

3R-405

BP AMERICA PRODUCTION CO.

REMEDIATION AND MONITORING REPORT

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

Soil / Groundwater Remediation Date: 2/22/07 – 4/15/07
Monitor Well Installation Date: 8/24/07 (MW #5, #6, #7)
Monitor Well Sampling Dates: 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 measure 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

SAMPLE DATE	WELL NAME or No.	D.T.W. (ft)	T.D. (ft)	TDS (mg/L)	COND. umhos	pH	PRODUCT (ft)	BTEX EPA METHOD 8021B (ppb)			
								Benzene	Toluene	Ethyl Benzene	Total Xylene
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		22	ND	39	420
27-Oct-06		11.49			1,400	7.00		1.1	ND	ND	14
22-Jan-07		10.83			1,300	7.35		ND	ND	ND	ND
22-May-07		10.95			1,000	7.55		ND	ND	ND	ND
09-Aug-07		11.66			1,500	7.27		ND	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								10	750	750	620

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

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 ₃	520	890	416	420	mg / L
TOTAL HARDNESS AS CaCO ₃	172	432	285	332	mg / L
BICARBONATE as HCO ₃	520	890	416	420	mg / L
CARBONATE AS CO ₃	< 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

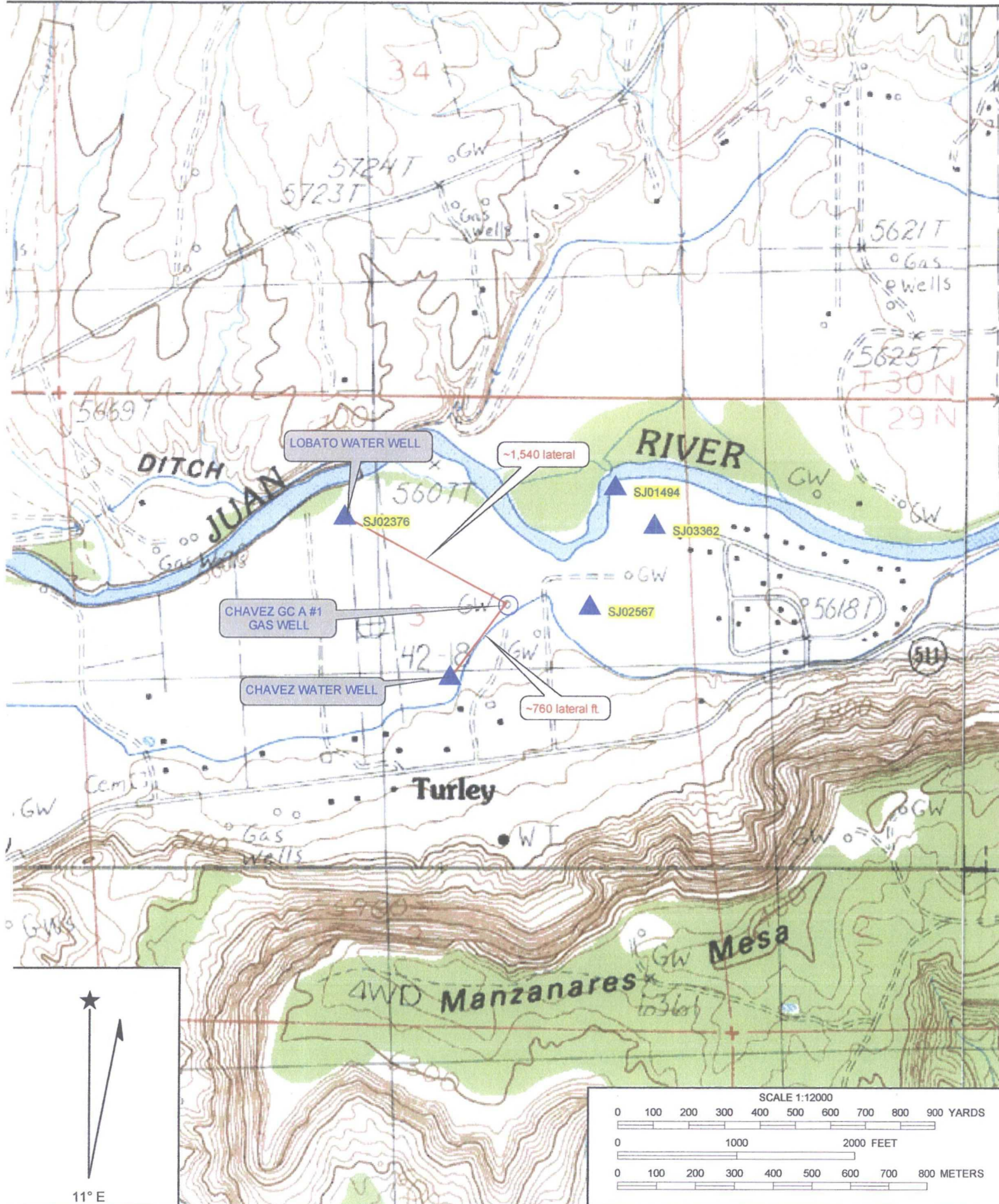
CHAVEZ GC A # 1

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. - stanadard 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 .



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
EPA METHOD 8260B: VOLATILES						Analyst: LMM
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 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: 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
EPA METHOD 8260B: VOLATILES						Analyst: LMM
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-Dichloropropane	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
Sum: 1,2-Dichloroethane-d4	108	76.6-113		%REC	1	3/8/2007
Sum: 4-Bromofluorobenzene	108	77-117		%REC	1	3/8/2007
Sum: Dibromofluoromethane	102	72.3-121		%REC	1	3/8/2007
Sum: 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
EPA METHOD 8021B: VOLATILES						Analyst: SMP
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 Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
RL Reporting Limit

Client: BLAG ENGINEERING INC.

Address: P.O. Box 87
Bloomfield NM 87413

Phone #: 505-632-1199

Fax #:

QA / QC Package:

Std ☐ Level 4 ☐

Other:

Project Name: CHAVEZ GC A #1

Project #:

Project Manager:

Sampler: Jeff Bures

Sample Temperature: 3°

[illegible]

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

ANALYSIS REQUEST

[illegible]

Remarks:

Date: 3/9/07	Time: 1100	Relinquished By: (Signature) Jeff Steyer
Date:	Time:	Relinquished By: (Signature)

Received By: (Signature) 3A107
 [Signature] 92L
 Received By: (Signature)

Client: **BLAGG ENGINEERING INC.**

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

Phone #: 505-632-1199

Fax #:

Std ☐ Level 4 ☐

Other:

Project Name:

CHAVEZ GC A#1

Project #:

Project Manager:

JEFF BLAGG

Sampler: Jeff Blag

Sample Temperature: 9 °

[illegible]

Date:	Time:
9/5/07	1715

Date:

Time: 1715

Time:

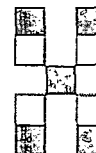
Relinquished By: (Signature)

Relinquished By: (Signature)

Received By (Signature)

Received By: (Signature)

9/6/07 9:45



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

ANALYSIS REQUEST

	X	BTEX + MTBE + TMB's (8021)
		BTEX + MTBE + TPH (Gasoline Only)
		TPH Method 8015B (Gas/Diesel)
		TPH (Method 418.1)
		EDB (Method 504.1)
		EDC (Method 8021)
		8310 (PNA or PAH)
		RCRA 8 Metals
		Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
		8081 Pesticides / PCB's (8082)
		8260B (VDA)
		8270 (Semi-VDA)
		Air Bubbles or Headspace (Y or N)

Remarks:

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			Batch ID: R22784	Analysis Date:		3/8/2007	
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	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

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

Batch ID: R22784

Analysis Date:

3/8/2007

4-Isopropyltoluene	ND	µg/L	1.0
4-Methyl-2-pentanone	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 lcs-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

4 / 5

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **BLAGG**

Date and Time Received:

3/9/2017

Work Order Number **0703105**

Received by

TLS

Checklist completed by

Jamy S
Signature

March 9, 07
Date

Matrix

Carrier name Greyhound

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

Container/Temp Blank temperature?

3°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

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
Method: SW8021									
Sample ID: 0709050-01A MSD		MSD			Batch ID: R25072	Analysis Date: 9/8/2007 7:50:19 AM			
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	
Sample ID: 5ML RB		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						
Sample ID: 100NG BTEX LCS		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			
Sample ID: 0709050-01A MS		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	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **BLAGG**

Date and Time Received:

9/6/2007

Work Order Number **0709050**

Received by **ARS**

Checklist completed by

Signature

Imepa Shomin

Date

Sept 4.07

Matrix

Carrier name Grayhound

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

Container/Temp Blank temperature?

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

POD Number	Sub basin	Use	County	Source	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)				(NAD83 UTM in meters)				(in feet)				
					q q q q				X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	
					6416	4	Sec	Tws									Rng
<u>SJ 02567</u>	DOM	SJ	Shallow	1	4	2	03	29N	09W	253488	4071372*	199	07/26/1994	07/26/1994	06/30/2000	14	2
<u>SJ 01494</u>	DOM	SJ	Shallow	2	2	03	29N	09W	253571	4071681*	410	10/22/1981	10/23/1981	11/02/1981		12	5
<u>SJ 03362</u>	DOM	SJ	Shallow	4	2	2	03	29N	09W	253670	4071580*	428	11/28/2003	12/28/2003	12/31/2003	38	12
<u>SJ 03362 POD2</u>	DOM	SJ	Shallow	4	2	2	03	29N	09W	253670	4071580*	428	08/08/2005	08/08/2005	08/10/2005	21	6
<u>SJ 02946</u>	DOM	SJ	Shallow	1	2	4	03	29N	09W	253516	4070978*	464	08/20/1999	10/20/1999	10/12/2000	95	40
<u>SJ 02369 CLW</u>	MDW	SJ	Shallow	4	2	1	03	29N	09W	252874	4071624*	480	04/20/1992	04/22/1992	11/05/1992	13	10
<u>SJ 02376</u>	MUL	SJ	Shallow	4	2	1	03	29N	09W	252874	4071624*	480	04/20/1992	04/22/1992	11/05/1992	13	10
<u>SJ 03856 POD1</u>	DOL	SJ	Shallow	2	2	4	03	29N	09W	253586	4070930	540	12/16/2008	12/20/2008	12/24/2008	320	60
<u>SJ 03300</u>	DOM	SJ	Shallow	2	2	2	03	29N	09W	253670	4071780*	550	11/25/2002	11/25/2002	12/02/2002	21	4
<u>SJ 01203</u>	DOM	SJ	Shallow	1	3	1	02	29N	09W	253878	4071351*	589	06/21/1980	06/22/1980	06/24/1980	25	12
<u>SJ 01210</u>	DOM	SJ	Shallow	1	3	1	02	29N	09W	253878	4071351*	589	07/08/1980	07/09/1980	07/17/1980	26	10
<u>SJ 01430</u>	DOM	SJ	Shallow	1	3	1	02	29N	09W	253878	4071351*	589	05/28/1981	05/29/1981	06/08/1981	24	11
<u>SJ 01460</u>	DOM	SJ	Shallow	1	3	1	02	29N	09W	253878	4071351*	589	08/21/1981	08/24/1981	09/08/1981	19	8
<u>SJ 02478</u>	DOM	SJ	Shallow	3	1	1	02	29N	09W	253865	4071558*	601	07/13/1993	07/15/1993	08/02/1993	16	8
<u>SJ 02492</u>	DOM	SJ	Shallow	3	1	1	02	29N	09W	253865	4071558*	601	09/16/1993	09/17/1993	08/21/1996	13	5
<u>SJ 02677</u>	DOM	SJ	Shallow	3	1	1	02	29N	09W	253865	4071558*	601	05/01/1996	05/01/1996	09/12/1997	21	7
<u>SJ 03138</u>	DOM	SJ	Shallow	1	1	1	02	29N	09W	253865	4071758*	687	04/02/2002	04/06/2002	04/15/2002	11	5
<u>SJ 01232</u>	DOM	SJ	Shallow	3	1	02	29N	09W	253979	4071252*	702	07/30/1980	08/01/1980	08/08/1980	25	9	
<u>SJ 03080</u>	DOM	SJ	Shallow	3	1	02	29N	09W	253979	4071252*	702	11/25/2001	12/10/2001	12/18/2001	35		
<u>SJ 03843 POD1</u>	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

POD Number	Sub basin	Use	County	Source	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)				(NAD83 UTM in meters)		Distance	Start Date	Log File			(in feet)	
					q	q	q	q	X	Y			Finish Date	Date		Depth Well	Depth Water
<u>SJ 01392</u>		DOM	SJ	Shallow	2	3	1	02	29N	09W	254078	4071351*	789	05/22/1981	05/25/1981 05/27/1981	25	11
<u>SJ 01579</u>		DOM	SJ	Shallow	2	3	1	02	29N	09W	254078	4071351*	789	06/01/1982	06/03/1982 06/08/1982	25	12
<u>SJ 01867</u>		DOM	SJ	Shallow	2	3	1	02	29N	09W	254078	4071351*	789	07/23/1984	07/25/1984 08/02/1984	25	71
<u>SJ 03003</u>		DOM	SJ	Shallow	2	3	1	02	29N	09W	254078	4071351*	789	08/17/2000	08/20/2000 09/01/2000	19	6
<u>SJ 03253</u>		DOM	SJ	Shallow	2	3	1	02	29N	09W	254078	4071351*	789	04/09/2003	04/09/2003 04/16/2003	16	9
<u>SJ 01066</u>		DOM	SJ	Shallow	4	1	1	02	29N	09W	254065	4071558*	795	11/20/1979	11/27/1979 12/04/1979	25	10
<u>SJ 01067</u>		DOM	SJ	Shallow	4	1	1	02	29N	09W	254065	4071558*	795	11/27/1979	11/29/1979 12/03/1979	25	10
<u>SJ 01183</u>		DOM	SJ	Shallow	4	1	1	02	29N	09W	254065	4071558*	795	06/13/1980	06/16/1980 06/24/1980	24	11
<u>SJ 02096</u>		DOM	SJ	Shallow	4	1	1	02	29N	09W	254065	4071558*	795	10/24/1986	10/25/1986 11/10/1986	27	11
<u>SJ 03396</u>		DOM	SJ	Shallow	2	1	1	02	29N	09W	254065	4071758*	861	07/21/2003	07/21/2003 07/31/2003	10	4
<u>SJ 02103</u>		DOM	SJ	Shallow		3	1	03	29N	09W	252397	4071340*	893	12/20/1986	12/23/1986 04/13/1988	21	4
<u>SJ 01983</u>		DOM	SJ	Shallow			1	02	29N	09W	254180	4071453*	893	07/16/1985	07/16/1985 07/30/1985	25	3
<u>SJ 02346</u>		DOM	SJ	Shallow			1	02	29N	09W	254180	4071453*	893	09/15/1991	09/17/1991 03/20/1992	25	4
<u>SJ 02347</u>		DOM	SJ	Shallow			1	02	29N	09W	254180	4071453*	893	09/18/1991	09/21/1991 03/20/1992	25	4
<u>SJ 02600</u>		DOM	SJ	Shallow	3	4	1	02	29N	09W	254292	4071149*	1029	01/04/1995	01/04/1995 08/23/1996	18	8
<u>SJ 03687 POD1</u>		DOM	SJ	Shallow	3	4	1	02	29N	09W	254292	4071149*	1029	01/23/2006	01/24/2006 01/25/2006	18	10
<u>SJ 03200</u>		DOM	SJ	Shallow	1	1	3	03	29N	09W	252316	4071045*	1030	08/05/2002	08/12/2002 05/28/2003	28	13
<u>SJ 03632</u>		DOM	SJ	Shallow	2	2	1	02	29N	09W	254472	4071753*	1239	05/25/2005	05/25/2005 06/03/2005	27	7
<u>SJ 01874</u>		DOM	SJ	Shallow				02	29N	09W	254652	4071064*	1399	07/30/1984	07/31/1984 08/03/1984	28	8
<u>SJ 02092</u>		MUL	SJ	Shallow	4	4	4	33	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

