples 40550 - 40557

*Deleen C. Apelien*  
Analyst

*Christopher M. Wartes*  
Review

# ENVIROTECH LABS

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EPA Method 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

## Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-02-07 QA/QC	Date Reported:	04-02-07
Laboratory Number:	40646	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-02-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	07-11-05	9.9358E+002	9.9458E+002	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	9.9936E+002	1.0014E+003	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

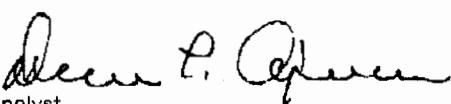
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	313	312	0.6%	0 - 30%

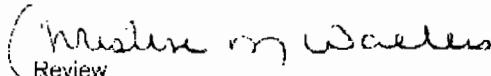
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	313	250	562	99.8%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 40646 - 40647, 40663 - 40669

  
Analyst

  
Review

# ENVIROTECH LABS

EPA Method 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

## Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-06-U7 QA/QC	Date Reported:	04-06-07
Laboratory Number:	40732	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-06-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	07-11-05	9.9324E+002	9.9423E+002	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	9.9301E+002	9.9500E+002	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

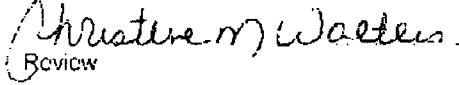
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	249	99.8%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 40732 - 40734, 40755 - 40757

  
Analyst

  
Review

# ENVIROTECH LABS

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**EPA Method 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons**

**Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	04-16-07 QA/QC	Date Reported:	04-16-07
Laboratory Number:	41005	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-16-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	07-11-05	9.9390E+002	9.9489E+002	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	9.9750E+002	9.9950E+002	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 41005, 41023 - 41029

*Deeve L. Queen*  
Analyst

*Christine M. Waller*  
Review

# ENVIROTECH LABS

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	02-26-BTEX QA/QC	Date Reported:	02-26-07
Laboratory Number:	40174	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-26-07
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	%Diff.	Blank Conc.	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	3.1143E+007	3.1176E+007	0.2%	ND	0.2
Toluene	5.0741E+007	5.0243E+007	0.2%	ND	0.2
Ethylbenzene	2.3975E+007	2.4023E+007	0.2%	ND	0.2
p,m-Xylene	1.0285E+008	1.0406E+008	0.2%	ND	0.2
o-Xylene	4.6696E+007	4.6892E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	58.4	57.4	1.7%	0 - 30%	1.8
Toluene	80.0	79.0	1.3%	0 - 30%	1.7
Ethylbenzene	90.0	89.0	1.1%	0 - 30%	1.5
p,m-Xylene	900	900	0.0%	0 - 30%	2.2
o-Xylene	130	127	2.3%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	58.4	50.0	108	99.7%	39 - 150
Toluene	80.0	50.0	120	92.3%	46 - 148
Ethylbenzene	90.0	50.0	130	92.9%	32 - 160
p,m-Xylene	900	100	990	99.0%	46 - 148
o-Xylene	130	50.0	170	94.4%	46 - 148

ND - Parameter not detected at the stated detection limit

References:  
 Method 5030B: Purge and Trap Test Methods for Evaluating Solid Waste: SW-846, USEPA December 1996  
 Method 8021B: Aromatic and Halogenated Volatiles by Gas Chromatography Using Photionization and/or Electrolytic Conductivity Detectors. SW-846 USEPA December 1996.

Comments: QA/QC for Samples 40174 - 40178 and 40182

Christine M. Walker  
Analyst

Shelly Vanilla  
Review

# ENVIROTECH LABS

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	02-28-BTEX QA/QC	Date Reported:	02-28-07
Laboratory Number:	40189	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-28-07
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc.	Detected
			Accept. Range 0 - 15%		Limit
Benzene	2.5006E+007	2.5968E+007	0.2%	ND	0.2
Toluene	3.6722E+007	3.6296E+007	0.2%	ND	0.2
Ethylbenzene	1.8182E+007	1.9031E+007	0.2%	ND	0.2
p,m-Xylene	7.8713E+007	7.6866E+007	0.2%	ND	0.2
o-Xylene	2.2464E+007	3.2629E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detected Limit
Benzene	29.6	28.6	3.4%	0 - 30%	1.8
Toluene	18.0	17.0	5.6%	0 - 30%	1.7
Ethylbenzene	33.4	32.4	3.0%	0 - 30%	1.5
p,m-Xylene	137	136	0.7%	0 - 30%	2.2
o-Xylene	51.4	50.4	1.9%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	29.6	50.0	79.3	99.6%	39 - 150
Toluene	18.0	50.0	65.0	95.6%	46 - 148
Ethylbenzene	33.4	50.0	75.0	89.9%	32 - 160
p,m-Xylene	137	100	230	97.1%	46 - 148
o-Xylene	51.4	50.0	90.0	88.6%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:  
 Method 5030B, Purge-and-Trap Test Methods for Evaluating Soils & Sludge, SW-846, USEPA, December 1998  
 Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1998

Comments: QA/QC for Samples 40189 - 40191, 40193 - 40194 and 40210.

Christine M. Waller  
Analyst

Ruth Vanlue  
Review

# ENVIROTECH LABS

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	03-12-BTEX QA/QC	Date Reported:	03-12-07
Laboratory Number:	40340	Date Sampled:	N/A
Sample Matrix:	Solid	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-12-07
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	%Diff.	Blank Conc.	Detect. Limit
Benzene	2.2130E+007	2.2175E+007	0.2%	ND	0.2
Toluene	5.6147E+007	5.6269E+007	0.2%	ND	0.2
Ethylbenzene	2.7960E+007	2.8018E+007	0.2%	ND	0.2
p,m-Xylene	1.2048E+008	1.2073E+008	0.2%	ND	0.2
o-Xylene	6.8880E+007	6.8987E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	13.5	13.4	0.7%	0 - 30%	1.8
Toluene	118	117	0.8%	0 - 30%	1.7
Ethylbenzene	118	119	0.8%	0 - 30%	1.5
p,m-Xylene	1,150	1,140	0.9%	0 - 30%	2.2
o-Xylene	228	229	0.4%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	13.5	50.0	63.4	99.8%	39 - 150
Toluene	118	50.0	167	99.3%	46 - 148
Ethylbenzene	118	50.0	168	99.9%	32 - 160
p,m-Xylene	1,150	100	1,240	99.2%	46 - 148
o-Xylene	228	50.0	276	99.5%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 6030B, Purge-and-Trap, Test Method for Evaluating Solid Waste, SW-846, USEPA, December 1996.  
 Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolyte Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 40340 - 40343

Debbie P. Barnes  
Analyst

Christine M. Woerner  
Review

# ENVIROTECH LABS

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	03-15-BTEX QA/QC	Date Reported:	03-15-07
Laboratory Number:	40502	Date Sampled:	N/A
Sample Matrix:	Solid	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-15-07
Condition:	N/A	Analysis:	BIFX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc.	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	2.8934E+007	2.8962E+007	0.2%	ND	0.2
Toluene	5.6048E+007	5.6157E+007	0.2%	ND	0.2
Ethylbenzene	2.6932E+007	2.7016E+007	0.2%	ND	0.2
p,m-Xylene	1.1803E+008	1.1827E+008	0.2%	ND	0.2
o-Xylene	6.5413E+007	6.5524E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	2.8	2.8	0.0%	0 - 30%	1.7
Ethylbenzene	5.1	5.1	0.0%	0 - 30%	1.5
p,m-Xylene	25.8	25.9	0.4%	0 - 30%	2.2
o-Xylene	8.1	8.1	0.0%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	2.8	50.0	52.7	99.8%	46 - 148
Ethylbenzene	5.1	50.0	55.1	100.0%	32 - 160
p,m-Xylene	25.8	100	125	99.7%	46 - 148
o-Xylene	8.1	50.0	58.0	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:  
 Method 5030B Purge-and-Trap, Test Method for Evaluating Solid Waste, SW-846 USEPA, December 1993.  
 Method 8021B Aromatic and Heterocyclic Volatiles by Gas Chromatography Using Programmed Temperature Electrolytic Conductivity Detectors, SW-846, USEPA December 1993.

Comments: QA/QC for Samples 40502 - 40503, 40505 - 40506

Debra P. Queen  
Analyst

Christine M. Woerner  
Review

# ENVIROTECH LABS

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	03-20-BTEX QA/QC	Date Reported:	03-20-07
Laboratory Number:	40525	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-20-07
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc.	Detect. Limit
	Accept. Range 0 - 15%				
Benzene	2.6229E+007	2.6286E+007	0.2%	ND	0.2
Toluene	3.8389E+007	3.8466E+007	0.2%	ND	0.2
Ethylbenzene	2.0273E+007	2.0317E+007	0.2%	ND	0.2
p,m-Xylene	6.2595E+007	6.2761E+007	0.2%	ND	0.2
o-Xylene	3.4799E+007	3.4868E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	2.0	2.0	0.0%	0 - 30%	1.8
Toluene	4.0	3.8	5.0%	0 - 30%	1.7
Ethylbenzene	5.2	5.0	3.8%	0 - 30%	1.5
p,m-Xylene	19.9	19.7	1.0%	0 - 30%	2.2
o-Xylene	13.7	13.5	1.5%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	2.0	50.0	51.9	99.8%	39 - 150
Toluene	4.0	50.0	53.9	99.8%	46 - 148
Ethylbenzene	5.2	50.0	55.1	99.8%	32 - 160
p,m-Xylene	19.9	100	119	99.6%	46 - 148
o-Xylene	13.7	50.0	63.7	100.0%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:  
 Method 6010B, Purge and Trap Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.  
 Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 40525 - 40527, 40534, 40538

dean C. Oliver  
Analyst

Christie M. Waite  
Review

# ENVIROTECH LABS

Environmental Testing • Analytical Services • Consulting

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	03-22-BTEX QA/QC	Date Reported:	03-22-07
Laboratory Number:	40550	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-22-07
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
Benzene	3.2490E+007	3.2555E+007	0.2%	ND	0.2
Toluene	6.3756E+007	5.3894E+007	0.2%	ND	0.2
Ethylbenzene	2.2001E+007	2.2045E+007	0.2%	ND	0.2
p,m-Xylene	1.0479E+008	1.0440E+008	0.2%	ND	0.2
o-Xylene	4.9874E+007	4.9974E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	23.5	23.5	0.0%	0 - 30%	1.8
Toluene	70.0	69.9	0.1%	0 - 30%	1.7
Ethylbenzene	54.7	54.6	0.2%	0 - 30%	1.5
p,m-Xylene	132	131	0.4%	0 - 30%	2.2
o-Xylene	48.8	48.7	0.2%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	23.5	50.0	73.4	99.9%	39 - 150
Toluene	70.0	50.0	119	99.5%	46 - 148
Ethylbenzene	54.7	50.0	104	99.7%	32 - 160
p,m-Xylene	132	100	231	99.7%	46 - 148
o-Xylene	48.8	50.0	98.6	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:  
 Method 8030B, Purge and Trap Test Methods for Evaluating Soils Waste, SW-846, USEPA, December 1996.  
 Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 40550 - 40557

Alex P. Olsen  
Analyst

Christine M. Walker  
Review

# ENVIROTECH LABS

ENVIRONMENTAL ANALYSIS • INDUSTRIAL CHEMICALS • PETROLEUM ANALYSIS

**EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS**

Client:	N/A	Project #:	N/A
Sample ID:	04-02-BTEX QA/QC	Date Reported:	04-02-07
Laboratory Number:	40663	Date Sampled:	N/A
Sample Matrix:	Sci.	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-02-07
Condition:	N/A	Analyst:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	PPM	Detect. Limit
Benzene	1.1540E+007	1.1973E+007	0.2%	ND	0.2	
Toluene	1.9147E+007	1.9188E+007	0.2%	ND	0.2	
Ethylbenzene	9.3960E+006	9.4154E+006	0.2%	ND	0.2	
p,m-Xylene	4.3743E-007	4.3871E+007	0.2%	ND	0.2	
o-Xylene	1.8334E+007	1.8371E+007	0.2%	ND	0.1	

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	ND	ND	0.0%	0 - 30%	1.7
Ethylbenzene	3.5	3.5	0.0%	0 - 30%	1.5
p,m-Xylene	23.5	23.3	0.9%	0 - 30%	2.2
o-Xylene	9.7	9.6	1.0%	0 - 30%	1.0

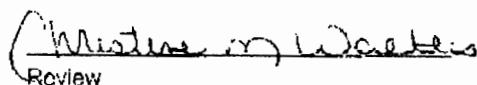
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	ND	50.0	50.0	100.0%	46 - 148
Ethylbenzene	3.5	50.0	53.4	99.8%	32 - 160
p,m-Xylene	23.5	100	123	99.9%	46 - 148
o-Xylene	9.7	50.0	59.7	100.0%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 6030B, Purge-and-Trap Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.  
 Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 40663 - 40669

  
Analyst

  
Review

# ENVIROTECH LABS

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	04-06-BTEX QA/QC	Date Reported:	04-06-07
Laboratory Number:	40732	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-06-07
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	%Diff.	Blank	Detect. Limit
Benzene	1.1536E+007	1.1609E+007	0.2%	ND	0.2
Toluene	1.8866E+007	1.8609E+007	0.2%	ND	0.2
Ethylbenzene	7.4723E+006	7.4872E+006	0.2%	ND	0.2
p,m-Xylene	3.9594E+007	3.9674E+007	0.2%	ND	0.2
o-Xylene	1.7021E+007	1.7068E+007	0.2%	ND	0.1

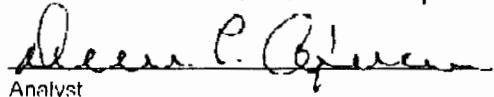
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	3.7	3.7	0.0%	0 - 30%	1.7
Ethylbenzene	14.2	14.2	0.0%	0 - 30%	1.5
p,m-Xylene	42.9	43.0	0.2%	0 - 30%	2.2
o-Xylene	34.0	33.9	0.3%	0 - 30%	1.0

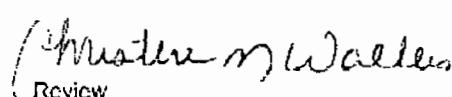
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	3.7	50.0	53.7	100.0%	46 - 148
Ethylbenzene	14.2	50.0	64.1	99.8%	32 - 160
p,m-Xylene	42.9	100	142	99.7%	46 - 148
o-Xylene	34.0	50.0	83.8	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:  
 Method 5030B, Purge-and-Trap, Test Method for Evaluating Solid Waste, SW-846, USEPA, December 1996.  
 Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 40732 - 40734, 40752 - 40757

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	04-16-STEX QA/QC	Date Reported:	04-16-07
Laboratory Number:	41005	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-16-07
Condition:	N/A	Analysis:	STEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc.	Detect. Limit
Benzene	3.2598E+007	3.2663E+007	0.2%	ND	0.2
Toluene	3.9192E+007	3.9270E+007	0.2%	ND	0.2
Ethylbenzene	1.9999E+007	2.0039E+007	0.2%	ND	0.2
p,m-Xylene	7.1658E+007	7.1801E+007	0.2%	ND	0.2
o-Xylene	3.3169E+007	3.0223E+007	0.2%	ND	0.1

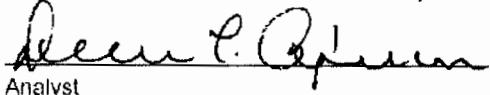
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	12.8	12.7	0.8%	0 - 30%	1.8
Toluene	15.1	15.0	0.7%	0 - 30%	1.7
Ethylbenzene	3.3	3.3	0.0%	0 - 30%	1.5
p,m-Xylene	28.3	28.2	0.4%	0 - 30%	2.2
o-Xylene	9.7	9.7	0.0%	0 - 30%	1.0

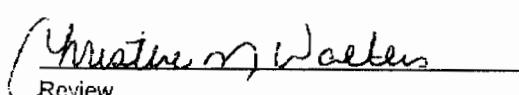
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	12.8	50.0	62.7	99.8%	39 - 150
Toluene	15.1	50.0	65.0	99.8%	46 - 148
Ethylbenzene	3.3	50.0	53.3	100.0%	32 - 160
p,m-Xylene	28.3	100	128	99.8%	46 - 148
o-Xylene	9.7	50.0	59.6	99.8%	46 - 148

ND = Parameter not detected at the stated detection limit.

