

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: <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 A #41</u> API #: <u>30-045- 21028</u> U/L or Qtr/Qtr <u>M</u> Sec <u>11</u> T <u>31N</u> R <u>11W</u>  |  |
| County: <u>SAN JUAN</u> Latitude <u>36.90818</u> Longitude <u>107.96596</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>Pit</b><br>Type: Drilling <input type="checkbox"/> Production <input type="checkbox"/> Disposal <input checked="" type="checkbox"/> <u>BLOW</u><br>Workover <input type="checkbox"/> Emergency <input type="checkbox"/><br>Lined <input type="checkbox"/> Unlined <input checked="" type="checkbox"/><br>Liner type: Synthetic <input type="checkbox"/> Thickness _____ mil Clay <input type="checkbox"/><br>Pit Volume _____ bbl | <b>Below-grade tank</b><br>Volume: _____ bbl Type of fluid: <u>N/A</u><br>Construction material: <u>N/A</u><br>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)<br>50 feet or more, but less than 100 feet (10 points) <u>0</u><br>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)<br>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)<br>200 feet or more, but less than 1000 feet (10 points) <u>0</u><br>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 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: <u>PIT LOCATED APPROXIMATELY 81 FT. S70W FROM WELL HEAD.</u>  |
| <u>PIT EXCAVATION: WIDTH 15 ft., LENGTH 14 ft., DEPTH 8 ft.</u>  |
| <u>PIT REMEDIATION: CLOSE AS IS: <input type="checkbox"/>, LANDFARM: <input checked="" type="checkbox"/>, COMPOST: <input type="checkbox"/>, STOCKPILE: <input type="checkbox"/>, OTHER <input type="checkbox"/> (explain)</u> |
| Cubic yards: <u>60</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: 12/15/05

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.

Approval:

Printed Name/Title

DEPUTY OIL & GAS INSPECTOR, DIST. #

Signature [Signature]

Date: FEB 28 2006

|                   |   |  |
|-------------------|---|--|
| CLIENT: <u>BP</u> | <b>BLAGG ENGINEERING, INC.</b><br><b>P.O. BOX 87, BLOOMFIELD, NM 87413</b><br><b>(505) 632-1199</b> | LOCATION NO: <u>B1715</u><br>COCR NO: <u>14516</u> |
|-------------------|---|--|

## FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: MUDGE A WELL #: 41 TYPE: BLOW

QUAD/UNIT: M SEC: 11 TWP: 31N RNG: 11W PM: NM CNTY: ST ST: NM

QTR/FOOTAGE: 800'S/800'W SW/SE CONTRACTOR: P+S (FERNANDO)

EXCAVATION APPROX. 15 FT. x 14 FT. x 8 FT. DEEP. CUBIC YARDAGE: 60

DISPOSAL FACILITY: BP CROUCH MESA FACILITY REMEDIATION METHOD: LANDFARM

LAND USE: RANGE - BLM LEASE: SE 078040 FORMATION: PC

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 81 FT. SW FROM WELLHEAD.

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1,000' NEAREST SURFACE WATER: >1,000'

NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5,000 PPM

**SOIL AND EXCAVATION DESCRIPTION:**

SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER \_\_\_\_\_

SOIL COLOR: MED. TO DK. GRAY

COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE

CONSISTENCY (NON COHESIVE SOILS): LOOSE / 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 / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED

DISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION - ENTIRE TEST HOLE INTERVAL

HC ODOR DETECTED: YES / NO EXPLANATION - EXCAVATED SOIL & OVM SAMPLE

SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. 1

ADDITIONAL COMMENTS: \_\_\_\_\_

OVM CALIB. READ. = 53.3 ppm  
 OVM CALIB. GAS = 100 ppm RF = 0.52  
 TIME: 11:30 am/pm DATE: 12/14/05

**SCALE**

0 FT

**FIELD 418.1 CALCULATIONS**

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

**PIT PERIMETER**

P.D. ~ 2' B.G.  
T.H. ~ 8' B.G.

**OVM READING**

| SAMPLE ID | FIELD HEADSPACE (ppm) |
|-----------|-----------------------|
| 1 @ 10'   | 1,376                 |
| 2 @       |                       |
| 3 @       |                       |
| 4 @       |                       |
| 5 @       |                       |
|           |                       |
|           |                       |
|           |                       |
|           |                       |
|           |                       |

**PIT PROFILE**

NOT APPLICABLE

**LAB SAMPLES**

| SAMPLE ID | ANALYSIS     | TIME  |
|-----------|--------------|-------|
| 1 @ 10'   | TAH (80158)  | 11/11 |
| "         | STEX (80218) | "     |
| "         | CHLORIDE     | "     |
|           |              |       |
|           |              |       |

PASSED

**TRAVEL NOTES:**

CALLOUT: 12/14/05 - MORN. ONSITE: 12/14/05 - MORN.