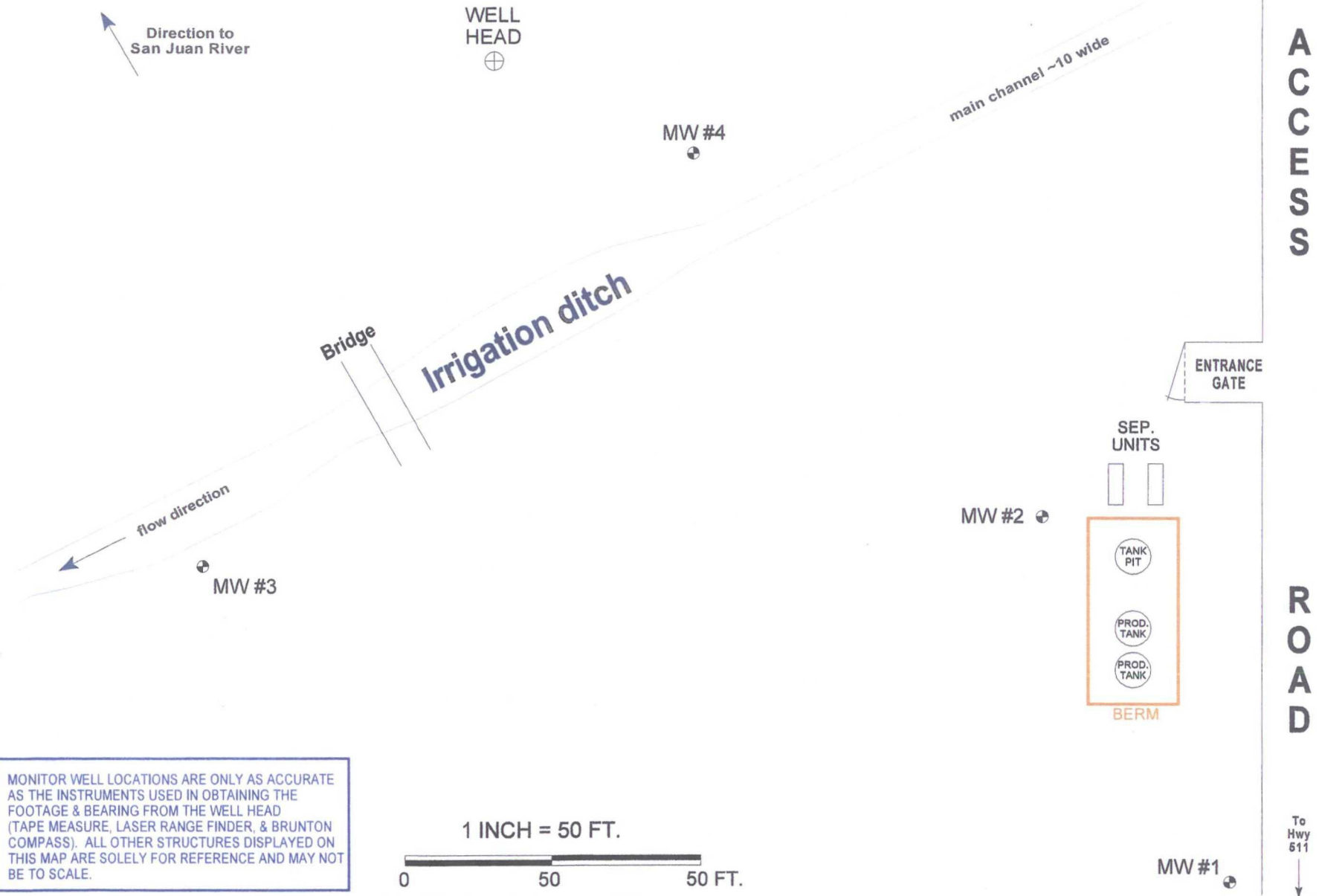
UTMNA83 Radius Search (in meters):

Easting (X): 253289.19

Northing (Y): 4071383

Radius: 1609

FIGURE 1



BP AMERICA PRODUCTION CO.

CHAVEZ GC A #1

SW/4 NE/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 GC A 1-SM.SKF

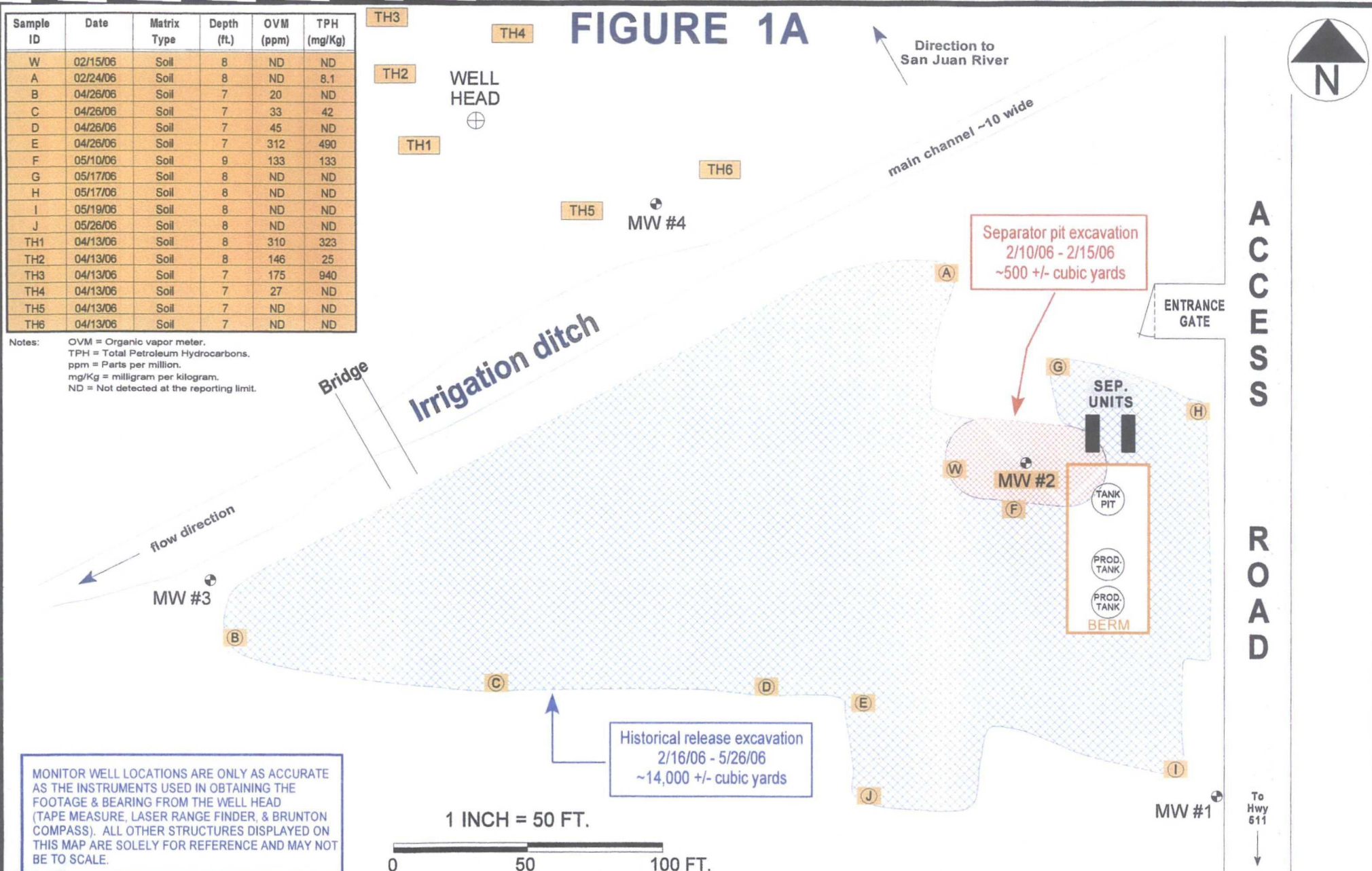
DRAFTED: 08-02-06 NJV

SITE
MAP

08/06

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	490
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.



BP AMERICA PRODUCTION CO.
CHAVEZ GC A #1
SW/4 NE/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 GC A 1-SM2.SKF
REVISED: 08-18-06 NJV

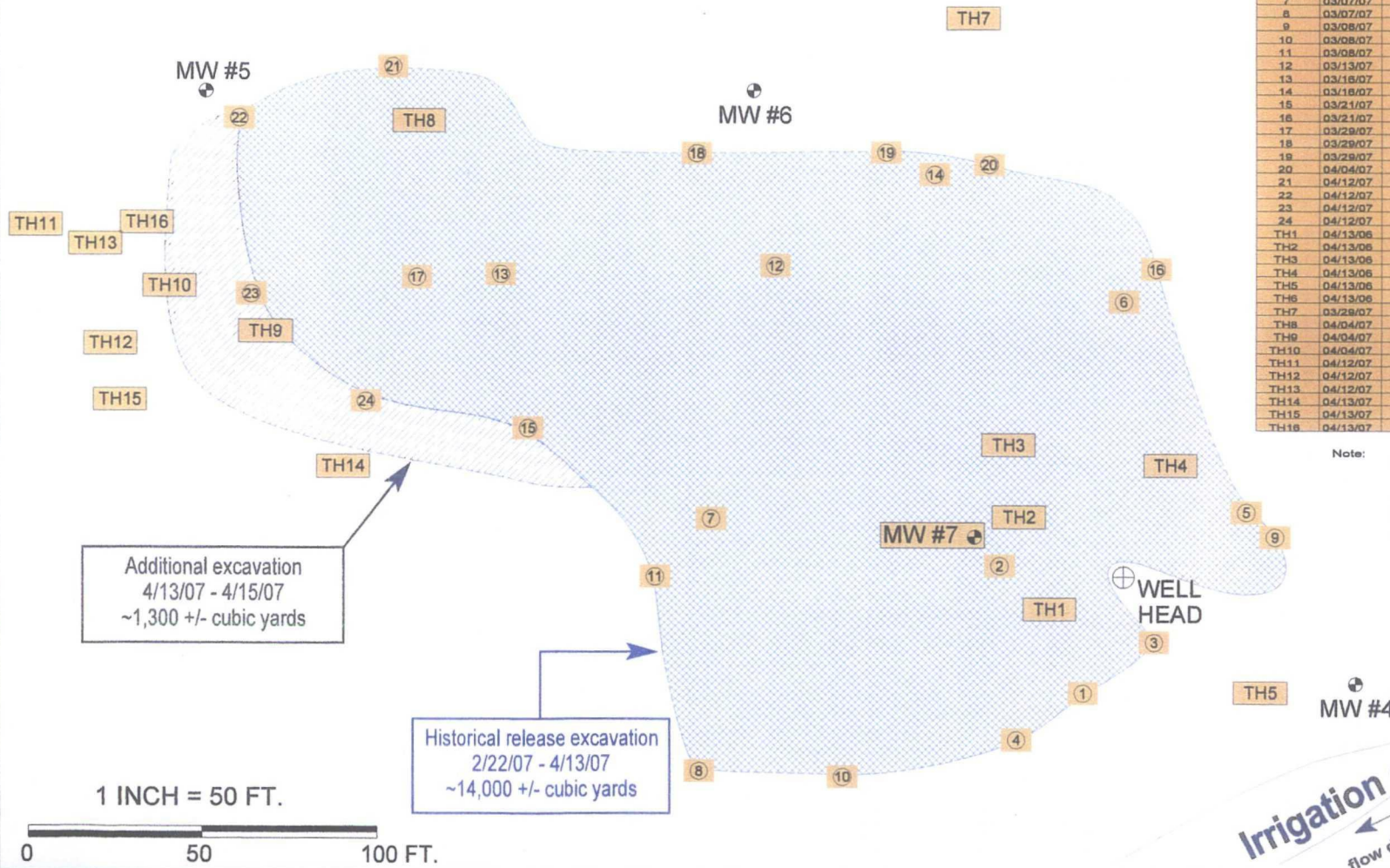
**SITE
MAP**
08/06

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.

FIGURE 1B



Direction to
San Juan River



Sample ID	Date	Matrix Type	Depth (ft.)	OVM (ppm)	TPH (mg/Kg)	Benz. (ppb)	BTEX (ppb)
1	02/22/07	Soil	9	3.3	0.3	21.5	252
2	02/22/07	Soil	7	514	1,550	ND	33,030
3	02/26/07	Soil	9	1.1	0.0	ND	39.9
4	02/26/07	Soil	7	0.0	0.0	2.0	8.0
5	03/07/07	Soil	7	175	N/A	N/A	N/A
6	03/07/07	Soil	7	270	N/A	N/A	N/A
7	03/07/07	Soil	7	144	N/A	N/A	N/A
8	03/07/07	Soil	7	108	N/A	N/A	N/A
9	03/08/07	Soil	9	2.4	1.0	4.9	644
10	03/08/07	Soil	7	24	0.5	3.2	211
11	03/08/07	Soil	8	1.6	0.0	ND	42.2
12	03/13/07	Soil	8	245	25.1	ND	717
13	03/16/07	Soil	8	118	6.1	23.3	654
14	03/16/07	Soil	8	179	450	915	19,290
15	03/21/07	Soil	8	186	10.8	5.4	726
16	03/21/07	Soil	8	2.3	0.0	2.7	104
17	03/29/07	Soil	8	239	2,360	1,540	31,510
18	03/29/07	Soil	8	257	82.2	110	2,820
19	03/29/07	Soil	8	10	4.2	ND	284
20	04/04/07	Soil	7	139	ND	ND	94.8
21	04/12/07	Soil	8-9	0.5	ND	2.1	10.5
22	04/12/07	Soil	8-9	2.3	ND	3.5	66.4
23	04/12/07	Soil	8-9	204	N/A	N/A	N/A
24	04/12/07	Soil	8-9	201	N/A	N/A	N/A
TH1	04/13/06	Soil	8	310	323	ND	1,630
TH2	04/13/06	Soil	8	146	25	ND	280
TH3	04/13/06	Soil	7	175	840	ND	7,000
TH4	04/13/06	Soil	7	27	0.0	ND	ND
TH5	04/13/06	Soil	7	0.0	0.0	ND	ND
TH6	04/13/06	Soil	7	0.0	0.0	ND	ND
TH7	03/29/07	Soil	6	0.0	N/A	N/A	N/A
TH8	04/04/07	Soil	8-9	3.0	N/A	N/A	N/A
TH9	04/04/07	Soil	8-9	177	0.8	15.0	539
TH10	04/04/07	Soil	8-9	200	411	86.9	7,090
TH11	04/12/07	Soil	8-9	0.0	N/A	N/A	N/A
TH12	04/12/07	Soil	8-9	0.2	ND	ND	ND
TH13	04/12/07	Soil	8-9	0.2	ND	ND	ND
TH14	04/13/07	Soil	8-9	0.0	ND	8.7	96.2
TH15	04/13/07	Soil	8-9	0.0	N/A	N/A	N/A
TH16	04/13/07	Soil	8-9	0.5	N/A	N/A	N/A

Note: OVM = Organic vapor meter.
TPH = Total Petroleum Hydrocarbons.
Benz. = benzene.
BTEX = 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.

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

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

PROJECT: MW INSTALLATIONS
DRAWN BY: NJV
FILENAME: CHAVEZ GC A 1-SM3.SKF
REVISED: 09-12-07 NJV

NORTHWEST
EXCAVATION
SITE MAP
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

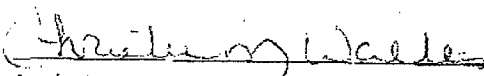
Project #: 94034-010
Date Reported: 02-26-07
Date Sampled: 02-22-07
Date Received: 02-22-07
Date Extracted: 02-23-07
Date Analyzed: 02-26-07
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C6 - 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.


Analyst


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	

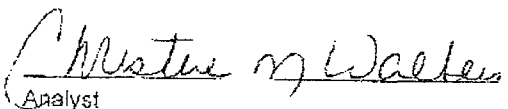
ND - Parameter not detected at the stated detection limit.

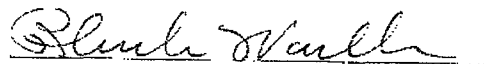
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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.


Analyst


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)

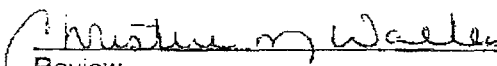
Total Chloride

8.18

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

Comments: Chavez GC A #1: North Source.


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

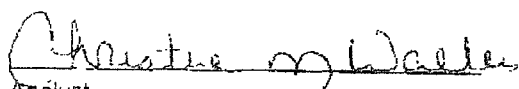
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	2 @ 7'	Date Reported:	02-26-07
Laboratory Number:	40176	Date Sampled:	02-22-07
Chain of Custody No.	1996	Date Received:	02-22-07
Sample Matrix:	Soil	Date Extracted:	02-23-07
Preservative:	Cool	Date Analyzed:	02-26-07
Condition:	Cool and Intact	Analysis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

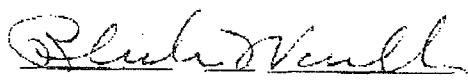
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1,120	0.2
Diesel Range (C10 - C28)	433	0.1
Total Petroleum Hydrocarbons	1,550	0.2

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.


Analyst


Review

ENVIROTECH LABS

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	

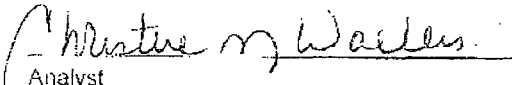
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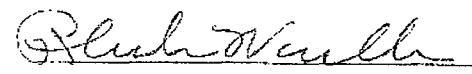
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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.