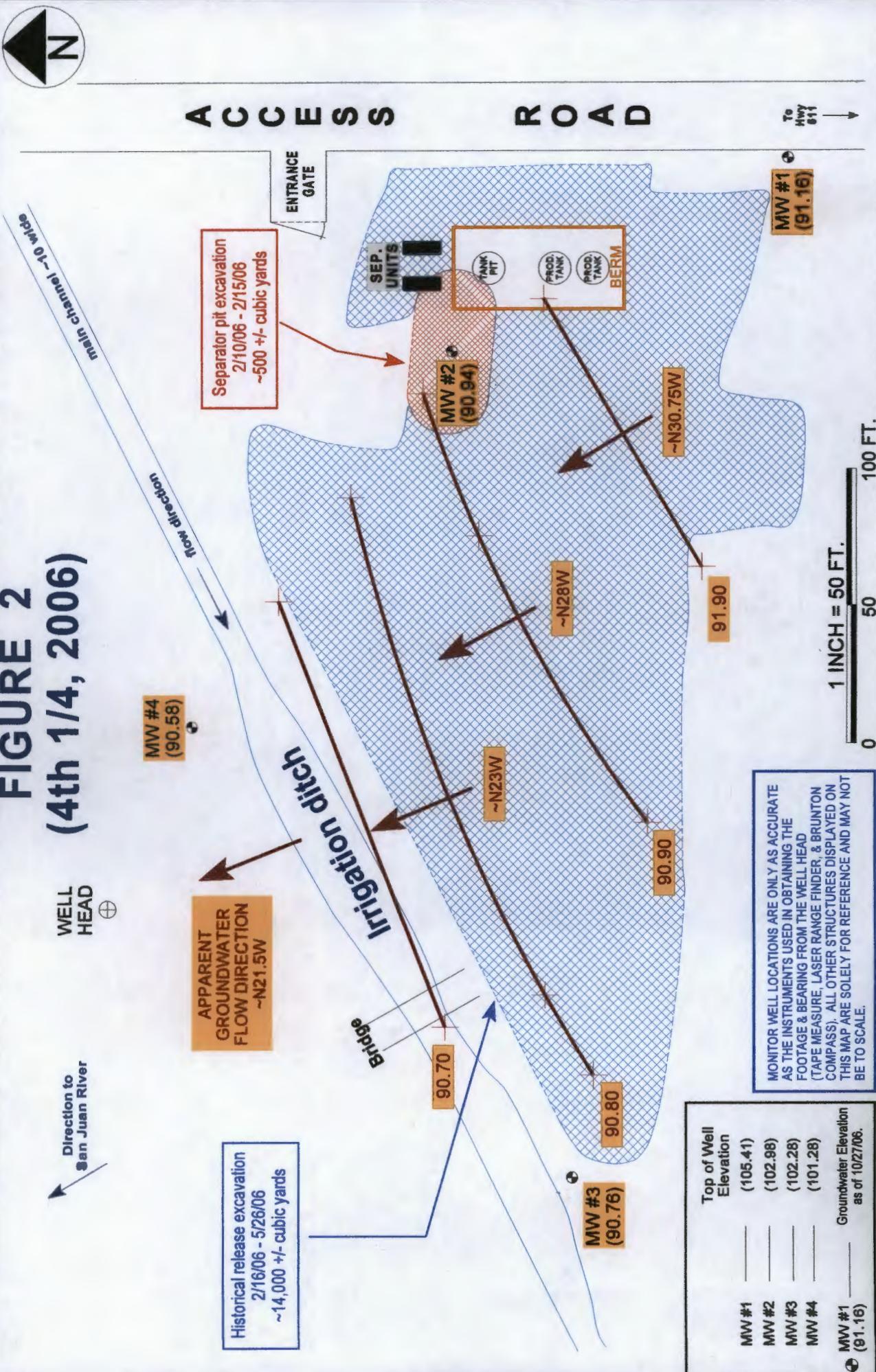
References: Method 5030B, Purge-and-Trap Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.  
Method 6021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 41005, 41023 - 41029

  
Debra C. Reiter  
Analyst

  
Christine M. Waeter  
Review

**FIGURE 2**  
**(4th 1/4, 2006)**



**GROUNDWATER GRADIENT MAP**  
10/06

**PROJECT: MW SAMPLING**  
DRAWN BY: NJV  
FILENAME: 10-27-06-GW SKF  
REVISED: 10-27-06 NJV

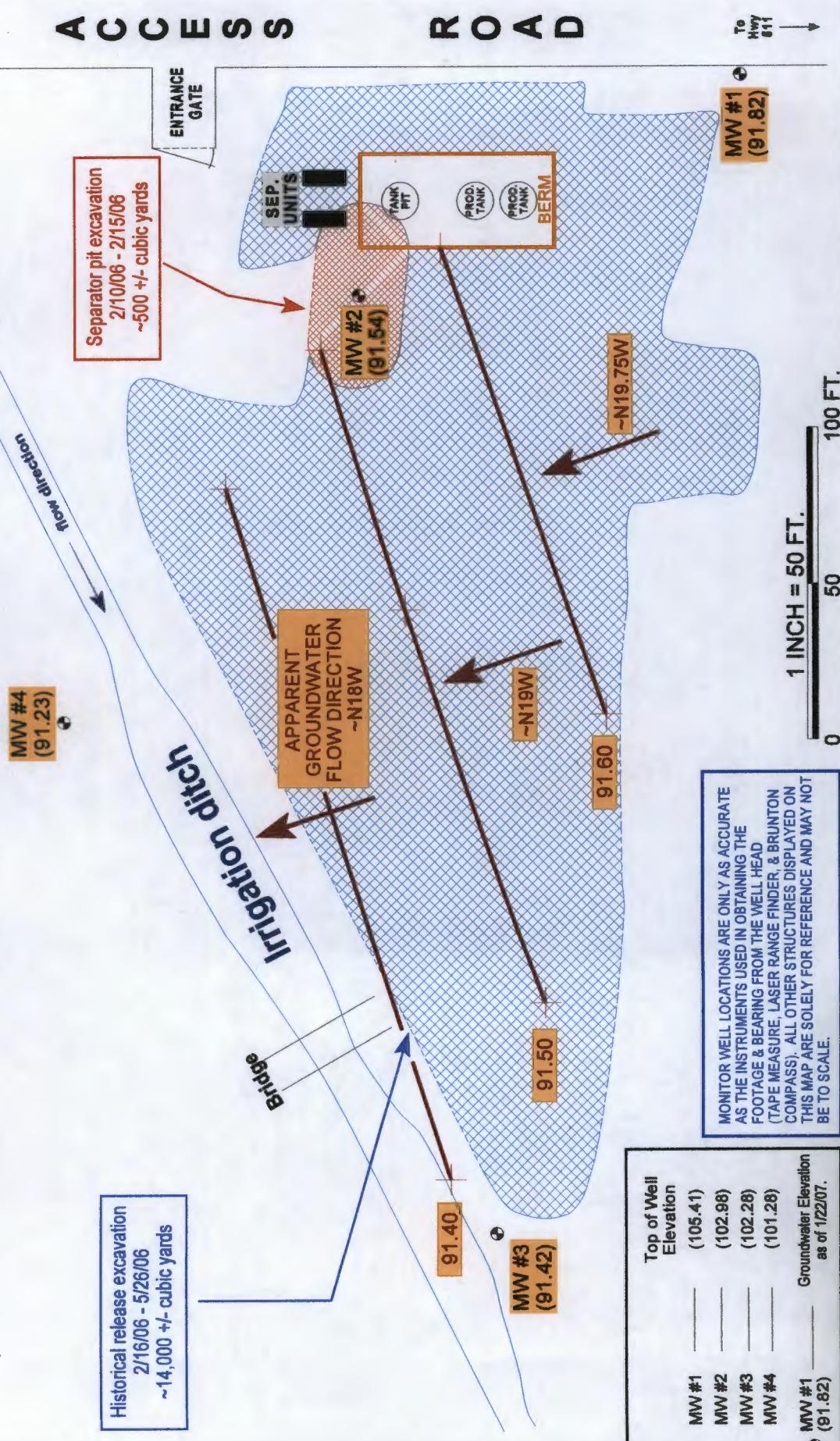
**BLAGG ENGINEERING, INC.**  
CONSULTING PETROLEUM / RECLAMATION SERVICES  
P.O. BOX 87  
BLOOMFIELD, NEW MEXICO 87413  
PHONE: (505) 632-1199

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

Top of Well	Elevation
MW #1	(105.41)
MW #2	(102.98)
MW #3	(102.28)
MW #4	(101.28)
MW #1	Groundwater Elevation as of 10/27/06.

**BP AMERICA PRODUCTION CO.**  
CHAVEZ GC A # 1  
SW 1/4 NE 1/4 SEC. 3, T29N, R9W  
SAN JUAN COUNTY, NEW MEXICO

**FIGURE 3**  
**(1st 1/4, 2007)**



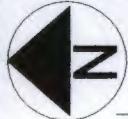
**BP AMERICA PRODUCTION CO.**  
CHAVEZ GC A # 1  
SW/4 NE/4 SEC. 3, T29N, R9W  
SAN JUAN COUNTY, NEW MEXICO

**PROJECT: MW SAMPLING**  
**DRAWN BY: NJV**  
**FILENAME: 01-22-07-GW.SKF**  
**REVISED: 01-22-07 NJV**

**BLAGG ENGINEERING, INC.**  
CONSULTING PETROLEUM / RECLAMATION SERVICES  
P.O. BOX 87  
BLOOMFIELD, NEW MEXICO 87413  
PHONE: (505) 632-1198

**GROUNDWATER GRADIENT MAP**  
01/07

# FIGURE 4 (2nd 1/4, 2007)



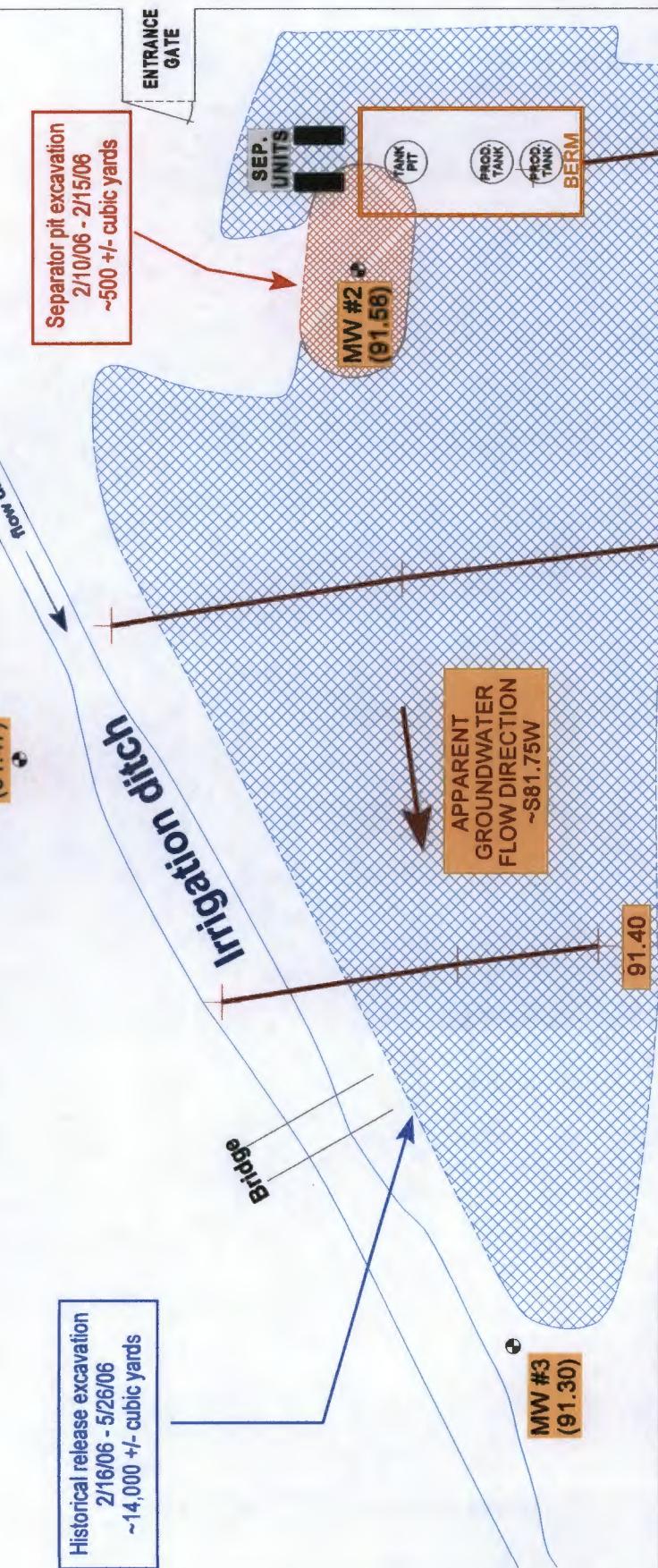
WELL HEAD

Direction to  
San Juan River

MW #4  
(91.47)

A C C E S S R O A D

main channel ~10 ft. wide



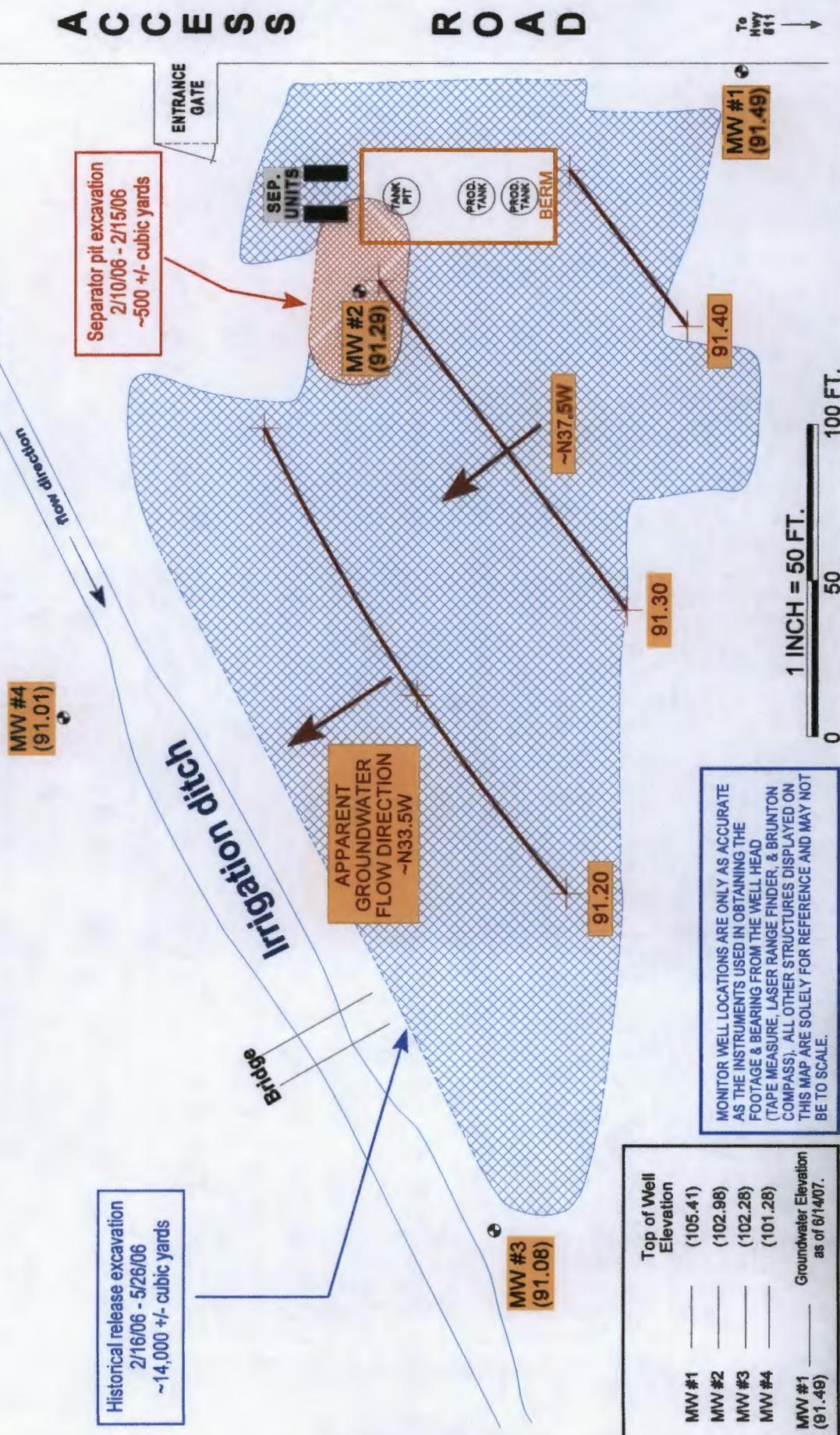
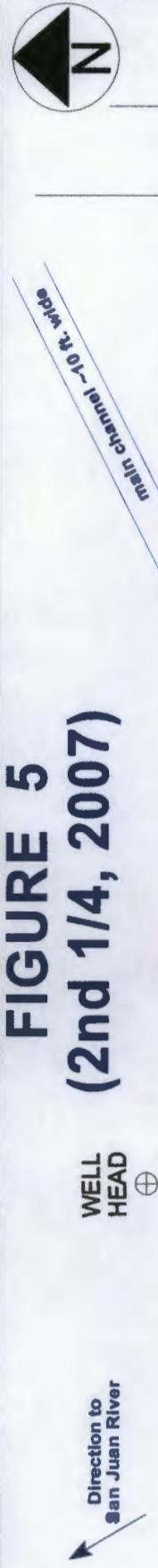
MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS). ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

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

BLAGG ENGINEERING, INC.  
CONSULTING PETROLEUM / RECLAMATION SERVICES  
P.O. BOX 87  
BLOOMFIELD, NEW MEXICO 87413  
PHONE: (505) 632-1198

PROJECT: MW SAMPLING  
DRAWN BY: NJV  
FILENAME: 05-22-07-GW.SKF  
REVISED: 05-22-07 NJV  
GROUNDWATER GRADIENT MAP  
05/07

