

**3R - 404**

# **REPORTS**

**DATE:**

Aug. 24, 2006

**BLAGG ENGINEERING INC.**

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

320404  
RECEIVED

SEP 22 2006

Oil Conservation Division  
Environmental Bureau

September 20, 2006

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

Re: BP America Production Company  
Transmittal of Remediation and Monitoring Report  
Jaquez GC C1  
(O) Sec. 6 - T29N - R9W, San Juan County, NM

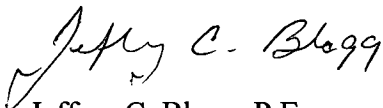
Dear Mr. von Gonten:

On behalf of BP America Production Company, Blagg Engineering, Inc. (BEI) is submitting the attached remediation and monitoring report for the Jaquez GC C 1 pursuant to the site groundwater management plan.

If you have questions or need additional information, please contact either myself at (505)632-1199 or Mr. Kevin Hansford of BP at (505)326-9200.

Respectfully:

**Blagg Engineering, Inc.**



Jeffrey C. Blagg, P.E.  
President

cc: Brandon Powell - NMOCD Aztec  
Kevin Hansford - BP SJ Op. Ctr.  
John Jaquez - Fee Surface Owner

File: rpt.xmt.wpd

320404

RECEIVED

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REMEDIATION AND  
MONITORING REPORT

SEP 22 2006

Oil Conservation Division  
Environmental Bureau

BP AMERICA PRODUCTION CO.  
JAQUEZ GC C #1

(O) SEC. 6 - 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 ENGINEERS  
P.O. BOX 87  
BLOOMFIELD, NM 87413  
(505)632-1199

AUGUST 24, 2006

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- 1/13/06 Soil – Hall Environmental Laboratories
- 7/26/06 Groundwater - Hall Environmental Laboratories
- 8/15/06 Groundwater - Envirotech Laboratories

**REMEDIATION AND MONITORING REPORT**  
**BP AMERICA PRODUCTION CO**  
**JAQUEZ GC C#1**

**Introduction and Executive Summary**

The Jaquez GC C #1 well is located on fee property in rural San Juan County, New Mexico. A private residence is located several hundred feet northwest of the well site and the San Juan River is within ½ mile to the southeast. Immediately south of the well and spill location is a meadow with marsh grasses with groundwater at the ground surface.

A release of hydrocarbons to the environment was discovered at the well on January 10, 2006. This release was at a production separator and appeared to result from a line freeze that allowed hydrocarbon condensate to spill onto the ground surface at the separator unit. Surface impacts were limited to an area of about 10 feet diameter at the spill site (Figure 1). Since shallow groundwater at a depth of less than 5 feet was known to exist at the site, BP elected to report a potential of groundwater impact and proceed with immediate abatement.

On January 11, 2006 soils with obvious impacts at the separator site were excavated with a backhoe and placed on site for future disposal. On January 13, 2006 a trackhoe was used to remove approximately 200 cubic yards (40' x 30' x 5'± deep) of soil from the impacted area and from around an adjacent sub-grade pit tank to insure that all potential sources to groundwater contamination were removed. The area was backfilled with clean imported soil.

Three (3) groundwater monitor wells were installed at the site on May 2, 2006. Following development, these wells were sampled for hydrocarbon impacts testing on July 26, 2006 and for cation/anion testing on August 15, 2006. Test results indicate that no groundwater contamination is present at the site.

**Abatement of Soil Impacts**

Site investigation and abatement was conducted concurrently using excavation equipment to remove all identified impacted soils that could exceed NMOCD standards, beginning from the ground surface and extending to below the water table (Figure 6). The soil at the site is an olive gray, non cohesive silty sand. The spill site was over-excavated (40' x 30' x 5'± deep) to minimize the potential for groundwater contamination. The impacted soils were transported to the NMOCD

permitted BP Crouch Mesa Landfarm for remediation.

Following excavation of impacts a 5-point composite sample at a depth of 2 feet below surface grade was collected from the perimeter sidewalls for laboratory testing of total petroleum hydrocarbons (Method 8015B), volatile organics (Method 8021B) and chloride (Method 9056A). Test results indicated an absence of residual contamination. The laboratory report is included in the appendices.

### **Monitor Well Installation and Water Quality Test Results**

Three (3) groundwater monitoring wells were installed on May 2, 2006 for water quality testing and to determine gradient. A hollow stem auger drill rig was used to advance borings to a depth of 11 to 11.5 feet below surface grade and set 2-inch diameter slotted screen with filter pack (Figures 3 – 5).

Following development, the wells were sampled on July 26, 2006 for testing of volatile organics by U.S. EPA Method 8260B. Samples were placed in laboratory supplied containers with preservative, stored in an ice chest with ice and express delivered to Hall Environmental Laboratories in Albuquerque, New Mexico for testing. Laboratory analysis indicates an absence of all contaminants. The laboratory data is summarized in Table 1 and laboratory test reports are included in the appendices.

The wells were sampled for cation/anion balance on August 15, 2006 following redevelopment. Samples were placed in laboratory supplied containers, stored in an ice chest with ice and hand delivered to Envirotech Labs in Farmington, New Mexico for testing. The cation/anion results are summarized in Table 2 and laboratory reports are included in the appendices. Review of the data indicates no discernable difference between up-gradient, source area and down-gradient water quality and no parameters were found to exceed New Mexico Water Quality Control Commission groundwater standards.

The measured groundwater depth during the July 26, 2006 sample event indicates a very shallow, water table type aquifer with a southwestern gradient at a slope of approximately 0.06 feet/foot (Figure 2). Based on this groundwater flow direction, down-gradient monitor well MW #3 is not ideally positioned. Future monitoring may indicate a seasonal shift in groundwater flow direction and determine this well is in a more preferable location.

### Recommendations for Further Action

Initial monitoring of soil and groundwater impacts indicates that all potential hydrocarbon contamination has been mitigated. However, the measured groundwater gradient indicates that down-gradient monitor well MW #3 is not presently located in an ideal location. BEI recommends monitoring the gradient on a quarterly basis to identify shifts in groundwater flow patterns. In the event that well MW #3 becomes more appropriate as a down-gradient monitoring point, it can be re-sampled for volatile organics and cation/anion testing. In the event that no changes in groundwater flow patterns are detected, an additional down-gradient monitor point may be considered.

### Limitations and Closure

The scope of BEI's 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 Jaquez GC C #1 well, located in the SW/4 of the SE/4 of Section 6, Township 29N, Range 9W, NMPM, San Juan County, New Mexico.

I certify that I am personally familiar with the investigative work at the site, site conditions and information as reported in this document.

**Respectively Submitted:**

***Blagg Engineering, Inc.***



**Jeffrey C. Blagg, NMPE 11607**

**President**

## FIGURES



# FIGURE 1



MW #1

Release location



Excavation perimeter

MW #2

PROD  
TANK

MW #3

WELL  
HEAD

To San Juan  
River

River flow  
direction

1 INCH = 20 FT.

0 20 40 FT.

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

BP AMERICA PRODUCTION CO.

