

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-144  
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action. Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

Operator: <u>BP AMERICA PROD. CO.</u> Telephone: <u>(505)-326-9200</u> e-mail address: _____		
Address: <u>200 ENERGY COURT, FARMINGTON, NM 87410</u>		
Facility or well name: <u>HEATON LS #23</u> API #: <u>30-045- 20316</u> U/L or Qtr/Qtr <u>I</u> Sec <u>29</u> T <u>31N</u> R <u>11W</u>		
County: <u>SAN JUAN</u> Latitude <u>36.86731</u> Longitude <u>108.00897</u> NAD: 1927 <input type="checkbox"/> 1983 <input checked="" type="checkbox"/> Surface Owner Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>		
<b>RCVD APR 5 '07</b>		
<b>Pit</b> Type: Drilling <input type="checkbox"/> Production <input type="checkbox"/> Disposal <input checked="" type="checkbox"/> <u>SEPARATOR</u> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input type="checkbox"/> Unlined <input checked="" type="checkbox"/> Liner type: Synthetic <input type="checkbox"/> Thickness _____ mil Clay <input type="checkbox"/> Pit Volume _____ bbl	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: <u>N/A</u> Construction material: <u>N/A</u> Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____	<b>OIL CONS. DIV.</b> <b>DIST. 3</b>
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet (20 points) 50 feet or more, but less than 100 feet (10 points) 100 feet or more ( 0 points)	<b>0</b>
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes (20 points) No ( 0 points)	<b>0</b>
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) 1000 feet or more ( 0 points)	<b>0</b>
<b>Ranking Score (Total Points)</b>		<b>0</b>

**If this is a pit closure:** (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☒ offsite ☐ If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments	<u>PIT LOCATED APPROXIMATELY 21 FT. N48W FROM WELL HEAD.</u>
<u>PIT EXCAVATION: WIDTH N/Aft., LENGTH N/Aft., DEPTH N/Aft.</u>	
PIT REMEDIATION: CLOSE AS IS: <input checked="" type="checkbox"/> LANDFARM: <input type="checkbox"/> COMPOST: <input type="checkbox"/> STOCKPILE: <input type="checkbox"/> OTHER <input type="checkbox"/> (explain)	
Cubic yards:	<u>N/A</u>
<b>BEDROCK BOTTOM</b>	

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an alternative OCD-approved plan ☒.


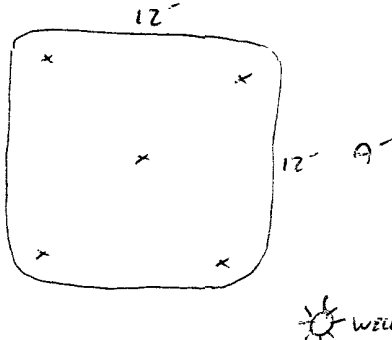
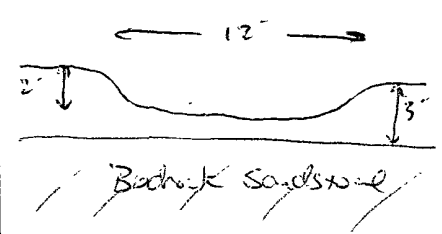
Date: 01/06/06

Printed Name/Title Jeff Blagg - P.E. # 11607 Signature [Signature]

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

**Deputy Oil & Gas Inspector,  
District #3**

Approval: \_\_\_\_\_  
Printed Name/Title \_\_\_\_\_ Signature [Signature] Date: AUG 06 2007