**FIGURE 5**  
**(2nd 1/4, 2007)**



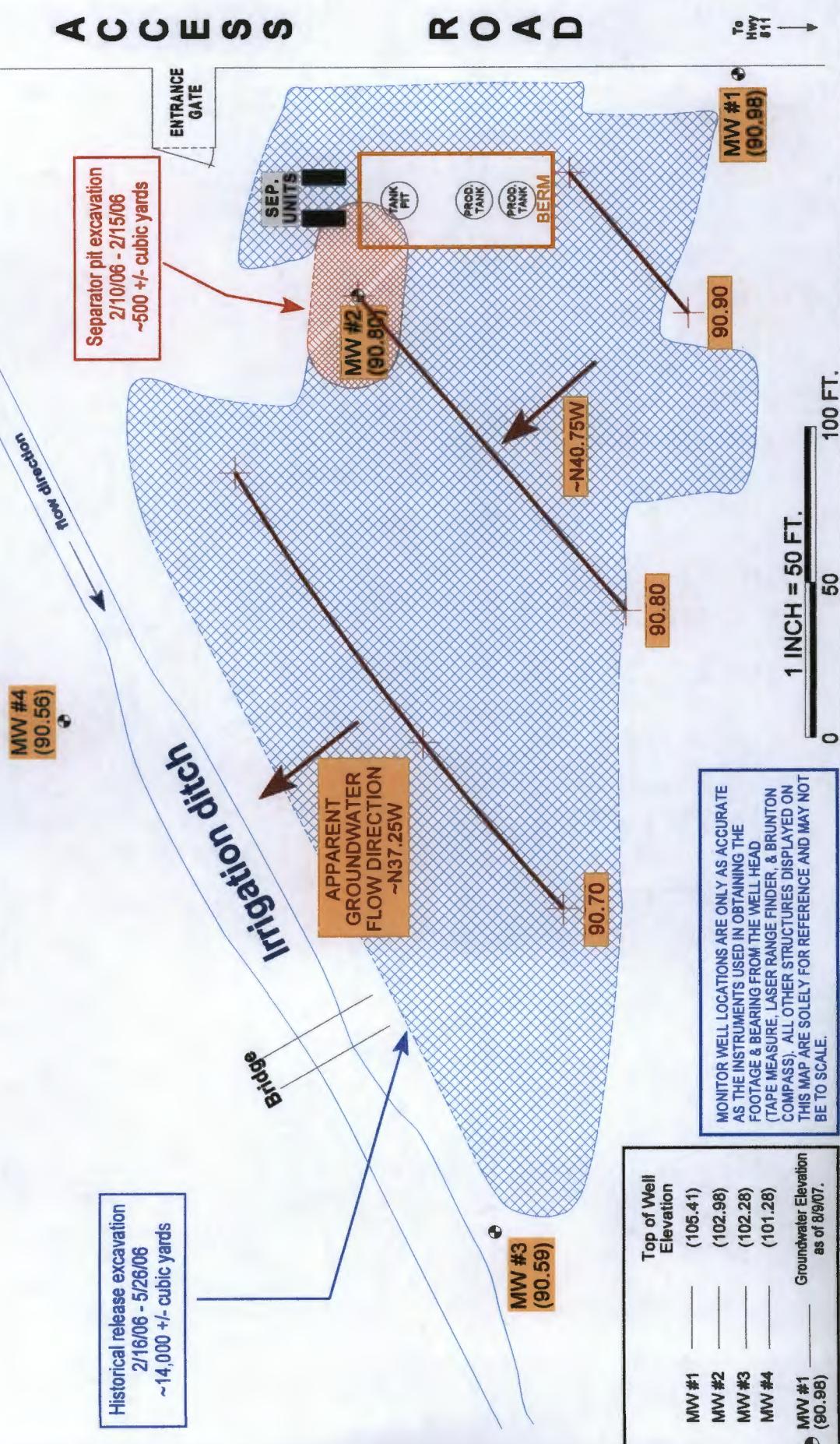
BP AMERICA PRODUCTION CO.  
CHAVEZ GC A # 1  
SW 1/4 NE 1/4 SEC. 3, T29N, R9W  
SAN JUAN COUNTY, NEW MEXICO

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

PROJECT: MW SAMPLING  
DRAWN BY: NJV  
FILENAME: 06-14-07-GW.SKF  
REVISED: 06-14-07 NJV

GROUNDWATER GRADIENT MAP  
06/07

**FIGURE 6**  
**(3rd 1/4, 2007)**



**BP AMERICA PRODUCTION CO.**  
CHAVEZ GC A # 1  
SW 1/4 NE 1/4 SEC. 3, T 29N, R 9W  
SAN JUAN COUNTY, NEW MEXICO

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

**GROUNDWATER GRADIENT MAP**  
To Hwy 81  
PROJECT: MW SAMPLING  
DRAWN BY: NJV  
FILENAME: 08-09-07-GW.SKF  
REVISED: 08-09-07 NJV  
08/07

**FIGURE 7**  
**(3rd 1/4, 2007)**

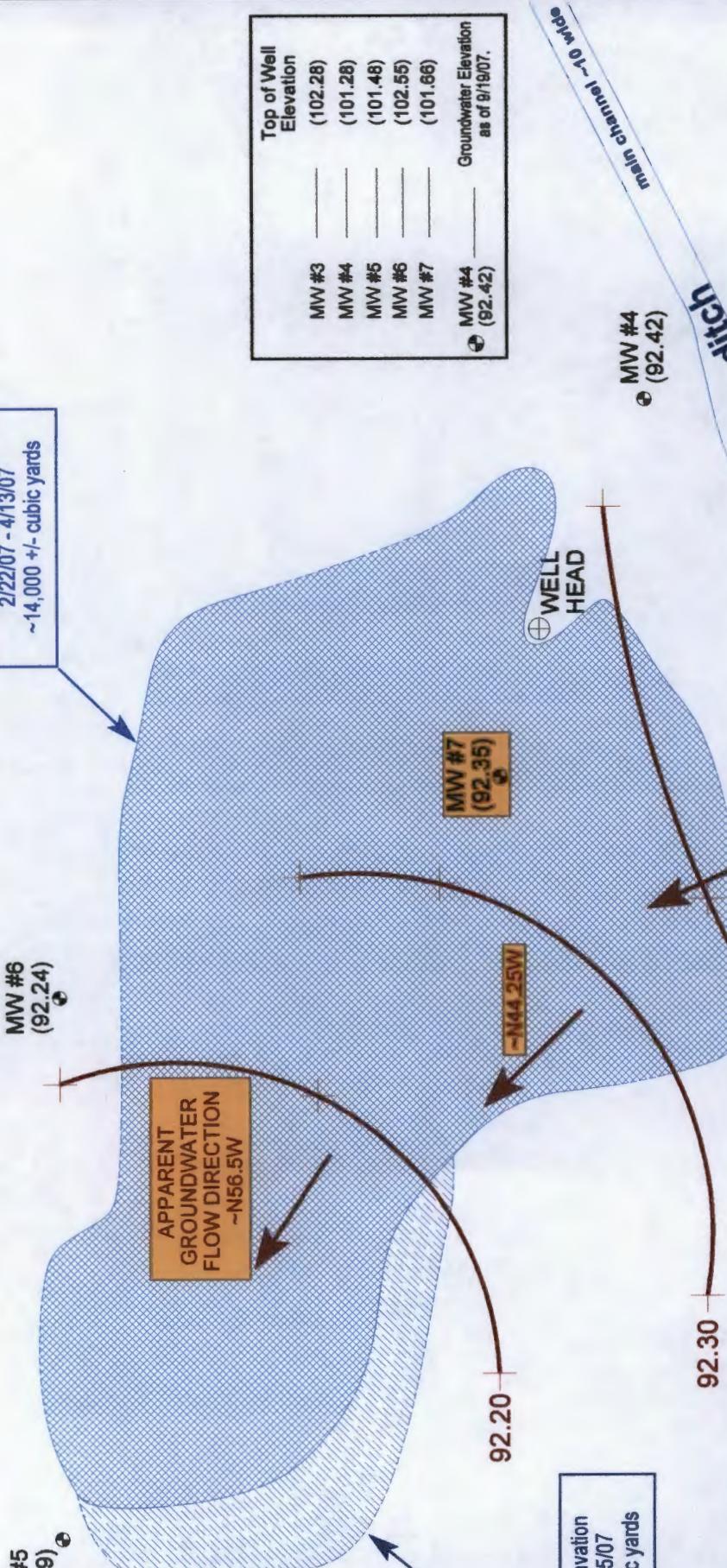
MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS). ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

Direction to  
San Juan River

Historical release excavation  
2/22/07 - 4/13/07  
~14,000 +/- cubic yards

MW #5  
(91.99)

APPARENT  
GROUNDWATER  
FLOW DIRECTION  
~N56.5W



Additional excavation  
4/13/07 - 4/15/07  
~1,300 +/- cubic yards

Top of Well Elevation  
MW #3 (102.28)  
MW #4 (101.28)  
MW #5 (101.48)  
MW #6 (102.55)  
MW #7 (101.66)  
MW #4 (92.42) Groundwater Elevation  
as of 8/19/07.

main channel ~10 wide  
Irrigation ditch  
flow direction  
To Entrance Gate

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

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

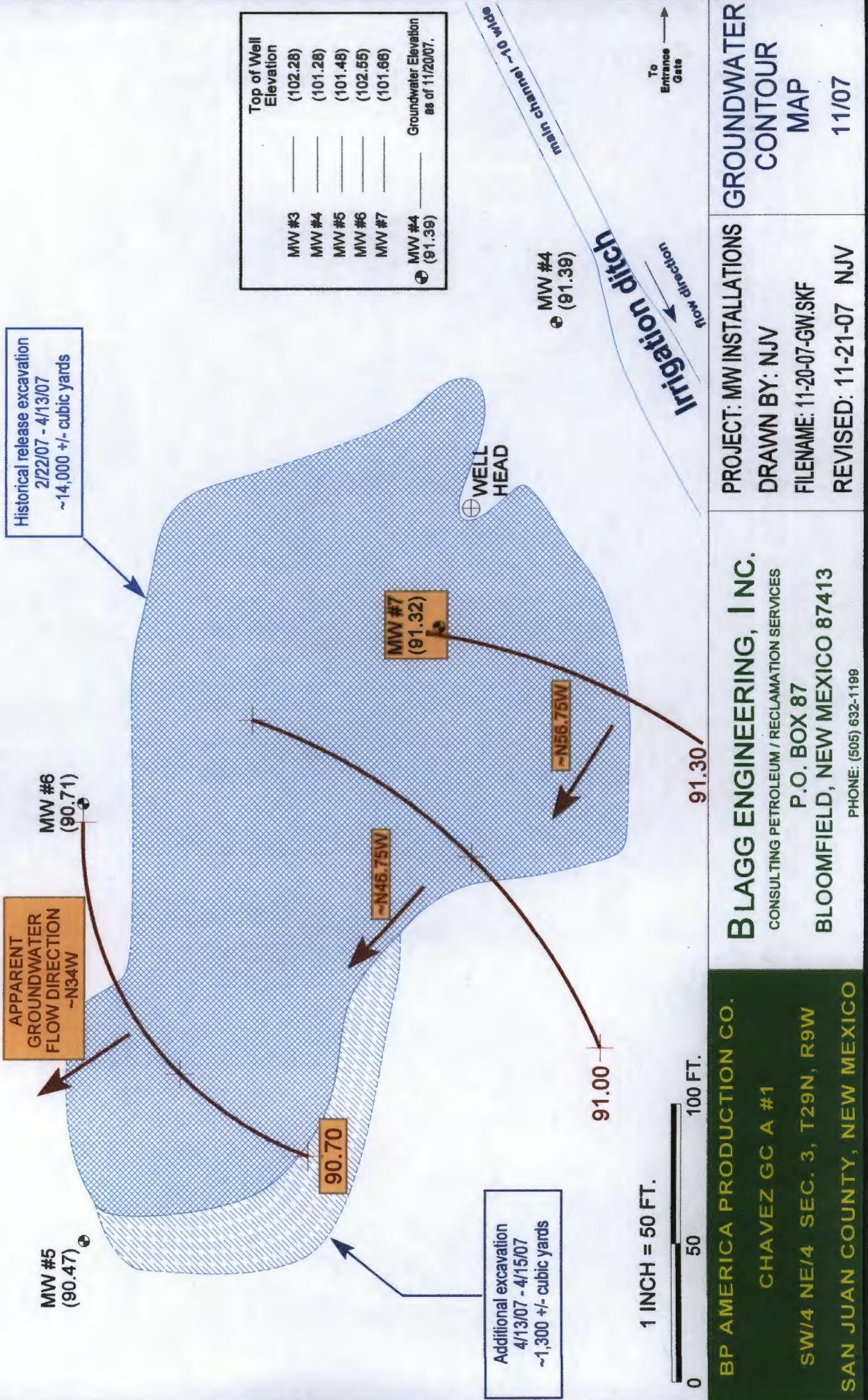
PROJECT: MW INSTALLATIONS	GROUNDWATER CONTOUR MAP
DRAWN BY: NJV	FILENAME: 09-19-07-GW.SKF
REVISED: 09-19-07 NJV	09/07

