

**JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528**

BT481

8/10/99
SEP-OK

SUBMIT 1 COPY TO

NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

RECEIVED
AUG 16 1999

OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY **Telephone:** (505) 328-9200
Address: 200 Amoco Court, Farmington, NM 87401
Facility or Well Name: JICARILLA CONTRACT #146-17
Location: Unit or Qtr/Qtr Sec G Sec 3 T25N R 5W County RIO ARriba
Pit Type: Separator Dehydrator Other BLOW
Land Type: RANGE

Pit Location: Pit dimensions: length 31', width 25', depth 10'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 170'
Direction from reference: 22 Degrees East of North X
X West of South

| | | |
|---|--|----------|
| Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater) | Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points) | <u>0</u> |
| Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width) | Less than 100 feet (10 points) Greater than 100 feet (0 points) | <u>0</u> |
| Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds) | Less than 100 feet (10 points) Greater than 100 feet (0 points) | <u>0</u> |
| 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 perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches) | Less than 100 feet (20 points) 100 feet to 1000 feet (10 points) Greater than 1000 feet (0 points) | <u>0</u> |

RANKING SCORE (TOTAL POINTS): 0

8J481 / BLOW PIT

Date Remediation Started: _____ Date Completed: 12/30/96

Remediation Method: Excavation ☒ Approx. cubic yards 175
eck all appropriate (ions) Landfarmed ☒ Insitu Bioremediation _____
Other _____

Remediation Location: Onsite ☒ Offsite _____
(i.e. landfarmed onsite,
name and location of
offsite facility) _____

General Description of Remedial Action: Excavation.Groundwater Encountered: No ☒ Yes _____ Depth _____

Final Pit: Sample location see Attached Documents
Closure Sampling:
(if multiple samples,
attach sample results
and diagram of sample
locations and depths)

Sample depth 7'Sample date 12/30/96 Sample time 1125

Sample Results

| | | | | | |
|-----------------|-------|-------------|----------------|-------|-------|
| Soil: Benzene | (ppm) | _____ | Water: Benzene | (ppb) | _____ |
| Total BTEX | (ppm) | _____ | Toluene | (ppb) | _____ |
| Field Headspace | (ppm) | <u>85.8</u> | Ethylbenzene | (ppb) | _____ |
| TPH | (ppm) | <u>332</u> | Total Xylenes | (ppb) | _____ |

Groundwater Sample: Yes _____ No ☒ (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEGE AND BELIEF

DATE 12/30/96 PRINTED NAME Buddy D. Shaw
SIGNATURE Buddy D. Shaw AND TITLE Environmental Coordinator

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES ☒ NO _____ (REASON) _____SIGNED: Kate C. Marshall DATE: 1-23-97

| | | |
|----------------------|--|--|
| CLIENT: <u>AMOCO</u> | BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199 | LOCATION NO: <u>BT 481</u> C.D.C. NO: _____ |
|----------------------|--|--|

| | |
|------------------------------------|-------------------------------|
| FIELD REPORT: CLOSURE VERIFICATION | PAGE No: <u>1</u> of <u>1</u> |
|------------------------------------|-------------------------------|

| | |
|--|---|
| LOCATION: NAME: <u>JICARILLA CONTRACT</u> WELL #: <u>146-17</u> PIT: <u>BLOW</u> | DATE STARTED: <u>12/30/96</u> DATE FINISHED: _____ |
| QUAD/UNIT: <u>6</u> SEC: <u>3</u> TWP: <u>25N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> | ENVIRONMENTAL SPECIALIST: <u>NV</u> |
| QTR/FOOTAGE: <u>SW/4 NE/4</u> CONTRACTOR: <u>P+S</u> | |

| |
|--|
| EXCAVATION APPROX. <u>31</u> FT. x <u>25</u> FT. x <u>10</u> FT. DEEP. CUBIC YARDAGE: <u>175</u> |
| DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFARMED</u> |
| LAND USE: <u>RANGE</u> LEASE: <u>JICA. CONTR. #146</u> FORMATION: <u>OK</u> |

| | |
|--|--|
| FIELD NOTES & REMARKS: | PIT LOCATED APPROXIMATELY <u>170</u> FT. <u>N22W</u> FROM WELLHEAD. |
| DEPTH TO GROUNDWATER: <u>>100'</u> NEAREST WATER SOURCE: <u>>1000'</u> NEAREST SURFACE WATER: <u>>1000'</u> | CHECK ONE: <input checked="" type="checkbox"/> PIT ABANDONED <input type="checkbox"/> STEEL TANK INSTALLED <input type="checkbox"/> FIBERGLASS TANK INSTALLED |
| NMOCB PANKING SCORE: <u>0</u> NMOCB TPH CLOSURE STD: <u>5000</u> PPM | |
| SOIL AND EXCAVATION DESCRIPTION: | |