CLIENT: <u>BP</u>	<b>BLAGG ENGINEERING, INC.</b> <b>P.O. BOX 87, BLOOMFIELD, NM 87413</b> <b>(505) 632-1199</b>	LOCATION NO: <u>81740</u> COCR NO: <u>15306</u>																																								
<b>FIELD REPORT: PIT CLOSURE VERIFICATION</b>		PAGE No: <u>1</u> of <u>1</u>																																								
LOCATION: NAME: <u>HEATON LS</u> WELL #: <u>23</u> TYPE: <u>SEPARATOR</u> QUAD/UNIT: <u>I SEC: 29 TWP: 31N RNG: 11W PM: NM CNTY: SJ ST: NM</u> QTR/FOOTAGE: <u>1650 FSL x 1125 FEL NE1SE</u> CONTRACTOR: <u>PXS (Robart)</u>		DATE STARTED: <u>1/3/06</u> DATE FINISHED: <u>1/3/06</u> ENVIRONMENTAL SPECIALIST: <u>JCB</u>																																								
EXCAVATION APPROX. <u>NA</u> FT. x <u>NA</u> FT. x <u>NA</u> FT. DEEP. CUBIC YARDAGE: <u>0</u>																																										
DISPOSAL FACILITY: <u>NA</u> REMEDIATION METHOD: <u>CLOSE AS IS</u>																																										
LAND USE: <u>RANGE - BLM</u> LEASE: <u>SF - 078097</u> FORMATION: <u>PC</u>																																										
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>21</u> FT. <u>N48W</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>&gt;100</u> NEAREST WATER SOURCE: <u>&gt;1000</u> NEAREST SURFACE WATER: <u>&gt;1000</u> NMOC D RANKING SCORE: <u>0</u> NMOC D TPH CLOSURE STD: <u>5000</u> PPM																																										
<b>SOIL AND EXCAVATION DESCRIPTION:</b>																																										
SOIL TYPE: SAND <u>(SILTY SAND)</u> / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER <u>BEDROCK SANDSTONE @ 3'</u> SOIL COLOR: <u>Light Tan</u> COHESION (ALL OTHERS): NON COHESIVE / <u>SLIGHTLY COHESIVE</u> / COHESIVE / HIGHLY COHESIVE CONSISTENCY (NON COHESIVE SOILS): LOOSE <u>(FIRM)</u> DENSE / VERY DENSE PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD MOISTURE: DRY / <u>SLIGHTLY MOIST</u> / MOIST / WET / SATURATED / SUPER SATURATED DISCOLORATION/STAINING OBSERVED: <u>YES</u> / NO EXPLANATION - <u>Light Grey on SS. surface</u> HC ODOR DETECTED: <u>YES</u> / NO EXPLANATION - <u>Mineral</u> SAMPLE TYPE: GRAB / <u>COMPOSITE</u> # OF PTS. <u>5</u> ADDITIONAL COMMENTS: <u>12' x 12' x 2' Deep Earth Pit. Dig into Pit w/</u> <u>BECKROCK BOTTOM</u> <u>Backhoe - Firm bedrock Sandstone @ 3' (1' Below Base). Collect</u> <u>Composite</u>																																										
FIELD 418.1 CALCULATIONS																																										
SCALE  0 10 FT	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMP. TIME</th> <th>SAMP. ID</th> <th>LAB NO.</th> <th>WEIGHT (g)</th> <th>mL FREON</th> <th>DILUTION</th> <th>READING</th> <th>CALC. (ppm)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)																																
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P.D. = PIT DEPRESSION, B.G. = BELOW GRADE; B = BELOW T.H. = TEST HOLE; ~ = APPROX.; T.B. = TANK BOTTOM																																										
TRAVEL NOTES: CALLOUT: _____ ONSITE: <u>1/3/2006</u>																																										

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

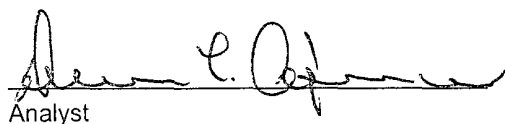
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	5-Point Composite @ 3'	Date Reported:	01-06-06
Laboratory Number:	35645	Date Sampled:	01-03-06
Chain of Custody No:	15306	Date Received:	01-05-06
Sample Matrix:	Soil	Date Extracted:	01-05-06
Preservative:	Cool	Date Analyzed:	01-06-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

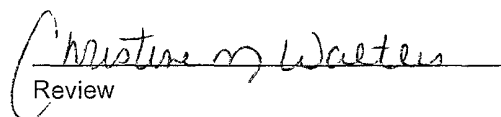
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: **Heaton LS 23 Sep Pit.**

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	5-Point Composite @ 3'	Date Reported:	01-06-06
Laboratory Number:	35645	Date Sampled:	01-03-06
Chain of Custody:	15306	Date Received:	01-05-06
Sample Matrix:	Soil	Date Analyzed:	01-06-06
Preservative:	Cool	Date Extracted:	01-05-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	6.4	1.8
Toluene	26.5	1.7
Ethylbenzene	2.3	1.5
p,m-Xylene	20.6	2.2
o-Xylene	8.4	1.0
Total BTEX	64.2	

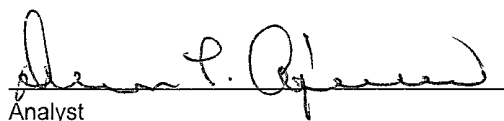
ND - Parameter not detected at the stated detection limit.