# FIGURE 8

## (4th 1/4, 2007)

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

Direction to  
San Juan River

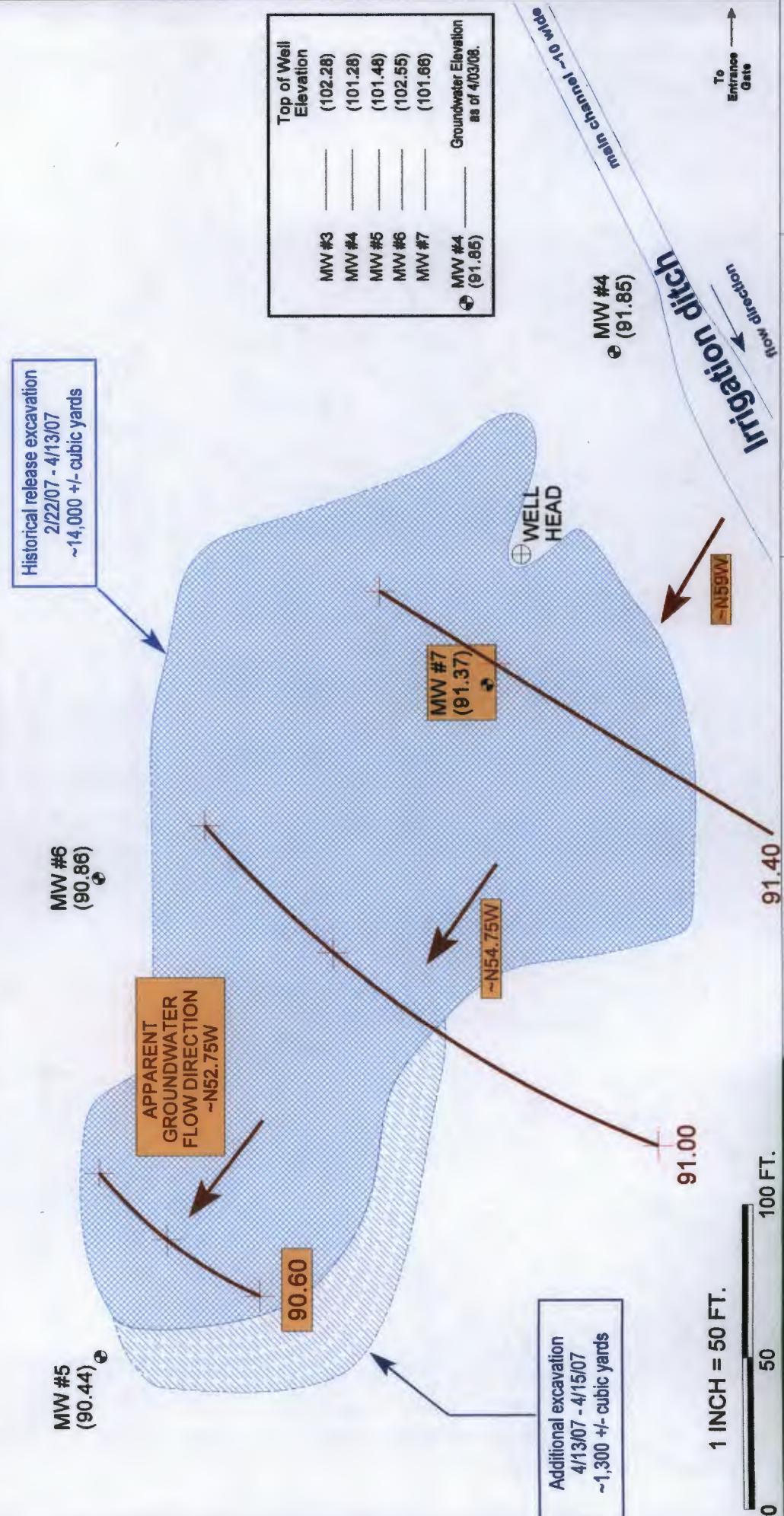




## FIGURE 9 (2nd 1/4, 2008)

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

Direction to  
San Juan River



**BP AMERICA PRODUCTION CO.**  
CHAVEZ GC A #1  
SW 1/4 NE 1/4 SEC. 3, T29N, R9W  
SAN JUAN COUNTY, NEW MEXICO

**PROJECT: MW INSTALLATIONS**  
**DRAWN BY: NJV**  
**FILENAME: 04-03-08-GW.SKF**  
**REVISED: 04-08-08 NJV**

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

**GROUNDWATER CONTOUR MAP**  
**04/08**

# BLAGG ENGINEERING, INC.

P.O. BOX 87  
BLOOMFIELD, NM 87413

(505) 632-1199

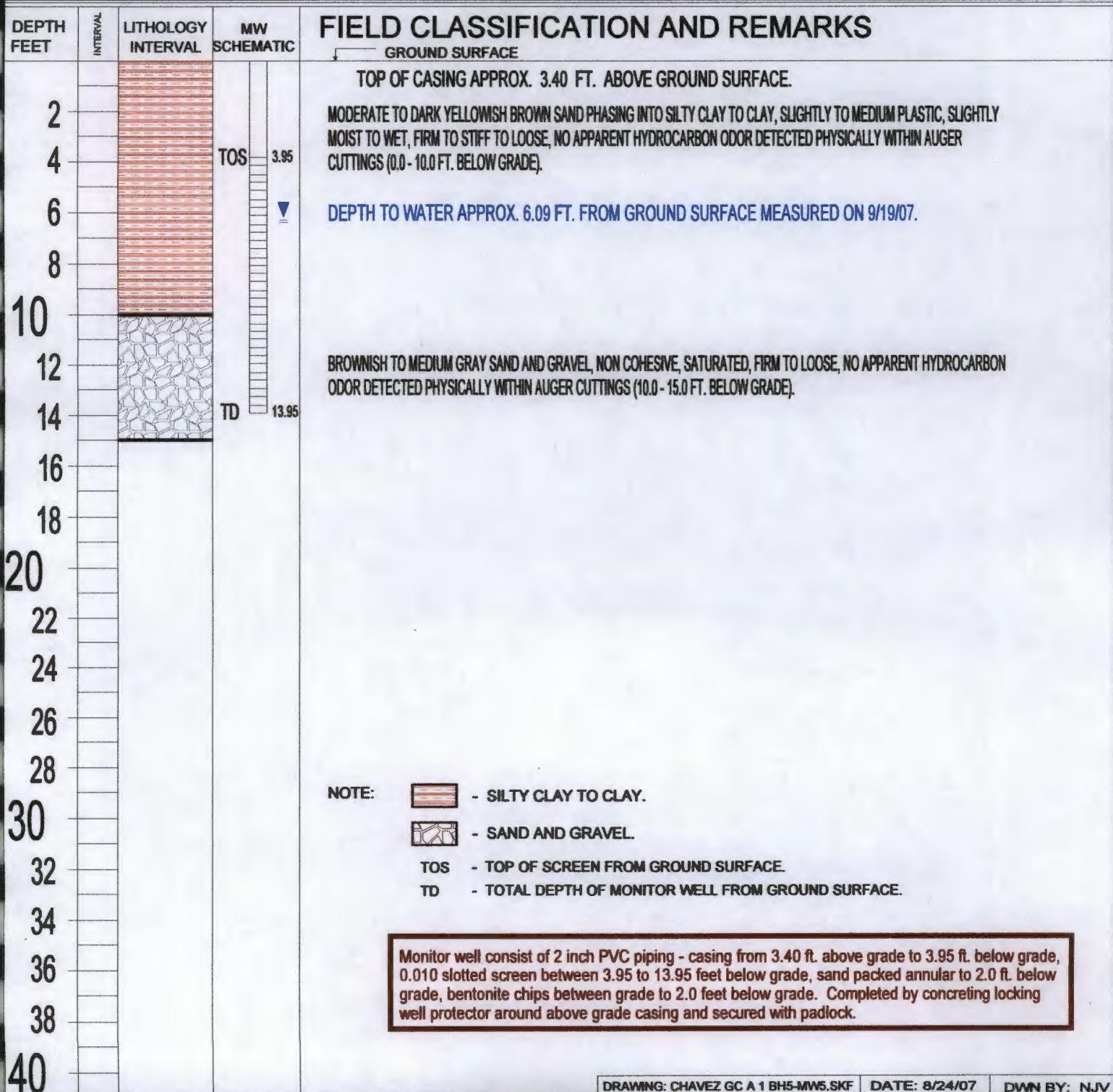
MW #5

## BORE / TEST HOLE REPORT

CLIENT:  
LOCATION NAME:  
CONTRACTOR:  
EQUIPMENT USED:  
BORING LOCATION:

**BP AMERICA PRODUCTION COMPANY**  
**CHAVEZ GC A # 1      UNIT G, SEC. 3, T29N, R9W**  
**BLAGG ENGINEERING, INC. / ENVIROTECH, INC.**  
**MOBILE DRILL RIG (CME 75)**  
**300 FT., N62W FROM WELL HEAD.**

BORING #.....	BH - 5
MW #.....	5
PAGE #.....	5
DATE STARTED	8/24/07
DATE FINISHED	8/24/07
OPERATOR.....	DP
PREPARED BY	NJV



# BLAGG ENGINEERING, INC.

P.O. BOX 87  
BLOOMFIELD, NM 87413

(505) 632-1199

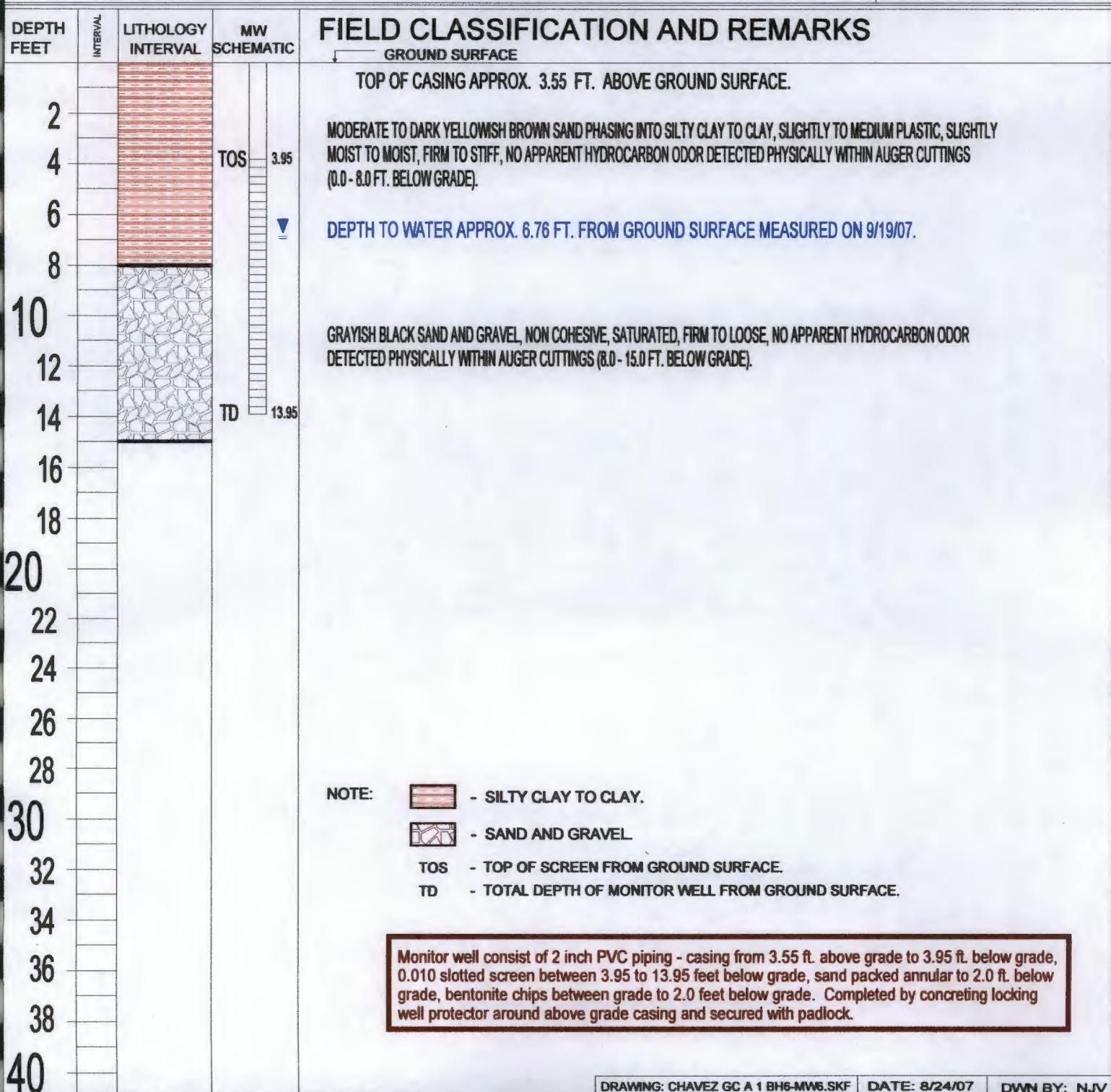
MW #6

## BORE / TEST HOLE REPORT

CLIENT:  
LOCATION NAME:  
CONTRACTOR:  
EQUIPMENT USED:  
BORING LOCATION:

**BP AMERICA PRODUCTION COMPANY**  
**CHAVEZ GC A # 1      UNIT G, SEC. 3, T29N, R9W**  
**BLAGG ENGINEERING, INC. / ENVIROTECH, INC.**  
**MOBILE DRILL RIG (CME 75)**  
**177 FT., N37W FROM WELL HEAD.**

BORING #.....	BH - 6
MW #.....	6
PAGE #.....	6
DATE STARTED	8/24/07
DATE FINISHED	8/24/07
OPERATOR.....	DP
PREPARED BY	NJV



# BLAGG ENGINEERING, INC.

P.O. BOX 87  
BLOOMFIELD, NM 87413

(505) 632-1199

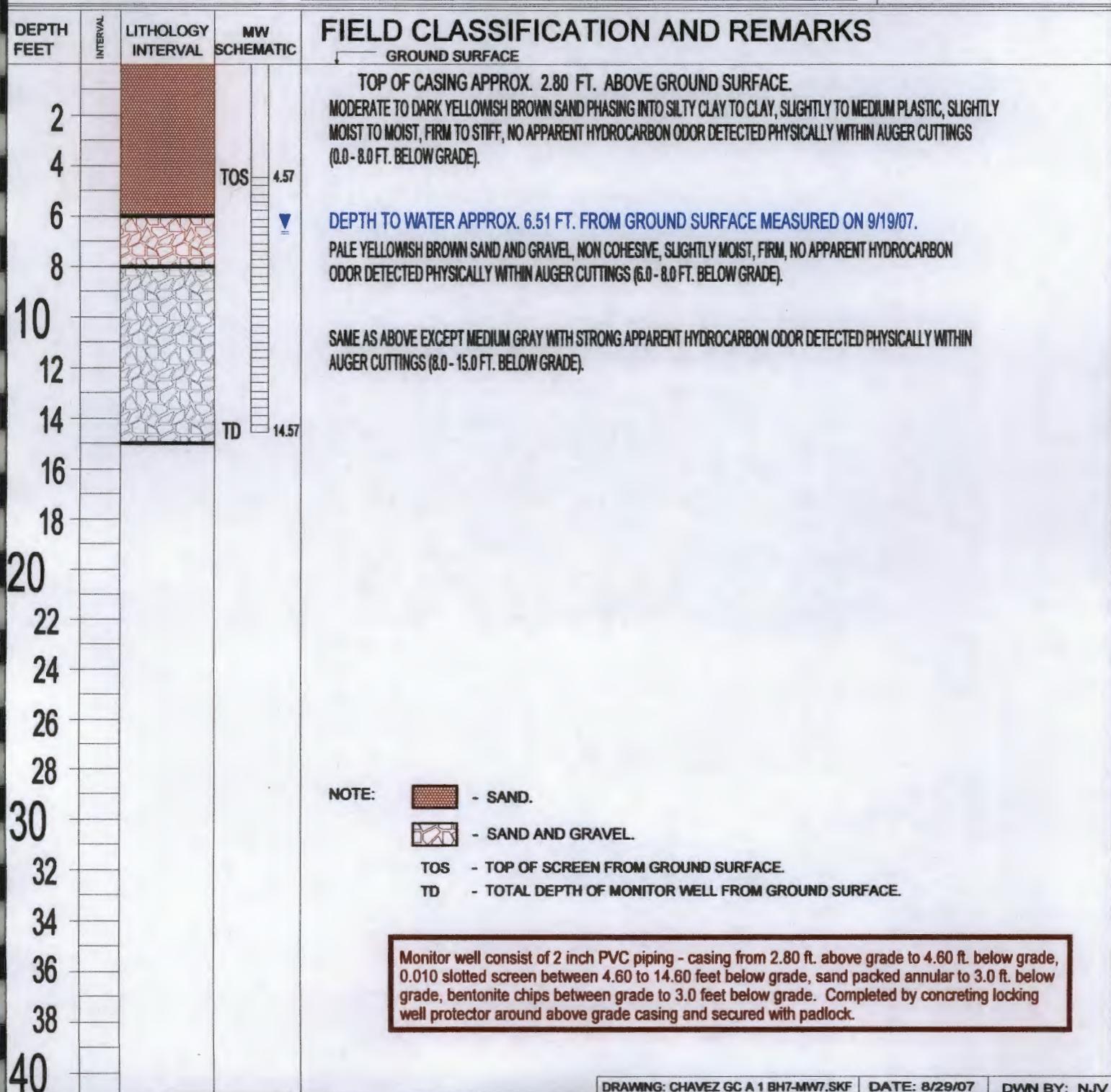
MW #7

## BORE / TEST HOLE REPORT

CLIENT:  
LOCATION NAME:  
CONTRACTOR:  
EQUIPMENT USED:  
BORING LOCATION:

**BP AMERICA PRODUCTION COMPANY**  
**CHAVEZ GC A # 1      UNIT G, SEC. 3, T29N, R9W**  
**BLAGG ENGINEERING, INC. / ENVIROTECH, INC.**  
**MOBILE DRILL RIG (CME 75)**  
**44.5 FT., N75W FROM WELL HEAD.**

BORING #.....	BH - 7
MW #.....	7
PAGE #.....	7
DATE STARTED	8/29/07
DATE FINISHED	8/29/07
OPERATOR.....	DP
PREPARED BY	NJV



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

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

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

CHAVEZ GC A # 1
UNIT G, SEC. 3, T29N, R9W

**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.)
MW - 1	105.41	91.16	14.25	19.50	-	-	-	-	-
MW - 2	102.98	90.94	12.04	18.00	1120	7.53	3,500	15.8	3.00
MW - 3	102.25	90.76	11.49	19.00	1230	7.00	1,400	16.2	3.75
MW - 4	101.28	90.58	10.70	16.00	1155	7.22	800	16.1	2.75
<b>INSTRUMENT CALIBRATIONS =</b>							7.00	2,800	
<b>DATE &amp; TIME =</b>							10/27/06	0845	

**NOTES :** Volume of water purged from well prior to sampling:  $V = \pi r^2 X h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$ .  
(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's sampled, slight HC odor detected physically in MW # 2. Collected BTEX from MW's #2, #3, & #4.

Top of casing MW #1 ~ 2.90 ft., MW #2 ~ 2.50 ft., MW #3 ~ 2.50 ft., MW #4 ~ 2.60 ft. above grade .

Hall Environmental Analysis Laboratory, Inc.