Analyst


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)

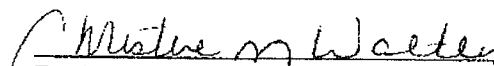
Total Chloride

8.58

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

Comments: Chavez GC A #1: North Source.


Analyst


Review

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

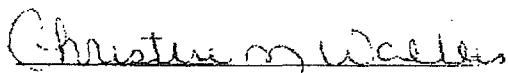
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	3 @ 9'	Date Reported:	02-28-07
Laboratory Number:	40193	Date Sampled:	02-26-07
Chain of Custody No:	2132	Date Received:	02-27-07
Sample Matrix:	Sol.	Date Extracted:	02-27-07
Preservative:	Cool	Date Analyzed:	02-28-07
Condition:	Cool and Intact	Analysis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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample 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.


Analyst


Review

ENVIROTECH LABS

Chloride

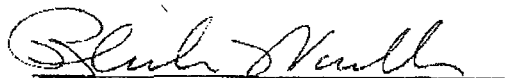
Client: Blagg / BP
Sample ID: 3 @ 9'
Lab ID#: 40193
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

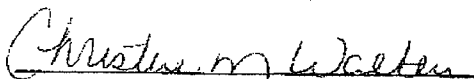
Project #: 94034-010
Date Reported: 02-28-07
Date Sampled: 02-26-07
Date Received: 02-27-07
Date Analyzed: 02-27-07
Chain of Custody: 2132

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.


Analyst


Review

ENVIROTECH LABS

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: 02-28-07
Date Sampled: 02-26-07
Date Received: 02-27-07
Date Extracted: 02-27-07
Date Analyzed: 02-28-07
Analysis Requested: 8015 TPH

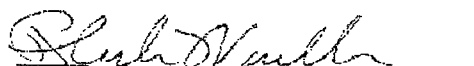
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

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

Comments: Chavez GC A #1 North Source Area.


Analyst


Review

ENVIROTECH LABS

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	

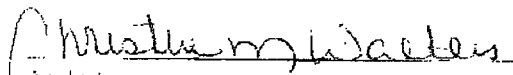
ND - Parameter not detected at the stated detection limit.

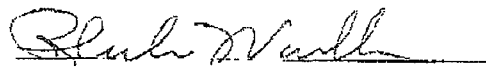
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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.


Analyst


Review

ENVIROTECH LABS

Chloride

Client: Blagg / BP
Sample ID: 4 @ 7'
Lab ID#: 40194
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 94034-010
Date Reported: 02-28-07
Date Sampled: 02-26-07
Date Received: 02-27-07
Date Analyzed: 02-27-07
Chain of Custody: 2132

Parameter

Concentration (mg/Kg)

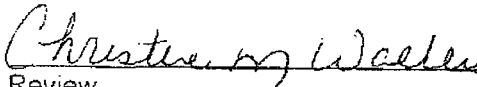
Total Chloride

6.8

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

Comments: **Chavez GC A #1 North Source Area.**


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: 9 @ 9'
Laboratory Number: 40341
Chain of Custody No: 2211
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

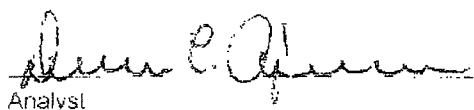
Project #: 94034-010
Date Reported: 03-12-07
Date Sampled: 03-08-07
Date Received: 03-08-07
Date Extracted: 03-09-07
Date Analyzed: 03-12-07
Analysis Requested: 8015 TPH

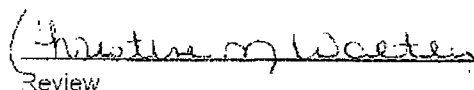
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.0	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	1.0	0.2

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	91034-010
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
Total BTEX	644	

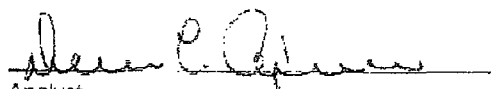
ND: Parameter not detected at the stated detection limit.

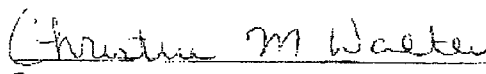
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1993.

Comments: Chavez GC A #1 North Source Area


Analyst


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)

Total Chloride

18.0

Reference: Standard Methods For The Examination of Water And Waste Water", 16th ed., 1992.

Comments: Chavez GC A #1 North Source Area

Christine M. Walter
Analyst

Devin C. O'Brien
Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: 10 @ 7'
Laboratory Number: 40342
Chain of Custody No: 2211
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 94034-010
Date Reported: 03-12-07
Date Sampled: 03-08-07
Date Received: 03-08-07
Date Extracted: 03-09-07
Date Analyzed: 03-12-07
Analysis Requested: 8015 TPH

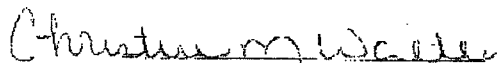
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.5	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.5	0.2

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

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:	2211	Date Received:	03-08-07
Sample Matrix:	Soil	Date Analyzed:	03-12-07
Preservative:	Cool	Date Extracted:	03-08-07
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
Total BTEX	211	

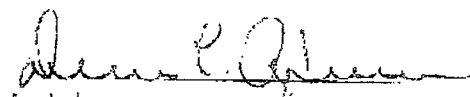
ND - Parameter not detected at the stated detection limit.

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


Analyst


Review

ENVIROTECH LABS

Chloride

Client:	Blagg / RP	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 Intact	Chain of Custody:	2211

Parameter

Concentration (mg/Kg)

Total Chloride

16.0

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

Comments: Chavez GC A #1 North Source Area

Christine M. Waeten
Analyst

Devin L. Quinn
Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: 11 @ 8'
Laboratory Number: 40343
Chain of Custody No: 2211
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

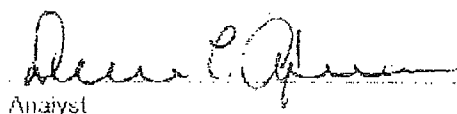
Project #: 94034-010
Date Reported: 03-12-07
Date Sampled: 03-08-07
Date Received: 03-08-07
Date Extracted: 03-09-07
Date Analyzed: 03-12-07
Analysis Requested: 8015 TPH

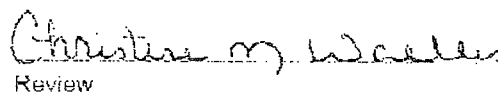
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Slagg / DP	Project #:	94034-010
Sample ID:	11 @ 8'	Date Reported:	03-12-07
Laboratory Number:	40343	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	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
Total BTEX	42.2	

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 Source Area


Analyst


Review

ENVIROTECH LABS

Chloride

Client: Blaghi / BP

Sample ID: 11 @ 8'

Lab ID#: 40343

Sample Matrix: Soil

Preservative: Cool

Condition: Cool and Intact

Project #: 94034-0111

Date Reported: 03-12-07

Date Sampled: 03-08-07

Date Received: 03-08-07

Date Analyzed: 03-12-07

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. Watten
Analyst

Shawn P. Olsen
Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: 12 @ 8'
Laboratory Number: 40503
Chain of Custody No: 2231
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

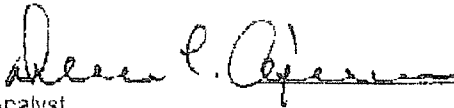
Project #: 94034-010
Date Reported: 03-15-07
Date Sampled: 03-13-07
Date Received: 03-14-07
Date Extracted: 03-14-07
Date Analyzed: 03-15-07
Analysis Requested: 8015 TPH

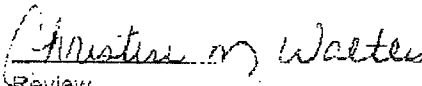
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	20.6	0.2
Diesel Range (C10 - C28)	4.5	0.1
Total Petroleum Hydrocarbons	25.1	0.2

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Blagg / BP
Sample ID: 12 @ 8'
Laboratory Number: 40503
Chain of Custody: 2231
Sample Matrix: Soil
Preservative: Cool
Condition: Cool & Intact

Project #: 94034-010
Date Reported: 03-15-07
Date Sampled: 03-13-07
Date Received: 03-14-07
Date Analyzed: 03-15-07
Date Extracted: 03-14-07
Analysis Requested: BILX

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	

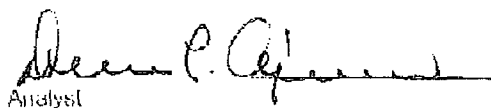
ND - Parameter not detected at the stated detection limit.

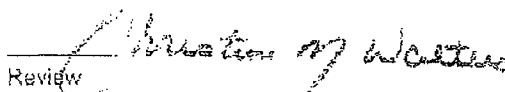
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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


Analyst


Review

ENVIROTECH LABS

Chloride

Client: Blagg / BP
Sample ID: 12 @ 8'
Lab ID#: 40503
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 94034-010
Date Reported: 03-15-07
Date Sampled: 03-13-07
Date Received: 03-14-07
Date Analyzed: 03-15-07
Chain of Custody: 2231

Parameter

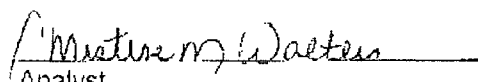
Concentration (mg/Kg)

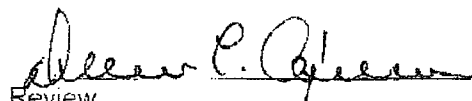
Total Chloride

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: 13 @ 8'
Laboratory Number: 40526
Chain of Custody No: 2248
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

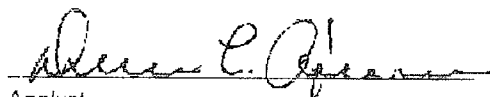
Project #: 94034-010
Date Reported: 03-20-07
Date Sampled: 03-16-07
Date Received: 03-16-07
Date Extracted: 03-19-07
Date Analyzed: 03-20-07
Analysis Requested: 8015 TPH

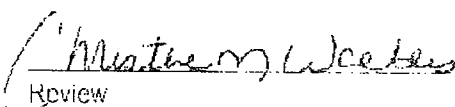
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	5.1	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	5.1	0.2

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Blagg / BP
Sample ID: 13 @ 8'
Laboratory Number: 40526
Chain of Custody: 2249
Sample Matrix: Soil
Preservative: Cool
Condition: Cool & Intact

Project #: 94034-010
Date Reported: 03-20-07
Date Sampled: 03-16-07
Date Received: 03-16-07
Date Analyzed: 03-20-07
Date Extracted: 03-19-07
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
Total BTEX	654	

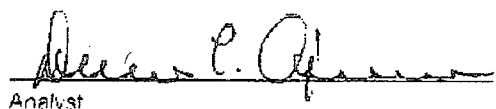
ND - Parameter not detected at the stated detection limit.

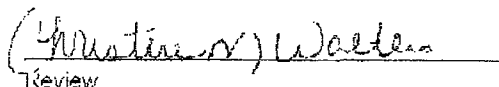
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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


Analyst


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)

Total Chloride

12.2

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

Comments: Chavez GC A #1 North Source Area

Christine M. Wooten
Analyst

William P. Agnew
Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: 14 @ 8'
Laboratory Number: 40527
Chain of Custody No: 2249
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

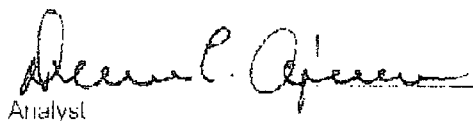
Project #: 94034-010
Date Reported: 03-20-07
Date Sampled: 03-16-07
Date Received: 03-16-07
Date Extracted: 03-19-07
Date Analyzed: 03-20-07
Analysis Requested: 8015 TPH

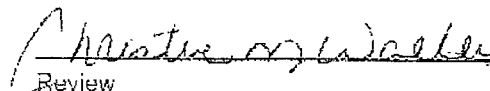
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	414	0.2
Diesel Range (C10 - C28)	35.7	0.1
Total Petroleum Hydrocarbons	450	0.2

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Bingg / 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
Total BTEX	19,290	

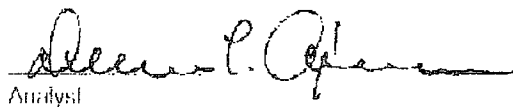
ND - Parameter not detected at the stated detection limit.

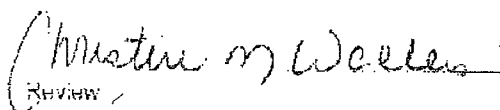
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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


Analyst


Review

ENVIROTECH LABS

Chloride

Client: Blagg / BP
Sample ID: 14 @ 8'
Lab ID#: 40527
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 94034-010
Date Reported: 03-20-07
Date Sampled: 03-16-07
Date Received: 03-16-07
Date Analyzed: 03-19-07
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

Christine M. Walters
Analyst

Devin P. Quinn
Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: 15 @ 8'
Laboratory Number: 40555
Chain of Custody No: 2305
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

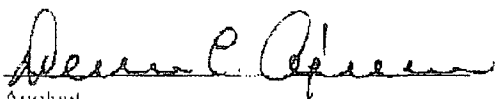
Project #: 94034-010
Date Reported: 03-22-07
Date Sampled: 03-21-07
Date Received: 03-21-07
Date Extracted: 03-22-07
Date Analyzed: 03-22-07
Analysis Requested: 8015 TPH

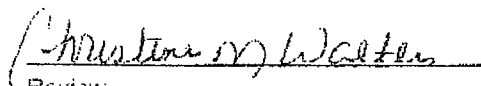
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	7.8	0.2
Diesel Range (C10 - C28)	3.0	0.1
Total Petroleum Hydrocarbons	10.8	0.2

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


Analyst


Review

ENVIROTECH LABS

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:	BTFX

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
Total BTEX	726	

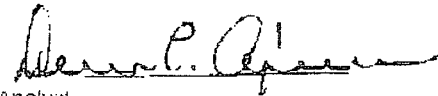
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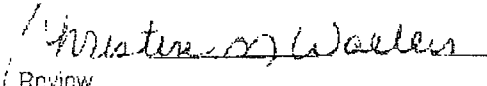
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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


Analyst


Reviewer

ENVIROTECH LABS

Chloride

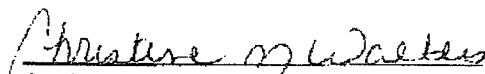
Client: Blagg / BP
Sample ID: 15 @ 8'
Lab ID#: 40555
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 94034-010
Date Reported: 03-22-07
Date Sampled: 03-21-07
Date Received: 03-21-07
Date Analyzed: 03-22-07
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


Analyst


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

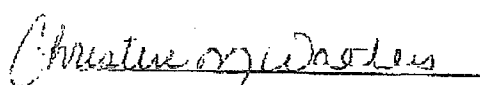
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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


Analyst


Review

ENVIROTECH LABS

Environmental Testing & Consulting Services

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / 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	

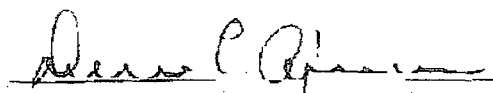
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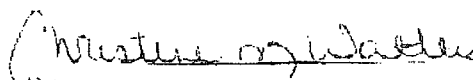
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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


Analyst


Review

ENVIROTECH LABS

Chloride

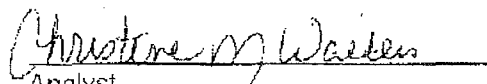
Client: Blogg / BP
Sample ID: 16 @ 8'
Lab ID#: 40556
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

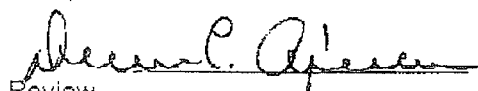
Project #: 94034-010
Date Reported: 03-22-07
Date Sampled: 03-21-07
Date Received: 03-21-07
Date Analyzed: 03-22-07
Chain of Custody: 2305

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: 17 @ 8'
Laboratory Number: 40667
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

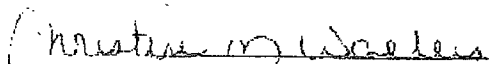
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2,110	0.2
Diesel Range (C10 - C28)	249	0.1
Total Petroleum Hydrocarbons	2,360	0.2

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


Analyst


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


Analyst


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. Watten
Analyst

Shawn P. Alperin
Review

ENVIROTECH LABS

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

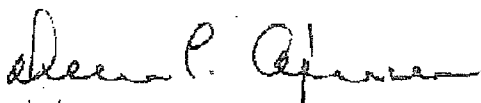
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Date Received: 03-30-07
Date Extracted: 03-30-07
Date Analyzed: 04-02-07
Analysis Requested: 8015 TPH

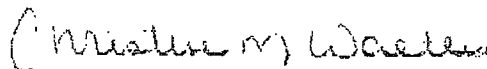
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	73.8	0.2
Diesel Range (C10 - C28)	8.4	0.1
Total Petroleum Hydrocarbons	82.2	0.2