PALE YELL. ORANGE TO DK. YELL. ORANGE SAND, NON-COHESIVE, SLIGHTLY MOIST, FIRM
SLIGHT HC ODOR IN NORTH SIDEWALL OVM SAMPLE, NO APPARENT HC STAINING
OBSERVED THROUGHOUT ENTIRE EXCAVATION.

CLOSED

SCALE
0 FT

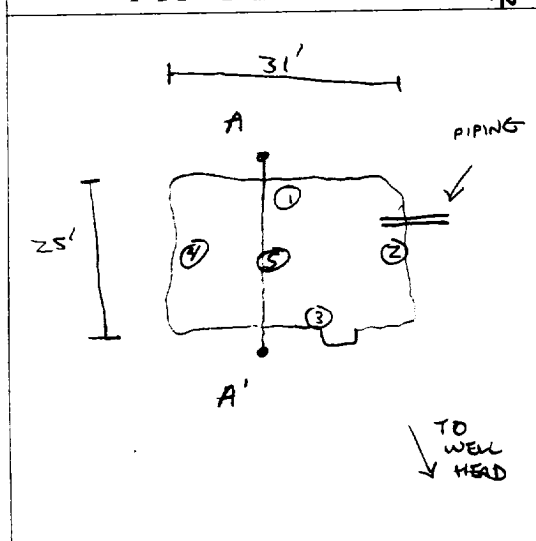
FIELD 418.1 CALCULATIONS

| TIME | SAMPLE I.D. | LAB No: | WEIGHT (g) | mL. FREON | DILUTION | READING | CALC. ppm |
|------|-------------|----------|------------|-----------|----------|---------|-----------|
| 1125 | ① @ 7' | TPH-1866 | 5 | 20 | 1:1 | 83 | 332 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

PIT PERIMETER

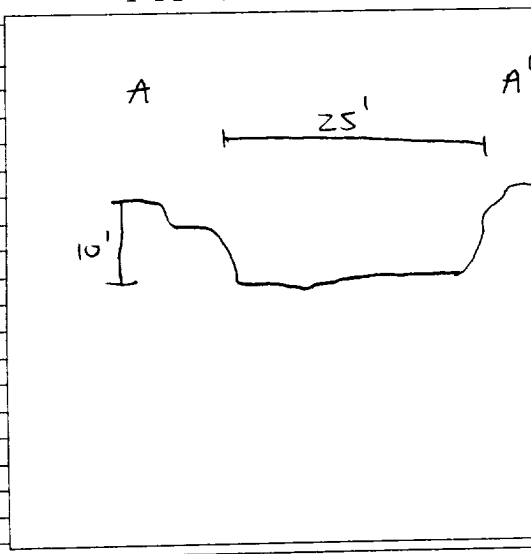
OVM RESULTS

PIT PROFILE



| SAMPLE ID | FIELD HEADSPACE PID (ppm) |
|-----------|---------------------------|
| 1 @ 7' | 85.8 |
| 2 @ 7' | 0.0 |
| 3 @ 7' | 0.8 |
| 4 @ 5' | 0.0 |
| 5 @ 11' | 0.0 |
| | |
| | |
| | |
| | |
| | |

| SAMPLE ID | ANALYSIS | TIME |
|-----------|----------|------|
| | | |
| | | |
| | | |
| | | |
| | | |



| | |
|---------------|---|
| TRAVEL NOTES: | CALLOUT: <u>12/24/96 AFTER.</u> ONSITE: <u>12/30/96 MORN.</u> |
|---------------|---|

BLAGG ENGINEERING, INC.