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

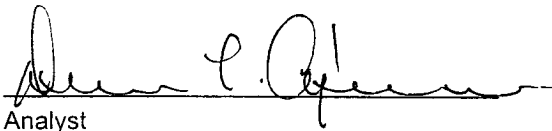
|                      |                 |                     |           |
|----------------------|-----------------|---------------------|-----------|
| Client:              | Blagg / BP      | Project #:          | 94034-010 |
| Sample ID:           | 1 @ 10'         | Date Reported:      | 12-15-05  |
| Laboratory Number:   | 35452           | Date Sampled:       | 12-14-05  |
| Chain of Custody No: | 14516           | Date Received:      | 12-14-05  |
| Sample Matrix:       | Soil            | Date Extracted:     | 12-14-05  |
| Preservative:        | Cool            | Date Analyzed:      | 12-15-05  |
| Condition:           | Cool and Intact | Analysis Requested: | 8015 TPH  |

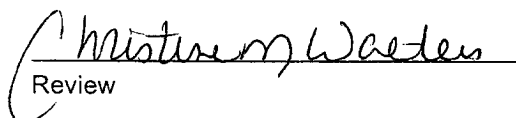
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 4,040                    | 0.2                      |
| Diesel Range (C10 - C28)     | 133                      | 0.1                      |
| Total Petroleum Hydrocarbons | 4,170                    | 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 A #41 Blow Pit Grab Sample.**

  
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 @ 10'       | Date Reported:      | 12-15-05  |
| Laboratory Number: | 35452         | Date Sampled:       | 12-14-05  |
| Chain of Custody:  | 14516         | Date Received:      | 12-14-05  |
| Sample Matrix:     | Soil          | Date Analyzed:      | 12-15-05  |
| Preservative:      | Cool          | Date Extracted:     | 12-14-05  |
| Condition:         | Cool & Intact | Analysis Requested: | BTEX      |

| Parameter    | Concentration<br>(ug/Kg) | Det.<br>Limit<br>(ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene      | 924                      | 1.8                      |
| Toluene      | 5,860                    | 1.7                      |
| Ethylbenzene | 4,560                    | 1.5                      |
| p,m-Xylene   | 22,130                   | 2.2                      |
| o-Xylene     | 8,260                    | 1.0                      |
| Total BTEX   | 41,730                   |                          |

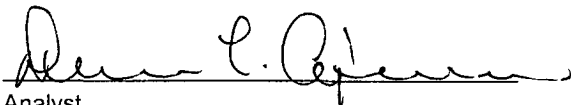
ND - Parameter not detected at the stated detection limit.

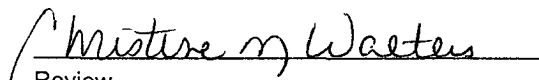
| Surrogate Recoveries: | Parameter           | Percent Recovery |
|-----------------------|---------------------|------------------|
|                       | Fluorobenzene       | 98.0 %           |
|                       | 1,4-difluorobenzene | 98.0 %           |
|                       | Bromochlorobenzene  | 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: Mudge A #41 Blow Pit Grab Sample.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Chloride

|                |                 |                   |           |
|----------------|-----------------|-------------------|-----------|
| Client:        | Blagg / BP      | Project #:        | 94034-010 |
| Sample ID:     | 1 @ 10'         | Date Reported:    | 12-15-05  |
| Lab ID#:       | 35452           | Date Sampled:     | 12-14-05  |
| Sample Matrix: | Soil            | Date Received:    | 12-14-05  |
| Preservative:  | Cool            | Date Analyzed:    | 12-15-05  |
| Condition:     | Cool and Intact | Chain of Custody: | 14516     |

Parameter

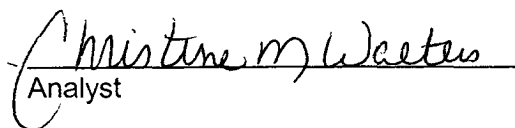
Concentration (mg/Kg)


Total Chloride

7.2

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

Comments: Mudge A #41 Blow Pit Grab Sample.