JAQUEZ GC C #1

SW/4 SE/4 SEC. 6, 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

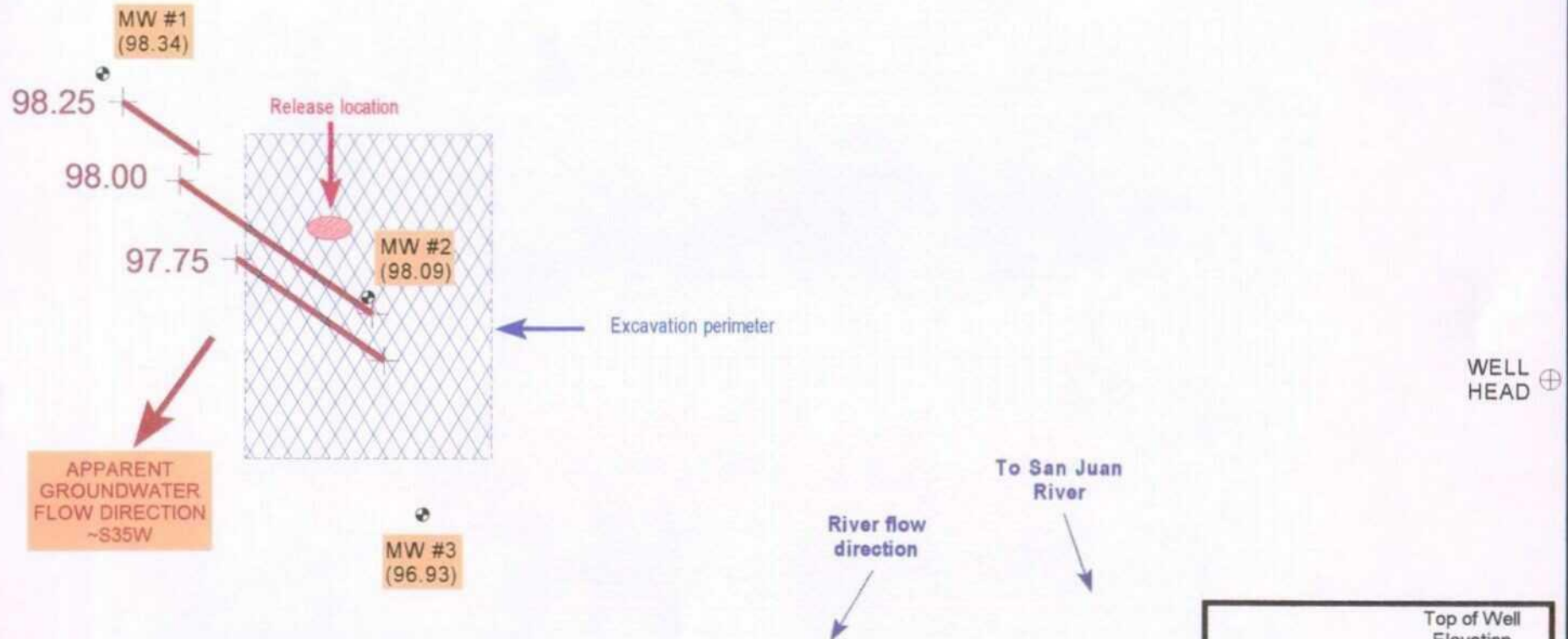
FILENAME: JAQUEZ GC C 1-SM.SKF

DRAFTED: 08-11-06 NJV

SITE  
MAP

07/06

**FIGURE 2**  
**(3rd 1/4, 2006)**



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.

1 INCH = 20 FT.

0 20 40 FT.

	Top of Well Elevation
MW #1	(99.61)
MW #2	(98.93)
MW #3	(98.63)
⊕ MW #1 (98.34)	Groundwater Elevation as of 7/26/06.

BP AMERICA PRODUCTION CO.

JAEQUEZ GC C #1

SW/4 SE/4 SEC. 6, 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: 07-26-06-GW.SKF

DRAFTED: 08-11-06 NJV

**GROUNDWATER**

**GRADIENT**

**MAP**

07/06

# BLAGG ENGINEERING, INC.

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

MW #1

## BORE / TEST HOLE REPORT

CLIENT: BP AMERICA PRODUCTION CO.  
LOCATION NAME: JAQUEZ GC C #1 - SEP. CLEAN UP, UNIT O, SEC. 6, T29N, R9W  
CONTRACTOR: BLAGG ENGINEERING, INC. / ENVIROTECH, INC.  
EQUIPMENT USED: MOBILE DRILL RIG (CME 75)  
BORING LOCATION: 180 FT., N78W FROM WELL HEAD.

BORING #..... BH-1  
MW #..... 1  
PAGE #..... 1  
DATE STARTED 5/02/06  
DATE FINISHED 5/02/06  
OPERATOR..... KP  
PREPARED BY NJV

DEPTH FEET	INTERVAL	LITHOLOGY INTERVAL	MW SCHEMATIC
1			TOS 1.00
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			TD 11.00
12			
13			
14			
15			
16			
17			
18			
19			
20			

### FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 1.00 FT. ABOVE GROUND SURFACE.

DARK YELLOWISH ORANGE SAND, NON COHESIVE, FIRM, SLIGHTLY MOIST TO MOIST, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (0.0 - 2.5 FT. BELOW GRADE).

MEDIUM GRAY PHASING INTO OLIVE GRAY SAND, NON COHESIVE, FIRM TO LOOSE, WET TO SATURATED, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (2.5 - 11.0 FT. BELOW GRADE).

NOTE: - SAND.

TOS - TOP OF SCREEN FROM GROUND SURFACE.

TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.

GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 1.00 ft. above grade to 1.00 ft. below grade, 0.010 slotted screen between 1.00 to 11.00 feet below grade, sanded annular to grade, secured with locking cap and padlock at monitor well top.

# BLAGG ENGINEERING, INC.

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

MW #2

## BORE / TEST HOLE REPORT

CLIENT: BP AMERICA PRODUCTION CO.  
LOCATION NAME: JAQUEZ GC C #1 - SEP. CLEAN UP, UNIT O, SEC. 6, T29N, R9W  
CONTRACTOR: BLAGG ENGINEERING, INC. / ENVIROTECH, INC.  
EQUIPMENT USED: MOBILE DRILL RIG (CME 75)  
BORING LOCATION: 144 FT., N86W FROM WELL HEAD.

BORING #..... BH-2  
MW #..... 2  
PAGE #..... 2  
DATE STARTED 5/02/06  
DATE FINISHED 5/02/06  
OPERATOR..... KP  
PREPARED BY NJV

DEPTH  
FEET

INTERVAL

LITHOLOGY  
INTERVAL

MW  
SCHEMATIC

### FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 0.75 FT. ABOVE GROUND SURFACE.

DARK YELLOWISH ORANGE SAND, NON COHESIVE, FIRM, SLIGHTLY MOIST TO MOIST, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (0.0 - 2.5 FT. BELOW GRADE).

MEDIUM GRAY PHASING INTO OLIVE GRAY SAND, NON COHESIVE, FIRM TO LOOSE, WET TO SATURATED, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (2.5 - 11.5 FT. BELOW GRADE).

NOTE: - SAND.

TOS - TOP OF SCREEN FROM GROUND SURFACE.

TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.

GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 0.75 ft. above grade to 1.25 ft. below grade, 0.010 slotted screen between 1.25 to 11.25 feet below grade, sanded annular to grade, secured with locking cap and padlock at monitor well top.

# BLAGG ENGINEERING, INC.

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

## MW #3

# BORE / TEST HOLE REPORT

CLIENT: BP AMERICA PRODUCTION CO.  
LOCATION NAME: JAQUEZ GC C #1 - SEP. CLEAN UP, UNIT O, SEC. 6, T29N, R9W  
CONTRACTOR: BLAGG ENGINEERING, INC. / ENVIROTECH, INC.  
EQUIPMENT USED: MOBILE DRILL RIG (CME 75)  
BORING LOCATION: 138 FT., S83W FROM WELL HEAD.

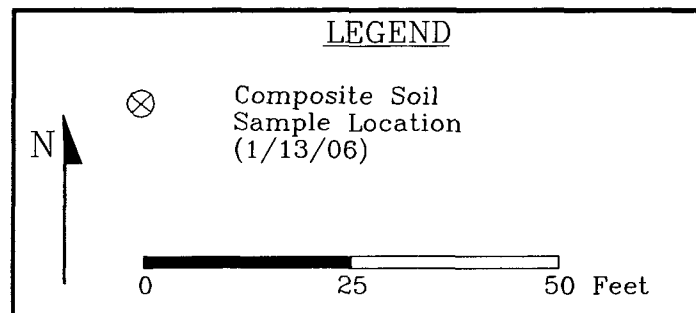
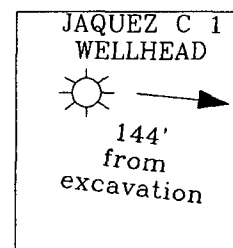
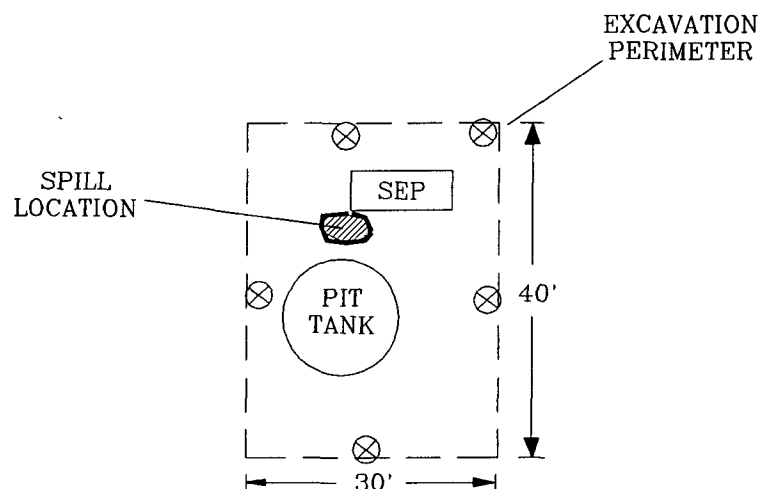
BORING #..... BH-3  
MW #..... 3  
PAGE #..... 3  
DATE STARTED 5/02/06  
DATE FINISHED 5/02/06  
OPERATOR..... KP  
PREPARED BY NJV

DEPTH FEET	INTERVAL	LITHOLOGY INTERVAL	MW SCHEMATIC	FIELD CLASSIFICATION AND REMARKS
1			TOS 0.75	GROUND SURFACE
2				TOP OF CASING APPROX. 1.25 FT. ABOVE GROUND SURFACE.
3				DARK YELLOWISH ORANGE SAND, NON COHESIVE, FIRM, SLIGHTLY MOIST TO MOIST, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (0.0 - 2.5 FT. BELOW GRADE).
4				
5				
6				
7				MEDIUM GRAY PHASING INTO OLIVE GRAY SAND, NON COHESIVE, FIRM TO LOOSE, WET TO SATURATED, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (2.5 - 11.0 FT. BELOW GRADE).
8				
9				
10				
11			TD 10.75	
12				
13				
14				
15				
16				
17				
18				
19				
20				

NOTE: - SAND.