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034 010
Sample ID:	18 @ 8'	Date Reported:	04-02-07
Laboratory Number:	40668	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
Total BTEX	2,620	

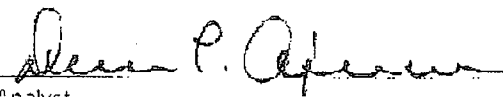
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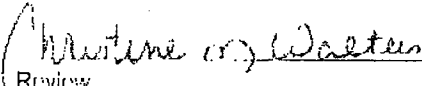
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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


Analyst


Reviewer

ENVIROTECH LABS

Chloride

Client: Blagg / BP
Sample ID: 18 @ 8'
Lab ID#: 40668
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

36.0

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

Comments: Chavez GC A #1 North Source Area

Christine M. Watters
Analyst

Steven P. O'Brien
Review

ENVIROTECH LABS

Environmental Laboratories, Inc. • 5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: 19 @ 8'
Laboratory Number: 40669
Chain of Custody No: 2036
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

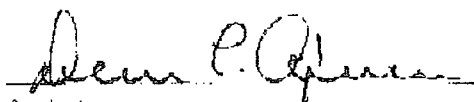
Project #: 94034 010
Date Reported: 04-02-07
Date Sampled: 03-29-07
Date Received: 03-30-07
Date Extracted: 03-30-07
Date Analyzed: 04-02-07
Analysis Requested: 8015 TPH

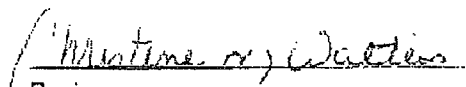
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	4.2	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	4.2	0.2

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Blagg / BP
Sample ID: 19 @ 8'
Laboratory Number: 40669
Chain of Custody: 2036
Sample Matrix: Soil
Preservative: Cool
Condition: Cool & intact

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

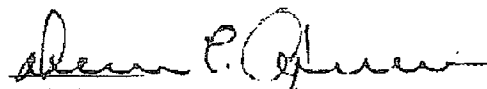
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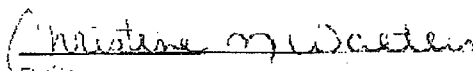
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, US EPA, 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


Analyst


Review

ENVIROTECH LABS

Chloride

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)

Total Chloride

48.0

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

Comments: Chavez GC A #1 North Source Area

Christine M. Watten
Analyst

Devin P. Green
Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

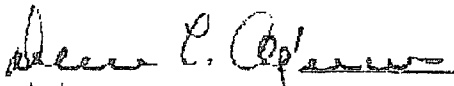
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	20 @ 7'	Date Reported:	04 06 07
Laboratory Number:	40732	Date Sampled:	04-04-07
Chain of Custody No:	2420	Date Received:	04-04-07
Sample Matrix:	Soil	Date Extracted:	04-05-07
Preservative:	Cool	Date Analyzed:	04-06-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

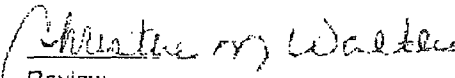
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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


Analyst


Review

ENVIROTECH LABS

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:	04-04-07
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	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
Total BTEX	94.8	

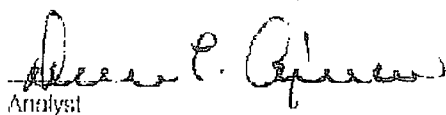
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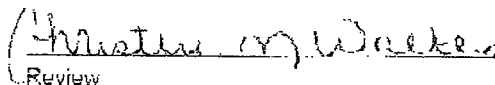
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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


Analyst


Review

ENVIROTECH LABS

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

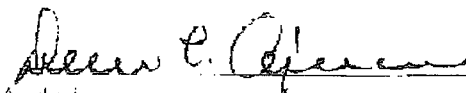
Project #: 94034-010
Date Reported: 04-16-07
Date Sampled: 04-12-07
Date Received: 04-13-07
Date Extracted: 04-13-07
Date Analyzed: 04-16-07
Analysis Requested: 8015 TPH

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	91031-010
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	

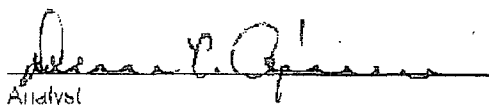
ND - Parameter not detected at the stated detection limit.

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: 22 @ 8'-9'
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

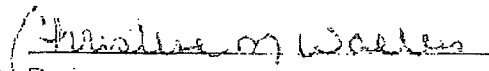
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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


Analyst


Review

ENVIROTECH LABS

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
Total BTEX	66.4	

ND - Parameter not detected at the stated detection limit.

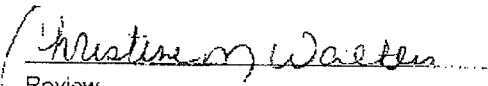
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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


Analyst


Review

ENVIROTECH LABS

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


Analyst


Review

ENVIROTECH LABS

Environmental & Soil Analysis Laboratory

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Biagg / 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 & Intact	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
Total BTEX	539	

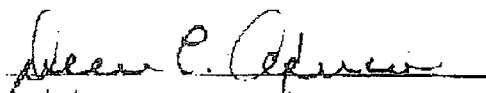
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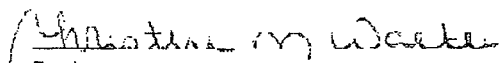
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

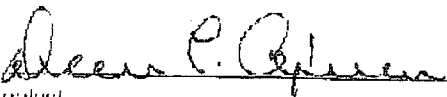
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	TII #10	Date Reported:	04-06-07
Laboratory Number:	40734	Date Sampled:	04-04-07
Chain of Custody No:	2420	Date Received:	04-04-07
Sample Matrix:	Soil	Date Extracted:	04-05-07
Preservative:	Cool	Date Analyzed:	04-06-07
Condition:	Cool and Intact	Analysis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


Analyst


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	

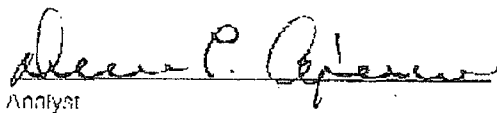
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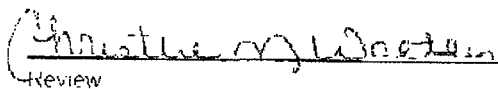
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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


Analyst


Review

ENVIROTECH LABS

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

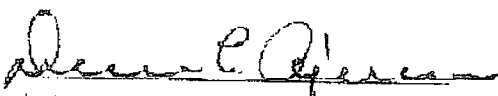
Project #: 94034-010
Date Reported: 04-16-07
Date Sampled: 04-12-07
Date Received: 04-13-07
Date Extracted: 04-13-07
Date Analyzed: 04-16-07
Analysis Requested: 8015 TPH

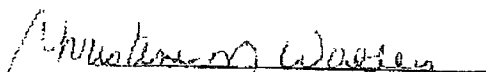
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / DP	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:	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	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.

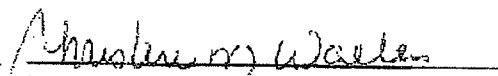
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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


Review

ENVIROTECH LABS

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / BP
Sample ID: TH #13 @ 8'-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


Review

ENVIROTECH LABS

Environmental Testing & Analysis, Inc.

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Diagg / DP	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:	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	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	

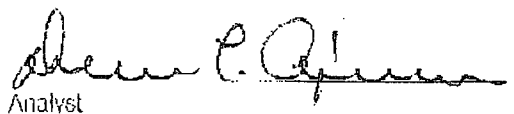
ND - Parameter not detected at the stated detection limit.

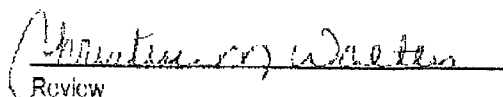
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 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


Review

ENVIROTECH LABS

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

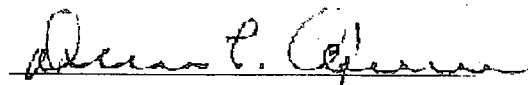
Project #: 94034-010
Date Reported: 04-16-07
Date Sampled: 04-12-07
Date Received: 04-13-07
Date Extracted: 04-13-07
Date Analyzed: 04-16-07
Analysis Requested: 8015 TPH

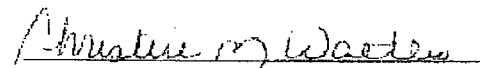
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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


Analyst


Review

ENVIROTECH LABS

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	

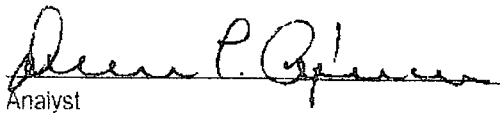
ND - Parameter not detected at the stated detection limit.

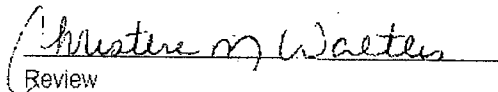
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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


Analyst


Review

1926

san juan reproduction 578-129

2291

san juan reproduction 578-129

2231

san juan reproduction 578-129

2249

san juan reproduction 578-129

2305

san juan reproduction 578-129

2036

san juan reproduction 578-129

2420

san juan reproductiv

CHAIN OF CUSTODY RECORD

2482

Client / Project Name		Project Location		ANALYSIS / PARAMETERS															
BLAGG/BP		CHAVEZ GC A #1																	
Sampler: JEFF BLAGG		Client No. 94034-010		Remarks															
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH 8015	STEX 8021												
(21) @ 8'-9'	4/12/07	1415	41025	SOIL	1	X	X												
(22) @ 8'-9'	"	1420	41026	"	1	X	X												
TH#12 @ 8'-9'	"	1446	41027	"	1	X	X												
TH#13 @ 8'-9'	"	1459	41028	"	1	X	X												
TH#14 @ 8'-9'	4/13/07	0825	41029	"	1	X	X												
Relinquished by: (Signature) <i>Jeff Blagg</i> Relinquished by: (Signature) Relinquished by: (Signature) Date Time Received by: (Signature) 4/13/07 1330 <i>Don L. Aguirre</i> Received by: (Signature) Received by: (Signature) Date Time 4/13/07 1330																			
ENVIROTECH INC. 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615				Sample Receipt <table border="1"> <tr> <td></td> <td>Y</td> <td>N</td> <td>N/A</td> </tr> <tr> <td>Received Intact</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>Cool - Ice/Blue Ice</td> <td>X</td> <td></td> <td></td> </tr> </table>					Y	N	N/A	Received Intact	X			Cool - Ice/Blue Ice	X		
	Y	N	N/A																
Received Intact	X																		
Cool - Ice/Blue Ice	X																		

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)	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	47.9	47.6	0.6%	0 - 30%
Diesel Range C10 - C28	122	121	0.6%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	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. Wheeler
Analyst

Blair Vanth
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 QA/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. Walters
Analyst

Blair D. Vail
Review

ENVIROTECH LABS

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	03-12-07 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%

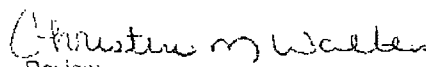
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	98.9	250	348	99.7%	75 - 125%
Diesel Range C10 - C28	524	250	773	99.9%	75 - 125%

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


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:	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%

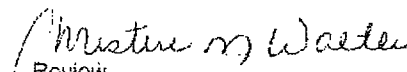
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	249	99.6%	75 - 125%
Diesel Range C10 - C28	13.2	250	262	99.6%	75 - 125%

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


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:	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%

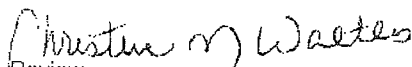
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

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


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:	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	1.0018E+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%

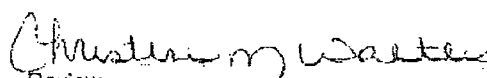
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	0.5	250	250	99.8%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

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


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:	04-02-07 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

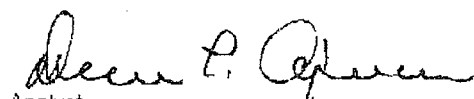
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	313	312	0.6%	0 - 30%

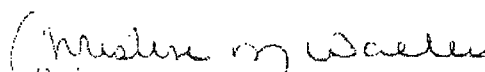
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	313	250	562	99.8%	75 - 125%

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:	04-06-07 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:	1PH

	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

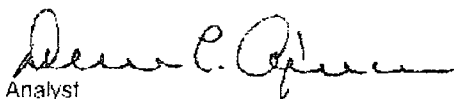
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

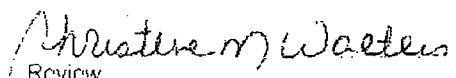
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	249	99.8%	75 - 125%

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


Reviewer

ENVIROTECH LABS

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

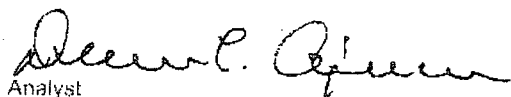
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

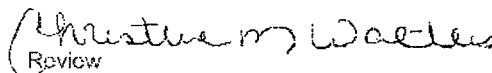
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

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


Analyst


Reviewer

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	0.1113E+007	0.1113E+007	0.2%	ND	0.2
Toluene	5.0741E+007	5.0741E+007	0.2%	ND	0.2
Ethylbenzene	2.3976E+007	2.4073E+007	0.2%	ND	0.2
p,m-Xylene	1.0365E+008	1.0406E+008	0.2%	ND	0.2
o-Xylene	4.6896E+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, US EPA December 1996
Method 8021B Aromatic and Heterocyclic Volatiles by Gas Chromatography Using Photoionization and/or Electrode Conductivity Detectors. SW-846 US EPA December 1996.

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

Christine M. Wadler
Analyst

Shirley Wadler
Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: N/A
Sample ID: 02-28-BTEX QA/QC
Laboratory Number: 40189
Sample Matrix: Soil
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 02-28-07
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 02-28-07
Analysis: BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	2.5006E-007	2.5958E+000	0.2%	ND	0.2
Toluene	3.6222E-007	3.6256E+000	0.2%	ND	0.2
Ethylbenzene	1.9182E+007	1.9021E-007	0.2%	ND	0.2
p,m-Xylene	7.8713E+007	7.866E-007	0.2%	ND	0.2
o-Xylene	3.2464E-007	3.2626E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. 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	88.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References

Method 5050B: Purge-and-Trap Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996
Method 8021 B: Aromatic and Halogenated Volatiles by Gas Chromatography using Photoionization and/or Electrolytic Conductivity Detectors, SW 846, USEPA December 1996

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

Christine M. Wadden
Analyst

Blair V. Vail
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:
		Accept. Range 0 - 15%			
Benzene	2.2130E+007	2.2175E+007	0.2%	ND	0.2
Toluene	5.6147E+007	5.6209E+007	0.2%	ND	0.2
Ethylbenzene	2.7960E+007	2.8018E+007	0.2%	ND	0.2
p,m-Xylene	1.2046E+008	1.2070E+008	0.2%	ND	0.2
o-Xylene	5.6883E+007	5.6987E+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 8030B, 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 Electrode Conductivity Detectors, SW-846, USEPA December 1993.