  
Analyst

  
Review

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Oil Conservation Division  
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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>MUDGE A #41</u> API #: <u>30-045- 21028</u> U/L or Qtr/Qtr <u>M</u> Sec <u>11</u> T <u>31N</u> R <u>11W</u>   |  |                      |
| County: <u>SAN JUAN</u> Latitude <u>36.90818</u> Longitude <u>107.96596</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>Pit</b><br>Type: Drilling <input type="checkbox"/> Production <input type="checkbox"/> Disposal <input checked="" type="checkbox"/> <u>SEPARATOR</u><br>Workover <input type="checkbox"/> Emergency <input type="checkbox"/><br>Lined <input type="checkbox"/> Unlined <input checked="" type="checkbox"/><br>Liner type: Synthetic <input type="checkbox"/> Thickness _____ mil Clay <input type="checkbox"/><br>Pit Volume _____ bbl | <b>Below-grade tank</b><br>Volume: _____ bbl Type of fluid: <u>N/A</u><br>Construction material: <u>N/A</u><br>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) <b>0</b> |
|   | 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) <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) <b>0</b> |
|   | 1000 feet or more  | ( 0 points)          |
| <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 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: <u>PIT LOCATED APPROXIMATELY 23 FT. N85E FROM WELL HEAD.</u>  |
| <u>PIT EXCAVATION: WIDTH 15 ft., LENGTH 14 ft., DEPTH 8 ft.</u>  |
| <u>PIT REMEDIATION: CLOSE AS IS: <input type="checkbox"/> LANDFARM: <input checked="" type="checkbox"/> COMPOST: <input type="checkbox"/> STOCKPILE: <input type="checkbox"/> OTHER <input type="checkbox"/> (explain)</u> |
| Cubic yards: <u>60</u>   |
| <u>BEDROCK BOTTOM</u>  |


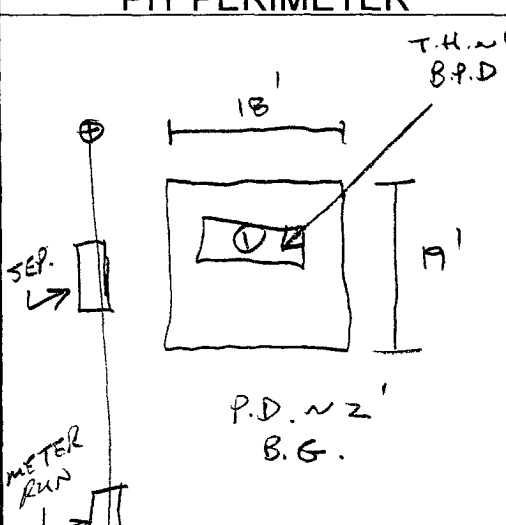
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an alternative OCD-approved plan ☒.

Date: 12/15/05

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. 4 Signature Bob Pull Date: FEB 28 2006

