

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>STOREY B #1E</u> API #: <u>30-045- 24959</u> U/L or Qtr/Qtr <u>I</u> Sec <u>11</u> T <u>30N</u> R <u>11W</u>		
County: <u>SAN JUAN</u> Latitude <u>36.82388</u> Longitude <u>107.95428</u> NAD: 1927 ☐ 1983 ☒ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐		
Pit Type: Drilling ☐ Production ☐ Disposal ☒ <u>BLOW</u> Workover ☐ Emergency ☐ Lined ☐ Unlined ☒ Liner type: Synthetic ☐ Thickness _____ mil Clay ☐ Pit Volume _____ bbl	Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not. _____	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) 0 (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) 10 (0 points)
Ranking Score (Total Points)		10

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 CROUCH MESA. (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. N55W FROM WELL HEAD.</u>	
<u>PIT EXCAVATION: WIDTH 12 ft., LENGTH 12 ft., DEPTH 11 ft.</u> <u>RCUD JUN13'07</u>	
<u>PIT REMEDIATION: CLOSE AS IS: ☒ LANDFARM: ☒ COMPOST: ☐ STOCKPILE: ☐ OTHER ☐ (explain) <u>OIL CONS. DIV.</u></u>	
Cubic yards: <u>37</u>	<u>DIST. 3</u>
<u>NEED TO ESTABLISH VERTICAL EXTENT</u>	

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: 03/10/05 06/05/07 915

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

Signature Jeff Blagg

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.

Approval: Deputy Oil & Gas Inspector,

Printed Name/Title

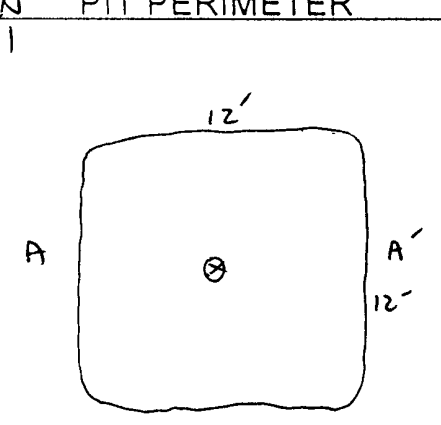
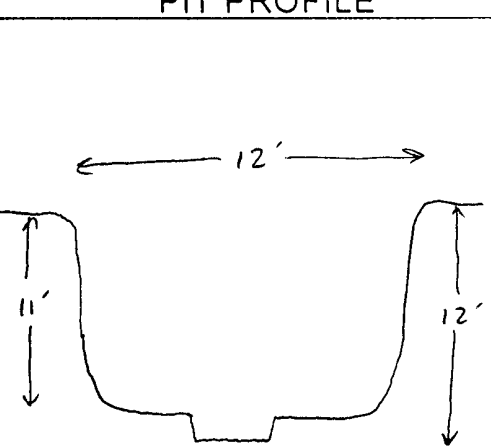
District #3