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

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

**FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS**

| | | | |
|--------------------|------------------------------|----------------|----------|
| Client: | AMOCO | Project #: | |
| Sample ID: | 1 @ 7' | Date Analyzed: | 12-30-96 |
| Project Location: | Jicarilla Contract 146 -- 17 | Date Reported: | 12-30-96 |
| Laboratory Number: | TPH-1866 | Sample Matrix: | Soil |

| Parameter | Result, mg/kg | Detection Limit, mg/kg |
|---|---------------|---------------------------|
| ----- | ----- | ----- |
| Total Recoverable Petroleum Hydrocarbons | 330 | 20 |

ND = Not Detectable at stated detection limits.

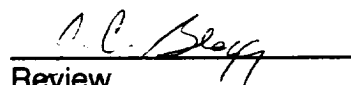
| QA/QC: | QA/QC Sample TPH mg/kg | Duplicate TPH mg/kg | % *Diff. |
|--------|---------------------------|------------------------|-------------|
| | ----- | ----- | ----- |
| | 80 | 84 | 4.88 |

* Administrative Acceptance limits set at 30%.

Method: Modified Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Blow Pit -- BJ481


Analyst


Review

BLAGG ENGINEERING, INC.

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

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

Field TPH-Worksheet

Max Characters:

Client:

AMOCO

Project #:

Sample ID:

1 @ 7'

Date Analyzed:

12-30-96

Project Location:

Jicarilla Contract 146 - 17

Date Reported:

12-30-96

Laboratory Number:

TPH-1866

Sample Matrix:

Soil

Sample Weight:

5.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

83 mg/kg

TPH Result:

332.0 mg/kg

Reported TPH Result:

330 mg/kg

Actual Detection Limit:

20.0 mg/kg

Reported Detection Limit:

20 mg/kg

QA/QC:

Original
TPH mg/kg

Duplicate
TPH mg/kg

%
Diff.

80

84

4.88

Comments:

*****Max Characters*****

Comments:

Blow Pit - BJ481

BT481

AND OIL & GAS ADMINISTRATION

| | | |
|---|--|----------------------------------|
| Operator: AMOCO PRODUCTION COMPANY | | Telephone: (505) 326-9200 |
| Address: 200 Amoco Court, Farmington, NM 87401 | | |
| Facility or Well Name: JICARILLA CONTRACT # 146-17 | | |
| Location: Unit or Qtr/Qtr Sec <u>G</u> Sec <u>3</u> T <u>25N</u> R <u>5W</u> County <u>RIO ARriba</u> | | |
| Pit Type: Separator <input checked="" type="checkbox"/> Dehydrator <input type="checkbox"/> Other <input type="checkbox"/> | | |
| Land Type: RANGE | | |

| | | | |
|--|---|--|--|
| Pit Location: (Attach diagram) | Pit dimensions: length <u>40'</u> , width <u>30'</u> , depth <u>14'</u> | | |
| | Reference: wellhead <u>X</u> , other _____ | | |
| | Footage from reference: <u>215</u> | | |
| | Direction from reference: <u>22</u> Degrees <input checked="" type="checkbox"/> East <input checked="" type="checkbox"/> North _____ West South _____ | | |

| | | | |
|---|------------------------|-------------|----------|
| Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater) | Less than 50 feet | (20 points) | |
| | 50 feet to 99 feet | (10 points) | <u>0</u> |
| | Greater than 100 feet | (0 points) | <u>0</u> |
| Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width) | Less than 100 feet | (10 points) | <u>0</u> |
| | Greater than 100 feet | (0 points) | <u>0</u> |
| Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds) | Less than 100 feet | (10 points) | <u>0</u> |
| | Greater than 100 feet | (0 points) | <u>0</u> |
| 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) | <u>0</u> |
| | No | (0 points) | <u>0</u> |
| Distance To SurfaceWater: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches) | Less than 100 feet | (20 points) | <u>0</u> |
| | 100 feet to 1000 feet | (10 points) | <u>0</u> |
| | Greater than 1000 feet | (0 points) | <u>0</u> |
| RANKING SCORE (TOTAL POINTS): | | | <u>0</u> |

BJ481 / SEP. PIT

Date Remediation Started: _____ Date Completed: 1/10/97Remediation Method: Excavation ☒ Approx. cubic yards 500Check all appropriate
options)Landfarmed ☒