Date: 03-Nov-06

CLIENT:	Blagg Engineering	Lab Order:	0610363
Project:	Chavez GC A #1		

Lab ID: 0610363-01 Collection Date: 10/27/2006 11:20:00 AM  
 Client Sample ID: MW #2 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						
Benzene	5.6	5.0		µg/L	5	11/2/2006 12:09:09 PM
Toluene	ND	5.0		µg/L	5	11/2/2006 12:09:09 PM
Ethylbenzene	30	5.0		µg/L	5	11/2/2006 12:09:09 PM
Xylenes, Total	82	15		µg/L	5	11/2/2006 12:09:09 PM
Surr: 4-Bromofluorobenzene	91.7	72.2-125		%REC	5	11/2/2006 12:09:09 PM

Lab ID: 0610363-02 Collection Date: 10/27/2006 12:30:00 PM  
 Client Sample ID: MW #3 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						
Benzene	1.1	1.0		µg/L	1	11/2/2006 8:15:11 PM
Toluene	ND	1.0		µg/L	1	11/2/2006 8:15:11 PM
Ethylbenzene	ND	1.0		µg/L	1	11/2/2006 8:15:11 PM
Xylenes, Total	14	3.0		µg/L	1	11/2/2006 8:15:11 PM
Surr: 4-Bromofluorobenzene	89.7	72.2-125		%REC	1	11/2/2006 8:15:11 PM

Lab ID: 0610363-03 Collection Date: 10/27/2006 11:55:00 AM  
 Client Sample ID: MW #4 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						
Benzene	ND	1.0		µg/L	1	11/2/2006 1:09:53 PM
Toluene	ND	1.0		µg/L	1	11/2/2006 1:09:53 PM
Ethylbenzene	ND	1.0		µg/L	1	11/2/2006 1:09:53 PM
Xylenes, Total	ND	3.0		µg/L	1	11/2/2006 1:09:53 PM
Surr: 4-Bromofluorobenzene	86.2	72.2-125		%REC	1	11/2/2006 1:09:53 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 Analytic 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

Client: BLAZES ENERGY /BP America

Address: P.O. Box 87  
BFD, NM 87413

Phone #:

Fax #:

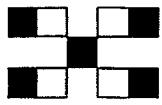
Project #:

Project Name:

CHAVEZ GC A #1

Other:

OA/GC Package:  
 Std     Level 4



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

4801 Hawkins NE, Suite D  
 Albuquerque, New Mexico 87109  
 Tel: 505.345.3975 Fax 505.345.4107  
[www.hallenvironmental.com](http://www.hallenvironmental.com)

ANALYSIS REQUEST		Air Bubbles or Headspace (Y or N)
		8270 (Semi-VOA)
		8260B (VOA)
		8081 Pesticides / PCB's (8082)
		Actions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )
		RCRA 8 Metals
		B310 (PNA or PAH)
		E0C (Method 8021)
		E0B (Method 504.1)
		TPH (Method 418.1)
		TPH Method 8015B (Gas/Diesel)
		BTEX + MTBE + TPH (Gasoline Only)
		(BTEX + MTBE + TPH) (8021B)

Remarks:

Received By: (Signature)

Relinquished By: (Signature)

Date: 10/27/06 Time: 0645

Received By: (Signature)

Relinquished By: (Signature)

Date: 10/31/06 Time: 0645

## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: Chavez GC A #1

Work Order: 0610363

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: SW8021</b>									
Sample ID: 5ML RB		MBLK							
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							
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			
Sample ID: 100NG BTEX LCSD		LCSD							
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	

## Qualifiers:

E Value above quantitation range  
 J Analytic 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 0610363

Received by AT

Checklist completed by Chris L

Signature

10/31/06

Date

Matrix

Carrier name Greyhound

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/> Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
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

<b>CHAVEZ GC A #1</b>
<b>UNIT G, SEC. 3, T29N, R9W</b>

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

**Date :** January 22, 2007

**SAMPLER :** NJV

**Filename :** 01-22-07.WK4

**PROJECT MANAGER :** JCB

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
<b>MW - 1</b>	105.41	91.82	13.59	19.50	-	-	-	-	-
<b>MW - 2</b>	102.98	91.54	11.44	18.00	1230	7.55	5,000	13.7	3.25
<b>MW - 3</b>	102.25	91.42	10.83	19.00	1150	7.35	1,300	10.7	4.00
<b>MW - 4</b>	101.28	91.23	10.05	16.00	1120	7.35	900	8.8	3.00

<b>INSTRUMENT CALIBRATIONS =</b>	7.00	2,800
<b>DATE &amp; TIME =</b>	01/22/07	1115

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

Ideally a minimum of three (3) wellbore volumes:

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

Comments or note well diameter if not standard 2".

Excellent recovery in MW's sampled, slight HC odor detected physically in MW # 2. Collected BTEX from MW's # 2, # 3, & # 4.

Top of casing MW # 1 ~ 2.90 ft., MW # 2 ~ 2.50 ft., MW # 3 ~ 2.50 ft., MW # 4 ~ 2.60 ft. above grade.

**Hall Environmental Analysis Laboratory, Inc.**

Date: 29-Jan-07

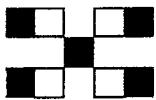
CLIENT:	Blagg Engineering	Lab Order:	0701272
Project:	Chavez GC A #1		
Lab ID:	0701272-01	Collection Date:	1/22/2007 12:30:00 PM
Client Sample ID:	MW#2	Matrix:	AQUEOUS
Analyses	Result	PQL Qual Units	DF Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>			Analyst: LMM
Benzene	1.8	1.0 µg/L	1 1/26/2007 2:10:40 PM
Toluene	ND	1.0 µg/L	1 1/26/2007 2:10:40 PM
Ethylbenzene	3.6	1.0 µg/L	1 1/26/2007 2:10:40 PM
Xylenes, Total	4.8	3.0 µg/L	1 1/26/2007 2:10:40 PM
Surr: 4-Bromofluorobenzene	89.8	70.2-105 %REC	1 1/26/2007 2:10:40 PM
Lab ID:	0701272-02	Collection Date:	1/22/2007 11:50:00 AM
Client Sample ID:	MW#3	Matrix:	AQUEOUS
Analyses	Result	PQL Qual Units	DF Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>			Analyst: LMM
Benzene	ND	1.0 µg/L	1 1/26/2007 2:40:43 PM
Toluene	ND	1.0 µg/L	1 1/26/2007 2:40:43 PM
Ethylbenzene	ND	1.0 µg/L	1 1/26/2007 2:40:43 PM
Xylenes, Total	ND	3.0 µg/L	1 1/26/2007 2:40:43 PM
Surr: 4-Bromofluorobenzene	84.8	70.2-105 %REC	1 1/26/2007 2:40:43 PM
Lab ID:	0701272-03	Collection Date:	1/22/2007 11:20:00 AM
Client Sample ID:	MW#4	Matrix:	AQUEOUS
Analyses	Result	PQL Qual Units	DF Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>			Analyst: LMM
Benzene	ND	1.0 µg/L	1 1/25/2007 4:29:01 PM
Toluene	ND	1.0 µg/L	1 1/25/2007 4:29:01 PM
Ethylbenzene	ND	1.0 µg/L	1 1/25/2007 4:29:01 PM
Xylenes, Total	5.3	3.0 µg/L	1 1/25/2007 4:29:01 PM
Surr: 4-Bromofluorobenzene	94.9	70.2-105 %REC	1 1/25/2007 4:29:01 PM
<b>Qualifiers:</b>	<ul style="list-style-type: none"> <li>* Value exceeds Maximum Contaminant Level</li> <li>E Value above quantitation range</li> <li>J Analyte detected below quantitation limits</li> <li>ND Not Detected at the Reporting Limit</li> <li>S Spike recovery outside accepted recovery limits</li> </ul>		
	<ul style="list-style-type: none"> <li>B Analyte detected in the associated Method Blank</li> <li>H Holding times for preparation or analysis exceeded</li> <li>MCL Maximum Contaminant Level</li> <li>RL Reporting Limit</li> </ul>		
	1 / 3		
	Page 1 of 1		

**CHAIN-OF-CUSTODY RECORD**Client: BLAZER ENERGY, SP AMERICA

Address:	<u>P.O. BOX 87</u>
Phone #:	<u>BLVD. NM 87413</u>
Fax #:	
Project #:	<u>CHAVEZ GC A #1</u>
Other:	

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative	HEAL No.
<u>1/22/07</u>	<u>1230</u>	<u>WATER</u>	<u>MW #2</u>	<u>2-40 ml</u>	<u>/</u>	<u>0701272</u>
<u>1/22/07</u>	<u>1150</u>	<u>WATER</u>	<u>MW #3</u>	<u>2-40 ml</u>	<u>/</u>	<u>1</u>
<u>1/22/07</u>	<u>1120</u>	<u>WATER</u>	<u>MW #4</u>	<u>2-40 ml</u>	<u>/</u>	<u>2</u>

**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**  
4901 Hawkins NE, Suite D  
Albuquerque, New Mexico 87109  
Tel. 505.345.3975 Fax 505.345.4107  
[www.hallenvironmental.com](http://www.hallenvironmental.com)

**ANALYSIS REQUEST**

Air Bubbles or Headspace (Y or N)
8270 (Semi-VOA)
8260B (VOA)
8081 Pesticides / PCB's (8082)
Antons (F, Cl, NO <sub>x</sub> , NO <sub>2</sub> , PO <sub>x</sub> , SO <sub>x</sub> )
RCRA 8 Metals
B310 (PNA or PAH)
EDC (Method 8021)
EDB (Method 504.1)
TPH (Method 418.1)
TPH Method 8015B (Gas/Diesel)
BTEX + MTBE + TMB's (8021B)

Remarks:

Date:	<u>1/23/07</u>	Time:	<u>1100</u>	Reinquished By: (Signature)	<u>John W.</u>	Received By: (Signature)	<u>John W.</u>
Date:		Time:		Reinquished By: (Signature)		Received By: (Signature)	

## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: Chavez GC A #1

Work Order: 0701272

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

Method: SW8021

Sample ID: 5ML RB

Benzene ND µg/L 1.0 Batch ID: R22273 Analysis Date: 1/25/2007 10:22:32 AM

Toluene ND µg/L 1.0

Ethylbenzene ND µg/L 1.0

Xylenes, Total ND µg/L 3.0

Sample ID: 5ML RB MBLK Batch ID: R22287 Analysis Date: 1/26/2007 10:39:39 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

Sample ID: 100NG BTEX LCS LCS Batch ID: R22287 Analysis Date: 1/26/2007 12:10:12 PM

Benzene 17.99 µg/L 1.0 90.0 85.9 113

Toluene 18.70 µg/L 1.0 93.5 86.4 113

Ethylbenzene 18.92 µg/L 1.0 94.6 83.5 118

Xylenes, Total 56.87 µg/L 3.0 94.8 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 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 **0701272**

Received by **GLS**

Checklist completed by D. Schlype

Signature

Date

**1-24-07**

Matrix

Carrier name **Greyhound**

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

<b>CHAVEZ GC A #1</b>
<b>UNIT G, SEC. 3, T29N, R9W</b>

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

**Date :** May 22, 2007

**SAMPLER :** N J V

**Filename :** 05-22-07.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	105.41	91.63	13.78	19.50	-	-	-	-	-
2	102.98	91.58	11.40	18.00	1020	7.58	3,200	16.6	3.25
3	102.25	91.30	10.95	19.00	0940	7.55	1,000	14.0	4.00
4	101.28	91.47	9.81	16.00	0910	7.15	2,100	14.5	3.00
<b>INSTRUMENT CALIBRATIONS =</b>						7.00	2,800		
<b>DATE &amp; TIME =</b>						05/08/07	0740		

**NOTES :** Volume of water purged from well prior to sampling:  $V = \pi r^2 X h X 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$ .  
(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's sampled, slight HC odor detected physically in MW # 2. Collected BTEX from MW's # 2, # 3, & # 4.

Top of casing MW # 1 ~ 2.90 ft., MW # 2 ~ 2.50 ft., MW # 3 ~ 2.50 ft., MW # 4 ~ 2.60 ft. above grade.

**Hall Environmental Analysis Laboratory, Inc.**

Date: 31-May-07

**CLIENT:** Blagg Engineering  
**Lab Order:** 0705359  
**Project:** Chavez GC A #1  
**Lab ID:** 0705359-01

**Client Sample ID:** MW #2  
**Collection Date:** 5/22/2007 10:20:00 AM  
**Date Received:** 5/23/2007  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						
Benzene	1.7	1.0		µg/L	1	5/29/2007 7:40:08 PM
Toluene	ND	1.0		µg/L	1	5/29/2007 7:40:08 PM
Ethylbenzene	ND	1.0		µg/L	1	5/29/2007 7:40:08 PM
Xylenes, Total	12	2.0		µg/L	1	5/29/2007 7:40:08 PM
Surr: 4-Bromofluorobenzene	92.6	70.2-105		%REC	1	5/29/2007 7:40:08 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

**Hall Environmental Analysis Laboratory, Inc.**

Date: 31-May-07

**CLIENT:** Blagg Engineering  
**Lab Order:** 0705359  
**Project:** Chavez GC A #1  
**Lab ID:** 0705359-02

**Client Sample ID:** MW #3  
**Collection Date:** 5/22/2007 9:40:00 AM  
**Date Received:** 5/23/2007  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Analyst: NSB
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	5/29/2007 8:10:14 PM	
Toluene	ND	1.0		µg/L	1	5/29/2007 8:10:14 PM	
Ethylbenzene	ND	1.0		µg/L	1	5/29/2007 8:10:14 PM	
Xylenes, Total	ND	2.0		µg/L	1	5/29/2007 8:10:14 PM	
Sum: 4-Bromofluorobenzene	91.1	70.2-105		%REC	1	5/29/2007 8:10:14 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

**Hall Environmental Analysis Laboratory, Inc.**

Date: 31-May-07

**CLIENT:** Blagg Engineering  
**Lab Order:** 0705359  
**Project:** Chavez GC A #1  
**Lab ID:** 0705359-03

**Client Sample ID:** MW #4  
**Collection Date:** 5/22/2007 9:10:00 AM  
**Date Received:** 5/23/2007  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						
Benzene	ND	1.0		µg/L	1	5/29/2007 8:40:18 PM
Toluene	ND	1.0		µg/L	1	5/29/2007 8:40:18 PM
Ethylbenzene	ND	1.0		µg/L	1	5/29/2007 8:40:18 PM
Xylenes, Total	ND	2.0		µg/L	1	5/29/2007 8:40:18 PM
Surr: 4-Bromofluorobenzene	91.1	70.2-105		%REC	1	5/29/2007 8:40:18 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

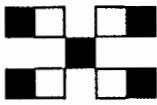
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
MCL Maximum Contaminant Level  
RL Reporting Limit

**CHAIN-OF-CUSTODY RECORD**Client: BLACK & VEATCH / BP AMERICA

Address:	<u>P.O. Box 87</u>			Project #:	<u>417</u>		
Phone #:	<u>632 - 1199</u>			Sampler:	<u>NV</u>		
Fax #:				Sample Temperature:	<u>5</u>		
Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative	<u>O-705359</u>	HEAL No. <u>00000005</u>
<u>5/22/07</u>	<u>1020</u>	<u>WATER</u>	<u>MW # 2</u>	<u>2-40 ml</u>	<u>HgCl<sub>2</sub></u>	<u>1</u>	<u>✓</u>
<u>5/22/07</u>	<u>0940</u>	<u>WATER</u>	<u>MW # 3</u>	<u>2-40 ml</u>	<u>HNO<sub>3</sub></u>	<u>2</u>	<u>✓</u>
<u>5/22/07</u>	<u>0910</u>	<u>WATER</u>	<u>MW # 4</u>	<u>2-40 ml</u>	<u>HNO<sub>3</sub></u>	<u>3</u>	<u>✓</u>
Air Bubbles or Headspace (Y or N)							

**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

4901 Hawkins NE, Suite D  
Albuquerque, New Mexico 87108  
Tel. 505.345.3975 Fax 505.345.4107  
www.hallenvironmental.com

**ANALYSIS REQUEST**

<u>ATRons (F, Cl, NO<sub>2</sub>, NO<sub>x</sub>, PO<sub>4</sub>, SO<sub>4</sub>)</u>
<u>B270 (Semi-VOA)</u>
<u>B260B (VOA)</u>
<u>B261 Pesticides / PCB's (8082)</u>
<u>RCRA 8 Metals</u>
<u>B310 (PNA or PAH)</u>
<u>EDC (Method 8021)</u>
<u>EDB (Method 504.1)</u>
<u>TPH (Method 418.1)</u>
<u>TPH Method 8015B (Gas/Diesel)</u>
<u>BTX + MTBE + TMB-a (8021b)</u>
<u>BTX + MTBE + TMB-a (8021b)</u>

Remarks:

Date: 5/22/07 Time: 1415 Received By: (Signature) John W. Received By: (Signature) John W.  
Date: Time: Relinquished By: (Signature) John W. Received By: (Signature) John W.

## QA/QC SUMMARY REPORT

**Client:** Blagg Engineering  
**Project:** Chavez GC A #1

**Work Order:** 0705359

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: SW8021</b>									
Sample ID: 5ML REAGENT BLA		MBLK					Batch ID: R23774	Analysis Date:	5/29/2007 8:19:53 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 100NG BTEX LCS		LCS					Batch ID: R23774	Analysis Date:	5/29/2007 9:40:18 PM
Benzene	19.41	µg/L	1.0	97.1	85.9	113			
Toluene	19.59	µg/L	1.0	97.9	86.4	113			
Ethylbenzene	19.63	µg/L	1.0	98.2	83.5	118			
Xylenes, Total	58.61	µg/L	2.0	97.7	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 Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG

Date and Time Received:

5/23/2007

Work Order Number 0705359

Received by TLS

Checklist completed by Ahshi

Signature

5/23/07

Date

Matrix

Carrier name UPS

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

**CHAVEZ GC A #1**

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

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

**Date :** August 9, 2007

**SAMPLER :** NJ V

**Filename :** 08-09-07.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	105.41	90.98	14.43	19.50	-	-	-	-	-
2	102.98	90.80	12.18	18.00	-	-	-	-	-
3	102.25	90.59	11.66	19.00	1015	7.27	1,500	20.0	3.75
4	101.28	90.56	10.72	16.00	-	-	-	-	-
<b>INSTRUMENT CALIBRATIONS =</b>							7.00	2,800	
<b>DATE &amp; TIME =</b>							08/09/07	0730	

**NOTES :** Volume of water purged from well prior to sampling:  $V = \pi r^2 h \times 7.48 \text{ gal./ft}^3 \times 3$  (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 # 3 . Collected sample from MW # 3 for BTEX analysis only.

Top of casing MW # 1 ~ 2.90 ft. , MW # 2 ~ 2.50 ft. , MW # 3 ~ 2.50 ft. , MW # 4 ~ 2.60 ft. above grade .