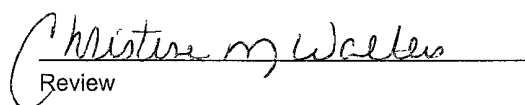
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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: Heaton LS 23 Sep Pit.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	5-Point Composite @ 3'	Date Reported:	01-06-06
Lab ID#:	35645	Date Sampled:	01-03-06
Sample Matrix:	Soil	Date Received:	01-05-06
Preservative:	Cool	Date Analyzed:	01-06-06
Condition:	Cool and Intact	Chain of Custody:	15306

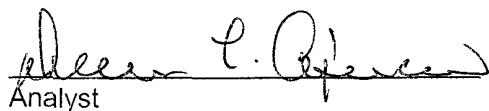
Parameter	Concentration (mg/Kg)
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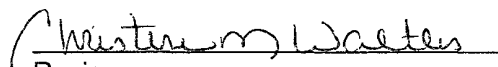
Total Chloride

29.9

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

Comments: Heaton LS 23 Sep Pit.

  
Analyst

  
Review

15306

san juan reproduction 578-129

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

### Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	01-06-06 QA/QC	Date Reported:	01-06-06
Laboratory Number:	35638	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-06-06
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	02-04-05	9.9753E+002	9.9853E+002	0.10%	0 - 15%
Diesel Range C10 - C28	02-04-05	9.9710E+002	9.9910E+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

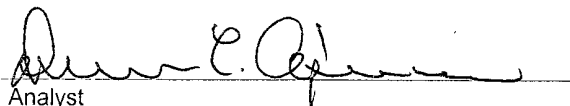
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	282	284	0.9%	0 - 30%
Diesel Range C10 - C28	648	650	0.3%	0 - 30%

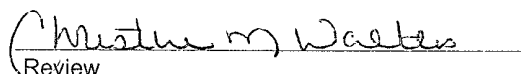
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	282	250	531	99.9%	75 - 125%
Diesel Range C10 - C28	648	250	897	99.9%	75 - 125%

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 35638 - 35639, 35641 - 35642, 35644 - 35649.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	01-06-BTEX QA/QC	Date Reported:	01-06-06
Laboratory Number:	35638	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-06-06
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	1.8414E+007	1.8451E+007	0.2%	ND	0.2
Toluene	5.3198E+007	5.3305E+007	0.2%	ND	0.2
Ethylbenzene	4.1896E+007	4.1980E+007	0.2%	ND	0.2
p,m-Xylene	8.5471E+007	8.5642E+007	0.2%	ND	0.2
o-Xylene	4.1039E+007	4.1122E+007	0.2%	ND	0.1

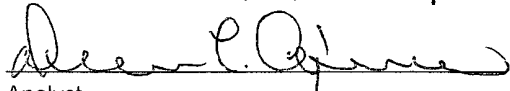
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect Limit
Benzene	31.0	31.0	0.0%	0 - 30%	1.8
Toluene	235	234	0.2%	0 - 30%	1.7
Ethylbenzene	794	793	0.1%	0 - 30%	1.5
p,m-Xylene	3,830	3,820	0.3%	0 - 30%	2.2
o-Xylene	637	636	0.1%	0 - 30%	1.0

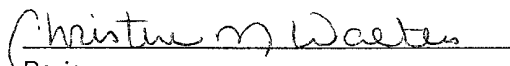
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	31.0	50.0	80.9	99.9%	39 - 150
Toluene	235	50.0	284	99.8%	46 - 148
Ethylbenzene	794	50.0	842	99.8%	32 - 160
p,m-Xylene	3,830	100	3,920	99.7%	46 - 148
o-Xylene	637	50.0	686	99.8%	46 - 148

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 35638, 35641 - 35642, 35644 - 35648.

  
Analyst

  
Review