TOS - TOP OF SCREEN FROM GROUND SURFACE.  
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.  
GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 1.25 ft. above grade to 0.75 ft. below grade, 0.010 slotted screen between 0.75 to 10.75 feet below grade, sanded annular to grade, secured with locking cap and padlock at monitor well top.



<b>SOIL EXCAVATION MAP</b> BP ** JAQUEZ C 1 ** (0)6-T29N-R9W			<b>BLAGG ENGINEERING, INC.</b>
DATE: 1/2006	FIGURE 6	BY: JCB	P.O. BOX 87, BLOOMFIELD, NM PHONE: (505)632-1199

# TABLES

# BP AMERICA PROD. CO. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

JAQUEZ GC C # 1

UNIT O, SEC. 6, T29N, R9W

REVISED DATE: August 17, 2006

FILENAME: (JC1-3Q06.WK4) NJV

								BTEX EPA METHOD 8021B ( ppb )			
SAMPLE DATE	WELL NAME or No.	D.T.W. (ft)	T.D. (ft)	TDS (mg/L)	COND. umhos	pH	PRODUCT (ft)	Benzene	Toluene	Ethyl Benzene	Total Xylene
26-Jul-06	MW #1	1.27	12.00	360	510	7.31		ND	ND	ND	ND
26-Jul-06	MW #2	0.84	12.00	280	608	7.67		ND	ND	ND	ND
26-Jul-06	MW #3	1.70	12.00	260	483	7.81		ND	ND	ND	ND
AVERAGE GROUNDWATER STANDARDS								15	150	150	320

NOTES : 1) TDS RESULTS DERIVED FROM AUGUST 15, 2006 SAMPLING EVENT .



# GENERAL WATER QUALITY

BP AMERICA PRODUCTION COMPANY

## JAQUEZ GC C # 1

Sample Date : August 15 , 2006

PARAMETERS	MW # 1	MW # 2	MW # 3	Units
LAB pH	7.90	8.07	8.19	s. u.
LAB CONDUCTIVITY @ 25 C	514	441	370	umhos / cm
TOTAL DISSOLVED SOLIDS @ 180 C	360	280	260	mg / L
TOTAL DISSOLVED SOLIDS (Calc)	390	300	290	mg / L
SODIUM ABSORPTION RATIO	2.0	1.3	1.8	ratio
TOTAL ALKALINITY AS CaCO3	270	170	180	mg / L
TOTAL HARDNESS AS CaCO3	189	160	144	mg / L
BICARBONATE as HCO3	270	170	180	mg / L
CARBONATE AS CO3	< 0.1	< 0.1	< 0.1	mg / L
HYDROXIDE AS OH	< 0.1	< 0.1	< 0.1	mg / L
NITRATE NITROGEN	0.1	0.1	0.2	mg / L
NITRITE NITROGEN	0.005	0.007	0.007	mg / L
CHLORIDE	18.0	18.0	54.0	mg / L
FLUORIDE	0.26	0.18	0.27	mg / L
PHOSPHATE	0.7	0.5	0.6	mg / L
SULFATE	75.0	75.0	25.0	mg / L
IRON	0.001	0.001	0.016	mg / L
CALCIUM	67.6	60.8	52.8	mg / L
MAGNESIUM	4.9	1.95	2.93	mg / L
POTASSIUM	2.09	0.96	0.46	mg / L
SODIUM	62.2	38.3	49.3	mg / L
CATION / ANION DIFFERENCE	0.00	0.05	0.03	

# BLAGG ENGINEERING, INC.

## MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : N / A

Jaquez GC C # 1

LABORATORY (S) USED : HALL ENVIRONMENTAL

UNIT O, SEC. 6, T29N, R9W

Date : July 26, 2006

SAMPLER : J C B

Filename : 07-26-06.WK4

PROJECT MANAGER : J C B

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	99.61	98.34	1.27	12.00	1335	7.31	510	16.8	10.00
2	98.93	98.09	0.84	12.00	1400	7.67	608	17.7	10.00
3	98.63	96.93	1.70	12.00	1430	7.81	483	17.5	10.00

INSTRUMENT CALIBRATIONS =

7.00 2,800

DATE & TIME =

07/26/06 1300

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 all MW's . Collected BTEX samples from all MW's .

Top of casings : MW # 1 ~ 1.00 ft. , MW # 2 ~ 0.75 ft. , MW # 3 ~ 1.25 ft. above grade .

# BLAGG ENGINEERING, INC.

## MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : BP AMERICA PROD. CO.

CHAIN-OF-CUSTODY # : 14673

JAQUEZ GC C # 1

LABORATORY (S) USED : ENVIROTECH

UNIT O, SEC. 6, T29N, R9W

Date : August 15, 2006

SAMPLER : J C B

Filename : 08-15-06.WK4

PROJECT MANAGER : J C B

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	99.61	98.23	1.38	12.00	0900	7.47	500	20.3	5.25
2	98.93	97.94	0.99	12.00	0850	7.65	400	21.2	5.50
3	98.63	97.00	1.63	12.00	0855	7.76	300	20.3	5.00

INSTRUMENT CALIBRATIONS =

7.00 2,800

DATE & TIME =

08/09/06 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 all MW's . Collected major anions / cations from all MW's .

Top of casings : MW # 1 ~ 1.00 ft. , MW # 2 ~ 0.75 ft. , MW # 3 ~ 1.25 ft. above grade .

## APPENDICES

Date: 1-17-06	Time: 0700	Relinquished By: (Signature) Jeff Blagg	Received By: (Signature) [Signature]	15:50 1/17/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

## 1. DEFINITIONS

- 1.1 "Acceptance of a sample" means the determination of HEAL to proceed with work following receipt and inspection of such sample.
- 1.2 "Customer" means the individual or entity who may request laboratory services and his or its heirs, successors, assigns, and representatives.
- 1.3 HEAL means Hall Environmental Analysis Laboratory its employees, servants, agents, and representative.
- 1.4 "Price schedule" means HEAL'S standard price schedule, as such, document may be amended from time to time by HEAL.
- 1.5 "Results" mean data generated by HEAL from the analysis of one or more samples.
- 1.6 "Terms and Conditions" mean these Terms and Conditions of sale, including the Price Schedule, and any additions or amendments hereto which are agreed to in writing by HEAL as provided in Section 7.1

## 2. ORDERS

- 2.1 The customer may order services by submitting a written purchase order to HEAL, by placing a telephone order, which will be subsequently confirmed in writing, or by negotiated contract. Any such order constitutes a) an acceptance by the Customer of HEAL'S offer to do business with the Customer under these Terms and Conditions, and b) an agreement to be bound by these Terms and Conditions. The Customer's delivery of samples to HEAL constitutes the Customer's express assent to be governed by these Terms and Conditions. HEAL reserves the right to refuse to proceed with work at any time based upon an unfavorable customer credit report.
- 2.2 Any order placed by the Customer under Section 2.1 is subject to a minimum cancellation charge of \$250.

## 3. PAYMENT TERMS

- 3.1 Services performed by HEAL will be in accordance with prices quoted and later confirmed in writing or as stated on the Price Schedule, which prices are subject to change periodically without notice. The Customer should confirm with HEAL the current price prior to placing an order for work.
- 3.2 Payment terms are net 30 days from the date of invoice by HEAL. All overdue payments are subject to an additional interest and service charge of one and one-half percent (1.5%) per month or portion thereof from the due date until the date of payment. All payments shall be made in United State currency.
- 3.3 The prices stated on the Price Schedule do not include any sales, use or other taxes unless specifically stated. Such taxes will be added to invoice prices when required.