| CLIENT: <u>BP</u>  | <b>BLAGG ENGINEERING, INC.</b><br><b>P.O. BOX 87, BLOOMFIELD, NM 87413</b><br><b>(505) 632-1199</b>  | LOCATION NO: <u>81715</u><br>COCR NO: <u>14516</u>  |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|--|--|---|------------|--|----------|---------|-------------|-------------|----------|-----------|-----------------------|----------|----------|---------|-------------|-----|--|-----|--|-----|--|--|--|--|--|--|--|--|--|--|--|-------------|--|--|-----------|----------|------|---------|------------|-------|---|--------------|---|---|----------|---|--|--|--|--|--|--|--|--|--|
| <b>FIELD REPORT: PIT CLOSURE VERIFICATION</b>  |  | PAGE No: <u>1</u> of <u>1</u>   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| LOCATION: NAME: <u>MUDGE A</u> WELL#: <u>41</u> TYPE: <u>SEP.</u><br>QUAD/UNIT: <u>M</u> SEC: <u>11</u> TWP: <u>31N</u> RNG: <u>11W</u> PM: <u>NM</u> CNTY: <u>ST</u> ST: <u>NM</u><br>QTR/FOOTAGE: <u>800'S/800'W</u> SW/SEW CONTRACTOR: <u>P+S (FERNANDO)</u>  |  | DATE STARTED: <u>12/14/05</u><br>DATE FINISHED: _____<br>ENVIRONMENTAL SPECIALIST: <u>NV</u>                                      |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| EXCAVATION APPROX. <u>14</u> FT. x <u>15</u> FT. x <u>8</u> FT. DEEP. CUBIC YARDAGE: <u>60</u>   |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| DISPOSAL FACILITY: <u>BP CROUCH MESA FACILITY</u> REMEDIATION METHOD: <u>LANDFARM</u>  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| LAND USE: <u>RANGE - BLM</u> LEASE: <u>SF 078040</u> FORMATION: <u>PC</u>  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>23</u> FT. <u>N85E</u> FROM WELLHEAD.<br>DEPTH TO GROUNDWATER: <u>&gt;100'</u> NEAREST WATER SOURCE: <u>&gt;1,000'</u> NEAREST SURFACE WATER: <u>&gt;1,000'</u><br>NMOCD RANKING SCORE: <u>2</u> NMOCD TPH CLOSURE STD: <u>5,000</u> PPM   |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| SOIL AND EXCAVATION DESCRIPTION:   |  | OVM CALIB. READ. = <u>53.3</u> ppm<br>OVM CALIB. GAS = <u>100</u> ppm RF = 0.52<br>TIME: <u>11:30</u> am/pm DATE: <u>12/14/05</u> |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| SOIL TYPE: <u>SAND</u> <u>(SILTY SAND)</u> SILT / SILTY CLAY / CLAY / GRAVEL / OTHER <u>BEDROCK (SANDSTONE)</u><br>SOIL COLOR: <u>LT. TO DK. GRAY</u> <u>BEDROCK - PALE YEL. ORANGE</u><br>COHESION (ALL OTHERS): <u>NON COHESIVE</u> / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE<br>CONSISTENCY (NON COHESIVE SOILS): <u>LOOSE</u> / FIRM / DENSE / VERY DENSE<br>PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC<br>DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD<br>MOISTURE: DRY / SLIGHTLY MOIST <u>MOIST</u> / WET / SATURATED / SUPER SATURATED<br>DISCOLORATION/STAINING OBSERVED: <u>YES</u> / NO EXPLANATION - <u>ENTIRE TEST HOLE INTERVAL EXCEPT BEDROCK.</u><br>HC ODOR DETECTED: <u>YES</u> / NO EXPLANATION - <u>EXCAVATED SOIL &amp; OVM SAMPLE.</u><br>SAMPLE TYPE: <u>GRAB</u> COMPOSITE - # OF PTS. _____<br>ADDITIONAL COMMENTS: <u>COLLECTED SAMPLE FROM BEDROCK SURFACE. BEDROCK - HARD, SLIGHTLY FRAGILE.</u><br><u>BEDROCK BOTTOM</u> |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| FIELD 418.1 CALCULATIONS   |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| SCALE<br><br>0 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> </tbody> </table> |   |            |  |          |         |             | SAMP. TIME  | SAMP. ID | LAB NO.   | WEIGHT (g)            | mL FREON | DILUTION | READING | CALC. (ppm) |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| SAMP. TIME   | SAMP. ID   | LAB NO.   | WEIGHT (g) | mL FREON   | DILUTION | READING | CALC. (ppm) |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| PIT PERIMETER  |  |   |            | PIT PROFILE  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|   |  |   |            | <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">OVM READING</th> </tr> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE (ppm)</th> </tr> </thead> <tbody> <tr><td>1 @ 10'</td><td>748</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><br><table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">LAB SAMPLES</th> </tr> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>TIME</th> </tr> </thead> <tbody> <tr><td>1 @ 10'</td><td>TPH (8158)</td><td>11:23</td></tr> <tr><td>"</td><td>ATEX (30213)</td><td>"</td></tr> <tr><td>"</td><td>CHLORIDE</td><td>"</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> |          |         |             | OVM READING |          | SAMPLE ID | FIELD HEADSPACE (ppm) | 1 @ 10'  | 748      | 2 @     |             | 3 @ |  | 4 @ |  | 5 @ |  |  |  |  |  |  |  |  |  |  |  | LAB SAMPLES |  |  | SAMPLE ID | ANALYSIS | TIME | 1 @ 10' | TPH (8158) | 11:23 | " | ATEX (30213) | " | " | CHLORIDE | " |  |  |  |  |  |  |  |  |  |
| OVM READING  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| SAMPLE ID  | FIELD HEADSPACE (ppm)  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| 1 @ 10'  | 748  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| 2 @  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| 3 @  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| 4 @  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| 5 @  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| LAB SAMPLES  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| SAMPLE ID  | ANALYSIS   | TIME  |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| 1 @ 10'  | TPH (8158)   | 11:23   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| "  | ATEX (30213)   | "   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| "  | CHLORIDE   | "   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
|  |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| P.D. = PIT DEPRESSION; B.G. = BELOW GRADE; B = BELOW<br>T.H. = TEST HOLE; ~ = APPROX.; T.B. = TANK BOTTOM  |  |   |            | NOT APPLICABLE   |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |
| TRAVEL NOTES: CALLOUT: <u>12/14/05 - MORN.</u> ONSITE: <u>12/14/05 - MORN.</u>   |  |   |            |  |          |         |             |             |          |           |                       |          |          |         |             |     |  |     |  |     |  |  |  |  |  |  |  |  |  |  |  |             |  |  |           |          |      |         |            |       |   |              |   |   |          |   |  |  |  |  |  |  |  |  |  |