**Hall Environmental Analysis Laboratory, Inc.**

Date: 20-Aug-07

**CLIENT:** Blagg Engineering  
**Lab Order:** 0708155  
**Project:** Chavez GC A #1  
**Lab ID:** 0708155-01

**Client Sample ID:** MW #3  
**Collection Date:** 8/9/2007 10:15:00 AM  
**Date Received:** 8/10/2007  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Analyst: NSB
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	8/17/2007 2:39:20 AM	
Toluene	ND	1.0		µg/L	1	8/17/2007 2:39:20 AM	
Ethylbenzene	ND	1.0		µg/L	1	8/17/2007 2:39:20 AM	
Xylenes, Total	ND	2.0		µg/L	1	8/17/2007 2:39:20 AM	
Surr: 4-Bromofluorobenzene	88.0	70.2-105		%REC	1	8/17/2007 2:39:20 AM	

**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

Page 1 of 1

**CHAIN-OF-CUSTODY RECORD**Client: **BALLES ENGR. / BP AMERICA**Address: **P.O. Box 87  
BFD, NM 87413**Phone #: **632-1199**Fax #: QA/QC Package:  
 Std  Level 4 

Other:

Project Name:

**CHAVEZ SC A #1**Project #: **310**

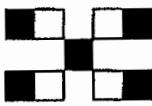
Project Manager:

**JCB**

Sampler:

**NV**

Sample Temperature:

**16****BTEx + MTBE + TPH (B021B)****BTEx + MTBE + TPH (Gasoline Only)****TPH Method B015B (Gas/Diesel)****EDB (Method 418.1)****EDC (Method 504.1)****8310 (PNA or PAH)****RCRA Metals****Arohns (F, Cl, NO<sub>2</sub>, NO<sub>x</sub>, PO<sub>4</sub>, SO<sub>4</sub>)****8081 Pesticides / PCBs (8082)****8260B (VOA)****8270 (Semi-VOA)****Air Bubbles or Headspace (Y or N)****HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**4901 Hawkins NE, Suite D  
Albuquerque, New Mexico 87109  
Tel. 505.345.3975 Fax 505.345.4107  
[www.hallenvironmental.com](http://www.hallenvironmental.com)**ANALYSIS REQUEST****BTEx + MTBE + TPH (B021B)****BTEx + MTBE + TPH (Gasoline Only)****TPH Method B015B (Gas/Diesel)****EDB (Method 418.1)****EDC (Method 504.1)****8310 (PNA or PAH)****RCRA Metals****Arohns (F, Cl, NO<sub>2</sub>, NO<sub>x</sub>, PO<sub>4</sub>, SO<sub>4</sub>)****8081 Pesticides / PCBs (8082)****8260B (VOA)****8270 (Semi-VOA)****Air Bubbles or Headspace (Y or N)**

Remarks:

Received By: [Signature]

Received By: [Signature]

Relinquished By: [Signature]

Relinquished By: [Signature]

Received By: [Signature]

Received By: [Signature]

# QA/QC SUMMARY REPORT

**Client:** Blagg Engineering  
**Project:** Chavez GC A #1

**Work Order:** 0708155

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: SW8021</b>									
Sample ID: SML RB		MBLK					Batch ID: R24795	Analysis Date:	8/16/2007 9:09:22 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: R24795	Analysis Date:	8/16/2007 11:09:32 AM
Benzene	20.13	µg/L	1.0	101	85.9	113			
Toluene	20.42	µg/L	1.0	102	86.4	113			
Ethylbenzene	20.40	µg/L	1.0	102	83.5	118			
Xylenes, Total	61.37	µg/L	2.0	102	83.4	122			
Sample ID: 100NG BTEX LCSD		LCSD					Batch ID: R24795	Analysis Date:	8/17/2007 3:39:25 AM
Benzene	18.68	µg/L	1.0	93.4	85.9	113	7.47	27	
Toluene	18.45	µg/L	1.0	92.2	86.4	113	10.1	19	
Ethylbenzene	18.87	µg/L	1.0	94.4	83.5	118	7.78	10	
Xylenes, Total	56.44	µg/L	2.0	94.1	83.4	122	8.37	13	

**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: 8/10/2017

Work Order Number 0708155

Received by ARS

Checklist completed by

Signature

8/10/07  
Date

Matrix

Carrier name Greyhound

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - Preservation labels on bottle and cap match?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Container/Temp Blank temperature?	4°	4° C ± 2 Acceptable		

COMMENTS:

If given sufficient time to cool.

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

**CHAVEZ GC A #1**

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

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

**Date :** September 19, 2007

**SAMPLER :** NJV

**Filename :** 09-19-07.WK4

**PROJECT MANAGER :** JCB

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	105.41	-	-	19.50	-	-	-	-	-
2	102.98	-	-	18.00	-	-	-	-	-
3	102.28	92.50	9.78	19.00	-	-	-	-	-
4	101.28	92.42	8.86	16.00	-	-	-	-	-
5	101.48	91.99	9.49	17.35	1025	7.00	1,200	23.1	4.00
6	102.55	92.24	10.31	17.50	1015	6.91	1,200	22.5	3.50
7	101.66	92.35	9.31	17.37	1105	6.92	4,100	23.3	4.00

**INSTRUMENT CALIBRATIONS =** 7.00    2,800

**DATE & TIME =** 09/17/07    0945

**NOTES :** Volume of water purged from well prior to sampling:  $V = \pi r^2 h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$ .  
(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 #5, #6, #7, all murky brown in appearance, hydrocarbon odor detected physically in MW #7 only, collected BTEX, anions, iron, pH, TDS samples from MW #5, #6, & #7.

---

Top of casing MW #1 ~ 2.90 ft., MW #2 ~ 2.50 ft., MW #3 ~ 2.50 ft., MW #4 ~ 2.60 ft.,  
MW #5 ~ 3.40 ft., MW #6 ~ 3.55 ft., MW #7 ~ 2.80 ft. above grade.

---

# Hall Environmental Analysis Laboratory, Inc.

Date: 02-Oct-07

CLIENT: Blagg Engineering  
 Lab Order: 0709289  
 Project: Chavez GC A #1  
 Lab ID: 0709289-01

Client Sample ID: MW #5  
 Collection Date: 9/19/2007 10:25:00 AM  
 Date Received: 9/21/2007  
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						
Benzene	ND	1.0		µg/L	1	9/28/2007 3:57:18 PM
Toluene	ND	1.0		µg/L	1	9/28/2007 3:57:18 PM
Ethylbenzene	ND	1.0		µg/L	1	9/28/2007 3:57:18 PM
Xylenes, Total	ND	2.0		µg/L	1	9/28/2007 3:57:18 PM
Surr: 4-Bromofluorobenzene	87.1	70.2-105		%REC	1	9/28/2007 3:57:18 PM
<b>EPA METHOD 300.0: ANIONS</b>						
Fluoride	0.63	0.10		mg/L	1	9/22/2007 9:36:43 AM
Chloride	19	0.10		mg/L	1	9/22/2007 9:36:43 AM
Nitrogen, Nitrite (As N)	ND	0.10	H	mg/L	1	9/22/2007 9:36:43 AM
Bromide	0.22	0.10		mg/L	1	9/22/2007 9:36:43 AM
Nitrogen, Nitrate (As N)	ND	0.10	H	mg/L	1	9/22/2007 9:36:43 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	9/22/2007 9:36:43 AM
Sulfate	410	5.0		mg/L	10	9/22/2007 9:54:08 AM
<b>FERROUS IRON</b>						
Ferrous Iron	0.38	0.10		mg/L	1	10/1/2007
<b>SM4500-H+B: PH</b>						
pH	7.23	0.1		pH units	1	9/24/2007
<b>SM 2540C: TDS</b>						
Total Dissolved Solids	1300	400		mg/L	1	9/21/2007

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

# Hall Environmental Analysis Laboratory, Inc.

Date: 02-Oct-07

**CLIENT:** Blagg Engineering  
**Lab Order:** 0709289  
**Project:** Chavez GC A #1  
**Lab ID:** 0709289-02

**Client Sample ID:** MW #6  
**Collection Date:** 9/19/2007 10:15:00 AM  
**Date Received:** 9/21/2007  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						
Benzene	ND	1.0		µg/L	1	9/28/2007 4:27:16 PM
Toluene	ND	1.0		µg/L	1	9/28/2007 4:27:16 PM
Ethylbenzene	ND	1.0		µg/L	1	9/28/2007 4:27:16 PM
Xylenes, Total	ND	2.0		µg/L	1	9/28/2007 4:27:16 PM
Surr: 4-Bromofluorobenzene	83.8	70.2-105		%REC	1	9/28/2007 4:27:16 PM
Analyst: NSB						
<b>EPA METHOD 300.0: ANIONS</b>						
Fluoride	0.44	0.10		mg/L	1	9/22/2007 10:11:32 AM
Chloride	21	0.10		mg/L	1	9/22/2007 10:11:32 AM
Nitrogen, Nitrile (As N)	ND	0.10	H	mg/L	1	9/22/2007 10:11:32 AM
Bromide	0.15	0.10		mg/L	1	9/22/2007 10:11:32 AM
Nitrogen, Nitrate (As N)	ND	0.10	H	mg/L	1	9/22/2007 10:11:32 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	9/22/2007 10:11:32 AM
Sulfate	270	5.0		mg/L	10	9/22/2007 11:03:45 AM
Analyst: KS						
<b>FERROUS IRON</b>						
Ferrous Iron	ND	0.10		mg/L	1	10/1/2007
Analyst: KS						
<b>SM4500-H+B: PH</b>						
pH	7.02	0.1		pH units	1	9/24/2007
Analyst: SMP						
<b>SM 2540C: TDS</b>						
Total Dissolved Solids	1000	200		mg/L	1	9/21/2007
Analyst: TAF						

**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

# Hall Environmental Analysis Laboratory, Inc.

Date: 02-Oct-07

**CLIENT:** Blagg Engineering  
**Lab Order:** 0709289  
**Project:** Chavez GC A #1  
**Lab ID:** 0709289-03

**Client Sample ID:** MW #7  
**Collection Date:** 9/19/2007 11:05:00 AM  
**Date Received:** 9/21/2007  
**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						
Benzene	ND	1.0		µg/L	1	9/28/2007 4:57:17 PM
Toluene	ND	1.0		µg/L	1	9/28/2007 4:57:17 PM
Ethylbenzene	6.3	1.0		µg/L	1	9/28/2007 4:57:17 PM
Xylenes, Total	130	2.0		µg/L	1	9/28/2007 4:57:17 PM
Surr: 4-Bromofluorobenzene	104	70.2-105		%REC	1	9/28/2007 4:57:17 PM
<b>EPA METHOD 300.0: ANIONS</b>						
Fluoride	2.1	0.10		mg/L	1	9/22/2007 11:21:09 AM
Chloride	410	2.0		mg/L	20	9/27/2007 12:37:03 PM
Nitrogen, Nitrite (As N)	ND	1.0	H	mg/L	10	9/22/2007 11:38:34 AM
Bromide	5.6	0.10		mg/L	1	9/22/2007 11:21:09 AM
Nitrogen, Nitrate (As N)	12	0.10	H	mg/L	1	9/22/2007 11:21:09 AM
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	9/22/2007 11:38:34 AM
Sulfate	3400	50		mg/L	100	9/28/2007 9:33:37 PM
<b>FERROUS IRON</b>						
Ferrous Iron	ND	0.10		mg/L	1	10/1/2007
<b>SM4500-H+B: PH</b>						
pH	7.11	0.1		pH units	1	9/24/2007
<b>SM 2540C: TDS</b>						
Total Dissolved Solids	6100	20		mg/L	1	9/21/2007

**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

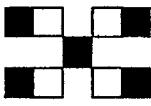
B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 MCL Maximum Contaminant Level  
 RL Reporting Limit

## CHAIN-OF-CUSTODY RECORD

Address:	P. O. BOX 87	Project #:	CHAVETZ GC A #1	QA/QC Package: <input checked="" type="checkbox"/> Std <input type="checkbox"/> Level 4			
Client:	BIGGE ENGR./BP America	Project Manager:	JCB	Other:			
Phone #:	632-1199	Sampler:	N/A				
Fax #:		Sample Temperature:	73				
Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative	HEAL No.	Remarks:
9/19/07	1025	WATER	MW #5	2-40ml	/	-1	
"	"	"	"	1-125ml	/	-1	
"	"	"	"	1-500ml	/	-1	
9/19/07	1015	WATER	MW #6	2-40ml	/	-2	
"	"	"	"	1-125ml	/	-2	
"	"	"	"	1-500ml	/	-2	
9/19/07	1105	WATER	MW #7	2-40ml	/	-3	
"	"	"	"	1-125ml	/	-3	
"	"	"	"	1-500ml	/	-3	
Date:	9/19/07 1545	Relinquished By: (Signature)	Received By: (Signature)				
Date:		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  
www.hallenvironmental.com

Air Bubbles or Headspace (Y or N)



## ANALYSIS REQUEST

AR	✓
TO5	✓
FE <sub>2+</sub>	✓
8270 (Semi-VOA)	
8260B (VOA)	
8081 Pesticides/PCBs (8082)	
Atrides (F, Cl, NO <sub>2</sub> , NO <sub>x</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	
RCRA 8 Metals	
B310 (PNA or PAH)	
EDC (Method 8021)	
EDB (Method 504.1)	
TPH (Method 418.1)	
TPH Method B015B (Gasoline Only)	
BTX + MTBE + TMB-5 (8021G)	
BTX + MTBE + TMB-5 (Gasoline Only)	
TPH Method B015B (Gas/Diesel)	
EDC (Method 504.1)	
RCRA 8 Metals	
B310 (PNA or PAH)	
EDC (Method 8021)	
EDB (Method 504.1)	
TPH (Method 418.1)	
TPH Method B015B (Gasoline Only)	
BTX + MTBE + TMB-5 (8021G)	

Remarks:

9/19/07 14:15

## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: Chavez GC A#1

Work Order: 0709289

Analyte	Result	Units	POL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: E300</b>									
Sample ID: MBLK		MBLK							
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		MBLK							
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		MBLK							
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		MBLK							
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS ST300-07038		LCS							
Fluoride	0.4835	mg/L	0.10	96.7	90	110			
Chloride	4.993	mg/L	0.10	99.9	90	110			
Nitrogen, Nitrite (As N)	0.9295	mg/L	0.10	93.0	90	110			
Bromide	2.591	mg/L	0.10	104	90	110			
Nitrogen, Nitrate (As N)	2.590	mg/L	0.10	104	90	110			
Phosphorus, Orthophosphate (As P)	5.342	mg/L	0.50	107	90	110			
Sulfate	10.35	mg/L	0.50	103	90	110			
Sample ID: LCS ST300-07038		LCS							
Fluoride	0.5198	mg/L	0.10	104	90	110			
Chloride	5.048	mg/L	0.10	101	90	110			
Nitrogen, Nitrite (As N)	0.9611	mg/L	0.10	96.1	90	110			

## 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

**QA/QC SUMMARY REPORT**

**Client:** Blagg Engineering  
**Project:** Chavez GC A #1                    **Work Order:** 0709289

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: E300</b>									
Sample ID: LCS ST300-07038		LCS					Batch ID: R25281		Analysis Date: 9/22/2007 7:52:16 AM
Bromide	2.627	mg/L	0.10	105	90	110			
Nitrogen, Nitrate (As N)	2.595	mg/L	0.10	104	90	110			
Phosphorus, Orthophosphate (As P)	5.427	mg/L	0.50	109	90	110			
Sulfate	10.51	mg/L	0.50	105	90	110			
Sample ID: LCS ST300-07038		LCS					Batch ID: R25359		Analysis Date: 9/27/2007 3:37:21 AM
Fluoride	0.5043	mg/L	0.10	101	90	110			
Chloride	5.069	mg/L	0.10	101	90	110			
Nitrogen, Nitrite (As N)	0.9621	mg/L	0.10	96.2	90	110			
Bromide	2.647	mg/L	0.10	106	90	110			
Nitrogen, Nitrate (As N)	2.628	mg/L	0.10	105	90	110			
Phosphorus, Orthophosphate (As P)	5.428	mg/L	0.50	109	90	110			
Sulfate	10.47	mg/L	0.50	105	90	110			
Sample ID: LCS ST300-07038		LCS					Batch ID: R25394		Analysis Date: 9/28/2007 4:37:40 PM
Fluoride	0.5194	mg/L	0.10	104	90	110			
Chloride	5.066	mg/L	0.10	101	90	110			
Nitrogen, Nitrite (As N)	0.9285	mg/L	0.10	92.9	90	110			
Bromide	2.632	mg/L	0.10	105	90	110			
Nitrogen, Nitrate (As N)	2.601	mg/L	0.10	104	90	110			
Phosphorus, Orthophosphate (As P)	5.318	mg/L	0.50	106	90	110			
Sulfate	10.45	mg/L	0.50	105	90	110			
<b>Method: SW3500</b>									
Sample ID: 0709289-02C MSD		MSD					Batch ID: R25391		Analysis Date: 10/1/2007
Ferrous Iron	0.7500	mg/L	0.10	75.0	50	150	5.90	20	
Sample ID: 0709289-02C MS		MS					Batch ID: R25391		Analysis Date: 10/1/2007
Ferrous Iron	0.7070	mg/L	0.10	70.7	50	150			
<b>Method: SW8021</b>									
Sample ID: 5ML RB		MBLK					Batch ID: R25381		Analysis Date: 9/28/2007 8:53:47 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: R25381		Analysis Date: 9/28/2007 10:54:15 AM
Benzene	20.62	µg/L	1.0	103	85.9	113			
Toluene	20.93	µg/L	1.0	104	86.4	113			
Ethylbenzene	20.92	µg/L	1.0	105	83.5	118			
Xylenes, Total	63.02	µg/L	2.0	105	83.4	122			

**Qualifiers:**

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- H Holding time for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

## QA/QC SUMMARY REPORT

**Client:** Blagg Engineering  
**Project:** Chavez GC A #1

**Work Order:** 0109289

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E160.1									
Sample ID: MBLK		mg/L							
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS		LCS							
Total Dissolved Solids	1018	mg/L	20	100	80	120			

**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

Page 3

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name BLAGG

Date and Time Received: 9/21/2007

Work Order Number 0709289

Received by AT

Checklist completed by Clare Shan

Date 9/21/07

Matrix

Carrier name UPS

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - Preservation labels on bottle and cap match?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Container/Temp Blank temperature?	<u>23°</u>	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

**CHAVEZ GC A #1**

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

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

**Date :** November 20, 2007

**SAMPLER :** NJ V

**Filename :** 11-20-07.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	105.41	-	-	19.50	-	-	-	-	-
2	102.98	-	-	18.00	-	-	-	-	-
3	102.28	91.35	10.93	19.00	-	-	-	-	-
4	101.28	91.39	9.89	16.00	-	-	-	-	-
5	101.48	90.47	11.01	17.35	1315	7.28	1,200	18.5	3.00
6	102.55	90.71	11.84	17.50	1325	7.06	1,300	17.4	2.75
7	101.66	91.32	10.34	17.37	1415	7.19	4,000	16.9	3.50

**INSTRUMENT CALIBRATIONS =** 7.00 2,800

**DATE & TIME =** 11/20/07 1100

**NOTES :** Volume of water purged from well prior to sampling:  $V = \pi r^2 h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$ .  
(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 # 5 , # 6 , # 7 , all murky brown in appearance , slight hydrocarbon odor detected physically in MW # 7 only , collected BTEX samples from MW # 5 , # 6 , & # 7 only .  
# 6 , & # 7 .