Signature Bob Bell

Date: AUG 10 2007

30-045-24959

36082388 x 107.95428

CLIENT: <u>BP</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>81498</u> COCR NO: <u>13656</u>																																								
FIELD REPORT: PIT CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																								
LOCATION: NAME: <u>STOREY B</u> WELL #: <u>1E</u> TYPE: <u>BLOW</u> QUAD/UNIT <u>I</u> SEC: <u>11</u> TWP: <u>30N</u> RNG: <u>11W</u> PM: <u>NM</u> CNTY: <u>SJ</u> ST: <u>NM</u> QTR/FOOTAGE: <u>1750 FSL x 800 FEL</u> ^{NEISE} CONTRACTOR: <u>HD (LUNEL)</u>		DATE STARTED <u>3-8-05</u> DATE FINISHED <u>3-8-05</u> ENVIRONMENTAL SPECIALIST: <u>JCB</u>																																								
EXCAVATION APPROX. <u>12</u> FT. x <u>12</u> FT. x <u>11</u> FT. DEEP. CUBIC YARDAGE: <u>37±</u>																																										
DISPOSAL FACILITY: <u>BP CROWN MESA LF</u> REMEDIATION METHOD: <u>L.F.</u>																																										
LAND USE: <u>RANGE - BLM</u> LEASE: <u>NM 076235</u> FORMATION: <u>DK</u>																																										
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>21</u> FT. <u>N55W</u> FROM WELLHEAD.																																										
DEPTH TO GROUNDWATER: <u>>100</u> NEAREST WATER SOURCE: <u>>1000</u> NEAREST SURFACE WATER: <u><1000</u>																																										
NMOCD RANKING SCORE: <u>10</u> NMOCD TPH CLOSURE STD: <u>1000</u> PPM																																										
SOIL AND EXCAVATION DESCRIPTION:		OVM CALIB. READ. = <u>53</u> ppm OVM CALIB. GAS = <u>100</u> ppm RF = 0.52 TIME: <u>1020</u> am/pm DATE: <u>3/8</u>																																								
SOIL TYPE SAND <u>SILTY SAND</u> / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER _____ SOIL COLOR <u>GRAY/BLACK 3'-10'</u> ; <u>BROWN 10'-12'</u> COHESION (ALL OTHERS): NON COHESIVE <u>SLIGHTLY COHESIVE</u> / COHESIVE / HIGHLY COHESIVE CONSISTENCY (NON COHESIVE SOILS) <u>LOOSE</u> / FIRM / 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>3'-10'</u> HC ODOR DETECTED: <u>YES</u> NO EXPLANATION - <u>MODERATE</u>																																										
NEED TO ESTABLISH VERTICAL EXTENT																																										
SAMPLE TYPE <u>GRAB/COMPOSITE</u> - # OF PTS. <u>—</u> <u>12' x 12' x 3' DEEP EARTHEN PIT. USE BACKHOLE</u> ADDITIONAL COMMENTS: <u>TO Remove Contaminated Soil & collect Sample.</u>																																										
FIELD 418.1 CALCULATIONS																																										
<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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SCALE  0 FT N PIT PERIMETER 	OVM READING <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE (ppm)</th> </tr> </thead> <tbody> <tr><td>1 @ 12'</td><td>317</td></tr> <tr><td>2 @</td><td> </td></tr> <tr><td>3 @</td><td> </td></tr> <tr><td>4 @</td><td> </td></tr> <tr><td>5 @</td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table> LAB SAMPLES <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>TIME</th> </tr> </thead> <tbody> <tr><td>DE12</td><td>TPH/BTEX</td><td>0730</td></tr> <tr><td colspan="3" style="text-align: center;">BOTH FAILED</td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	SAMPLE ID	FIELD HEADSPACE (ppm)	1 @ 12'	317	2 @		3 @		4 @		5 @												SAMPLE ID	ANALYSIS	TIME	DE12	TPH/BTEX	0730	BOTH FAILED												PIT PROFILE 
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D = PIT DEPRESSION, B.G. = BELOW GRADE; B = BELOW T.H. = TEST HOLE, ~ = APPROX.; T.B. = TANK BOTTOM																																										
TRAVEL NOTES: CALLOUT: <u>3/8/05 0730</u> ONSITE: <u>3/8/05 0805</u>																																										

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

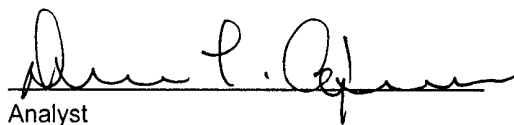
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	1 @ 12'	Date Reported:	03-10-05
Laboratory Number:	32327	Date Sampled:	03-08-05
Chain of Custody No:	13656	Date Received:	03-09-05
Sample Matrix:	Soil	Date Extracted:	03-09-05
Preservative:	Cool	Date Analyzed:	03-10-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

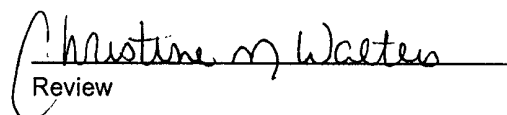
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2,210	0.2
Diesel Range (C10 - C28)	835	0.1
Total Petroleum Hydrocarbons	3,050	0.2

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: Storey B #1E Blow 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:	1 @ 12'	Date Reported:	03-10-05
Laboratory Number:	32327	Date Sampled:	03-08-05
Chain of Custody:	13656	Date Received:	03-09-05
Sample Matrix:	Soil	Date Analyzed:	03-10-05
Preservative:	Cool	Date Extracted:	03-09-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	50.0	2.1
Toluene	4,060	1.8
Ethylbenzene	6,390	1.7
p,m-Xylene	62,510	1.5
o-Xylene	37,470	2.2
Total BTEX	110,480	

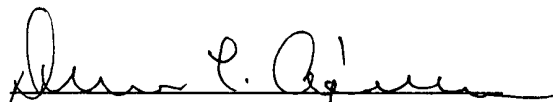
ND - Parameter not detected at the stated detection limit.