Insitu Bioremediation _____

Other _____

Remediation Location: Onsite ☒ Offsite _____(i.e. landfarmed onsite,
name and location of
offsite facility)General Description of Remedial Action: Excavation. BEDROCK BOTTOM. SPRAYED
w/ FERTILIZER (SOUTH SIDEWALL).Groundwater Encountered: No ☒ Yes _____ Depth _____Final Pit:
Closure Sampling:
(if multiple samples,
attach sample results
and diagram of sample
locations and depths)Sample location see Attached DocumentsSample depth 7'Sample date 12/30/96 Sample time 1045

Sample Results

| | | | | | |
|-----------------|-------|---------------|----------------|-------|-------|
| Soil: Benzene | (ppm) | <u>0.0092</u> | Water: Benzene | (ppb) | _____ |
| Total BTEX | (ppm) | <u>43.250</u> | Toluene | (ppb) | _____ |
| Field Headspace | (ppm) | <u>975</u> | Ethylbenzene | (ppb) | _____ |
| TPH | (ppm) | <u>3,690</u> | Total Xylenes | (ppb) | _____ |

Groundwater Sample: Yes _____ No ☒ (If yes, attach sample results)I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY
KNOWLEDGE AND BELIEF

DATE

1/10/97PRINTED NAME Buddy D. Shaw

SIGNATURE

Buddy D. Shaw

AND TITLE

Environmental CoordinatorAFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE
TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.APPROVED: YES ☒ NO _____ (REASON) _____

SIGNED:

Ken C. Mamm

DATE:

1-23-97

| | | |
|----------------------|--|---|
| CLIENT: <u>AMOCO</u> | BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199 | LOCATION NO: <u>BJ481</u> C.O.C. NO: <u>4975</u> |
|----------------------|--|---|

| | |
|------------------------------------|-------------------------------|
| FIELD REPORT: CLOSURE VERIFICATION | PAGE No: <u>1</u> of <u>1</u> |
|------------------------------------|-------------------------------|

| | |
|--|---|
| LOCATION: NAME: <u>TICARILLA CONTRACT</u> WELL #: <u>146-17</u> PIT: <u>SEP</u> | DATE STARTED: <u>12/30/96</u> DATE FINISHED: _____ |
| QUAD/UNIT: <u>G</u> SEC: <u>3</u> TWP: <u>25N</u> RNG: <u>5W</u> PM: <u>Nm</u> CNTY: <u>RA</u> ST: <u>Nm</u> | ENVIRONMENTAL SPECIALIST: <u>NV</u> |
| OTP/FOOTAGE: <u>SW/4 NE/4</u> CONTRACTOR: <u>P+S</u> | |

| | |
|--|---|
| EXCAVATION APPROX. <u>40</u> FT. x <u>30</u> FT. x <u>14</u> FT. DEEP. | CUBIC YARDAGE: <u>500</u> |
| DISPOSAL FACILITY: <u>ON-SITE</u> | REMEDIATION METHOD: <u>LANDFARMED</u> |
| LAND USE: <u>RANGE</u> | LEASE: <u>JICA - CONTR. #146</u> FORMATION: <u>OK</u> |

| | |
|------------------------------------|--|
| FIELD NOTES & REMARKS: | PIT LOCATED APPROXIMATELY <u>215</u> FT. <u>N21E</u> FROM WELLHEAD. |
| DEPTH TO GROUNDWATER: <u>2100'</u> | NEAREST WATER SOURCE: <u>21000'</u> NEAREST SURFACE WATER: <u>21000'</u> |
| NMOCB PANKING SCORE: <u>0</u> | NMOCB TPH CLOSURE STD: <u>5000</u> PPM |
| SOIL AND EXCAVATION DESCRIPTION: | |

SIDEWALLS: DK. YEEL. ORANGE TO BROWN SAND, NON-COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT HC ODOR IN NORTH + WEST SIDEWALL SAMPLES DUSKY RED HARD CLAY/BEDROCK EXPOSED APPROX. 5' ABOVE PIT BOTTOM TO PIT BOTTOM ON NORTH SIDEWALL 6' OF EAST SIDEWALL + 4' ON SOUTH SIDEWALL HC STAINING APPARENT ON SOUTH SIDEWALL BETWEEN 4-10' INTERVAL (BELOW GRADE) NO APPARENT HC STAINING OBSERVED ELSEWHERE WITHIN THE EXCAVATION. WILL SPRAY SOUTH SIDEWALL W/ FERTILIZER.