Comments: QA/QC for Samples 40340 - 40343

Analyst

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:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc.	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	2.8904E+007	2.8962E+007	0.2%	ND	0.2
Toluene	5.6045E+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	5.5413E+007	5.5524E+007	0.2%	ND	0.1

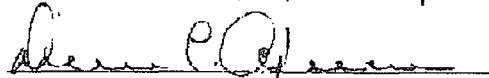
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	2.8	2.8	0.0%	0 - 30%	1.7
Ethylbenzene	5.1	5.1	0.0%	0 - 30%	1.5
p,m-Xylene	25.8	25.9	0.4%	0 - 30%	2.2
o-Xylene	8.1	8.1	0.0%	0 - 30%	1.0

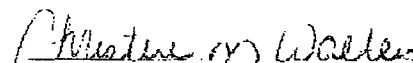
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	2.8	50.0	52.7	99.8%	46 - 148
Ethylbenzene	5.1	50.0	55.1	100.0%	32 - 160
p,m-Xylene	25.8	100	125	99.7%	46 - 148
o-Xylene	8.1	50.0	58.0	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846 US EPA, December 1993.
Method 8021B Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Flame Ionization Conductivity Detection, SW 846, USEPA December 1993

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


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: N/A
Sample ID: 03-20-BTFX QA/QC
Laboratory Number: 40525
Sample Matrix: Soil
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 03-20-07
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 03-20-07
Analysis: BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	2.8229E+007	2.9286E+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	5.2593E+007	5.2761E+007	0.2%	ND	0.2
o-Xylene	3.7799E+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 8030B, 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

Analyst

Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: N/A
Sample ID: 03-22-RTEX QA/QC
Laboratory Number: 40550
Sample Matrix: Soil
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 03-22-07
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 03-22-07
Analysis: BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	3.2490E+007	3.2555E+007	0.2%	ND	0.2
Toluene	5.3766E+007	5.3894E+007	0.2%	ND	0.2
Ethylbenzene	2.2007E+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	4.9874E+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

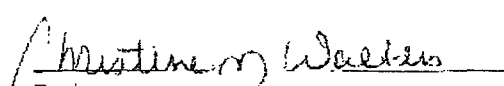
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	23.5	50.0	73.4	99.9%	39 - 150
Toluene	70.0	50.0	119	99.5%	46 - 148
Ethylbenzene	54.7	50.0	104	99.7%	32 - 160
p,m-Xylene	132	100	231	99.7%	46 - 148
o-Xylene	48.8	50.0	98.6	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

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

Comments: QA/QC for Samples 40550 - 40557


Analyst


Review

ENVIROTECH LABS

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: N/A
Sample ID: 04-02-BTEX QA/QC
Laboratory Number: 40663
Sample Matrix: Sol.
Preservation: N/A
Condition: N/A

Project #: N/A
Date Reported: 04-02-07
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 04-02-07
Analysis: BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	1.0940E+007	1.1973E+007	0.2%	ND	0.2
Toluene	1.9147E+007	1.9186E+007	0.2%	ND	0.2
Ethylbenzene	9.3900E+005	9.4154E+005	0.2%	ND	0.2
p,m-Xylene	4.3783E+007	4.3871E+007	0.2%	ND	0.2
o-Xylene	1.8334E+007	1.8371E+007	0.2%	ND	0.1

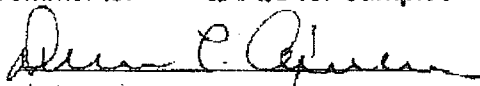
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	ND	ND	0.0%	0 - 30%	1.7
Ethylbenzene	3.5	3.5	0.0%	0 - 30%	1.5
p,m-Xylene	23.5	23.3	0.9%	0 - 30%	2.2
o-Xylene	9.7	9.6	1.0%	0 - 30%	1.0

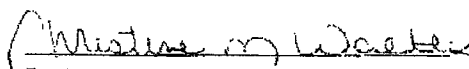
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	ND	50.0	50.0	100.0%	46 - 148
Ethylbenzene	3.5	50.0	53.4	99.8%	32 - 160
p,m-Xylene	23.5	100	123	99.9%	46 - 148
o-Xylene	9.7	50.0	59.7	100.0%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 8030B, 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:	04-06-3TEx 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 Conc	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	1.1535E+007	1.1639E+007	0.2%	ND	0.2
Toluene	1.6865E+007	1.6899E+007	0.2%	ND	0.2
Ethylbenzene	7.4723E+006	7.4672E+006	0.2%	ND	0.2
p,m-Xylene	3.9594E+007	3.9674E+007	0.2%	ND	0.2
o-Xylene	1.7024E+007	1.7059E+007	0.2%	ND	0.1

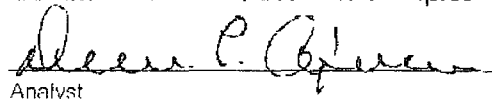
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	3.7	3.7	0.0%	0 - 30%	1.7
Ethylbenzene	14.2	14.2	0.0%	0 - 30%	1.5
p,m-Xylene	42.9	43.0	0.2%	0 - 30%	2.2
o-Xylene	34.0	33.9	0.3%	0 - 30%	1.0

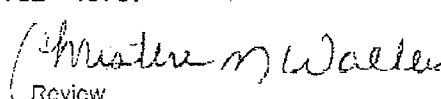
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	3.7	50.0	53.7	100.0%	46 - 148
Ethylbenzene	14.2	50.0	64.1	99.8%	32 - 160
p,m-Xylene	42.9	100	142	99.7%	46 - 148
o-Xylene	34.0	50.0	83.8	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test 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 40732 - 40734, 40752 - 40757


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: N/A
Sample ID: 04-16-STEX QA/QC
Laboratory Number: 41005
Sample Matrix: Soil
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 04-16-07
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 04-16-07
Analysis: STEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
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	7.1638E+007	7.1301E+007	0.2%	ND	0.2
o-Xylene	3.0163E+007	3.0223E+007	0.2%	ND	0.1

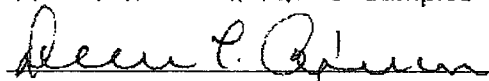
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	12.8	12.7	0.8%	0 - 30%	1.8
Toluene	15.1	15.0	0.7%	0 - 30%	1.7
Ethylbenzene	3.3	3.3	0.0%	0 - 30%	1.5
p,m-Xylene	28.3	28.2	0.4%	0 - 30%	2.2
o-Xylene	9.7	9.7	0.0%	0 - 30%	1.0

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


Analyst

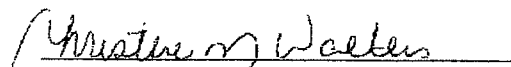
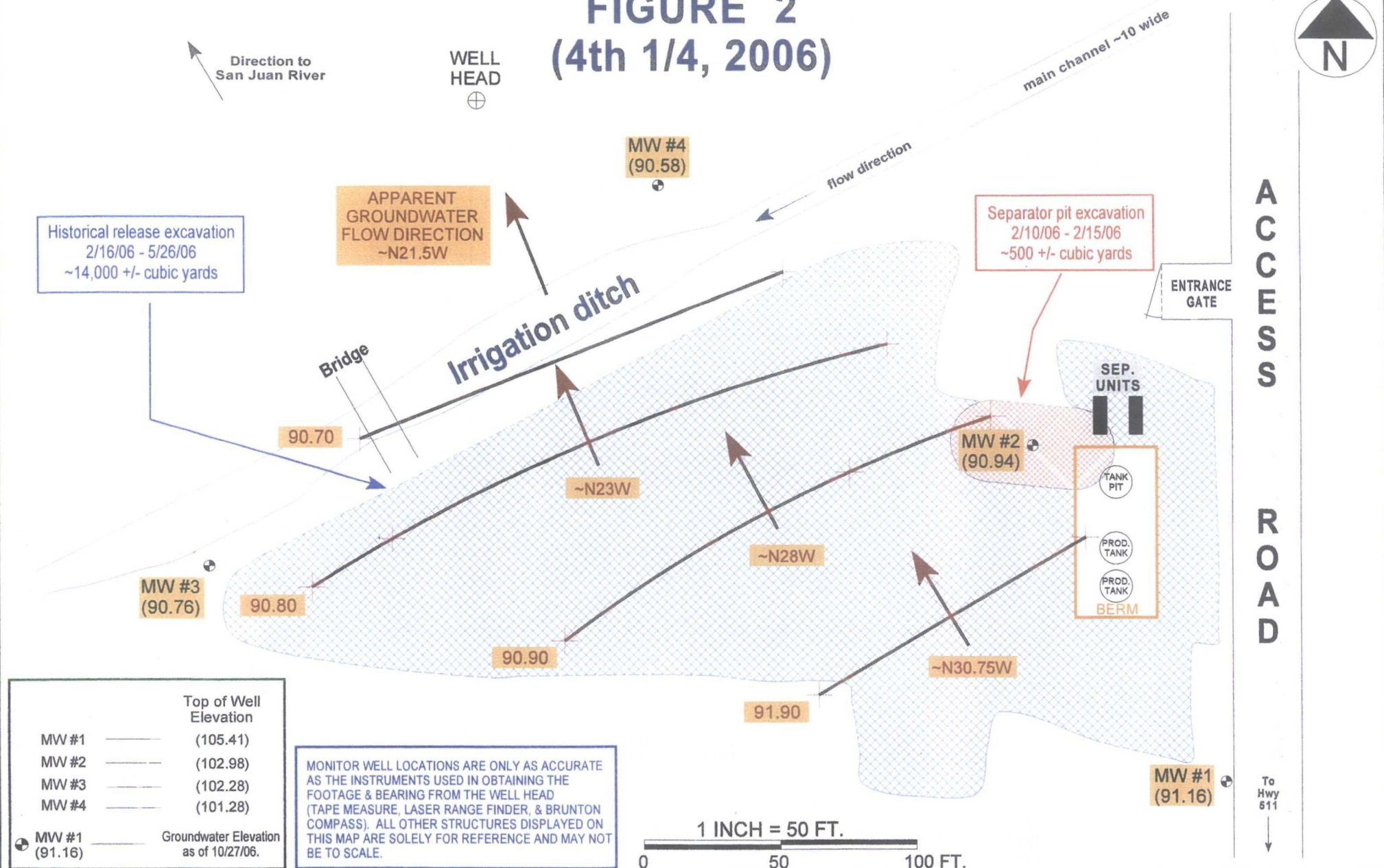

Review

FIGURE 2 (4th 1/4, 2006)



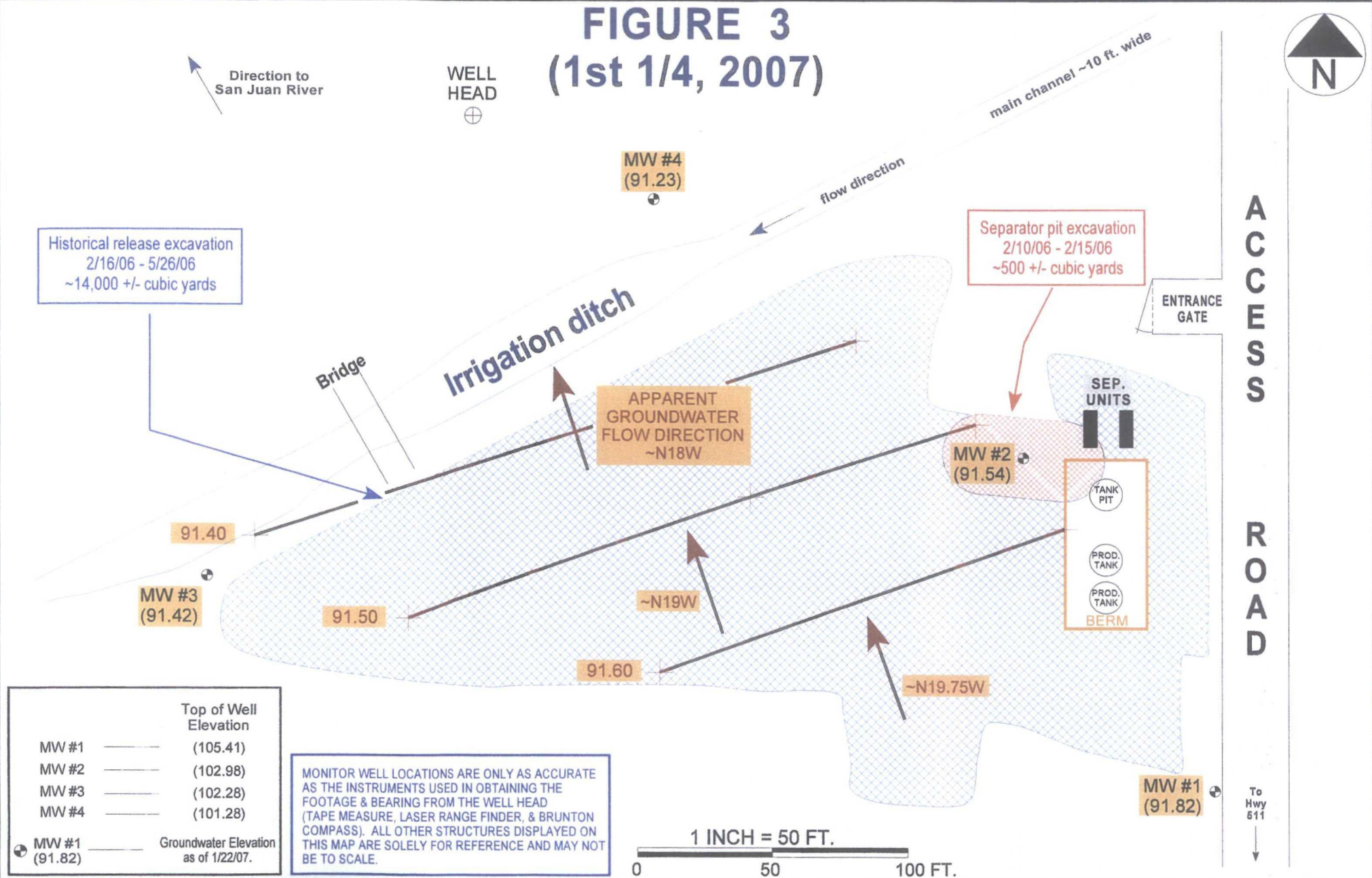
BP AMERICA PRODUCTION CO.
CHAVEZ GC A # 1
SW/4 NE/4 SEC. 3, T29N, R9W
SAN JUAN COUNTY, NEW MEXICO

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: 10-27-06-GW.SKF
REVISED: 10-27-06 NJV

GROUNDWATER GRADIENT MAP
10/06

FIGURE 3 (1st 1/4, 2007)



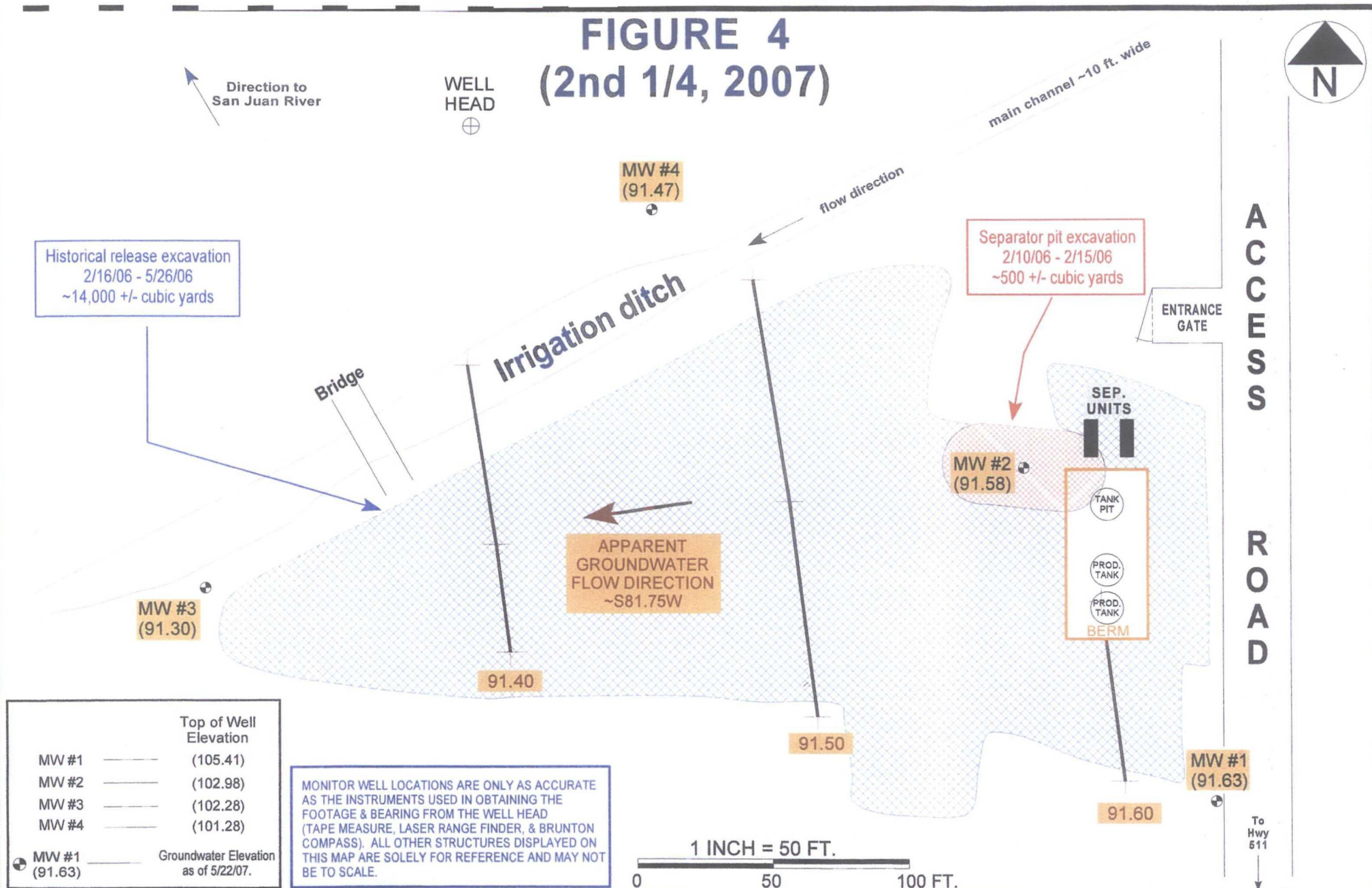
BP AMERICA PRODUCTION CO.
CHAVEZ GC A # 1
SW/4 NE/4 SEC. 3, T29N, R9W
SAN JUAN COUNTY, NEW MEXICO

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: 01-22-07-GW.SKF
REVISED: 01-22-07 NJV

GROUNDWATER GRADIENT MAP
01/07

FIGURE 4 (2nd 1/4, 2007)



BP AMERICA PRODUCTION CO.