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

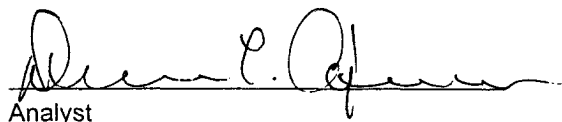
|                      |                 |                     |           |
|----------------------|-----------------|---------------------|-----------|
| Client:              | Blagg / BP      | Project #:          | 94034-010 |
| Sample ID:           | 1 @ 10'         | Date Reported:      | 12-15-05  |
| Laboratory Number:   | 35453           | Date Sampled:       | 12-14-05  |
| Chain of Custody No: | 14516           | Date Received:      | 12-14-05  |
| Sample Matrix:       | Soil            | Date Extracted:     | 12-14-05  |
| Preservative:        | Cool            | Date Analyzed:      | 12-15-05  |
| Condition:           | Cool and Intact | Analysis Requested: | 8015 TPH  |

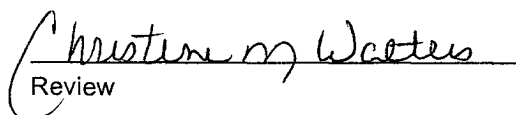
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 5.6                      | 0.2                      |
| Diesel Range (C10 - C28)     | 20.8                     | 0.1                      |
| Total Petroleum Hydrocarbons | 26.4                     | 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 A #41 Separator Pit Grab Sample.**

  
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 @ 10'       | Date Reported:      | 12-15-05  |
| Laboratory Number: | 35453         | Date Sampled:       | 12-14-05  |
| Chain of Custody:  | 14516         | Date Received:      | 12-14-05  |
| Sample Matrix:     | Soil          | Date Analyzed:      | 12-15-05  |
| Preservative:      | Cool          | Date Extracted:     | 12-14-05  |
| Condition:         | Cool & Intact | Analysis Requested: | BTEX      |

| Parameter    | Concentration<br>(ug/Kg) | Det.<br>Limit<br>(ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene      | 5.2                      | 1.8                      |
| Toluene      | 236                      | 1.7                      |
| Ethylbenzene | 252                      | 1.5                      |
| p,m-Xylene   | 1,660                    | 2.2                      |
| o-Xylene     | 518                      | 1.0                      |
| Total BTEX   | 2,670                    |                          |

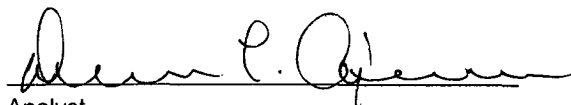
ND - Parameter not detected at the stated detection limit.

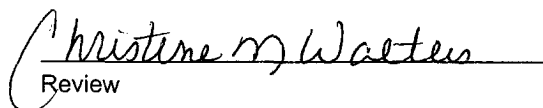
| Surrogate Recoveries: | Parameter           | Percent Recovery |
|-----------------------|---------------------|------------------|
|                       | Fluorobenzene       | 99.0 %           |
|                       | 1,4-difluorobenzene | 99.0 %           |
|                       | Bromochlorobenzene  | 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: Mudge A #41 Separator Pit Grab Sample.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Chloride

|                |                 |                   |           |
|----------------|-----------------|-------------------|-----------|
| Client:        | Blagg / BP      | Project #:        | 94034-010 |
| Sample ID:     | 1 @ 10'         | Date Reported:    | 12-15-05  |
| Lab ID#:       | 35453           | Date Sampled:     | 12-14-05  |
| Sample Matrix: | Soil            | Date Received:    | 12-14-05  |
| Preservative:  | Cool            | Date Analyzed:    | 12-15-05  |
| Condition:     | Cool and Intact | Chain of Custody: | 14516     |

Parameter

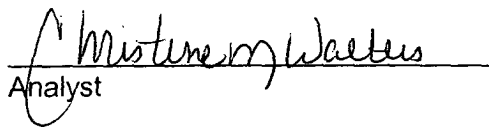
Concentration (mg/Kg)

Total Chloride

5.1

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

Comments: Mudge A #41 Separator Pit Grab Sample.

  
Analyst

  
Review