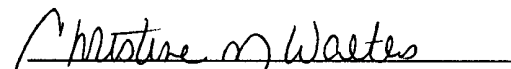
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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

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

Comments: Storey B #1E Blow Pit.


Analyst


Review

BLAGG ENGINEERING, Inc.

P.O. BOX 87

BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT:

BP AMERICA PRODUCTION CO.

LOCATION NAME:

STOREY B #1E BLOW PIT UNIT I, SEC. 11, T30N, R11W

CONTRACTOR:

BLAGG ENGINEERING, INC. / ENVIROTECH, INC.

EQUIPMENT USED:

MOBILE DRILL RIG (CME 75)

BORING LOCATION:

20 FEET, N49W FROM WELL HEAD.

BORING #..... BH1

MW #..... NA

PAGE #..... 1

DATE STARTED 09/20/06

DATE FINISHED 09/20/06

OPERATOR..... DP

PREPARED BY NJV

DEPTH
(FT.)

INTERVAL

LITHOLOGY
INTERVAL

OVM
READING
(ppm)

FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40

MODERATE TO DARK YELLOWISH BROWN SAND (FILL MATERIAL), NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 8.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT WITH MINOR AMOUNT OF MEDIUM GRAY INTERMIXED AND SLIGHT APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (8.0 - 13.0 FT. BELOW GRADE).

BH1 @ 15-17 FT TIME 1035 BLOW COUNT = 24 PER 2 FEET COLLECTED WITH SPLIT SPOON SAMPLER.

TPH = ND, BENZENE = ND, TOTAL BTEX = ND, CHLORIDE = 60 ppm.

PALE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, SLIGHT PHASING TO NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (13.0 - 20.0 FT. BELOW GRADE).

BH1 @ 20-22 FT TIME 1043 BLOW COUNT = 31 PER 2 FEET COLLECTED WITH SPLIT SPOON SAMPLER.

TPH = ND, BENZENE = ND, TOTAL BTEX = ND, CHLORIDE = 41 ppm.

NOTES:



- SAND.

OVM

- Organic Vapor Meter or Photo-ionization Detector (PID).

TPH

- Total Petroleum Hydrocarbons EPA Method 8015B.

ND

- Not detected at the Reporting Limit.

ppm

- Parts per million (unit value).

OVM CALIBRATION = 51.3 ppm
with 100 ppm Isobutylene gas &
response factor set @ 0.52;
DATE - 09/19/06, TIME - 1535.

DRAWING STOREY B 1E BH1.SKF DATE 03/19/07 DWN BY: NJV

Hall Environmental Analysis Laboratory, Inc.

Date: 02-Oct-06

CLIENT:	Blagg Engineering	Client Sample ID:	BH1 @15'-17' BLOW PIT
Lab Order:	0609258	Collection Date:	9/20/2006 10:35:00 AM
Project:	Storey B #1E	Date Received:	9/21/2006
Lab ID:	0609258-01	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/26/2006 1:22:14 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/26/2006 1:22:14 AM
Surr: DNOP	78.4	61.7-135		%REC	1	9/26/2006 1:22:14 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/29/2006 1:52:14 PM
Surr: BFB	96.3	84.5-129		%REC	1	9/29/2006 1:52:14 PM
EPA METHOD 8021B: VOLATILES						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/29/2006 1:52:14 PM
Toluene	ND	0.050		mg/Kg	1	9/29/2006 1:52:14 PM
Ethylbenzene	ND	0.050		mg/Kg	1	9/29/2006 1:52:14 PM
Xylenes, Total	ND	0.15		mg/Kg	1	9/29/2006 1:52:14 PM
Surr. 4-Bromofluorobenzene	92.5	76.8-115		%REC	1	9/29/2006 1:52:14 PM
EPA METHOD 9056A: ANIONS						Analyst: TES
Chloride	60	0.30		mg/Kg	1	9/26/2006 2:08:55 PM

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

Hall Environmental Analysis Laboratory, Inc.