## 4. RECEIPT OF SAMPLES AND DELIVERY OF SERVICES

- 4.1 Prior to HEAL'S Acceptance of any sample (or after any revocation of Acceptance), the entire risk of loss or damage to such sample will remain with the Customer. In no event will HEAL have any responsibility or liability for the action or inaction of HEAL'S carrier shipping or delivering any sample to or from HEAL'S premises.
- 4.2 HEAL reserves the absolute right, exercisable at any time to refuse delivery of, refuse to accept, or revoke Acceptance of, any sample which in the sole judgement of HEAL a) is of unsuitable volume, b) unsuitable containers as required for the requested analysis, or c) may be or become unsuitable for, or may pose a risk in, handling, transport or processing for any health, safety, environmental or other reason, whether or not due to the presence in the sample of any hazardous substance and whether or not such presence has been disclosed to HEAL by the Customer.
- 4.3 Where applicable, HEAL will use analytical methodologies which are in substantial conformity with U.S. Environmental Protection Agency (EPA), state agency, American Society for Testing and Materials (ASTM), Association of Official Analytical Chemist (AOAC), Standard Methods for the examination of Water and Wastewater, or other recognized methodologies. HEAL reserves the right to deviate from these

methodologies, if necessary or appropriate due to the nature of composition of the sample or otherwise based on the reasonable judgement of HEAL, which deviation, if any will be made on a basis consistent with recognized standards of industry and/or HEAL'S Standard Operating Procedures.

- 4.4 Upon timely delivery of samples, HEAL will use its best efforts to comply with storage, processing and analytical holding time limits as set forth in applicable EPA or state guidelines or otherwise requested by the Customer or set forth on the Price Schedule. However, unless specifically made part of a written agreement between HEAL and the Customer, such time limits cannot be guaranteed. Unless specifically indicated on the Price Schedule or expressly made part of a written agreement between HEAL and the Customer, analytical turnaround times are not guaranteed.

- 4.5 At HEAL'S sole discretion, verbal Results may be given in advance of the written report of Results. Such verbal Results are TENTATIVE RESULTS ONLY, subject to confirmation or change based on HEAL'S standard quality assurance review procedures.

## 5. WARRANTIES, LIABILITY AND INDEMNIFICATION

- 5.1 HEAL warrants only that its services will fulfill obligations set forth in Section 4.3 and 4.4 hereof. This warranty is the sole and exclusive warranty given by HEAL in connection with any such services, and HEAL gives and makes no other representation or warranty of any kind, express or implied. No representative of HEAL is authorized to give or make any other representation or warranty or modify the warranty in any way.
- 5.2 The liability and obligations of HEAL, and the remedies of the Customer in connection with any services performed by HEAL will be limited to repeating the services performed or, at the sole option of HEAL, refunding in full or in part fees paid by the Customer for such services. HEAL'S obligation to repeat any services with respect to any sample will be contingent on the Customer's providing, at the request of HEAL and at the Customer's expense, an additional sample if necessary. Any reanalysis generating Results consistent with the Original Results will be at the Customer's expense. Except as otherwise specifically provided herein, HEAL shall have no liability, obligation or responsibility of any kind for any losses, costs, expenses, or other damages (including but not limited to any special, indirect, incidental or consequential damages) for any representation or warranty of a kind with respect to HEAL'S Services or Results.
- 5.3 In no event shall HEAL have any responsibility or liability to the Customer for any failure or delay in performance by HEAL, which results, directly or indirectly, in whole or in part, from any cause or circumstance beyond the reasonable control of HEAL. Such cause and circumstance shall include, but not be limited to, acts of God, acts of Customer, acts of orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disputes, difficulties or delays in transportation, mail or delivery services, inability to obtain from HEAL usual sources sufficient services or supplies, or any other cause beyond HEAL'S reasonable control.

- 5.4 All results provided by HEAL are strictly for the use of its Customers, and HEAL is in no way responsible for the use of such results by Customers or third parties. All results should be considered in their entirety, and HEAL is in no way responsible for the separation, detachment, or other use of any portion of the results.

- 5.5 The customer represents and warrants that any sample delivered to HEAL will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by the customer. The Customer further warrants that any sample containing any hazardous substance, which is to be delivered to HEAL'S premises will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.

- 5.6 It is understood and agreed that all samples and cuttings of materials containing hazardous contaminants are the property and the responsibility of the Customer. All contaminated samples and laboratory byproducts will be returned to the Customer for disposal. It is understood and agreed that HEAL is not, and has no responsibility as, a generator, treater, storer, or disposer of hazardous or toxic substances found or identified at a site, and the Customer agrees to assume the responsibility for the foregoing.

- 5.7 The Customer shall indemnify and hold harmless HEAL from and against any and all claims, suits, judgements, damages, losses, liabilities, expenses, payments, taxes, duties, fines and/or other costs (including but not limited to liability to a third party) arising out of a) the presence of hazardous substances in any sample of the Customer regardless of the Customer's compliance with paragraph 5.5 hereof b) accidents occurring during the transport of any sample of the Customer, c) events control, or d) negligence by the Customer in the use, evaluation, or application of Results provided by HEAL.

- 5.8 Should any Customer sample, due to its matrix or constituents of its matrix, cause the operations of any HEAL instrumentation to be reduced, stopped, or altered, HEAL is entitled to compensation by the Customer for any loss of revenue due to the instrument's downtime, and/or the parts and labor necessary to bring the instruments back to its former operating condition. The amount of compensation is negotiable upon acceptance of these Terms and Conditions and the individual circumstances warranting the reimbursement.

## 6. ENTIRE AGREEMENT: SEVERABILITY

- 6.1 These Terms and Conditions, together with any additions or revisions which may be agreed to in writing by HEAL as provided in Section 7.1, embodied the whole agreement of the parties. There are no promises, terms, conditions, understandings, obligations or agreements other than those contained herein, unless made in accordance with Section 7.1; and these Terms and Conditions shall supersede all previous communications, representations, or agreements, either verbal or written, between the Customer and HEAL. HEAL specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Customer to HEAL.
- 6.2 The invalidity or unenforceability, in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions, the intent of the parties being that the provisions be severable.

## 7. AMENDMENTS AND WAIVERS

- 7.1 HEAL shall not be subject to or bound by any provision, term or condition which is in addition to or inconsistent or conflicting with these Terms and Conditions. HEAL shall not be deemed to have amended or waived any provision, term or condition, or have given any required consent or approval, or to have waived any breach by the Customer of any of these Terms and Conditions unless specifically set forth in writing and executed on behalf of HEAL by a duly authorized officer. No other employee, servant, agent or representatives of HEAL has any authority whatsoever to add to, delete, alter or vary any of these Terms and Conditions in any manner, or to give any consent, approval or waiver, and HEAL shall not be bound by any such purported addition, deletion, alteration, variation, consent, approval or waiver.
- 7.2 No waiver by HEAL of any provision, term or condition hereof or of any breach by or obligation of the Customer hereunder shall constitute a waiver of such provision, term or condition on any other occasion or a waiver of any other breach by or obligation of the Customer.

## 8. SAMPLE STORAGE

- 8.1 Bulk samples will be retained for thirty (30) days after the analytical report has been issued unless alternate arrangements have been made in advance. Storage of samples or extracts for longer periods is by request only. Sample storage charges depend upon storage requirements and duration. Nominally, a sample storage fee of \$5.00 per sample, per month will be billed monthly unless other arrangements are made. If requested, unused sample material may be returned at the client's expense. Materials, which are identified as hazardous, will be returned to the client or disposed of as hazardous waste and billed at the rate of \$25.00 per sample. HEAL reserves the right to return all dibenzodioxins/dibenzofurans to the client.

## 9. SECTION HEADING

- 9.1 The section headings of these Terms and Conditions are intended solely for convenient reference and shall not define, limit or affect in any way These Terms and Conditions or their interpretations.

## 10. GOVERNING LAW

- 10.1 These Terms and Conditions, and transaction or agreement, to which they apply, shall be governed both as to interpretation and performance by the laws of the State of New Mexico.