CHAVEZ GC A # 1

SW/4 NE/4 SEC. 3, T29N, R9W

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P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SAMPLING

DRAWN BY: NJV

FILENAME: 05-22-07-GW.SKF

REVISED: 05-22-07 NJV

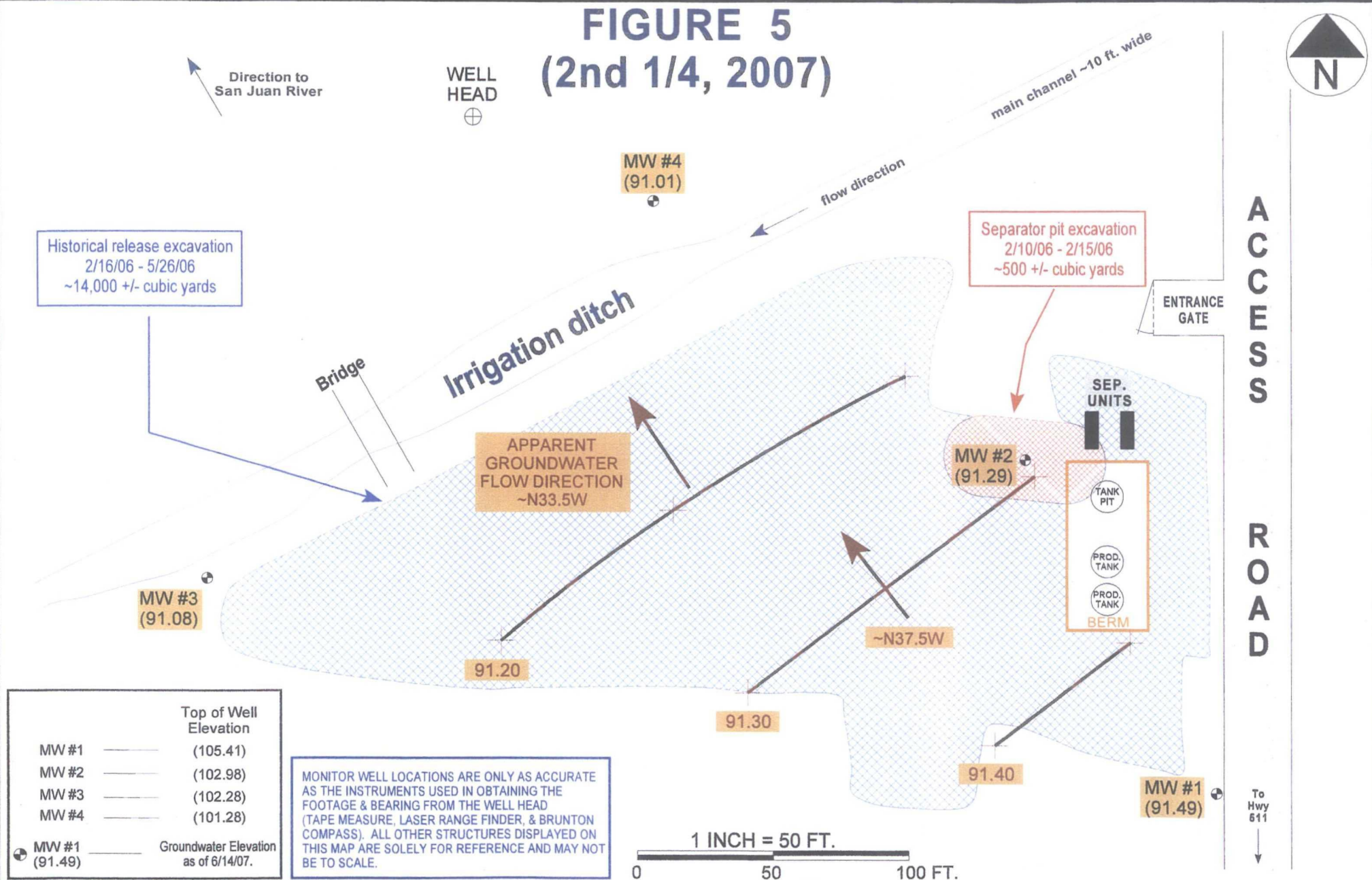
GROUNDWATER

GRADIENT

MAP

05/07

FIGURE 5 (2nd 1/4, 2007)



BP AMERICA PRODUCTION CO.

CHAVEZ GC A # 1

SW/4 NE/4 SEC. 3, T29N, R9W

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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

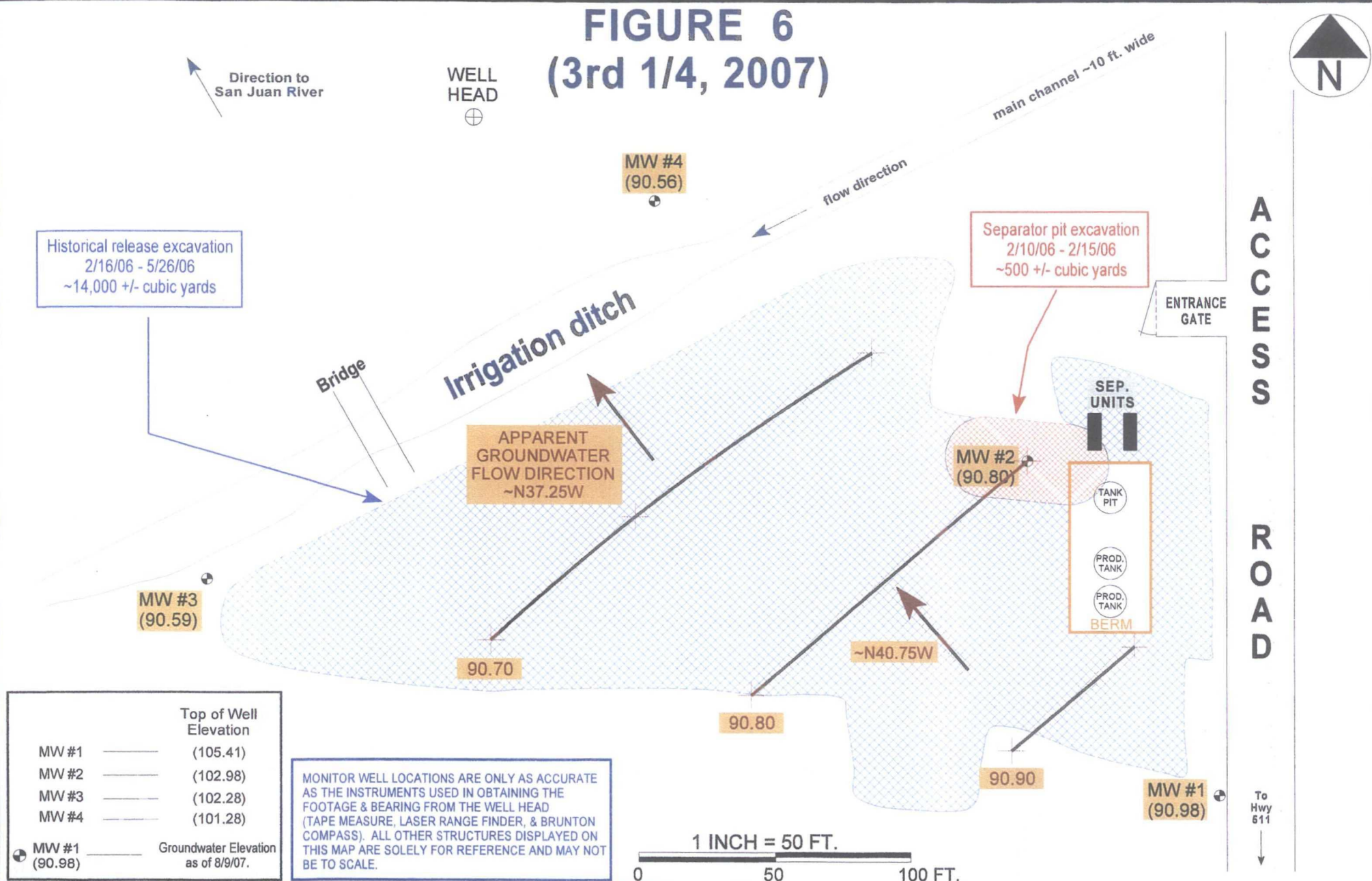
GROUNDWATER

GRADIENT

MAP

06/07

FIGURE 6 (3rd 1/4, 2007)



BP AMERICA PRODUCTION CO.

CHAVEZ GC A # 1

SW/4 NE/4 SEC. 3, T29N, R9W

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P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SAMPLING

DRAWN BY: NJV

FILENAME: 08-09-07-GW.SKF

REVISED: 08-09-07 NJV

GROUNDWATER

GRADIENT

MAP

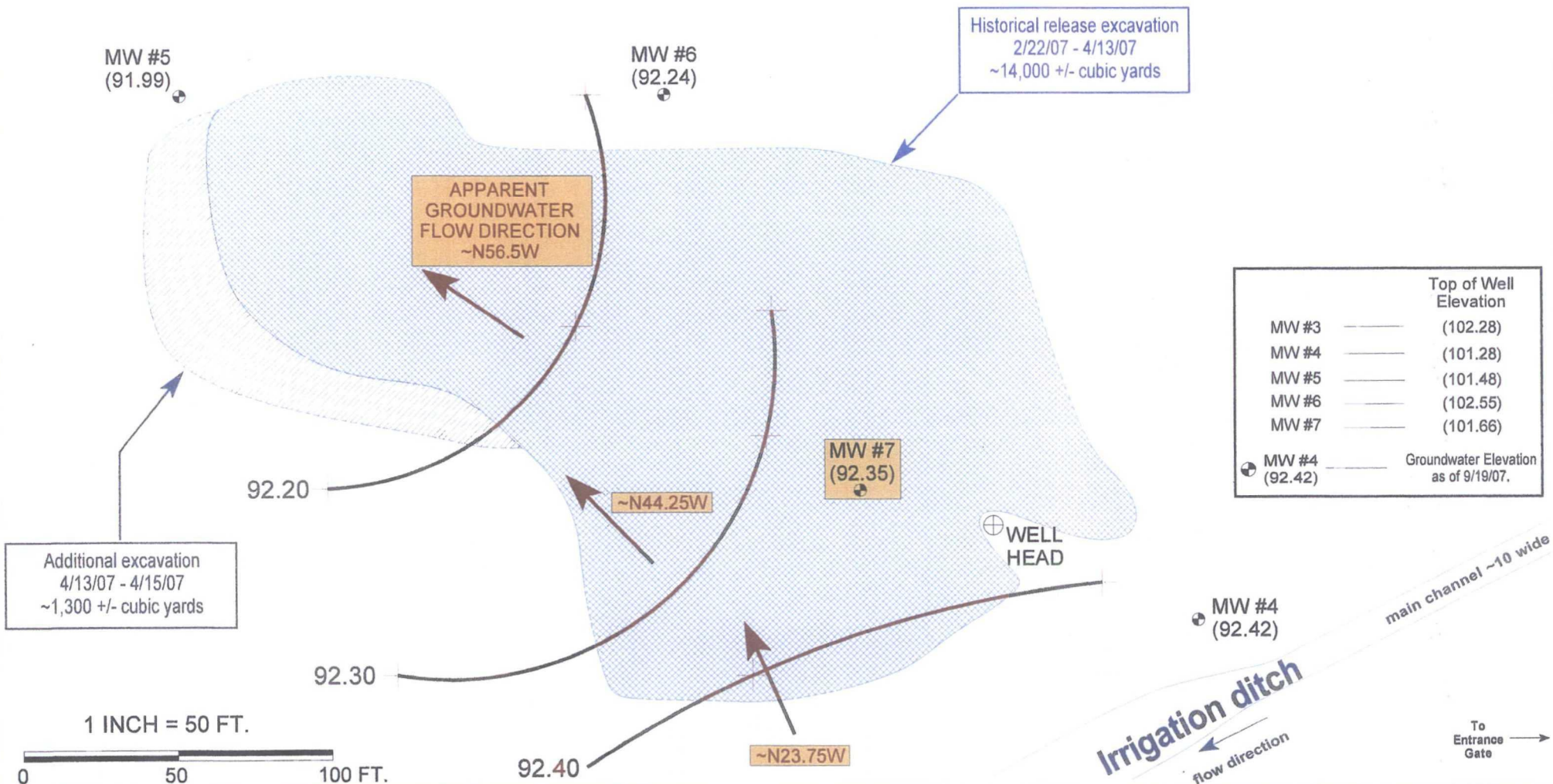
08/07

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.

FIGURE 7 (3rd 1/4, 2007)



Direction to
San Juan River



BP AMERICA PRODUCTION CO.

CHAVEZ GC A #1

SW/4 NE/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

DRAWN BY: NJV

FILENAME: 09-19-07-GW.SKF

REVISED: 09-19-07 NJV

GROUNDWATER

CONTOUR

MAP

09/07

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.

FIGURE 8 (4th 1/4, 2007)



Direction to
San Juan River

APPARENT
GROUNDWATER
FLOW DIRECTION
~N34W

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

MW #5
(90.47)

MW #6
(90.71)

90.70

~N46.75W

MW #7
(91.32)

~N56.75W

WELL
HEAD

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

91.00

91.30

1 INCH = 50 FT.

0 50 100 FT.

	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 (91.39)	Groundwater Elevation as of 11/20/07.

MW #4
(91.39)

main channel ~10 wide

Irrigation ditch
flow direction

To
Entrance
Gate

BP AMERICA PRODUCTION CO.

CHAVEZ GC A #1

SW/4 NE/4 SEC. 3, T29N, R9W

SAN JUAN COUNTY, NEW MEXICO

B LAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW INSTALLATIONS

DRAWN BY: NJV

FILENAME: 11-20-07-GW.SKF

REVISED: 11-21-07 NJV

GROUNDWATER
CONTOUR
MAP

11/07

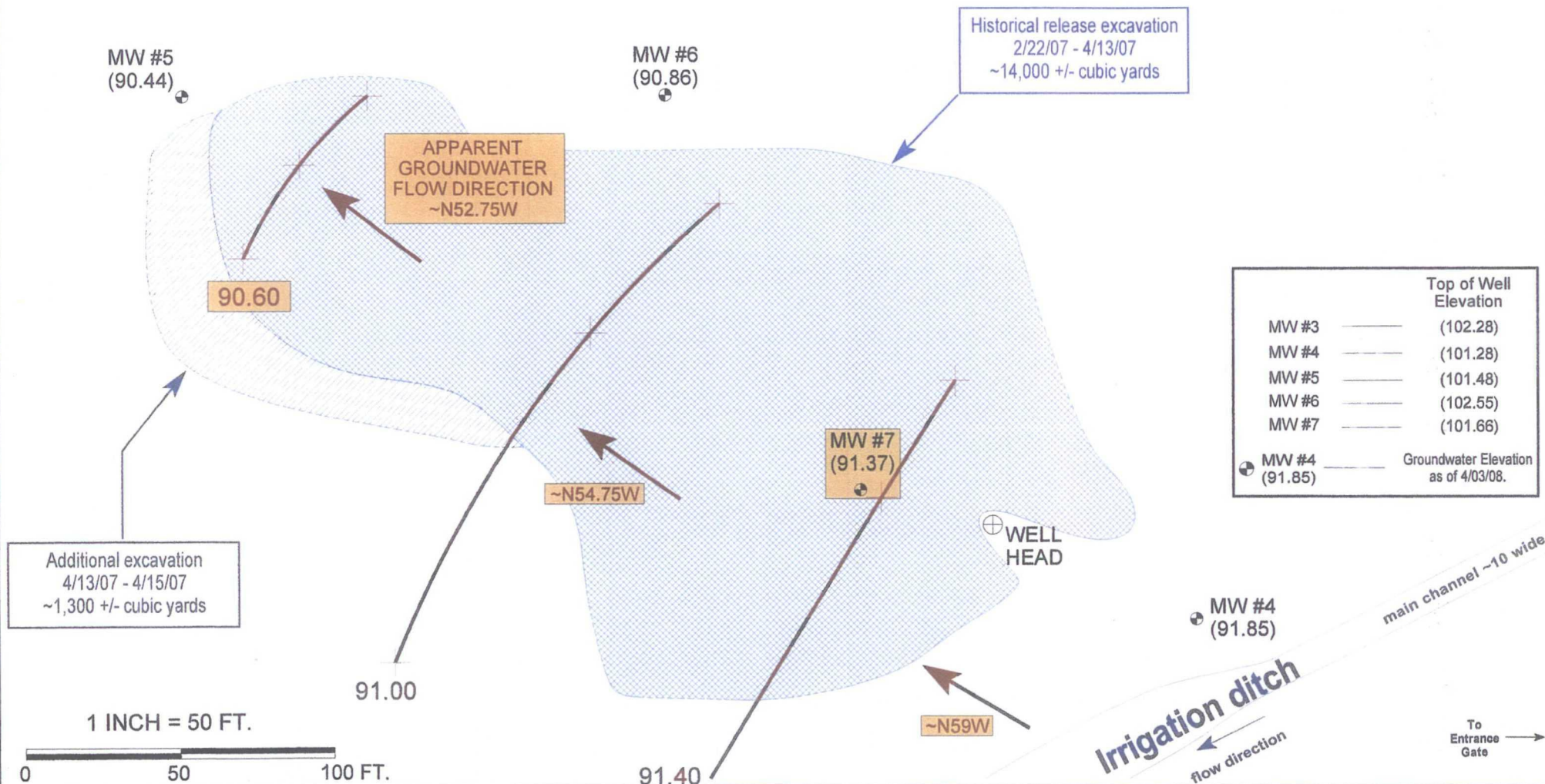
MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS). ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

FIGURE 9

(2nd 1/4, 2008)



Direction to
San Juan River



BP AMERICA PRODUCTION CO.