BOTTOM - DUSKY RED TO LT. OLIVE GRAY BEDROCK, VERY HARD, NO APPARENT HC ODOR IN OVM SAMPLE.

BEDROCK

FIELD 418.1 CALCULATIONS

| TIME | SAMPLE I.D. | LAB No: | WEIGHT (g) | mL. FREON | DILUTION | READING | CALC. ppm |
|------|-------------|---------|------------|-----------|----------|---------|-----------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

SCALE

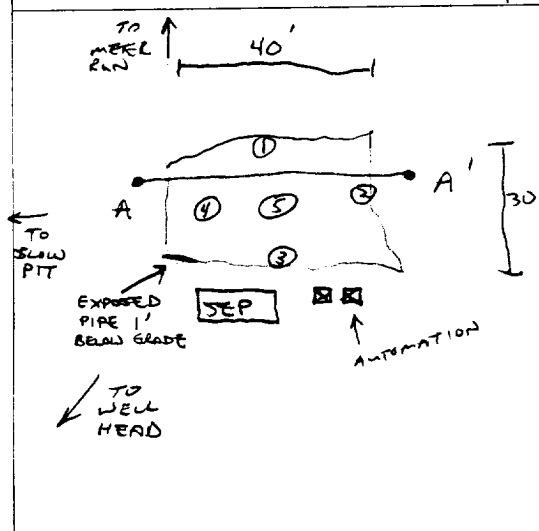


0 FT

PIT PERIMETER

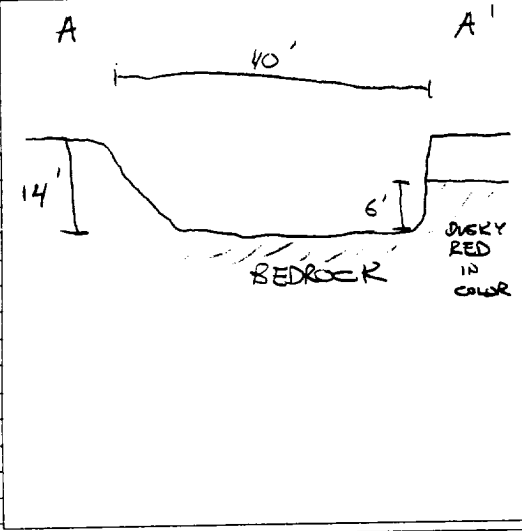
OVM RESULTS

PIT PROFILE



| SAMPLE ID | FIELD HEADSPACE PID (ppm) |
|-----------|---------------------------|
| 1 @ 9' | 0.0 |
| 2 @ 10' | 15.0 |
| 3 @ 7' | 975 |
| 4 @ 8' | 27.4 |
| 5 @ 14' | 4.8 |
| | |
| | |
| | |
| | |
| | |
| | |

| SAMPLE ID | ANALYSIS | TIME |
|-----------|---------------|------|
| 3 @ 7' | TPH (8TEX) | 1045 |
| | (8015) (8020) | |
| | | |
| | | |
| | | |
| | | |



| | |
|---------------|--|
| TRAVEL NOTES: | CALLOUT: <u>12/24/96</u> AFTER: <u>12/30/96</u> MORNING. |
|---------------|--|

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

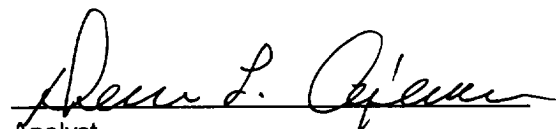
| | | | |
|----------------------|-----------------|---------------------|----------|
| Client: | Blagg / Amoco | Project #: | 04034 |
| Sample ID: | 3 @ 7' | Date Reported: | 01-07-97 |
| Laboratory Number: | A882 | Date Sampled: | 12-30-96 |
| Chain of Custody No: | 4975 | Date Received: | 12-31-96 |
| Sample Matrix: | Soil | Date Extracted: | 01-03-97 |
| Preservative: | Cool | Date Analyzed: | 01-03-97 |
| Condition: | Cool and Intact | Analysis Requested: | 8015 TPH |