Date: 02-Oct-06

CLIENT:	Blagg Engineering	Client Sample ID:	BH1 @20'-22'
Lab Order:	0609258	Collection Date:	9/20/2006 10:43:00 AM
Project:	Storey B #1E	Date Received:	9/21/2006
Lab ID:	0609258-02	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/26/2006 3:41:22 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/26/2006 3:41:22 AM
Surr: DNOP	83.4	61.7-135		%REC	1	9/26/2006 3:41:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/29/2006 2:21:11 PM
Surr: BFB	95.4	84.5-129		%REC	1	9/29/2006 2:21:11 PM
EPA METHOD 8021B: VOLATILES						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/29/2006 2:21:11 PM
Toluene	ND	0.050		mg/Kg	1	9/29/2006 2:21:11 PM
Ethylbenzene	ND	0.050		mg/Kg	1	9/29/2006 2:21:11 PM
Xylenes, Total	ND	0.15		mg/Kg	1	9/29/2006 2:21:11 PM
Surr: 4-Bromofluorobenzene	92.3	76.8-115		%REC	1	9/29/2006 2:21:11 PM
EPA METHOD 9056A: ANIONS						Analyst: TES
Chloride	41	0.30		mg/Kg	1	9/26/2006 3:01:08 PM

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

CHAIN OF CUSTODY RECORD

13650

Client / Project Name BLAGG / BP			Project Location STOREY B #1E		ANALYSIS / PARAMETERS																				
Sampler: J. C. Blagg			Client No. 94034-010		No. of Containers	TPH 8015	BTEX 8021					Remarks													
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix																					
① @ 4'	3/8/05	0915	32326	SOIL	1	X						DEHY PIT													
① @ 12'	"	0930	32327	"	1	X	X					BLOW PIT													
① @ 13'	"	0940	32328	"	1	X						SEP PIT													
① @ 11'	"	0955	32329	"	1	X	X					PROD PIT													
Relinquished by: (Signature) J. C. Blagg			Date 3/9/05	Time 0643	Received by: (Signature) [Signature]			Date 3/9/05	Time 0643																
Relinquished by: (Signature)					Received by: (Signature)																				
Relinquished by: (Signature)					Received by: (Signature)																				
ENVIROTECH INC. 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615												Sample Receipt <table border="1"> <tr> <td> </td> <td>Y</td> <td>N</td> <td>N/A</td> </tr> <tr> <td>Received Intact</td> <td>☒</td> <td> </td> <td> </td> </tr> <tr> <td>Cool - Ice/Blue Ice</td> <td>☒</td> <td> </td> <td> </td> </tr> </table>			Y	N	N/A	Received Intact	☒			Cool - Ice/Blue Ice	☒		
	Y	N	N/A																						
Received Intact	☒																								
Cool - Ice/Blue Ice	☒																								

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:	03-10-05 QA/QC	Date Reported:	03-10-05
Laboratory Number:	32326	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-10-05
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	9.9670E+002	9.9770E+002	0.10%	0 - 15%
Diesel Range C10 - C28	02-04-05	9.9851E+002	1.0005E+003	0.20%	0 - 15%

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

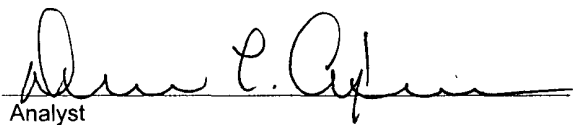
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

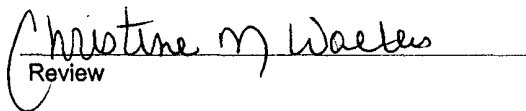
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

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

Comments: QA/QC for Samples 32326 - 32329, 32332 - 32333, 32337.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	03-10-BTEX QA/QC	Date Reported:	03-10-05
Laboratory Number:	32327	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-10-05
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	%Diff	Blank Conc	Detect Limit
		Accept Range 0 - 15%			
Benzene	3.6082E+006	3.6155E+006	0.2%	ND	0.2
Toluene	1.3478E+007	1.3505E+007	0.2%	ND	0.2
Ethylbenzene	7.9328E+006	7.9487E+006	0.2%	ND	0.2
p,m-Xylene	2.4128E+007	2.4176E+007	0.2%	ND	0.2
o-Xylene	1.1642E+007	1.1665E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect Limit
Benzene	50.0	49.9	0.2%	0 - 30%	1.8
Toluene	4,060	4,050	0.2%	0 - 30%	1.7
Ethylbenzene	6,390	6,380	0.2%	0 - 30%	1.5
p,m-Xylene	62,510	62,460	0.1%	0 - 30%	2.2
o-Xylene	37,470	37,440	0.1%	0 - 30%	1.0