# Hall Environmental Analysis Laboratory

Date: 02-Feb-06

CLIENT: Blagg Engineering  
Lab Order: 0601144  
Project: Jaquez GC C1 Separator  
Lab ID: 0601144-01

Client Sample ID: 5-Point Composite  
Collection Date: 1/13/2006 11:02:00 AM  
Date Received: 1/17/2006  
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/23/2006 12:36:46 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/23/2006 12:36:46 PM
Surr: DNOP	87.6	60-124		%REC	1	1/23/2006 12:36:46 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/20/2006 11:36:53 PM
Surr: BFB	110	83.1-124		%REC	1	1/20/2006 11:36:53 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/20/2006 11:36:53 PM
Toluene	ND	0.025		mg/Kg	1	1/20/2006 11:36:53 PM
Ethylbenzene	ND	0.025		mg/Kg	1	1/20/2006 11:36:53 PM
Xylenes, Total	ND	0.025		mg/Kg	1	1/20/2006 11:36:53 PM
Surr: 4-Bromofluorobenzene	98.2	87.5-115		%REC	1	1/20/2006 11:36:53 PM
<b>EPA METHOD 9056A: ANIONS</b>						Analyst: TES
Chloride	2.8	1.5		mg/Kg	5	1/18/2006

Qualifiers: \* Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

CLIENT: Blagg Engineering  
Work Order: 0601144  
Project: Jaquez GC C1 Separator

## ANALYTICAL QC SUMMARY REPORT

TestCode: 300\_S

Sample ID: MB-9607	SampType: MBLK	TestCode: 300_S	Units: mg/Kg	Prep Date: 1/18/2006	RunNo: 17965						
Client ID: ZZZZZ	Batch ID: 9607	TestNo: E300		Analysis Date: 1/18/2006	SeqNo: 441589						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	ND	0.30									

Sample ID: LCS-9607	SampType: LCS	TestCode: 300_S	Units: mg/Kg	Prep Date: 1/18/2006	RunNo: 17965						
Client ID: ZZZZZ	Batch ID: 9607	TestNo: E300		Analysis Date: 1/18/2006	SeqNo: 441590						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	13.85	0.30	15	0	92.3	90	110				

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Qualifiers: E Value above quantitation range  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits



CLIENT: Blagg Engineering  
Work Order: 0601144  
Project: Jaquez GC C1 Separator

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO\_S

Sample ID: MB-9618	SampType: MBLK	TestCode: 8015DRO_S	Units: mg/Kg	Prep Date: 1/20/2006	RunNo: 17998						
Client ID: ZZZZZ	Batch ID: 9618	TestNo: SW8015		Analysis Date: 1/23/2006	SeqNo: 442649						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	ND	10
Motor Oil Range Organics (MRO)	ND	50

Sample ID: LCS-9618	SampType: LCS	TestCode: 8015DRO_S	Units: mg/Kg	Prep Date: 1/20/2006	RunNo: 17998						
Client ID: ZZZZZ	Batch ID: 9618	TestNo: SW8015		Analysis Date: 1/23/2006	SeqNo: 442665						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	34.85	10	50	0	69.7	67.4	117
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Sample ID: LCSD-9618	SampType: LCSD	TestCode: 8015DRO_S	Units: mg/Kg	Prep Date: 1/20/2006	RunNo: 17998						
Client ID: ZZZZZ	Batch ID: 9618	TestNo: SW8015		Analysis Date: 1/23/2006	SeqNo: 442881						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	35.44	10	50	0	70.9	67.4	117	34.85	1.67	17.4
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Qualifiers: E Value above quantitation range  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

CLIENT: Blagg Engineering  
Work Order: 0601144  
Project: Jaquez GC C1 Separator

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO\_S

Sample ID: MB-9603	SampType: MBLK	TestCode: 8015GRO_S	Units: mg/Kg	Prep Date: 1/18/2006	RunNo: 17996						
Client ID: ZZZZZ	Batch ID: 9603	TestNo: SW8015	(SW5035)	Analysis Date: 1/20/2006	SeqNo: 442626						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline Range Organics (GRO) ND 5.0

Sample ID: LCS-9603	SampType: LCS	TestCode: 8015GRO_S	Units: mg/Kg	Prep Date: 1/18/2006	RunNo: 17996						
Client ID: ZZZZZ	Batch ID: 9603	TestNo: SW8015	(SW5035)	Analysis Date: 1/20/2006	SeqNo: 442627						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline Range Organics (GRO) 24.10 5.0 25 0 96.4 84 120

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Qualifiers: E Value above quantitation range  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

CLIENT: Blagg Engineering  
Work Order: 0601144  
Project: Jaquez GC C1 Separator

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX\_S

Sample ID: MB-9603	SampType: MBLK	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 1/18/2006	RunNo: 17996						
Client ID: ZZZZZ	Batch ID: 9603	TestNo: SW8021	(SW5035)	Analysis Date: 1/20/2006	SeqNo: 442540						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	ND	0.025									
Toluene	ND	0.025									
Ethylbenzene	ND	0.025									
Xylenes, Total	ND	0.025									

Sample ID: LCS-9603	SampType: LCS	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 1/18/2006	RunNo: 17996						
Client ID: ZZZZZ	Batch ID: 9603	TestNo: SW8021	(SW5035)	Analysis Date: 1/20/2006	SeqNo: 442541						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	0.4132	0.025	0.42	0	98.4	85.6	116				
Toluene	2.102	0.025	1.9	0	111	82.4	120				
Ethylbenzene	0.3893	0.025	0.41	0	95.0	86.4	111				
Xylenes, Total	2.064	0.025	1.9	0	109	78.4	125				

9/5/6

Qualifiers: E Value above quantitation range  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Hall Environmental Analysis Laboratory

## Sample Receipt Checklist

Client Name **BLAGG**

Date and Time Received:

1/17/2006

Work Order Number **0601144**

Received by **AT**

Checklist completed by

Signature

Date

1/17/06

Matrix

Carrier name Greyhound

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Container/Temp Blank temperature?	7°	4° C ± 2 Acceptable If given sufficient time to cool.		

COMMENTS:

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

Received By: (Signature) *[Signature]* F2/F01  
Received By: (Signature) *[Signature]* 11013

## 1. DEFINITIONS

- 1.1 "Acceptance of a sample" means the determination of HEAL to proceed with work following receipt and inspection of such sample.
- 1.2 "Customer" means the individual or entity who may request laboratory services and his or its heirs, successors, assigns, and representatives
- 1.3 HEAL means Hall Environmental Analysis Laboratory its employees, servants, agents, and representative.
- 1.4 "Price schedule" means HEAL'S standard price schedule, as such, document may be amended from time to time by HEAL.
- 1.5 "Results" mean data generated by HEAL from the analysis of one or more samples.
- 1.6 "Terms and Conditions" mean these Terms and Conditions of sale, including the Price Schedule, and any additions or amendments hereto which are agreed to in writing by HEAL as provided in Section 7.1

## 2. ORDERS

- 2.1 The customer may order services by submitting a written purchase order to HEAL, by placing a telephone order, which will be subsequently confirmed in writing, or by negotiated contract. Any such order constitutes a) an acceptance by the Customer of HEAL'S offer to do business with the Customer under these Terms and Conditions, and b) an agreement to be bound by these Terms and Conditions. The Customer's delivery of samples to HEAL constitutes the Customer's express assent to be governed by these Terms and Conditions. HEAL reserves the right to refuse to proceed with work at any time based upon an unfavorable customer credit report.
- 2.2 Any order placed by the Customer under Section 2.1 is subject to a minimum cancellation charge of \$250.

## 3. PAYMENT TERMS

- 3.1 Services performed by HEAL will be in accordance with prices quoted and later confirmed in writing or as stated on the Price Schedule, which prices are subject to change periodically without notice. The Customer should confirm with HEAL the current price prior to placing an order for work.
- 3.2 Payment terms are net 30 days from the date of invoice by HEAL. All overdue payments are subject to an additional interest and service charge of one and one-half percent (1.5%) per month or portion thereof from the due date until the date of payment. All payments shall be made in United State currency.
- 3.3 The prices stated on the Price Schedule do not include any sales, use or other taxes unless specifically stated. Such taxes will be added to invoice prices when required.

## 4. RECEIPT OF SAMPLES AND DELIVERY OF SERVICES

- 4.1 Prior to HEAL'S Acceptance of any sample (or after any revocation of Acceptance), the entire risk of loss or damage to such sample will remain with the Customer. In no event will HEAL have any responsibility or liability for the action or inaction of HEAL'S carrier shipping or delivering any sample to or from HEAL'S premises.
- 4.2 HEAL reserves the absolute right, exercisable at any time to refuse delivery of, refuse to accept, or revoke Acceptance or, any sample which in the sole judgement of HEAL a) is of unsuitable volume, b) unsuitable containers as required for the requested analysis, or c) may be or become unsuitable for, or may pose a risk in, handling, transport or processing for any health, safety, environmental or other reason, whether or not due to the presence in the sample of any hazardous substance and whether or not such presence has been disclosed to HEAL by the Customer.
- 4.3 Where applicable, HEAL will use analytical methodologies which are in substantial conformity with U.S. Environmental Protection Agency (EPA), state agency, American Society for Testing and Materials (ASTM), Association of Official Analytical Chemist (AOAC), Standard Methods for the examination of Water and Wastewater, or other recognized methodologies. HEAL reserves the right to deviate from these

methodologies, if necessary or appropriate due to the nature of composition of the sample or otherwise based on the reasonable judgement of HEAL, which deviation, if any will be made on a basis consistent with recognized standards of industry and/or HEAL'S Standard Operating Procedures.

