

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

Form C-144
June 1, 2004

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

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: BP AMERICA PROD. CO. Telephone: (505)-326-9200 e-mail address: _____
Address: 200 ENERGY COURT, FARMINGTON, NM 87410
Facility or well name: MUDGE LS #22 API #: 30-045- 11057 U/L or Qtr/Qtr G Sec 4 T 31N R 11W
County: SAN JUAN Latitude 36.92888 Longitude 107.99169 NAD: 1927 ☐ 1983 ☒ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☐ Production ☐ Disposal ☒ BLOW
Workover ☐ Emergency ☐
Lined ☐ Unlined ☒
Liner type: Synthetic ☐ Thickness _____ mil Clay ☐
Pit Volume _____ bbl

Below-grade tank

Volume: _____ bbl Type of fluid: _____
Construction material: N/A
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	(20 points)	
	50 feet or more, but less than 100 feet	(10 points)	0
	100 feet or more	(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	(20 points)	
	No	(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	(20 points)	
	200 feet or more, but less than 1000 feet	(10 points)	0
	1000 feet or more	(0 points)	
Ranking Score (Total Points)			0

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 BP CROUCH MESA LF. (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: PIT LOCATED APPROXIMATELY 75 FT. NSE FROM WELL HEAD.
PIT EXCAVATION: WIDTH 15 ft., LENGTH 15 ft., DEPTH 6 ft.
PIT REMEDIATION: CLOSE AS IS: ☐, LANDFARM: ☐, COMPOST: ☐, STOCKPILE: ☐, OTHER ☒ EXCAVATE
Cubic yards: 25
BEDROCK BOTTOM

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: 12/07/05

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, DIST. 8 Signature [Signature] Date: FEB 28 2006
Printed Name/Title _____

30-045-11057

36.92888 x 107.99169

CLIENT: BP
BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199
LOCATION NO: 81719COCR NO: 15180**FIELD REPORT: PIT CLOSURE VERIFICATION**PAGE No: 1 of 1LOCATION: NAME: MUDGE LS WELL #: 22 TYPE: BLOWDATE STARTED: 12-5-05DATE FINISHED: 12-5-05QUAD/UNIT: G SEC: 4 TWP: 31N RNG: 11W PM: NM CNTY: 5J ST: NMQTR/FOOTAGE: 1850 FNL x 1450 FEL ^{TW/NE} CONTRACTOR: PXS (Fernando)ENVIRONMENTAL SPECIALIST: JCBEXCAVATION APPROX. 15 FT. x 15 FT. x 6 FT. DEEP. CUBIC YARDAGE: 25 ±DISPOSAL FACILITY: BP CROUCH MESA L.F. REMEDIATION METHOD: EXCAVATELAND USE: RANGE - BLM LEASE: SF-078051 FORMATION: DKFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 75 FT. NSE FROM WELLHEAD.DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM**SOIL AND EXCAVATION DESCRIPTION:**
OVM CALIB. READ. = 52.1 ppm
OVM CALIB. GAS = 100 ppm RF = 0.52
TIME: 0905 (am/pm) DATE: 12/5
SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER Bedrock Sandstone @ 6" B.G.SOIL COLOR: Light TanCOHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVECONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSEPLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATEDDISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION - Gray / Black StainingHC ODOR DETECTED: YES / NO EXPLANATION - ModerateSAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. 5 15' x 15' x 3' Deep Earth Pit. Excavate

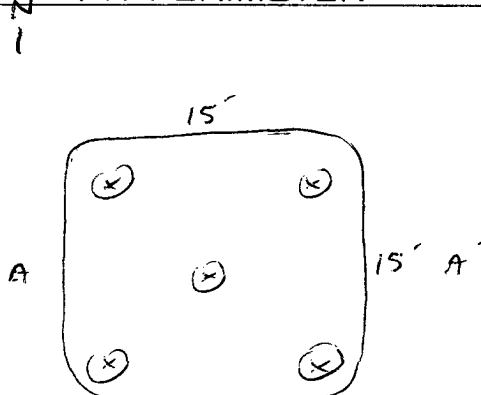
ADDITIONAL COMMENTS:

Bedrock BottomImpacted Soils to Bedrock @ 6"CLOSED**SCALE**

0 FT

FIELD 418.1 CALCULATIONS

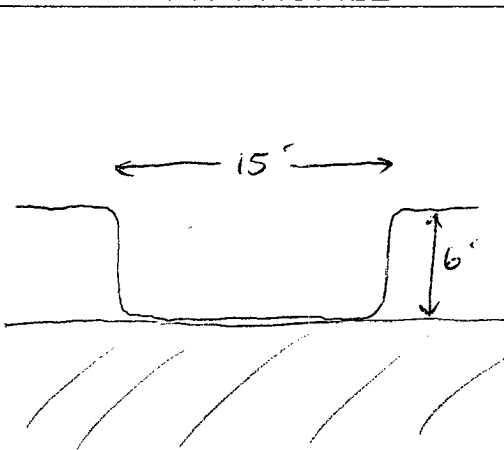
SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)