CHAVEZ GC A #1

SW/4 NE/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

DRAWN BY: NJV

FILENAME: 04-03-08-GW.SKF

REVISED: 04-08-08 NJV

GROUNDWATER

CONTOUR

MAP

04/08

BLAGG ENGINEERING, INC.

P.O. BOX 87
BLOOMFIELD, NM 87413

(505) 632-1199

MW #5

BORE / TEST HOLE REPORT

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

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

FIELD CLASSIFICATION AND REMARKS

DEPTH FEET	INTERVAL	LITHOLOGY INTERVAL	MW SCHEMATIC
2			
4			
6			
8			
10			
12			
14			
16			
18			
20			
22			
24			
26			
28			
30			
32			
34			
36			
38			
40			

GROUND SURFACE

TOP OF CASING APPROX. 3.40 FT. ABOVE GROUND SURFACE.

MODERATE TO DARK YELLOWISH BROWN SAND PHASING INTO SILTY CLAY TO CLAY, SLIGHTLY TO MEDIUM PLASTIC, SLIGHTLY MOIST TO WET, FIRM TO STIFF TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (0.0 - 10.0 FT. BELOW GRADE).

DEPTH TO WATER APPROX. 6.09 FT. FROM GROUND SURFACE MEASURED ON 9/19/07.

BROWNISH TO MEDIUM GRAY SAND AND GRAVEL, NON COHESIVE, SATURATED, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (10.0 - 15.0 FT. BELOW GRADE).

NOTE:



- SILTY CLAY TO CLAY.



- SAND AND GRAVEL.

TOS - TOP OF SCREEN FROM GROUND SURFACE.

TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.

Monitor well consist of 2 inch PVC piping - casing from 3.40 ft. above grade to 3.95 ft. below grade, 0.010 slotted screen between 3.95 to 13.95 feet below grade, sand packed annular to 2.0 ft. below grade, bentonite chips between grade to 2.0 feet below grade. Completed by concreting locking well protector around above grade casing and secured with padlock.

BLAGG ENGINEERING, INC.

P.O. BOX 87
BLOOMFIELD, NM 87413

(505) 632-1199

MW #6

BORE / TEST HOLE REPORT

CLIENT:

BP AMERICA PRODUCTION COMPANY

LOCATION NAME:

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

CONTRACTOR:

BLAGG ENGINEERING, INC. / ENVIROTECH, INC.

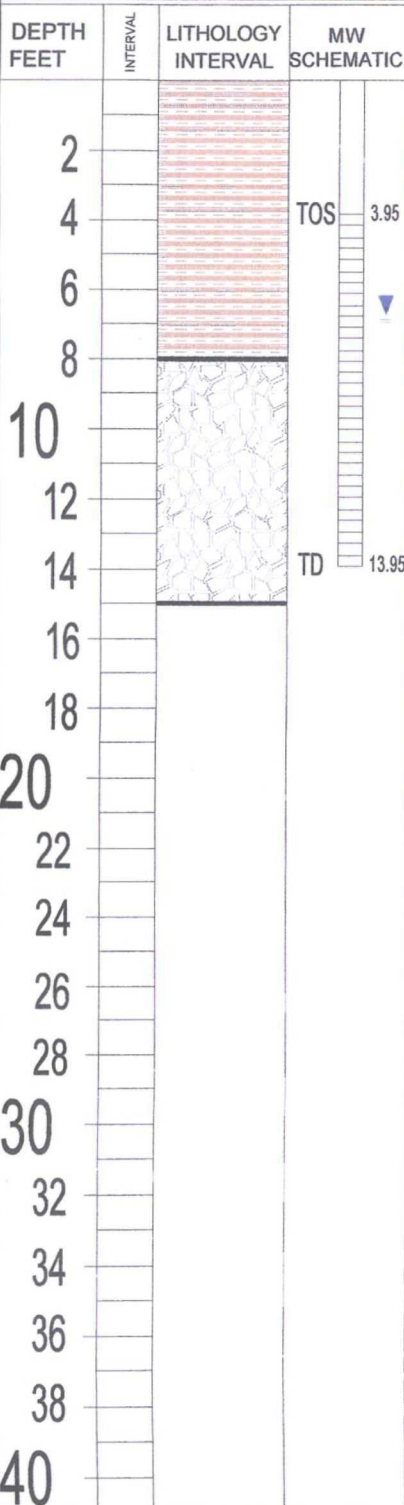
EQUIPMENT USED:

MOBILE DRILL RIG (CME 75)

BORING LOCATION:

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



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 3.55 FT. ABOVE GROUND SURFACE.

MODERATE TO DARK YELLOWISH BROWN SAND PHASING INTO SILTY CLAY TO CLAY, SLIGHTLY TO MEDIUM PLASTIC, SLIGHTLY MOIST TO MOIST, FIRM TO STIFF, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (0.0 - 8.0 FT. BELOW GRADE).

DEPTH TO WATER APPROX. 6.76 FT. FROM GROUND SURFACE MEASURED ON 9/19/07.

GRAYISH BLACK SAND AND GRAVEL, NON COHESIVE, SATURATED, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (8.0 - 15.0 FT. BELOW GRADE).

NOTE:



- SILTY CLAY TO CLAY.



- SAND AND GRAVEL.

TOS - TOP OF SCREEN FROM GROUND SURFACE.

TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.

Monitor well consist of 2 inch PVC piping - casing from 3.55 ft. above grade to 3.95 ft. below grade, 0.010 slotted screen between 3.95 to 13.95 feet below grade, sand packed annular to 2.0 ft. below grade, bentonite chips between grade to 2.0 feet below grade. Completed by concreting locking well protector around above grade casing and secured with padlock.

BLAGG ENGINEERING, INC.

P.O. BOX 87
BLOOMFIELD, NM 87413

(505) 632-1199

MW #7

BORE / TEST HOLE REPORT

CLIENT:

BP AMERICA PRODUCTION COMPANY

LOCATION NAME:

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

CONTRACTOR:

BLAGG ENGINEERING, INC. / ENVIROTECH, INC.

EQUIPMENT USED:

MOBILE DRILL RIG (CME 75)

BORING LOCATION:

44.5 FT., N75W FROM WELL HEAD.

BORING #..... **BH - 7**

MW #..... **7**

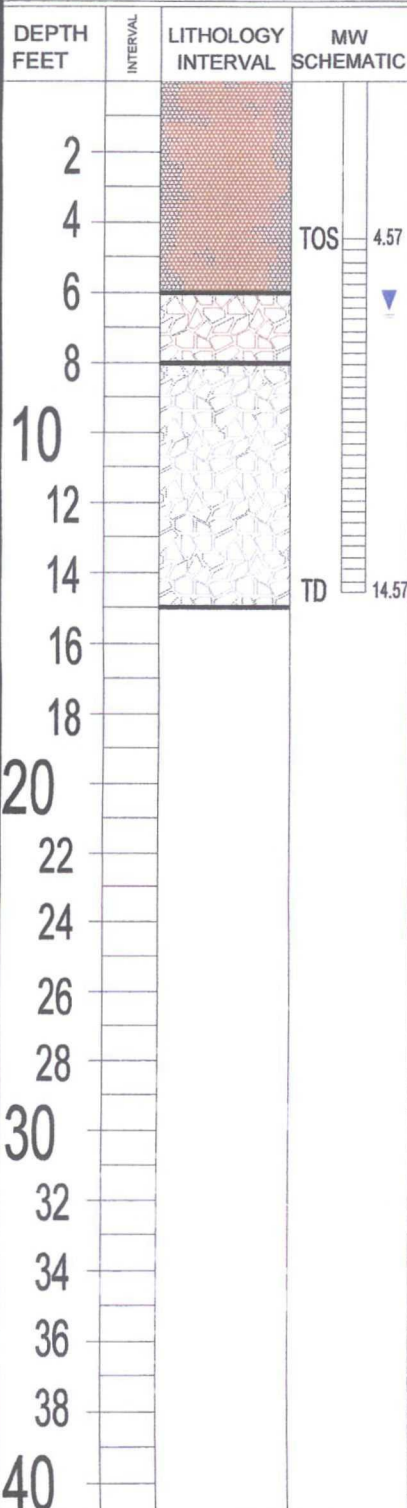
PAGE #..... **7**

DATE STARTED **8/29/07**

DATE FINISHED **8/29/07**

OPERATOR..... **DP**

PREPARED BY **NJV**



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.80 FT. ABOVE GROUND SURFACE.

MODERATE TO DARK YELLOWISH BROWN SAND PHASING INTO SILTY CLAY TO CLAY, SLIGHTLY TO MEDIUM PLASTIC, SLIGHTLY MOIST TO MOIST, FIRM TO STIFF, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (0.0 - 8.0 FT. BELOW GRADE).

DEPTH TO WATER APPROX. 6.51 FT. FROM GROUND SURFACE MEASURED ON 9/19/07.

PALE YELLOWISH BROWN SAND AND GRAVEL, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (6.0 - 8.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT MEDIUM GRAY WITH STRONG APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (8.0 - 15.0 FT. BELOW GRADE).

NOTE:

 - SAND.

 - SAND AND GRAVEL.

TOS - TOP OF SCREEN FROM GROUND SURFACE.

TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.

Monitor well consist of 2 inch PVC piping - casing from 2.80 ft. above grade to 4.60 ft. below grade, 0.010 slotted screen between 4.60 to 14.60 feet below grade, sand packed annular to 3.0 ft. below grade, bentonite chips between grade to 3.0 feet below grade. Completed by concreting locking well protector around above grade casing and secured with padlock.

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: October 27, 2006

SAMPLER: NJV

Filename: 10-27-06.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.)
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

INSTRUMENT CALIBRATIONS =

7.00 2,800

DATE & TIME =

10/27/06 0845

NOTES: Volume of water purged from well prior to sampling: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$
(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: 03-Nov-06

CLIENT: Blagg Engineering
Project: Chavez GC A #1

Lab Order: 0610363

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
EPA METHOD 8021B: VOLATILES						Analyst: NSB
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
EPA METHOD 8021B: VOLATILES						Analyst: NSB
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
EPA METHOD 8021B: VOLATILES						Analyst: NSB
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 Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
RL Reporting Limit

Client: BLAGG ENGR / BP AMERICA

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

Phone #: 632-1199

Fax #:

QA/QC Package:

Std ☐ Level 4 ☐

Other:

Project Name:

CHAVEZ GC A #1

Project #:

Project Manager:

JCB

Sampler:

NV

Sample Temperature:

7a

[illegible]

Date:	Time:
10/30/06	0645

Relinquished By: (Signature)

Received By: (Signature)

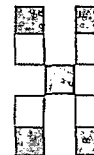
1031/06
0942

Remarks:

Date: Time:

Relinquished By: (Signature)

Received By: (Signature)



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

ANALYSIS REQUEST

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
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: SW8021

Sample ID: 5ML RB

MBLK

Batch ID: R21272 Analysis Date: 11/2/2006 8:24:59 AM

Benzene	ND	µg/L	1.0
Toluene	ND	µg/L	1.0
Ethylbenzene	ND	µg/L	1.0
Xylenes, Total	ND	µg/L	3.0

Sample ID: 100NG BTEX LCS

LCS

Batch ID: R21272 Analysis Date: 11/2/2006 5:13:35 PM

Benzene	18.71	µg/L	1.0	93.6	85	115
Toluene	18.92	µg/L	1.0	94.6	85	118
Ethylbenzene	18.78	µg/L	1.0	91.3	85	116
Xylenes, Total	37.98	µg/L	3.0	91.3	85	119

Sample ID: 100NG BTEX LCSD

LCSD

Batch ID: R21272 Analysis Date: 11/2/2006 5:43:34 PM

Benzene	18.94	µg/L	1.0	94.7	85	115	1.18	27
Toluene	19.35	µg/L	1.0	96.7	85	118	2.23	19
Ethylbenzene	19.05	µg/L	1.0	92.6	85	116	1.45	10
Xylenes, Total	39.18	µg/L	3.0	94.3	85	119	3.11	13

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **BLAGG**

Date and Time Received:

10/31/2006

Work Order Number **0610363**

Received by **AT**

Checklist completed by



10/31/06

Signature

Date

Matrix

Carrier name **Greyhound**

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Not Shipped ☐

Custody seals intact on sample bottles?

Yes ☐

No ☒

N/A ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☐

Yes ☒

No ☐

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

1°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT: BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY #: N / A

CHAVEZ GC A #1

LABORATORY (S) USED: HALL ENVIRONMENTAL

UNIT G, SEC. 3, T29N, R9W

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.)
MW - 1	105.41	91.82	13.59	19.50	-	-	-	-	-
MW - 2	102.98	91.54	11.44	18.00	1230	7.55	5,000	13.7	3.25
MW - 3	102.25	91.42	10.83	19.00	1150	7.35	1,300	10.7	4.00
MW - 4	101.28	91.23	10.05	16.00	1120	7.35	900	8.8	3.00

INSTRUMENT CALIBRATIONS =

7.00 2,800

DATE & TIME =

01/22/07 1115

NOTES: Volume of water purged from well prior to sampling: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$
(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
Project: Chavez GC A #1

Lab Order: 0701272

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
EPA METHOD 8021B: VOLATILES						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
EPA METHOD 8021B: VOLATILES						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
EPA METHOD 8021B: VOLATILES						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

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 1 / 3

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Client: BLAKE ENGR. / BP AMERICA

Std ☐ Level 4 ☐

Other:

Project Name:

CHAVEZ GC A #1

Address:

P.O. BOX 87

BLFD. NM 87413

Project #:

Project Manager:

T-8

Phone #:

632-1199

Sampler:

NV

Fax #:

Sample Temperature:

[illegible]

Date:

Time:

Relinquished By: (Signature)

Received By: (Signature)

1-24-07
0937

Remarks:

Date:

Time:

Relinquished 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		MBLK		Batch ID: R22273		Analysis Date: 1/25/2007 10:22:32 AM			
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 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

Signature

Date

Matrix

Carrier name Greyhound

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐ Not Shipped ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☐

Yes ☒

No ☐

Water - Preservation labels on bottle and cap match?

Yes ☐

No ☐

N/A ☒

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

1°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT: BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY #: N / A

CHAVEZ GC A #1

LABORATORY (S) USED: HALL ENVIRONMENTAL

UNIT G, SEC. 3, T29N, R9W

Date: May 22, 2007

SAMPLER: NJV

Filename: 05-22-07.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.)
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

INSTRUMENT CALIBRATIONS =

7.00	2,800
DATE & TIME = 05/08/07	0740

NOTES: Volume of water purged from well prior to sampling: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$
(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: 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
EPA METHOD 8021B: VOLATILES						Analyst: NSB
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
EPA METHOD 8021B: VOLATILES						Analyst: NSB
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
Surr: 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
EPA METHOD 8021B: VOLATILES						Analyst: NSB
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

Remarks:

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
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: SW8021

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **BLAGG**

Date and Time Received:

5/23/2007

Work Order Number 0705359

Received by **TLS**

Checklist completed by

Signature

Date

Matrix

Carrier name **UPS**

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

Container/Temp Blank temperature?