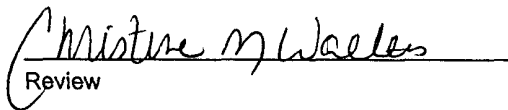
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	50.0	50.0	99.8	99.8%	39 - 150
Toluene	4,060	50.0	4,100	99.8%	46 - 148
Ethylbenzene	6,390	50.0	6,430	99.8%	32 - 160
p,m-Xylene	62,510	100	62,480	99.8%	46 - 148
o-Xylene	37,470	50.0	37,450	99.8%	46 - 148

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 32327, 32329, 32332, 32334.


Analyst


Review

QA/QC SUMMARY REPORT

Client: Blagg Engineering
Project: Storey B #1E

Work Order: 0609258

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: MB-11355		MBLK			Batch ID: 11355		Analysis Date: 9/26/2006 1:34:07 PM		
Chloride	ND	mg/Kg	0.30						
Sample ID: LCS-11355		LCS			Batch ID: 11355		Analysis Date: 9/26/2006 12:24:29 PM		
Chloride	14.68	mg/Kg	0.30	97.9	90	110			
Method: SW8015									
Sample ID: 0609258-01AMSD		MSD			Batch ID: 11335		Analysis Date: 9/26/2006 3:06:37 AM		
Diesel Range Organics (DRO)	34.19	mg/Kg	10	68.4	67.4	117	2.46	17.4	
Sample ID: MB-11335		MBLK			Batch ID: 11335		Analysis Date: 9/22/2006 8:31:32 PM		
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-11335		LCS			Batch ID: 11335		Analysis Date: 9/22/2006 9:06:03 PM		
Diesel Range Organics (DRO)	39.52	mg/Kg	10	79.0	64.6	116			
Sample ID: LCSD-11335		LCSD			Batch ID: 11335		Analysis Date: 9/22/2006 9:40:51 PM		
Diesel Range Organics (DRO)	37.46	mg/Kg	10	74.9	64.6	116	5.35	17.4	
Sample ID: 0609258-01AMS		MS			Batch ID: 11335		Analysis Date: 9/26/2006 1:57:01 AM		
Diesel Range Organics (DRO)	35.04	mg/Kg	10	70.1	67.4	117			
Method: SW8015									
Sample ID: MB-11343		MBLK			Batch ID: 11343		Analysis Date: 9/26/2006 1:06:36 AM		
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-11343		LCS			Batch ID: 11343		Analysis Date: 9/26/2006 1:36:35 AM		
Gasoline Range Organics (GRO)	21.20	mg/Kg	5.0	80.8	73.4	115			
Sample ID: LCSD-11343		LCSD			Batch ID: 11343		Analysis Date: 9/26/2006 2:06:38 AM		
Gasoline Range Organics (GRO)	20.60	mg/Kg	5.0	78.4	73.4	115	2.87	11.6	
Method: SW8021									
Sample ID: MB-11343		MBLK			Batch ID: 11343		Analysis Date: 9/26/2006 1:06:36 AM		
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.15						
Sample ID: LCS-11343		LCS			Batch ID: 11343		Analysis Date: 9/26/2006 1:36:35 AM		
Benzene	0.2887	mg/Kg	0.050	111	77.5	123			
Toluene	2.015	mg/Kg	0.050	110	85.3	129			
Ethylbenzene	0.3749	mg/Kg	0.050	104	79.6	121			
Xylenes, Total	2.318	mg/Kg	0.15	107	80	130			
Sample ID: LCSD-11343		LCSD			Batch ID: 11343		Analysis Date: 9/26/2006 2:06:38 AM		
Benzene	0.2927	mg/Kg	0.050	113	77.5	123	1.38	27	
Toluene	2.044	mg/Kg	0.050	112	85.3	129	1.42	19	
Ethylbenzene	0.3802	mg/Kg	0.050	106	79.6	121	1.40	10	
Xylenes, Total	2.342	mg/Kg	0.15	108	80	130	1.05	13	

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **BLAGG**

Date and Time Received:

9/21/2006

Work Order Number **0609258**

Received by **GLS**

Checklist completed by

Signature

Date

Matrix

Carrier name **Greyhound**

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Not Shipped ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

6°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action