- 4.4 Upon timely delivery of samples, HEAL will use its best efforts to comply with storage, processing and analytical holding time limits as set forth in applicable EPA or state guidelines or otherwise requested by the Customer or set forth on the Price Schedule. However, unless specifically made part of a written agreement between HEAL and the Customer, such time limits cannot be guaranteed. Unless specifically indicated on the Price Schedule or expressly made part of a written agreement between HEAL and the Customer, analytical turnaround times are not guaranteed.
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- 5.2 The liability and obligations of HEAL, and the remedies of the Customer in connection with any services performed by HEAL will be limited to repeating the services performed or, at the sole option of HEAL, refunding in full or in part fees paid by the Customer for such services. HEAL'S obligation to repeat any services with respect to any sample will be contingent on the Customer's providing, at the request of HEAL and at the Customer's expense, an additional sample if necessary. Any reanalysis generating Results consistent with the Original Results will be at the Customer's expense. Except as otherwise specifically provided herein, HEAL shall have no liability, obligation or responsibility of any kind for any losses, costs, expenses, or other damages (including but not limited to any special, indirect, incidental or consequential damages) for any representation or warranty of a kind with respect to HEAL'S Services or Results.
- 5.3 In no event shall HEAL have any responsibility or liability to the Customer for any failure or delay in performance by HEAL, which results, directly or indirectly, in whole or in part, from any cause or circumstance beyond the reasonable control of HEAL. Such cause and circumstance shall include, but not be limited to, acts of God, acts of Customer, acts of orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disputes, difficulties or delays in transportation, mail or delivery services, inability to obtain from HEAL usual sources sufficient services or supplies, or any other cause beyond HEAL'S reasonable control.

- 5.4 All results provided by HEAL are strictly for the use of its Customers, and HEAL is in no way responsible for the use of such results by Customers or third parties. All results should be considered in their entirety, and HEAL is in no way responsible for the separation, detachment, or other use of any portion of the results.

- 5.5 The customer represents and warrants that any sample delivered to HEAL will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by the customer. The Customer further warrants that any sample containing any hazardous substance, which is to be delivered to HEAL'S premises will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.

- 5.6 It is understood and agreed that all samples and cuttings of materials containing hazardous contaminants are the property and the responsibility of the Customer. All contaminated samples and laboratory byproducts will be returned to the Customer for disposal. It is understood and agreed that HEAL is not, and has no responsibility as, a generator, treater, storer, or disposer of hazardous or toxic substances found or identified at a site, and the Customer agrees to assume the responsibility for the foregoing.

- 5.7 The Customer shall indemnify and hold harmless HEAL from and against any and all claims, suits, judgments, damages, losses, liabilities, expenses, payments, taxes, duties, fines and/or other costs (including but not limited to liability to a third party) arising out of a) the presence of hazardous substances in any sample of the Customer regardless of the Customer's compliance with paragraph 5.5 hereof b) accidents occurring during the transport of any sample of the Customer, c) events control, or d) negligence by the Customer in the use, evaluation, or application of Results provided by HEAL.

- 5.8 Should any Customer sample, due to its matrix or constituents of its matrix, cause the operations of any HEAL instrumentation to be reduced, stopped, or altered, HEAL is entitled to compensation by the Customer for any loss of revenue due to the instrument's downtime, and/or the parts and labor necessary to bring the instruments back to its former operating condition. The amount of compensation is negotiable upon acceptance of these Terms and Conditions and the individual circumstances warranting the reimbursement.

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- 6.1 These Terms and Conditions, together with any additions or revisions which may be agreed to in writing by HEAL as provided in Section 7.1, embodied the whole agreement of the parties. There are no promises, terms, conditions, understandings, obligations or agreements other than those contained herein, unless made in accordance with Section 7.1, and these Terms and Conditions shall supersede all previous communications, representations, or agreements, either verbal or written, between the Customer and HEAL. HEAL specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Customer to HEAL.
- 6.2 The invalidity or unenforceability, in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions, the intent of the parties being that the provisions be severable.

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- 7.1 HEAL shall not be subject to or bound by any provision, term or condition which is in addition to or inconsistent or conflicting with these Terms and Conditions. HEAL shall not be deemed to have amended or waived or provision, term or condition, or have given any required consent or approval, or to have waived any breach by the Customer of any of these Terms and Conditions unless specifically set forth in writing and executed on behalf of HEAL by a duly authorized officer. No other employee, servant, agent or representatives of HEAL has any authority whatsoever to add to, delete, alter or vary any of these Terms and Conditions in any manner, or to give any consent, approval or waiver, and HEAL shall not be bound by any such purported addition, deletion, alteration, variation, consent, approval or waiver.
- 7.2 No waiver by HEAL of any provision, term or condition hereof or of any breach by or obligation of the Customer hereunder shall constitute a waiver of such provision, term or condition on any other occasion or a waiver of any other breach by or obligation of the Customer.

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- 8.1 Bulk samples will be retained for thirty (30) days after the analytical report has been issued unless alternate arrangements have been made in advance. Storage of samples or extracts for longer periods is by request only. Sample storage charges depend upon storage requirements and duration. Nominally, a sample storage fee of \$5.00 per sample, per month will be billed monthly unless other arrangements are made. If requested, unused sample material may be returned at the client's expense. Materials, which are identified as hazardous, will be returned to the client or disposed of as hazardous waste and billed at the rate of \$25.00 per sample. HEAL reserves the right to return all dibenzodioxins/dibenzofurans to the client.

## 9. SECTION HEADING

- 9.1 The section headings of these Terms and Conditions are intended solely for convenient reference and shall not define, limit or affect in any way These Terms and Conditions or their interpretations.

## 10. GOVERNING LAW

- 10.1 These Terms and Conditions, and transaction or agreement, to which they apply, shall be governed both as to interpretation and performance by the laws of the State of New Mexico.

# Hall Environmental Analysis Laboratory, Inc.

Date: 31-Jul-06

CLIENT: Blagg Engineering  
Lab Order: 0607319  
Project: BP: Jaquez GC C#1  
Lab ID: 0607319-01

Client Sample ID: MW-1  
Collection Date: 7/26/2006 1:35:00 PM  
Date Received: 7/27/2006  
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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## EPA METHOD 8260B: VOLATILES

Analyst: LMM

Benzene	ND	1.0		µg/L	1	7/29/2006
Toluene	ND	1.0		µg/L	1	7/29/2006
Ethylbenzene	ND	1.0		µg/L	1	7/29/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	7/29/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/29/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/29/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/29/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/29/2006
Naphthalene	ND	2.0		µg/L	1	7/29/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	7/29/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	7/29/2006
Acetone	ND	10		µg/L	1	7/29/2006
Bromobenzene	ND	1.0		µg/L	1	7/29/2006
Bromochloromethane	ND	1.0		µg/L	1	7/29/2006
Bromodichloromethane	ND	1.0		µg/L	1	7/29/2006
Bromoform	ND	1.0		µg/L	1	7/29/2006
Bromomethane	ND	2.0		µg/L	1	7/29/2006
2-Butanone	ND	10		µg/L	1	7/29/2006
Carbon disulfide	ND	10		µg/L	1	7/29/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	7/29/2006
Chlorobenzene	ND	1.0		µg/L	1	7/29/2006
Chloroethane	ND	2.0		µg/L	1	7/29/2006
Chloroform	ND	1.0		µg/L	1	7/29/2006
Chloromethane	ND	1.0		µg/L	1	7/29/2006
2-Chlorotoluene	ND	1.0		µg/L	1	7/29/2006
4-Chlorotoluene	ND	1.0		µg/L	1	7/29/2006
cis-1,2-DCE	ND	1.0		µg/L	1	7/29/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/29/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/29/2006
Dibromochloromethane	ND	1.0		µg/L	1	7/29/2006
Dibromomethane	ND	2.0		µg/L	1	7/29/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/29/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/29/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	7/29/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	7/29/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	7/29/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	7/29/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	7/29/2006

Qualifiers: \* Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

## Hall Environmental Analysis Laboratory, Inc.

Date: 31-Jul-06

CLIENT: Blagg Engineering  
 Lab Order: 0607319  
 Project: BP: Jaquez GC C#1  
 Lab ID: 0607319-01

Client Sample ID: MW-1  
 Collection Date: 7/26/2006 1:35:00 PM  
 Date Received: 7/27/2006  
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: LMM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/29/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	7/29/2006
2-Hexanone	ND	10		µg/L	1	7/29/2006
Isopropylbenzene	ND	1.0		µg/L	1	7/29/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	7/29/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	7/29/2006
Methylene Chloride	ND	3.0		µg/L	1	7/29/2006
n-Butylbenzene	ND	1.0		µg/L	1	7/29/2006
n-Propylbenzene	ND	1.0		µg/L	1	7/29/2006
sec-Butylbenzene	ND	2.0		µg/L	1	7/29/2006
Styrene	ND	1.5		µg/L	1	7/29/2006
tert-Butylbenzene	ND	1.0		µg/L	1	7/29/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/29/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	7/29/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/29/2006
trans-1,2-DCE	ND	1.0		µg/L	1	7/29/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/29/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/29/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/29/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/29/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	7/29/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/29/2006
Vinyl chloride	ND	1.0		µg/L	1	7/29/2006
Xylenes, Total	ND	3.0		µg/L	1	7/29/2006
Surr: 1,2-Dichloroethane-d4	111	69.9-130		%REC	1	7/29/2006
Surr: 4-Bromofluorobenzene	106	75-139		%REC	1	7/29/2006
Surr: Dibromofluoromethane	113	57.3-135		%REC	1	7/29/2006
Surr: Toluene-d8	110	81.9-122		%REC	1	7/29/2006