Top of casing MW # 1 ~ 2.90 ft. , MW # 2 ~ 2.50 ft. , MW # 3 ~ 2.50 ft. , MW # 4 ~ 2.60 ft. ,  
MW # 5 ~ 3.40 ft. , MW # 6 ~ 3.55 ft. , MW # 7 ~ 2.80 ft. above grade .

**Hall Environmental Analysis Laboratory, Inc.**

Date: 30-Nov-07

<b>CLIENT:</b>	Blagg Engineering	<b>Lab Order:</b>	0711368
<b>Project:</b>	Chavez GC A #1		

<b>Lab ID:</b>	0711368-01	<b>Collection Date:</b>	11/20/2007 1:15:00 PM
----------------	------------	-------------------------	-----------------------

<b>Client Sample ID:</b>	MW #5	<b>Matrix:</b>	AQUEOUS
--------------------------	-------	----------------	---------

<b>Analyses</b>	<b>Result</b>	<b>PQL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>	<b>Analyst:</b>
<b>EPA METHOD 8021B: VOLATILES</b>							NSB
Benzene	ND	1.0		µg/L	1	11/29/2007 3:46:49 AM	
Toluene	ND	1.0		µg/L	1	11/29/2007 3:46:49 AM	
Ethylbenzene	ND	1.0		µg/L	1	11/29/2007 3:46:49 AM	
Xylenes, Total	ND	2.0		µg/L	1	11/29/2007 3:46:49 AM	
Sur: 4-Bromofluorobenzene	83.1	70.2-105		%REC	1	11/29/2007 3:46:49 AM	

<b>Lab ID:</b>	0711368-02	<b>Collection Date:</b>	11/20/2007 1:25:00 PM
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<b>Client Sample ID:</b>	MW #6	<b>Matrix:</b>	AQUEOUS
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<b>Analyses</b>	<b>Result</b>	<b>PQL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>	<b>Analyst:</b>
<b>EPA METHOD 8021B: VOLATILES</b>							NSB
Benzene	ND	1.0		µg/L	1	11/29/2007 4:16:47 AM	
Toluene	ND	1.0		µg/L	1	11/29/2007 4:16:47 AM	
Ethylbenzene	ND	1.0		µg/L	1	11/29/2007 4:16:47 AM	
Xylenes, Total	ND	2.0		µg/L	1	11/29/2007 4:16:47 AM	
Sur: 4-Bromofluorobenzene	79.0	70.2-105		%REC	1	11/29/2007 4:16:47 AM	

<b>Lab ID:</b>	0711368-03	<b>Collection Date:</b>	11/20/2007 2:15:00 PM
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<b>Client Sample ID:</b>	MW #7	<b>Matrix:</b>	AQUEOUS
--------------------------	-------	----------------	---------

<b>Analyses</b>	<b>Result</b>	<b>PQL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>	<b>Analyst:</b>
<b>EPA METHOD 8021B: VOLATILES</b>							NSB
Benzene	ND	1.0		µg/L	1	11/29/2007 4:46:47 AM	
Toluene	ND	1.0		µg/L	1	11/29/2007 4:46:47 AM	
Ethylbenzene	9.3	1.0		µg/L	1	11/29/2007 4:46:47 AM	
Xylenes, Total	74	2.0		µg/L	1	11/29/2007 4:46:47 AM	
Sur: 4-Bromofluorobenzene	100	70.2-105		%REC	1	11/29/2007 4:46:47 AM	

**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-OFF-CUSTODY RECORD

Client: Biggs Engr. / BP America

Project Name:

CHAVEZ GC A #1

Address: P.O. Box 87

BFD. NM 87413

Project #: MW

Project Manager: JCB

Phone #: 632-1199

Fax #:

Sampler: NV

Sample Temperature: 2 -

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative	HEAL No.	Air Bubbles or Headspace (Y or N)
<u>11/26/07</u>	<u>1315</u>	<u>WATER</u>	<u>MW #5</u>	<u>2- 40ml</u>	<u>/</u>	<u>-1</u>	<u>/</u>
<u>11/26/07</u>	<u>1325</u>	<u>WATER</u>	<u>MW #6</u>	<u>2-40ml</u>	<u>/</u>	<u>-2</u>	<u>/</u>
<u>11/26/07</u>	<u>1415</u>	<u>WATER</u>	<u>MW #7</u>	<u>2-40ml</u>	<u>/</u>	<u>-3</u>	<u>/</u>

Remarks: BTX + MTBE + TPH (Gasoline Only) (8021B)

Received By: (Signature) JCB

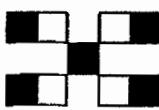
Date: 11/26/07 Time: 1600 Relinquished By: (Signature) Biggs

Received By: (Signature) JCB

Date: 11/26/07 Time: 1600 Relinquished By: (Signature) Biggs

## HALL ENVIRONMENTAL ANALYSIS LABORATORY

4801 Hawkins NE, Suite D  
Albuquerque, New Mexico 87109  
Tel. 505.345.3975 Fax 505.345.4107  
[www.hallenvironmental.com](http://www.hallenvironmental.com)



## ANALYSIS REQUEST

<input type="checkbox"/>	QA/GC Package:
<input type="checkbox"/>	Std <input type="checkbox"/> Level 4 <input type="checkbox"/>
<input type="checkbox"/>	Other:
<input type="checkbox"/>	Project Name:
<input type="checkbox"/>	Project #: <u>MW</u>
<input type="checkbox"/>	Project Manager: <u>JCB</u>
<input type="checkbox"/>	Phone #: <u>632-1199</u>
<input type="checkbox"/>	Fax #: <u></u>
<input type="checkbox"/>	Sampler: <u>NV</u>
<input type="checkbox"/>	Sample Temperature: <u>2 -</u>
<input type="checkbox"/>	BTX + MTBE + TPH (Gasoline Only) (8021B)
<input type="checkbox"/>	TPH Method 8015B (Gas/Diesel)
<input type="checkbox"/>	EDC (Method 418.1)
<input type="checkbox"/>	EDB (Method 504.1)
<input type="checkbox"/>	RCRA 8 Metals
<input type="checkbox"/>	Aions (F, Cl, NO <sub>2</sub> , NO <sub>3</sub> , PO <sub>4</sub> , SO <sub>4</sub> )
<input type="checkbox"/>	8081 Pesticides / PCB's (8082)
<input type="checkbox"/>	8260B (VOA)
<input type="checkbox"/>	8270 (Semi-VOA)

## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: Chavez GC A #1

Work Order: 0711368

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Method: EPA Method 8021B: Volatiles

Sample ID: 5ML RB MBLK Batch ID: R26267 Analysis Date: 11/28/2007 8:42:41 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: R26267 Analysis Date: 11/29/2007 2:16:42 AM

Benzene	20.23	µg/L	1.0	101	85.9	113
Toluene	19.91	µg/L	1.0	99.6	86.4	113
Ethylbenzene	19.97	µg/L	1.0	99.8	83.5	118
Xylenes, Total	59.65	µg/L	2.0	99.4	83.4	122

## Qualifiers:

B 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**

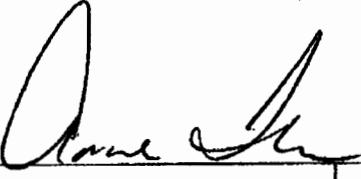
Date Received:

11/21/2007

Work Order Number 0711368

Received by: AT

Checklist completed by:

  
Signature

Sample ID labels checked by

  
Initials

Matrix

Carrier name UPS

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

COMMENTS:

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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 #:** 156386

**CHAVEZ GC A #1**

**LABORATORY (S) USED:** PACE ANALYTICAL

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

**Date :** April 3, 2008

**SAMPLER :** NJV

**Filename :** 04-03-08.WK4

**PROJECT MANAGER :** JCB

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	105.41	-	-	19.50	-	-	-	-	-
2	102.98	-	-	18.00	-	-	-	-	-
3	102.28	91.38	10.90	19.00	-	-	-	-	-
4	101.28	91.85	9.43	16.00	-	-	-	-	-
5	101.48	90.44	11.04	17.35	1100	7.12	1,200	14.4	3.00
6	102.55	90.86	11.69	17.50	1130	6.85	1,500	12.7	3.00
7	101.66	91.37	10.29	17.37	1200	6.99	3,800	11.1	3.50

**INSTRUMENT CALIBRATIONS =** 4.01/7.00/10.00 2,800

**DATE & TIME =** 04/03/08 1030

**NOTES :** Volume of water purged from well prior to sampling:  $V = \pi r^2 h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$ .  
(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 # 5 , # 6 , # 7 , all murky brown in appearance , slight hydrocarbon odor detected physically in MW # 7 only , collected sample for BTEX per US EPA Method 8260 from MW # 5 , # 6 , & # 7 only .

Top of casing MW # 1 ~ 2.90 ft. , MW # 2 ~ 2.50 ft. , MW # 3 ~ 2.50 ft. , MW # 4 ~ 2.60 ft. ,  
MW # 5 ~ 3.40 ft. , MW # 6 ~ 3.55 ft. , MW # 7 ~ 2.80 ft. above grade .

## ANALYTICAL RESULTS

Project: CHAVEZ GC A #1

Pace Project No.: 6038270

Sample: MW #5	Lab ID: 6038270001	Collected: 04/03/08 11:00	Received: 04/08/08 08:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		04/11/08 18:11	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		04/11/08 18:11	100-41-4	
Toluene	ND ug/L		1.0	1		04/11/08 18:11	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		04/11/08 18:11	1330-20-7	
Dibromofluoromethane (S)	98 %		85-114	1		04/11/08 18:11	1868-53-7	
Toluene-d8 (S)	100 %		82-114	1		04/11/08 18:11	2037-26-5	
4-Bromofluorobenzene (S)	95 %		85-119	1		04/11/08 18:11	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		81-118	1		04/11/08 18:11	17060-07-0	
Preservation pH	1.0		1.0	1		04/11/08 18:11		

Date: 04/15/2008 05:50 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CHAVEZ GC A #1  
 Pace Project No.: 6038270

Sample: MW #8	Lab ID: 6038270002	Collected: 04/03/08 11:30	Received: 04/08/08 08:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		04/11/08 18:27	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		04/11/08 18:27	100-41-4	
Toluene	ND ug/L		1.0	1		04/11/08 18:27	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		04/11/08 18:27	1330-20-7	
Dibromofluoromethane (S)	99 %		85-114	1		04/11/08 18:27	1868-53-7	
Toluene-d8 (S)	101 %		82-114	1		04/11/08 18:27	2037-28-5	
4-Bromofluorobenzene (S)	94 %		85-119	1		04/11/08 18:27	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		81-118	1		04/11/08 18:27	17060-07-0	
Preservation pH	1.0		1.0	1		04/11/08 18:27		

Date: 04/15/2008 05:50 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CHAVEZ GC A#1

Pace Project No.: 6038270

Sample: MW #7	Lab ID: 6038270003	Collected: 04/03/08 12:00	Received: 04/08/08 08:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		04/11/08 18:44	71-43-2	
Ethylbenzene	3.5 ug/L		1.0	1		04/11/08 18:44	100-41-4	
Toluene	ND ug/L		1.0	1		04/11/08 18:44	108-88-3	
Xylene (Total)	28.4 ug/L		3.0	1		04/11/08 18:44	1330-20-7	
Dibromofluoromethane (S)	99 %		85-114	1		04/11/08 18:44	1868-53-7	
Toluene-d8 (S)	102 %		82-114	1		04/11/08 18:44	2037-26-5	
4-Bromofluorobenzene (S)	102 %		85-119	1		04/11/08 18:44	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		81-118	1		04/11/08 18:44	17060-07-0	
Preservation pH	1.0			1.0	1	04/11/08 18:44		

Date: 04/15/2008 05:50 PM

## REPORT OF LABORATORY ANALYSIS

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156386

## Chain of Custody Record

Project Name:

CHAVEZ GC #1  
 BP BU/AR Region/Envos Segment: JAN JUN 1 SC SOUTH  
 State or Lead Regulatory Agency: AMOCD  
 Requested Due Date (mm/dd/yy): 4/17/08

Page 1 of 1

On-site Time:	10:05	Temp:	55°F
Off-site Time:	12:30	Temp:	59°F
Sky Conditions:	SW-NW TO PARTLY CLOUDY		
Meteorological Events:			
Wind Speed:	0 - 5 (GUST >15)	Direction:	WEST

Lab Name: <u>BLAINE ANALYTICAL</u>	BP/AR Facility No.: <u>WR192509</u>	Consultant/Contractor: <u>BLAINE ANALYTICAL</u>	
Address: <u>9608 LOVET BLVD</u>	BP/AR Facility Address: <u>110 N. FOURTH ST.</u>	Address: <u>110 N. FOURTH ST.</u>	
Site Lat/Long: <u>37.671470, -122.194532</u>	California Global ID No.: <u>B1000151540</u>	Site Lat/Long: <u>37.671470, -122.194532</u>	
Lab PM: <u>MARY TAYE</u>	Envos Project No.: <u>41808737</u>	Consultant/Contractor Project No.: <u>41808737</u>	
Tele/Fax: <u>(931)599-5663</u>	Provision or RCOP (circle one)	Consultant/Contractor PM: <u>NEILSON VELEZ</u>	
BP/AR PM Contact: <u>MIRE YELLEN, PG</u>	Phase/WBS:	Tele/Fax: <u>(605) 632-1199 FAX: (605) 632-3988</u>	
Address: <u>5501 WESTLAKE PARK RD.</u>	Sub Phase/Task:	Report Type & QC Level: <u>STANDARD</u>	
<u>RM 28144B Hwy 70</u>	Cost Element: <u>C1</u>	E-mail EDD To: <u>b7a.99 - NY @ Yahoo . com</u>	
Tele/Fax: <u>(281)366-7485</u>	Preservative:	Invoice to: Consultant or BP of Atlantic Richfield Co. (circle one)	
Lab Bottle Order No.: <u></u>	Matrix:	Requested Analysis: <u>(a-38270)</u>	
Item No.	Sample Description	Laboratory No.	Sample Point Lat/Long and Comments
	Date		
1	MW # 5	4/13/08	Air
2	MW # 6	4/13/08	Water/Liquid
3	MW # 7	4/13/08	Soil/Solid
4			
5			
6			
7			
8			
9			
10			
Sampler's Name: <u>NEILSON VELEZ</u>	Relinquished By / Affiliation: <u>BLAINE ANALYTICAL</u>	Date: <u>4/17/08</u>	Time: <u>15:30</u>
Sampler's Company: <u>BLAINE ANALYTICAL, INC.</u>			
Shipment Date: <u>APRIL 7, 2008</u>			
Shipment Method: <u>FED EX OVERNITE</u>			
Shipment Tracking No.: <u></u>			
Special Instructions: <u>REPORT BTX CONCENTRATIONS ONLY.</u>			
Custody Seals In Place Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temp Blank Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Cooler Temperature on Receipt <u>34°F</u>	Trip Blank Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
LABORATORY			

## PROJECT NARRATIVE

Project: CHAVEZ GC A#1  
Pace Project No.: 6038270

---

**Method:** EPA 8260  
**Description:** 8260 MSV UST, Water  
**Client:** BP-Blagg Engineering  
**Date:** April 15, 2008

**General Information:**

3 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

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

**Initial Calibrations (including MS Tune as applicable):**

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

**Continuing Calibration:**

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

**Internal Standards:**

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

**Surrogates:**

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

**Method Blank:**

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

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

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

**Duplicate Sample:**

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

**Additional Comments:**

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

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: CHAVEZ GC A #1

Pace Project No.: 6038270

QC Batch:	MSV/13958	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	6038270001, 6038270002, 6038270003		

METHOD BLANK: 311255

Associated Lab Samples: 6038270001, 6038270002, 6038270003

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)	%	99	81-118	
4-Bromofluorobenzene (S)	%	98	85-119	
Dibromofluoromethane (S)	%	101	85-114	
Toluene-d8 (S)	%	100	82-114	

LABORATORY CONTROL SAMPLE: 311256

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	9.2	92	87-117	
Ethylbenzene	ug/L	10	9.4	94	84-123	
Toluene	ug/L	10	9.6	96	81-124	
Xylene (Total)	ug/L	30	27.3	91	83-125	
1,2-Dichloroethane-d4 (S)	%			105	81-118	
4-Bromofluorobenzene (S)	%			98	85-119	
Dibromofluoromethane (S)	%			98	85-114	
Toluene-d8 (S)	%			104	82-114	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 311257 311258

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max		Qual
		6038059018	Result	Spike Conc.	Spike Conc.				RPD	RPD	
Benzene	ug/L	ND	10	10	7.7	8.5	73	81	30-162	10	22
Ethylbenzene	ug/L	8.2	10	10	15.7	16.5	75	83	37-154	5	18
Toluene	ug/L	ND	10	10	8.2	8.6	76	80	49-143	5	20
Xylene (Total)	ug/L	22.6	30	30	45.2	46.7	75	80	32-154	3	15
1,2-Dichloroethane-d4 (S)	%						101	102	81-118		
4-Bromofluorobenzene (S)	%						91	96	85-119		
Dibromofluoromethane (S)	%						97	101	85-114		
Toluene-d8 (S)	%						105	103	82-114		
Preservation pH		1.0			1.0	1.0				0	

Date: 04/15/2008 05:50 PM

**REPORT OF LABORATORY ANALYSIS**

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## QUALIFIERS

Project: CHAVEZ GC A #1

Pace Project No.: 6038270

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### 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.



### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CHAVEZ GCA #1  
 Pace Project No.: 6038270

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
6038270001	MW #5	EPA 8260	MSV/13958		
6038270002	MW #6	EPA 8260	MSV/13958		
6038270003	MW #7	EPA 8260	MSV/13958		

Date: 04/15/2008 05:50 PM

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: CHAVEZ GC A #1

Pace Project No.: 6038270

Lab ID	Sample ID	Method	Analysts	Analytes Reported
6038270001	MW #5	EPA 8260	JKL	9
6038270002	MW #6	EPA 8260	JKL	9
6038270003	MW #7	EPA 8260	JKL	9

### REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: CHAVEZ GCA #1

Pace Project No.: 6038270

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6038270001	MW #5	Water	04/03/08 11:00	04/08/08 08:45
6038270002	MW #6	Water	04/03/08 11:30	04/08/08 08:45
6038270003	MW #7	Water	04/03/08 12:00	04/08/08 08:45

## REPORT OF LABORATORY ANALYSIS

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## Sample Condition Upon Receipt

Client Name: BP JRS Project # Cea38270

Courier:  FedEx  UPS  USPS  Client  Commercial  Pace Other \_\_\_\_\_  
Tracking #: 4994348715

Optional	
Proj. Due Date:	4/13/03
Proj. Name:	
Chavez GC A#1	

Custody Seal on Cooler/Box Present:  Yes  No Seals intact:  Yes  NoPacking Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_Thermometer Used T-168  T-169Type of Ice:  Wet  Blue  None  Samples on ice, cooling process has begun

Cooler Temperature 36

Biological Tissue Is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Date and initials of person examining  
contents: 4/13/03  
Vas. vco

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	LST	
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>6</u> Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16. 3 TBS sent w/ multiple projects
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):	B 3/17-2-3	<u>6</u>

## Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution:  
\_\_\_\_\_  
\_\_\_\_\_Project Manager Review: MW 4/9/03 Date: \_\_\_\_\_

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

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

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

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

**CHAVEZ GC A #1**

**LABORATORY (S) USED:** PACE ANALYTICAL

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

**Date :** June 10, 2008

**SAMPLER :** NJ V

**Filename :** 06-10-08.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	105.41	-	-	19.50	-	-	-	-	-
2	102.98	-	-	18.00	-	-	-	-	-
3	102.28	93.33	8.95	19.00	-	-	-	-	-
4	101.28	93.79	7.49	16.00	-	-	-	-	-
5	101.48	95.84	5.64	17.35	0940	7.40	2,000	17.3	5.75
6	102.55	95.00	7.55	17.50	1010	7.08	1,000	16.6	5.00
7	101.66	93.97	7.69	17.37	1055	7.26	3,500	21.5	4.75

**INSTRUMENT CALIBRATIONS =**

4.01/7.00/10.00	2,800
-----------------	-------

**DATE & TIME =**

06/09/08	0700
----------	------

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

Ideally a minimum of three (3) wellbore volumes:

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

Comments or note well diameter if not standard 2".

Excellent recovery in MW # 5 , # 6 , # 7 , all murky brown in appearance , slight hydrocarbon odor detected physically in MW # 7 only , collected sample for BTEX per US EPA Method 8260 from MW # 5 , # 6 , & # 7 only . Collected duplicate sample from MW # 7 and labeled MW # 1X on chain of custody record ( time - 0915 ).

Top of casing MW # 1 ~ 2.90 ft. , MW # 2 ~ 2.50 ft. , MW # 3 ~ 2.50 ft. , MW # 4 ~ 2.60 ft. , MW # 5 ~ 3.40 ft. , MW # 6 ~ 3.55 ft. , MW # 7 ~ 2.80 ft. above grade .

on-site	9:12	temp	68
off-site	11:20	temp	83
sky cond.	sunny		
wind speed	0-10	direct.	north

## ANALYTICAL RESULTS

Project: CHAVEZ GC A 1

Pace Project No.: 6041661

Sample: MW #5	Lab ID: 6041661001	Collected: 06/10/08 07:40	Received: 06/11/08 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		06/13/08 05:09	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		06/13/08 05:09	100-41-4	
Toluene	ND ug/L		1.0	1		06/13/08 05:09	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		06/13/08 05:09	1330-20-7	
Dibromofluoromethane (S)	111 %		85-114	1		06/13/08 05:09	1868-53-7	
Toluene-d8 (S)	97 %		82-114	1		06/13/08 05:09	2037-26-5	
4-Bromofluorobenzene (S)	101 %		85-119	1		06/13/08 05:09	460-00-4	
1,2-Dichloroethane-d4 (S)	121 %		81-118	1		06/13/08 05:09	17060-07-0	S3
Preservation pH	1.0		1.0	1		06/13/08 05:09		

Date: 06/23/2008 03:06 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CHAVEZ GC A 1

Pace Project No.: 6041661

Sample: MW #6	Lab ID: 6041661002	Collected: 06/10/08 10:10	Received: 06/11/08 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		06/13/08 06:02	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		06/13/08 06:02	100-41-4	
Toluene	ND ug/L		1.0	1		06/13/08 06:02	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		06/13/08 06:02	1330-20-7	
Dibromofluoromethane (S)	99 %		85-114	1		06/13/08 06:02	1868-53-7	
Toluene-d8 (S)	103 %		82-114	1		06/13/08 06:02	2037-26-5	
4-Bromofluorobenzene (S)	98 %		85-119	1		06/13/08 06:02	460-00-4	
1,2-Dichloroethane-d4 (S)	99 %		81-118	1		06/13/08 06:02	17060-07-0	
Preservation pH	1.0		1.0	1		06/13/08 06:02		

Date: 06/23/2008 03:06 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CHAVEZ GC A 1

Pace Project No.: 6041661

Sample: MW #7	Lab ID: 6041661003	Collected: 06/10/08 10:55	Received: 06/11/08 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		06/13/08 06:19	71-43-2	
Ethylbenzene	1.9 ug/L		1.0	1		06/13/08 06:19	100-41-4	
Toluene	ND ug/L		1.0	1		06/13/08 06:19	108-88-3	
Xylene (Total)	10.6 ug/L		3.0	1		06/13/08 06:19	1330-20-7	
Dibromofluoromethane (S)	102 %		85-114	1		06/13/08 06:19	1868-53-7	
Toluene-d8 (S)	109 %		82-114	1		06/13/08 06:19	2037-26-5	
4-Bromofluorobenzene (S)	110 %		85-119	1		06/13/08 06:19	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		81-118	1		06/13/08 06:19	17060-07-0	
Preservation pH	1.0		1.0	1		06/13/08 06:19		

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## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CHAVEZ GCA 1

Pace Project No.: 6041661

Sample: MW #1X	Lab ID: 6041661004	Collected: 06/10/08 09:15	Received: 06/11/08 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		06/13/08 06:36	71-43-2	
Ethylbenzene	2.1 ug/L		1.0	1		06/13/08 06:36	100-41-4	
Toluene	ND ug/L		1.0	1		06/13/08 06:36	108-88-3	
Xylene (Total)	10.9 ug/L		3.0	1		06/13/08 06:36	1330-20-7	
Dibromofluoromethane (S)	102 %		85-114	1		06/13/08 06:36	1868-53-7	
Toluene-d8 (S)	110 %		82-114	1		06/13/08 06:36	2037-26-5	
4-Bromofluorobenzene (S)	109 %		85-119	1		06/13/08 06:36	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		81-118	1		06/13/08 06:36	17060-07-0	
Preservation pH	1.0		1.0	1		06/13/08 06:36		

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## Chain of Custody Record

CHAVEZ GCA 1

Project Name:

BP BUAR Region/Envos Segment:

SJOC SOUTH

State or Lead Regulatory Agency:

NMOC

Requested Due Date (mm/dd/yy):

6/23/08



Lab Name: Pace Analytical Services, Inc.	BP/AR Facility No.:
Address: 9609 Laird Blvd	BP/AR Facility Address:
Lanier, KS 66219	Site Lat/Long:
Lab P.M.: MJ Walls	California Global ID No.:
Tele/Fax: 913-563-1401	Envos Project No.: 0019L-00011
BP/AR EMB: Mike Whelan	Provision or OOC (circle one)
Address: 501 Westlake Park Blvd.	Phase/WBS:
Rm28, 144B Houston, TX 77079	Sub Phase/Task:
Tele: (281) 366-7485	Cost Element:
Lab Bottle Order No: / 7703	Matrix

On-site Time: 8:55	Temp: 65°F
Off-sites Time: 11:20	Temp: 83°F
Sky Conditions: Sunny	
Meteorological Events:	
Wind Speed: 0 - 10	Direction N/NE

Item No.	Sample Description	Date	Time	Matrix	Soil/Solid	Water/Liquid	Air	Laboratory No.	No. of Contaminants	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Methanol	BTEX (8260)	Requested Analysis		Comments	Sample Point Lat/Long and	Comments	
																Accepted By / Affiliation	Date	Time			
1	MW #5	0940			/	/	/	001	3	/									3(DC-9H)		
2	MW #6	1010			/	/	/	002	3	/											
3	MW #7	1035			/	/	/	003	3	/											
4	MW #1X	0945			/	/	/	004	3	/											
5								005													
6																					
7																					
8																					
9																					
10																					
Sampler's Name: NELSON	VELEZ																				
Sampler's Company: BLAGGE ANALYTICALS																					
Shipment Date: JUNE 10, 2008																					
Shipment Method: FED EX																					
Shipment Tracking No: 4994348682																					
Special Instructions: REPORT BTEX constituents only.																					
Custody Seals In Place: Yes / No																					
Temp Blank: Yes / No																					
Cooler Temp on Receipt: 51.2 °F/C																					
Trip Blank: Yes / No																					
MS/MSD Sample Submitted: Yes / No																					

## PROJECT NARRATIVE

Project: CHAVEZ GC A 1

Pace Project No.: 6041661

---

**Method:** EPA 8260

**Description:** 8260 MSV UST, Water

**Client:** BP-Blagg Engineering

**Date:** June 23, 2008

### General Information:

4 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.

QC Batch: MSV/15149

S3: Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- MW #5 (Lab ID: 6041661001)
- 1,2-Dichloroethane-d4 (S)

### 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/15149

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 6041661001

R1: RPD value was outside control limits.

- MSD (Lab ID: 339183)
- Toluene

### Duplicate Sample:

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

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: CHAVEZ GC A 1  
Pace Project No.: 6041661

---

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

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

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: CHAVEZ GC A 1

Pace Project No.: 6041661

QC Batch:	MSV/15149	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	6041661001, 6041661002, 6041661003, 6041661004		

METHOD BLANK: 339180

Associated Lab Samples: 6041661001, 6041661002, 6041661003, 6041661004

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)	%	96	81-118	
4-Bromofluorobenzene (S)	%	95	85-119	
Dibromofluoromethane (S)	%	100	85-114	
Toluene-d8 (S)	%	104	82-114	

LABORATORY CONTROL SAMPLE: 339181

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	10	8.8	88	87-117	
Ethylbenzene	ug/L	10	9.6	96	84-123	
Toluene	ug/L	10	9.2	92	81-124	
Xylene (Total)	ug/L	30	28.2	94	83-125	
1,2-Dichloroethane-d4 (S)	%			96	81-118	
4-Bromofluorobenzene (S)	%			100	85-119	
Dibromofluoromethane (S)	%			98	85-114	
Toluene-d8 (S)	%			103	82-114	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 339182 339183

Parameter	Units	MS		MSD		MS	MSD	% Rec	Limits	Max	
		6041661001	Spike Conc.	Spike Conc.	Result					RPD	RPD
Benzene	ug/L	ND	10	10	9.5	7.9	95	79	30-162	19	22
Ethylbenzene	ug/L	ND	10	10	9.3	7.9	93	79	37-154	16	18
Toluene	ug/L	ND	10	10	9.5	7.7	95	77	49-143	21	20 R1
Xylene (Total)	ug/L	ND	30	30	28.7	24.7	96	82	32-154	15	15
1,2-Dichloroethane-d4 (S)	%						99	101	81-118		
4-Bromofluorobenzene (S)	%						96	101	85-119		
Dibromofluoromethane (S)	%						103	100	85-114		
Toluene-d8 (S)	%						103	100	82-114		
Preservation pH		1.0			1.0	1.0				0	

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## QUALITY CONTROL DATA

Project: CHAVEZ GC A 1

Pace Project No.: 6041661

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QC Batch: MSV/15149 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER  
Associated Lab Samples: 6041661001, 6041661002, 6041661003, 6041661004

---

METHOD BLANK: 339180

Associated Lab Samples: 6041661001, 6041661002, 6041661003, 6041661004

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	++ ++ ++

## QUALIFIERS

Project: CHAVEZ GC A 1

Pace Project No.: 6041661

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### 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.

### ANALYTE QUALIFIERS

R1 RPD value was outside control limits.

S3 Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples.  
Results unaffected by high bias.

**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: CHAVEZ GC A 1

Pace Project No.: 6041661

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
6041661001	MW #5	EPA 8260	MSV/15149		
6041661002	MW #6	EPA 8260	MSV/15149		
6041661003	MW #7	EPA 8260	MSV/15149		
6041661004	MW #1X	EPA 8260	MSV/15149		

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### SAMPLE ANALYTE COUNT

Project: CHAVEZ GC A 1  
Pace Project No.: 6041661

Lab ID	Sample ID	Method	Analysts	Analytes Reported
6041661001	MW #5	EPA 8260	GEZ	9
6041661002	MW #6	EPA 8260	GEZ	9
6041661003	MW #7	EPA 8260	GEZ	9
6041661004	MW #1X	EPA 8260	GEZ	9

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: CHAVEZ GCA 1

Pace Project No.: 6041661

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6041661001	MW #5	Water	06/10/08 07:40	06/11/08 09:10
6041661002	MW #6	Water	06/10/08 10:10	06/11/08 09:10
6041661003	MW #7	Water	06/10/08 10:55	06/11/08 09:10
6041661004	MW #1X	Water	06/10/08 09:15	06/11/08 09:10

### REPORT OF LABORATORY ANALYSIS

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## Sample Condition Upon Receipt

*Pace Analytical*Client Name: Be BlazcProject # Go 4/661

Courier:  FedEx  UPS  USPS  Client  Commercial  Pace Other  
 Tracking #: 8643 6005 2346

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  noPacking Material:  Bubble Wrap  Bubble Bags  None  OtherThermometer Used T-169 / T-179Type of Ice: Wet Blue None Samples on ice, cooling process has begunCooler Temperature 5.2

Biological Tissue Is Frozen: Yes No

Date and Initials of person examining contents: BR 6/11  
S: 10:10 E: 10:15

Temp should be above freezing to 6°C

Comments:

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

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Project Manager Review: MW 4/12/08

Date: \_\_\_\_\_

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