PIT PERIMETER**OVM READING**

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @	
2 @	
3 @	
4 @	
5 @	
S-Point Composite @ 6"	136

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
S-Point	TPH	1210
	BTEX	
	CL-	
	<u>ANALYSIS</u>	

PIT PROFILE
P.D. = PIT DEPRESSION; B.G. = BELOW GRADE; B = BELOW
T.H. = TEST HOLE; ~ = APPROX.; T.B. = TANK BOTTOM

TRAVEL NOTES:

CALLOUT:

ONSITE: 12/5/05

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

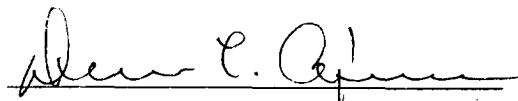
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	5-Point Composite @ 6'	Date Reported:	12-07-05
Laboratory Number:	35356	Date Sampled:	12-05-05
Chain of Custody No:	15180	Date Received:	12-05-05
Sample Matrix:	Soil	Date Extracted:	12-05-05
Preservative:	Cool	Date Analyzed:	12-07-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

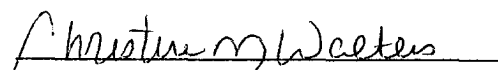
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2,420	0.2
Diesel Range (C10 - C28)	1,940	0.1
Total Petroleum Hydrocarbons	4,360	0.2

ND - Parameter not detected at the stated detection limit.

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

Comments: **Mudge LS 22 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:	5-Point Composite @ 6'	Date Reported:	12-07-05
Laboratory Number:	35356	Date Sampled:	12-05-05
Chain of Custody:	15180	Date Received:	12-05-05
Sample Matrix:	Soil	Date Analyzed:	12-07-05
Preservative:	Cool	Date Extracted:	12-05-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	274	1.8
Toluene	325	1.7
Ethylbenzene	1,760	1.5
p,m-Xylene	12,950	2.2
o-Xylene	3,500	1.0
Total BTEX	18,810	

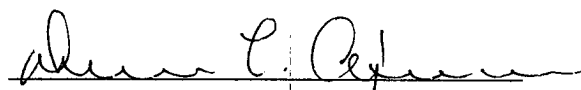
ND - Parameter not detected at the stated detection limit.


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

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

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

Comments: Mudge LS 22 Blow Pit.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	5-Point Composite @ 6'	Date Reported:	12-07-05
Lab ID#:	35356	Date Sampled:	12-05-05
Sample Matrix:	Soil	Date Received:	12-05-05
Preservative:	Cool	Date Analyzed:	12-06-05
Condition:	Cool and Intact	Chain of Custody:	15180

Parameter

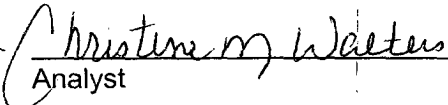
Concentration (mg/Kg)

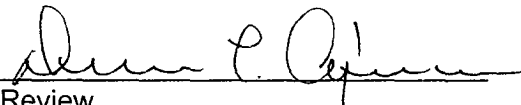
Total Chloride

9.8

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

Comments: Mudge LS 22 Blow Pit.


Analyst


Review

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1301 W. Grand Avenue, Artesia, NM 88210
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-144
June 1, 2004

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

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>MUDGE LS #22</u> API #: <u>30-045- 11057</u> U/L or Qtr/Qtr <u>G</u> Sec <u>4</u> T <u>31N</u> R <u>11W</u>		
County: <u>SAN JUAN</u> Latitude <u>36.92888</u> Longitude <u>107.99169</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"/>		
Pit 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	Below-grade tank 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. _____	
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) <u>0</u>
	100 feet or more	(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	(20 points)
	No	(0 points) <u>0</u>
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) <u>0</u>
	1000 feet or more	(0 points)
Ranking Score (Total Points)		<u>0</u>

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 93 FT. S69W FROM WELL HEAD.</u>
<u>PIT EXCAVATION: WIDTH N/A ft., LENGTH N/A ft., DEPTH N/A ft.</u>
<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)</u>
Cubic yards: <u>N/A</u>
<u>BEDROCK BOTTOM</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: 12/07/05

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:

Printed Name/Title DEPUTY OIL & GAS INSPECTOR, DIST. 8

Signature Red Red

Date: FEB 28 2006

30-045-11057

36.92888 x 107.99169

CLIENT: BP
BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199
LOCATION NO: 81719COCR NO: 15180**FIELD REPORT: PIT CLOSURE VERIFICATION**PAGE No: 1 of 1LOCATION: NAME: MUDGE LS WELL#: 22 TYPE: SEPARATORQUAD/UNIT: G SEC: 4 TWP: 31N RNG: 11W PM: NM CNTY: SJ ST: NMQTR/FOOTAGE: 1850 FNL x 1450 FEL ^{SW/NE} CONTRACTOR: PXS (Fernando)DATE STARTED: 12-5-05DATE FINISHED: 12-5-05ENVIRONMENTAL SPECIALIST: JCBEXCAVATION APPROX. NA FT. x NA FT. x NA FT. DEEP. CUBIC YARDAGE: 0DISPOSAL FACILITY: NA REMEDIATION METHOD: CLOSE AS ISLAND USE: RANGE-BLM LEASE: SF-078051 FORMATION: JK**FIELD NOTES & REMARKS:**PIT LOCATED APPROXIMATELY 93 FT. 569W FROM WELLHEAD.DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM**SOIL AND EXCAVATION DESCRIPTION:**
 OVM CALIB. READ. = 52.1 ppm
 OVM CALIB. GAS = 100 ppm RF = 0.52
 TIME: 0905 am/pm DATE: 12/5
SOIL TYPE: SAND / SILTY SAND / SILT (SILTY CLAY) CLAY / GRAVEL / OTHER BEDROCK SANDSTONE @ 5' BGSOIL COLOR: Light TanCOHESION (ALL OTHERS): NON COHESIVE (SLIGHTLY COHESIVE) COHESIVE / HIGHLY COHESIVECONSISTENCY (NON COHESIVE SOILS): LOOSE (FIRM) DENSE / VERY DENSEPLASTICITY (CLAYS): NON PLASTIC (SLIGHTLY PLASTIC) COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

MOISTURE: DRY (SLIGHTLY MOIST) MOIST / WET / SATURATED / SUPER SATURATEDDISCOLORATION/STAINING OBSERVED: YES (NO) EXPLANATION -HC ODOR DETECTED: YES (NO) EXPLANATION -SAMPLE TYPE: GRAB (COMPOSITE) # OF PTS. 5

ADDITIONAL COMMENTS:

12" x 12" x 3" Deep Eorther Pit. Use Backhoe
to collect samples. FIRM Bedrock Sandstone @ 5' BG.
SCALE**FIELD 418.1 CALCULATIONS**

SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)

0 FT

PIT PERIMETER**PIT PROFILE****OVM READING**

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @	
2 @	
3 @	
4 @	
5 @	
5-Point Composite @ 5'	

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
5-Point	TPH	1135
	BTEX	
	CL-	
	<u>POSTED</u>	

 P.D. = PIT DEPRESSION; B.G. = BELOW GRADE; B = BELOW
 T.H. = TEST HOLE; ~ = APPROX.; T.B. = TANK BOTTOM

TRAVEL NOTES:

CALLOUT: _____

ONSITE: 12/5/05

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

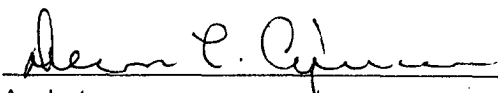
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	5-Point Composite @ 5'	Date Reported:	12-07-05
Laboratory Number:	35355	Date Sampled:	12-05-05
Chain of Custody No:	15180	Date Received:	12-05-05
Sample Matrix:	Soil	Date Extracted:	12-05-05
Preservative:	Cool	Date Analyzed:	12-07-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

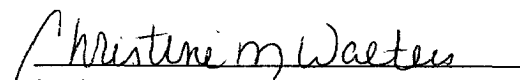
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: Mudge LS 22 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 @ 5'	Date Reported:	12-07-05
Laboratory Number:	35355	Date Sampled:	12-05-05
Chain of Custody:	15180	Date Received:	12-05-05
Sample Matrix:	Soil	Date Analyzed:	12-07-05
Preservative:	Cool	Date Extracted:	12-05-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	6.8	1.8
Toluene	10.4	1.7
Ethylbenzene	3.0	1.5
p,m-Xylene	52.9	2.2
o-Xylene	11.0	1.0
Total BTEX	84.1	


ND - Parameter not detected at the stated detection limit.

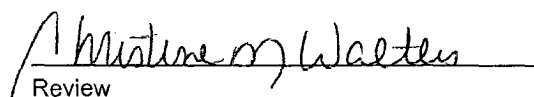
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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

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

Comments: Mudge LS 22 Sep Pit.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Chloride

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	5-Point Composite @ 5'	Date Reported:	12-07-05
Lab ID#:	35355	Date Sampled:	12-05-05
Sample Matrix:	Soil	Date Received:	12-05-05
Preservative:	Cool	Date Analyzed:	12-06-05
Condition:	Cool and Intact	Chain of Custody:	15180

Parameter

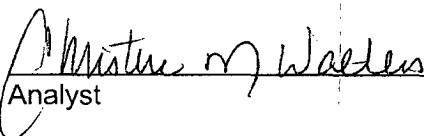
Concentration (mg/Kg)

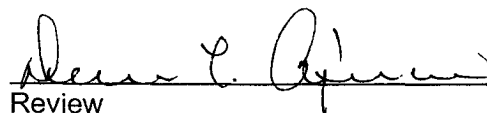
Total Chloride

21.8

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

Comments: Mudge LS 22 Sep Pit.


Analyst


Review