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 : N J 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	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	7.00	2,800
DATE & TIME =	08/09/07	0730

NOTES : Volume of water purged from well prior to sampling: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$
(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 # 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
EPA METHOD 8021B: VOLATILES						Analyst: NSB
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

Client: BLAGE ENGR. / BP AMERICA

Std ☐ Level 4 ☐

Other:

Project Name:

CHAVEZ GC A #1

Address:

P.O. Box 87

BLFO, NM 87413

Project #:

Project Manager:

$$J \subset B$$

Phone #:

632-1199

Sampler:

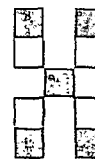
NV

Fax #:

Sample Temperature:

46

Date: 8/9/07	Time: 1730	Relinquished By: (Signature) <i>[Signature]</i>	Received By: (Signature) <i>[Signature]</i> 9:45 8/10/07
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)



**HALL ENVIRONMENTAL
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Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

[illegible]

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
Method: SW8021									
Sample ID: 5ML 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:

8/10/07

Work Order Number **0708155**

Received by

ARS

Checklist completed by

Signature



8/10/07
Date

Matrix

Carrier name Grayhound

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

Container/Temp Blank temperature?

4°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

BLAGG ENGINEERING, INC.**MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA**CLIENT : **BP AMERICA PROD. CO.**CHAIN-OF-CUSTODY # : **N / A****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: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$
(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, 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
EPA METHOD 8021B: VOLATILES						Analyst: NSB
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	87.4	70.2-105		%REC	1	9/28/2007 3:57:18 PM
EPA METHOD 300.0: ANIONS						Analyst: KS
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
FERROUS IRON						Analyst: KS
Ferrous Iron	0.38	0.10		mg/L	1	10/1/2007
SM4500-H+B: PH						Analyst: SMP
pH	7.23	0.1		pH units	1	9/24/2007
SM 2540C: TDS						Analyst: TAF
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
EPA METHOD 8021B: VOLATILES						Analyst: NSB
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
EPA METHOD 300.0: ANIONS						Analyst: KS
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, Nitrite (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
FERROUS IRON						Analyst: KS
Ferrous Iron	ND	0.10		mg/L	1	10/11/2007
SM4500-H+B: PH						Analyst: SMP
pH	7.02	0.1		pH units	1	9/24/2007
SM 2540C: TDS						Analyst: TAF
Total Dissolved Solids	1000	200		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: 0709289-03

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
EPA METHOD 8021B: VOLATILES						Analyst: NSB
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
EPA METHOD 300.0: ANIONS						Analyst: KS
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
FERROUS IRON						Analyst: KS
Ferrous Iron	ND	0.10		mg/L	1	10/1/2007
SM4500-H+B: PH						Analyst: SMP
pH	7.11	0.1		pH units	1	9/24/2007
SM 2540C: TDS						Analyst: TAF
Total Dissolved Solids	6100	20		mg/L	1	9/21/2007

Qualifiers:
 V Value exceeds Maximum Contaminant Level
 F 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: BLAGE ENGR. / BP AMERICA

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

Phone #: 632-1199

Fax #:

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

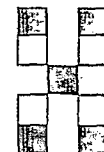
Project Name:
CHAVEZ GC A #1

Project #:
NV

Project Manager:
JCB

Sampler:
NV

Sample Temperature:
23



**HALL ENVIRONMENTAL
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ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative			HEAL No.	ANALYSIS REQUEST												Air Bubbles				
					HgCl ₂	HNO ₃	HCl		BTEX + MTBE + TMB-s (80215)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)		Fe ²⁺	TDS	PH	
9/19/07	1025	WATER	MW #5	2-40ml	✓			0709289	✓																
"	"	"	"	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 Time: 1545 Relinquished By: (Signature) [Signature]

Date: Time: Relinquished By: (Signature)

Received By: (Signature) [Signature]

Received By: (Signature) 9/19/07 21:145

Remarks:

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
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: E300

Sample ID: MBLK

MBLK

Batch ID: R25281 Analysis Date: 9/21/2007 10:41:23 AM

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

Batch ID: R25281 Analysis Date: 9/22/2007 7:34:51 AM

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

Batch ID: R25359 Analysis Date: 9/27/2007 3:19:55 AM

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

Batch ID: R25394 Analysis Date: 9/28/2007 4:20:15 PM

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

Batch ID: R25281 Analysis Date: 9/21/2007 10:58:48 AM

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

Batch ID: R25281 Analysis Date: 9/22/2007 7:52:16 AM

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:

- L 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
Method: E300									
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			
Method: SW3500									
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			
Method: SW8021									
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 times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

Page 2

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
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: E160.1

Sample ID: MB-13906

MBLK

Batch ID: 13906

Analysis Date:

9/21/2007

Total Dissolved Solids

ND

mg/L

20

Sample ID: LCS-13906

LCS

Batch ID: 13906

Analysis Date:

9/21/2007

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

[Signature]

Date

9/21/07

Matrix

Carrier name **UPS**

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

Container/Temp Blank temperature?

23°

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 : **NJV**Filename : **11-20-07.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	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: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$
(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 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.

CLIENT: Blagg Engineering
Project: Chavez GC A #1

Lab Order: 0711368

Lab ID: 0711368-01

Collection Date: 11/20/2007 1:15:00 PM

Client Sample ID: MW #5

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: 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
Surr: 4-Bromofluorobenzene	83.1	70.2-105		%REC	1	11/29/2007 3:46:49 AM

Lab ID: 0711368-02

Collection Date: 11/20/2007 1:25:00 PM

Client Sample ID: MW #6

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: 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
Surr: 4-Bromofluorobenzene	79.0	70.2-105		%REC	1	11/29/2007 4:16:47 AM

Lab ID: 0711368-03

Collection Date: 11/20/2007 2:15:00 PM

Client Sample ID: MW #7

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: 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
Surr: 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

Client: BLAZE ENERGY / BP AMERICA

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

Phone #: 632-1199

Fax #:

QA / QC Package:

Std ☐ Level 4 ☐

Other:

Project Name:

CHAVEZ EC A #1

Project #:

Project Manager:

JCS

Sampler:

NV

Sample Temperature:

22

[illegible]

Date:

Time:

Relinquished By: [Signature]

Received By: (Signature)

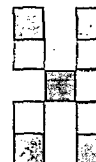
Date:

Time:

Relinquished By: (Signature)

Received By: (Signature)

e) 11/21/07
1410



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

ANALYSIS REQUEST

✓	✓	✓	(BTEX) + MTBE + TMB's (80218)
			BTEX + MTBE + TPH (Gasoline Only)
			TPH Method 8015B (Gas/Diesel)
			TPH (Method 418.1)
			EDB (Method 504.1)
			EDC (Method 8021)
			8310 (PNA or PAH)
			RCRA 8 Metals
			Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
			8081 Pesticides / PCB's (8082)
			8260B (VOA)
			8270 (Semi-VOA)
			Air Bubbles or Headspace (Y or N)

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
---------	--------	-------	-----	------	----------	-----------	------	----------	------

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:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **BLAGG**

Date Received:

11/21/2007

Work Order Number **0711368**

Received by: **AT**

Checklist completed by:

Signature

Date

Sample ID labels checked by

Initials

Matrix

Carrier name **UPS**

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

Container/Temp Blank temperature?

2°

<6° C Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

BLAGG ENGINEERING, INC.**MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA**CLIENT: **BP AMERICA PROD. CO.**CHAIN-OF-CUSTODY #: **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: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$
(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.

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
8260 MSV UST, Water		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

Page 5 of 10

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ANALYTICAL RESULTS

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

Sample: MW #6		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
8260 MSV UST, Water		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	2037-26-5	
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: RAW #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
8260 MSV UST, Water		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		

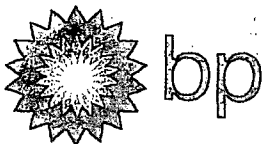
Date: 04/15/2008 05:50 PM

REPORT OF LABORATORY ANALYSIS

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Chain of Custody Record

156386

Page 1 of 1

Project Name: CHAVEZ GC A #1
BP BU/AR Region/Enfos Segment: SAN JUAN GC SOUTH
State or Lead Regulatory Agency: NMOC
Requested Due Date (mm/dd/yy): 4/17/08

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

Lab Name: <u>FACE ANALYTICAL</u>				BP/AR Facility No.: <u>WR192504</u>				Consultant/Contractor: <u>BLAGG / WRS</u>												
Address: <u>9608 LOIRET BLVD</u>				BP/AR Facility Address:				Address: <u>110 N. FOURTH ST.</u>												
<u>LENEXA, KS 66219</u>				Site Lat/Long:				<u>BLOOMFIELD, NM 87413</u>												
Lab PM: <u>MARY JANE WALLS</u>				California Global ID No.:				Consultant/Contractor Project No.: <u>41008737</u>												
Tele/Fax: <u>(913) 599-5668 FAX: (913) 599-1759</u>				Enfos Project No.: <u>0019 L</u>				Consultant/Contractor PM: <u>NELSON VELEZ</u>												
BP/AR PM Contact: <u>MIKE WHELAN, PG</u>				Provision or RCOP (circle one)				Tele/Fax: <u>(505) 632-1199 FAX: (505) 632-3988</u>												
Address: <u>501 WESTLAKE PARK BLVD.</u>				Phase/WBS:				Report Type & QC Level: <u>STANDARD</u>												
<u>Rm 28.144B Houston TX 77079</u>				Sub Phase/Task:				E-mail EDD To: <u>blagg-njve@yahoo.com</u>												
Tele/Fax: <u>(281) 366-7485 FAX: (281) 366-7094</u>				Cost Element: <u>01</u>				Invoice to: Consultant or BP of Atlantic Richfield Co. (circle one)												
Lab Bottle Order No:				Matrix				Requested Analysis												
Item No.	Sample Description	Time	Date	Soil/Solid	Water/Liquid	Air	Laboratory No.	No. of Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	BTEX 8021	BTEX/TPH	BTEX/Oxy/TPH	EPA 8260	EPA 8270	Sample Point Lat/Long and Comments	
1	MW #5	1100	4/3/08	✓				3				✓					✓			<u>001</u>
2	MW #6	1130	4/3/08	✓				3				✓					✓			<u>002</u>
3	MW #7	12.00	4/3/08	✓				3				✓					✓			<u>003</u>
4																				
5																				
6																				
7																				
8																				
9																				
10																				
Sampler's Name: <u>NELSON VELEZ</u>				Relinquished By / Affiliation				Date	Time	Accepted By / Affiliation				Date	Time					
Sampler's Company: <u>BLAGG ENGINEERING, INC.</u>				<u>Nelson Velez - BLAGG ENGR.</u>				<u>4/7/08</u>	<u>1530</u>	<u>[Signature]</u>				<u>4/16/08</u>	<u>826</u>					
Shipment Date: <u>APRIL 7, 2008</u>																				
Shipment Method: <u>FED EX OVERNITE</u>																				
Shipment Tracking No:																				
Special Instructions: <u>REPORT BTEX CONSTITUENTS ONLY. SAN JUAN COUNTY, NM</u>																				
Custody Seals In Place Yes ☒ No ☐ Temp Blank Yes ☒ No ☐ Cooler Temperature on Receipt <u>34 °F</u> Trip Blank Yes ☒ No ☐																				

LABORATORY

BP COC Rev.4 10/1/04

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 & MATRIX SPIKE DUPLICATE: 311257 311258

Parameter	Units	6038059018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
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

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QUALIFIERS

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

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 GC A #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		

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

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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

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Client Name: BPJESProject # C6038270Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____Tracking #: 499 4348 715Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ noPacking Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____Thermometer Used T-168 T-169 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begunCooler Temperature 36

Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 4/18/08
BR BR

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>LT</u>		
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	
exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water)	☒ Yes ☐ No	Initial when completed <u>BR</u> Lot # of added preservative
Samples checked for dechlorination:	☐ Yes ☐ No ☒ N/A	14.
Headspace in VOA Vials (>6mm):	☐ Yes ☒ No ☐ N/A	15.
Trip Blank Present:	☒ Yes ☐ No ☐ N/A	16. <u>3 TB sent w/ multiple preservatives</u>
Trip Blank Custody Seals Present	☐ Yes ☒ No ☐ N/A	
Pace Trip Blank Lot # (if purchased): <u>63728-3</u>		<u>BR</u>

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: mw 4/19/08

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)

F-ALLC003rev.3, 11September2006

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 : **NJV**Filename : **06-10-08.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	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: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$
(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
8260 MSV UST, Water		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

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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
8260 MSV UST, Water		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

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ANALYTICAL RESULTS

Project: CHAVEZ GCA 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
8260 MSV UST, Water		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		

Date: 06/23/2008 03:06 PM

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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
8260 MSV UST, Water		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		

Date: 06/23/2008 03:06 PM

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Chain of Custody Record

Project Name: CHAVEZ GC A 1
 BP BU/AR Region/Enfos Segment: STOC SOUTH
 State or Lead Regulatory Agency: NMOC
 Requested Due Date (mm/dd/yy): 6/23/08

On-site Time: <u>8:55</u>	Temp: <u>65°F</u>
Off-site Time: <u>11:20</u>	Temp: <u>83°F</u>
Sky Conditions: <u>SUNNY</u>	
Meteorological Events:	
Wind Speed: <u>0-10</u>	Direction: <u>NORTH</u>

Lab Name: <u>Pace Analytical Services, Inc.</u>				BP/AR Facility No.:				Consultant/Contractor: <u>Blagg/URS</u>							
Address: <u>9609 Loiret Blvd</u>				BP/AR Facility Address:				Address: <u>110 N. Forth St.</u>							
<u>Lenexa, KS 66219</u>				Site Lat/Long:				<u>Bloomfield, NM 87413</u>							
Lab PM: <u>MJ Walls</u>				California Global ID No.:				Consultant/Contractor Project No.:							
Tele/Fax: <u>913-563-1401</u>				Enfos Project No.: <u>0019L-0001</u>				Consultant/Contractor PM: <u>Nelson Velez</u>							
BP/AR EMB: <u>Mike Whelan</u>				Provision or OOC (circle one)				Tele: <u>(505) 632-1199</u> Fax: <u>(505) 632-3903</u>							
Address: <u>501 Westlake Park Blvd.</u>				Phase/WBS:				Report Type & QC Level: <u>STD</u>							
<u>Rm28, 144B Houston, TX 77079</u>				Sub Phase/Task:				E-Mail EDD To: <u>blagg-njve@yahoo.com</u>							
Tele: <u>(281) 366-7485</u> Fax: <u>(281) 366-7094</u>				Cost Element:				Invoice to: Consultant or BP of Atlantic Richfield Co. (circle one)							
Lab Bottle Order No: <u>17703</u>				Matrix				Requested Analysis							
Item No.	Sample Description	Time	Date	Soil/Solid	Water/Liquid	Air	Laboratory No.	No. of Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	BTEX (8260)	Sample Point Lat/Long and Comments
1	<u>MW #5</u>	<u>0940</u>		☒			<u>001</u>	<u>3</u>				☒		☒	<u>3(DC-9H)</u>
2	<u>MW #6</u>	<u>1010</u>		☒			<u>002</u>	<u>3</u>				☒		☒	
3	<u>MW #7</u>	<u>1055</u>		☒			<u>003</u>	<u>3</u>				☒		☒	
4	<u>MW #1X</u>	<u>0915</u>		☒			<u>004</u>	<u>3</u>				☒		☒	
5							<u>005</u>								
6															
7															
8															
9															
10															
Sampler's Name: <u>NELSON VELEZ</u>				Relinquished By / Affiliation				Date	Time	Accepted By / Affiliation				Date	Time
Sampler's Company: <u>BLAGG ENERGY, INC.</u>				<u>Nelson Velez</u>				<u>6/10/08</u>	<u>1540</u>	<u>[Signature]</u>				<u>6/11</u>	<u>910</u>
Shipment Date: <u>JUNE 10, 2008</u>															
Shipment Method: <u>FED. EX.</u>															
Shipment Tracking No: <u>4994348682</u>															
Special Instructions: <u>REPORT BTEX CONSTITUENTS ONLY.</u> <u>SAN JUAN COUNTY, NM</u>															
Custody Seals In Place: <u>Yes</u> / No Temp Blank: <u>Yes</u> / No Cooler Temp on Receipt: <u>5.2 °F</u> Trip Blank: <u>Yes</u> / No MS/MSD Sample Submitted: Yes / <u>No</u>															

PROJECT NARRATIVE

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

Method: EPA 8260
Description: 8260 MSV UST, Water
Client: BP-Biagg 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:

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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.

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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 & MATRIX SPIKE DUPLICATE: 339182 339183

Parameter	Units	6041661001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
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	

QUALITY CONTROL DATA

Project: CHAVEZ GCA 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	

QUALIFIERS

Project: CHAVEZ GCA 1
Pace Project No.: 6041661

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		

SAMPLE ANALYTE COUNT

Project: CHAVEZ GCA 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

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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

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Sample Condition Upon Receipt

Client Name: BR BLACKProject # 6041661Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____Tracking #: 8643 6005 2346Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ noPacking Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____Thermometer 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

Temp should be above freezing to 6°C

Comments:

Optional

Proj. Due Date: 6/23Proj. Name: Have 2 GC A1Date and Initials of person examining contents: EW 6/11

S: 1010 E: 1015

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

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: me 6/12/08

Date: _____

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