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit



# Hall Environmental Analysis Laboratory, Inc.

Date: 31-Jul-06

CLIENT: Blagg Engineering  
Lab Order: 0607319  
Project: BP: Jaquez GC C#1  
Lab ID: 0607319-02

Client Sample ID: MW-2  
Collection Date: 7/26/2006 2:00:00 PM  
Date Received: 7/27/2006  
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: LMM
Benzene	ND	1.0		µg/L	1	7/29/2006
Toluene	ND	1.0		µg/L	1	7/29/2006
Ethylbenzene	ND	1.0		µg/L	1	7/29/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	7/29/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/29/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/29/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/29/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/29/2006
Naphthalene	ND	2.0		µg/L	1	7/29/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	7/29/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	7/29/2006
Acetone	ND	10		µg/L	1	7/29/2006
Bromobenzene	ND	1.0		µg/L	1	7/29/2006
Bromochloromethane	ND	1.0		µg/L	1	7/29/2006
Bromodichloromethane	ND	1.0		µg/L	1	7/29/2006
Bromoform	ND	1.0		µg/L	1	7/29/2006
Bromomethane	ND	2.0		µg/L	1	7/29/2006
2-Butanone	ND	10		µg/L	1	7/29/2006
Carbon disulfide	ND	10		µg/L	1	7/29/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	7/29/2006
Chlorobenzene	ND	1.0		µg/L	1	7/29/2006
Chloroethane	ND	2.0		µg/L	1	7/29/2006
Chloroform	ND	1.0		µg/L	1	7/29/2006
Chloromethane	ND	1.0		µg/L	1	7/29/2006
2-Chlorotoluene	ND	1.0		µg/L	1	7/29/2006
4-Chlorotoluene	ND	1.0		µg/L	1	7/29/2006
cis-1,2-DCE	ND	1.0		µg/L	1	7/29/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/29/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/29/2006
Dibromochloromethane	ND	1.0		µg/L	1	7/29/2006
Dibromomethane	ND	2.0		µg/L	1	7/29/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/29/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/29/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	7/29/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	7/29/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	7/29/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	7/29/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	7/29/2006

Qualifiers: \* Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

## Hall Environmental Analysis Laboratory, Inc.

Date: 31-Jul-06

CLIENT: Blagg Engineering  
 Lab Order: 0607319  
 Project: BP: Jaquez GC C#1  
 Lab ID: 0607319-02

Client Sample ID: MW-2  
 Collection Date: 7/26/2006 2:00:00 PM  
 Date Received: 7/27/2006  
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: LMM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/29/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	7/29/2006
2-Hexanone	ND	10		µg/L	1	7/29/2006
Isopropylbenzene	ND	1.0		µg/L	1	7/29/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	7/29/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	7/29/2006
Methylene Chloride	ND	3.0		µg/L	1	7/29/2006
n-Butylbenzene	ND	1.0		µg/L	1	7/29/2006
n-Propylbenzene	ND	1.0		µg/L	1	7/29/2006
sec-Butylbenzene	ND	2.0		µg/L	1	7/29/2006
Styrene	ND	1.5		µg/L	1	7/29/2006
tert-Butylbenzene	ND	1.0		µg/L	1	7/29/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/29/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	7/29/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/29/2006
trans-1,2-DCE	ND	1.0		µg/L	1	7/29/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/29/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/29/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/29/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/29/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	7/29/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/29/2006
Vinyl chloride	ND	1.0		µg/L	1	7/29/2006
Xylenes, Total	ND	3.0		µg/L	1	7/29/2006
Surr: 1,2-Dichloroethane-d4	113	69.9-130		%REC	1	7/29/2006
Surr: 4-Bromofluorobenzene	105	75-139		%REC	1	7/29/2006
Surr: Dibromofluoromethane	112	57.3-135		%REC	1	7/29/2006
Surr: Toluene-d8	106	81.9-122		%REC	1	7/29/2006

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

Date: 31-Jul-06

CLIENT: Blagg Engineering  
Lab Order: 0607319  
Project: BP: Jaquez GC C#1  
Lab ID: 0607319-03

Client Sample ID: MW-3  
Collection Date: 7/26/2006 2:30:00 PM  
Date Received: 7/27/2006  
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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## EPA METHOD 8260B: VOLATILES

Analyst: LMM

Benzene	ND	1.0		µg/L	1	7/29/2006
Toluene	ND	1.0		µg/L	1	7/29/2006
Ethylbenzene	ND	1.0		µg/L	1	7/29/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	7/29/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/29/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/29/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/29/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/29/2006
Naphthalene	ND	2.0		µg/L	1	7/29/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	7/29/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	7/29/2006
Acetone	ND	10		µg/L	1	7/29/2006
Bromobenzene	ND	1.0		µg/L	1	7/29/2006
Bromochloromethane	ND	1.0		µg/L	1	7/29/2006
Bromodichloromethane	ND	1.0		µg/L	1	7/29/2006
Bromoform	ND	1.0		µg/L	1	7/29/2006
Bromomethane	ND	2.0		µg/L	1	7/29/2006
2-Butanone	ND	10		µg/L	1	7/29/2006
Carbon disulfide	ND	10		µg/L	1	7/29/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	7/29/2006
Chlorobenzene	ND	1.0		µg/L	1	7/29/2006
Chloroethane	ND	2.0		µg/L	1	7/29/2006
Chloroform	ND	1.0		µg/L	1	7/29/2006
Chloromethane	ND	1.0		µg/L	1	7/29/2006
2-Chlorotoluene	ND	1.0		µg/L	1	7/29/2006
4-Chlorotoluene	ND	1.0		µg/L	1	7/29/2006
cis-1,2-DCE	ND	1.0		µg/L	1	7/29/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/29/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/29/2006
Dibromochloromethane	ND	1.0		µg/L	1	7/29/2006
Dibromomethane	ND	2.0		µg/L	1	7/29/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/29/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/29/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	7/29/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	7/29/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	7/29/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	7/29/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	7/29/2006

Qualifiers: \* Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

Date: 31-Jul-06

CLIENT: Blagg Engineering  
Lab Order: 0607319  
Project: BP: Jaquez GC C#1  
Lab ID: 0607319-03

Client Sample ID: MW-3  
Collection Date: 7/26/2006 2:30:00 PM  
Date Received: 7/27/2006  
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: LMM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/29/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	7/29/2006
2-Hexanone	ND	10		µg/L	1	7/29/2006
Isopropylbenzene	ND	1.0		µg/L	1	7/29/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	7/29/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	7/29/2006
Methylene Chloride	ND	3.0		µg/L	1	7/29/2006
n-Butylbenzene	ND	1.0		µg/L	1	7/29/2006
n-Propylbenzene	ND	1.0		µg/L	1	7/29/2006
sec-Butylbenzene	ND	2.0		µg/L	1	7/29/2006
Styrene	ND	1.5		µg/L	1	7/29/2006
tert-Butylbenzene	ND	1.0		µg/L	1	7/29/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/29/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	7/29/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/29/2006
trans-1,2-DCE	ND	1.0		µg/L	1	7/29/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/29/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/29/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/29/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/29/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/29/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	7/29/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/29/2006
Vinyl chloride	ND	1.0		µg/L	1	7/29/2006
Xylenes, Total	ND	3.0		µg/L	1	7/29/2006
Surr: 1,2-Dichloroethane-d4	111	69.9-130		%REC	1	7/29/2006
Surr: 4-Bromofluorobenzene	113	75-139		%REC	1	7/29/2006
Surr: Dibromofluoromethane	113	57.3-135		%REC	1	7/29/2006
Surr: Toluene-d8	97.7	81.9-122		%REC	1	7/29/2006

Qualifiers: \* Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: BP: Jaquez GC C#1

Work Order: 0607319

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Method: SW8260B

Sample ID: 0607319-01a msd

MSD

Batch ID: R20087

Analysis Date:

7/29/2006

Benzene	18.52	µg/L	1.0	92.6	71	124	0.108	15	
Toluene	19.03	µg/L	1.0	95.1	77.7	120	7.43	15	
Chlorobenzene	18.97	µg/L	1.0	94.9	81.1	130	5.95	15	
1,1-Dichloroethene	17.48	µg/L	1.0	87.4	65.5	134	6.64	17.8	
Trichloroethene (TCE)	18.22	µg/L	1.0	91.1	69.5	119	0.580	19.8	

Sample ID: 5mL rb

MBLK

Batch ID: R20087

Analysis Date:

7/28/2006

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	1.5						
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						

## 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 <sup>Smile</sup> Recovery outside accepted recovery limits

## QA/QC SUMMARY REPORT

Client: Blagg Engineering  
 Project: BP: Jaquez GC C#1

Work Order: 0607319

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Method: SW8260B

Sample ID: 5mL rb

MBLK

Batch ID: R20087

Analysis Date:

7/28/2006

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
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

LCS

Batch ID: R20087

Analysis Date:

7/28/2006

Benzene	17.70	µg/L	1.0	88.5	71	124
Toluene	18.22	µg/L	1.0	91.1	81.5	118
Chlorobenzene	19.32	µg/L	1.0	96.6	81.2	132
1,1-Dichloroethene	20.23	µg/L	1.0	101	65.5	134
Trichloroethene (TCE)	18.66	µg/L	1.0	93.3	69.5	119

Sample ID: 0607319-01a ms

MS

Batch ID: R20087

Analysis Date:

7/29/2006

Benzene	18.50	µg/L	1.0	92.5	71	124
Toluene	20.49	µg/L	1.0	102	77.7	120
Chlorobenzene	20.14	µg/L	1.0	101	81.1	130
1,1-Dichloroethene	18.68	µg/L	1.0	93.4	65.5	134
Trichloroethene (TCE)	18.33	µg/L	1.0	91.6	69.5	119

## 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:

7/27/2006

Work Order Number 0607319

Received by

GLS

Checklist completed by

Signature

Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Not Shipped ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☐

Yes ☒

No ☐

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

4°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

# CHAIN OF CUSTODY RECORD

14673

Client / Project Name <b>BLAGG / BP</b>			Project Location <b>JACQUEZ GC C #1</b>		ANALYSIS / PARAMETERS							
Sampler: <b>NV</b>			Client No. <b>94034-010</b>		No. of Containers	MAJOR ANIONS/CATIONS					Remarks <b>PRESERVED COOL GRAB SAMPLES</b>	
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix								
<b>MW #1</b>	<b>8/15/06</b>	<b>0900</b>	<b>38169</b>	<b>WATER</b>								
<b>MW #2</b>	<b>8/15/06</b>	<b>0850</b>	<b>38170</b>	<b>WATER</b>								
<b>MW #3</b>	<b>8/15/06</b>	<b>0855</b>	<b>38171</b>	<b>WATER</b>	<b>1</b>	<b>✓</b>						
Relinquished by: (Signature) <i>[Signature]</i>			Date <b>8/15/06</b>	Time <b>1403</b>	Received by: (Signature) <i>[Signature]</i>			Date <b>8/15/06</b>	Time <b>1403</b>			
Relinquished by: (Signature)					Received by: (Signature)							
Relinquished by: (Signature)					Received by: (Signature)							

<b>ENVIROTECH INC.</b> 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615				Sample Receipt			
					Y	N	N/A
				Received Intact	✓		
				Cool - Ice/Blue Ice	✓		



# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## CATION / ANION ANALYSIS

Client: Blagg / BP  
Sample ID: MW #1  
Laboratory Number: 38169  
Chain of Custody: 14673  
Sample Matrix: Water  
Preservative: Cool  
Condition: Cool & Intact

Project #: 94034-010  
Date Reported: 08-16-06  
Date Sampled: 08-15-06  
Date Received: 08-15-06  
Date Extracted: N/A  
Date Analyzed: 08-15-06

Parameter	Analytical Result	Units		
pH	7.90	s.u.		
Conductivity @ 25° C	514	umhos/cm		
Total Dissolved Solids @ 180C	360	mg/L		
Total Dissolved Solids (Calc)	390	mg/L		
SAR	2.0	ratio		
Total Alkalinity as CaCO3	270	mg/L		
Total Hardness as CaCO3	189	mg/L		
Bicarbonate as HCO3	270	mg/L	4.43	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	0.005	mg/L	0.00	meq/L
Chloride	18.0	mg/L	0.51	meq/L
Fluoride	0.26	mg/L	0.01	meq/L
Phosphate	0.7	mg/L	0.02	meq/L
Sulfate	75.0	mg/L	1.56	meq/L
Iron	0.001	mg/L	0.00	meq/L
Calcium	67.6	mg/L	3.37	meq/L
Magnesium	4.9	mg/L	0.40	meq/L
Potassium	2.09	mg/L	0.05	meq/L
Sodium	62.2	mg/L	2.70	meq/L
Cations			6.53	meq/L
Anions			6.53	meq/L
Cation/Anion Difference			0.00%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.  
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Jaquez GC C #1. Grab Sample.

Analyst

Review

*Christine M. Walker*

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## CATION / ANION ANALYSIS

Client: Blagg / BP  
Sample ID: MW #2  
Laboratory Number: 38170  
Chain of Custody: 14673  
Sample Matrix: Water  
Preservative: Cool  
Condition: Cool & Intact

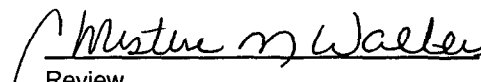
Project #: 94034-010  
Date Reported: 08-16-06  
Date Sampled: 08-15-06  
Date Received: 08-15-06  
Date Extracted: N/A  
Date Analyzed: 08-15-06

Parameter	Analytical Result	Units		
pH	8.07	s.u.		
Conductivity @ 25° C	441	umhos/cm		
Total Dissolved Solids @ 180C	280	mg/L		
Total Dissolved Solids (Calc)	300	mg/L		
SAR	1.3	ratio		
Total Alkalinity as CaCO3	170	mg/L		
Total Hardness as CaCO3	160	mg/L		
Bicarbonate as HCO3	170	mg/L	2.79	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	0.007	mg/L	0.00	meq/L
Chloride	18.0	mg/L	0.51	meq/L
Fluoride	0.18	mg/L	0.01	meq/L
Phosphate	0.5	mg/L	0.02	meq/L
Sulfate	75.0	mg/L	1.56	meq/L
Iron	0.001	mg/L	0.00	meq/L
Calcium	60.8	mg/L	3.03	meq/L
Magnesium	1.95	mg/L	0.16	meq/L
Potassium	0.96	mg/L	0.02	meq/L
Sodium	38.3	mg/L	1.67	meq/L
Cations			4.88	meq/L
Anions			4.88	meq/L
Cation/Anion Difference			0.05%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.  
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Jaquez GC C #1. Grab Sample.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## CATION / ANION ANALYSIS

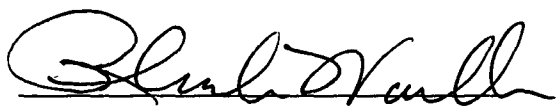
Client: Blagg / BP  
Sample ID: MW #3  
Laboratory Number: 38171  
Chain of Custody: 14673  
Sample Matrix: Water  
Preservative: Cool  
Condition: Cool & Intact

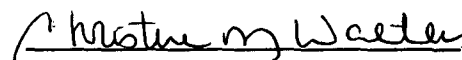
Project #: 94034-010  
Date Reported: 08-16-06  
Date Sampled: 08-15-06  
Date Received: 08-15-06  
Date Extracted: N/A  
Date Analyzed: 08-15-06

Parameter	Analytical Result	Units		
pH	8.19	s.u.		
Conductivity @ 25° C	370	umhos/cm		
Total Dissolved Solids @ 180C	260	mg/L		
Total Dissolved Solids (Calc)	290	mg/L		
SAR	1.8	ratio		
Total Alkalinity as CaCO3	180	mg/L		
Total Hardness as CaCO3	144	mg/L		
Bicarbonate as HCO3	180	mg/L	2.95	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.2	mg/L	0.00	meq/L
Nitrite Nitrogen	0.007	mg/L	0.00	meq/L
Chloride	54.0	mg/L	1.52	meq/L
Fluoride	0.27	mg/L	0.01	meq/L
Phosphate	0.6	mg/L	0.02	meq/L
Sulfate	25.0	mg/L	0.52	meq/L
Iron	0.016	mg/L	0.00	meq/L
Calcium	52.8	mg/L	2.63	meq/L
Magnesium	2.93	mg/L	0.24	meq/L
Potassium	0.46	mg/L	0.01	meq/L
Sodium	49.3	mg/L	2.14	meq/L
Cations			5.03	meq/L
Anions			5.03	meq/L
Cation/Anion Difference			0.03%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.  
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Jaquez GC C #1. Grab Sample.

  
Analyst

  
Review