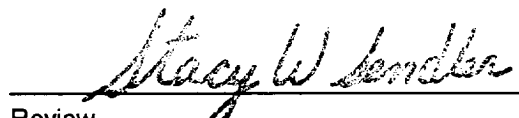
| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10) | 2,440 | 0.2 |
| Diesel Range (C10 - C28) | 1,260 | 0.1 |
| Total Petroleum Hydrocarbons | 3,690 | 0.2 |

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: Jicarilla Contract #146-17 Separator Pit.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

| | | | |
|--------------------|---------------|---------------------|----------|
| Client: | Blagg / Amoco | Project #: | 04034 |
| Sample ID: | 3 @ 7' | Date Reported: | 01-08-97 |
| Laboratory Number: | A882 | Date Sampled: | 12-30-96 |
| Chain of Custody: | 4975 | Date Received: | 12-31-96 |
| Sample Matrix: | Soil | Date Analyzed: | 01-07-97 |
| Preservative: | Cool | Date Extracted: | 01-07-97 |
| Condition: | Cool & Intact | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/Kg) | Det. Limit (ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene | 9.2 | 8.8 |
| Toluene | 4,280 | 8.4 |
| Ethylbenzene | 3,590 | 7.6 |
| p,m-Xylene | 25,900 | 10.8 |
| o-Xylene | 9,470 | 5.2 |
| Total BTEX | 43,250 | |

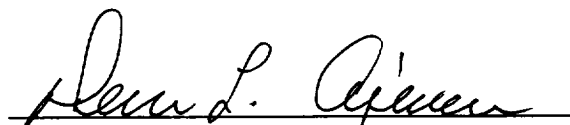
ND - Parameter not detected at the stated detection limit.


| Surrogate Recoveries: | Parameter | Percent Recovery |
|-----------------------|--------------------|------------------|
| | Trifluorotoluene | 103 % |
| | Bromofluorobenzene | 95 % |

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1994.

Comments: Jicarilla Contract 146-17 Separator Pit.


Analyst


Review

**JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528**

BJ 481

SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9200

Address: 200 Amoco Court, Farmington, NM 87401

Facility or Well Name: JICARILLA CONTRACT # 146-17

Location: Unit or Qtr/Qtr Sec G Sec 3 T 25N R 5W County RIO ARriba

Land Type: RANGE

Date Remediation Started: 12/30/96 Date Completed: 7/23/98

Remediation Method: Landfarmed X Approx. cubic yards 675

Composted

Other

Depth To Groundwater: (pts.) 0

Distance to an Ephemeral Stream (pts.) 0

Distance to Nearest Lake, Playa,
or Watering Pond (pts.) 0

Wellhead Protection Area: (pts.) 0

Distance To Surface Water: (pts.) 0

RANKING SCORE (TOTAL POINTS): 0

Final Closure Sampling:

Sampling Date: 7/21/98 Time: 1230

Sample Results:

Field Headspace (ppm) 0.0

TPH (ppm) 4.4 Method 8015

Other

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 7/23/98 PRINTED NAME Buddy D. Shaw

SIGNATURE Buddy D. Shaw AND TITLE Environmental Coordinator

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO (REASON) use as Backfill

SIGNED: Kent M. M...ll DATE: 9-9-98

| | | |
|----------------------|---|---|
| CLIENT: <u>AMOCO</u> | BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199 | LOCATION NO: <u>8J481</u> C.O.C. NO: <u>6107</u> |
|----------------------|---|---|

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

| | |
|---|-------------------------------------|
| LOCATION: NAME: <u>JUP, CONTR. 146</u> WELL #: <u>17</u> PITS: <u>SEP., BLW</u> | DATE STARTED: <u>7/21/98</u> |
| QUAD/UNIT: <u>G SEC: 3 TWP: 25N RNG: 5W PM: NM CNTY: RA ST: NM</u> | DATE FINISHED: _____ |
| QTR/FOOTAGE: <u>SW/4 NE/4</u> CONTRACTOR: <u>P & S</u> | ENVIRONMENTAL SPECIALIST: <u>NV</u> |

| | |
|-------------------------------------|-----------------------------------|
| SOIL REMEDIATION: | |
| REMEDIATION SYSTEM: <u>LANDFARM</u> | APPROX. CUBIC YARDAGE: <u>675</u> |
| LAND USE: <u>RANGE</u> | LIFT DEPTH (ft): <u>1'-2'</u> |

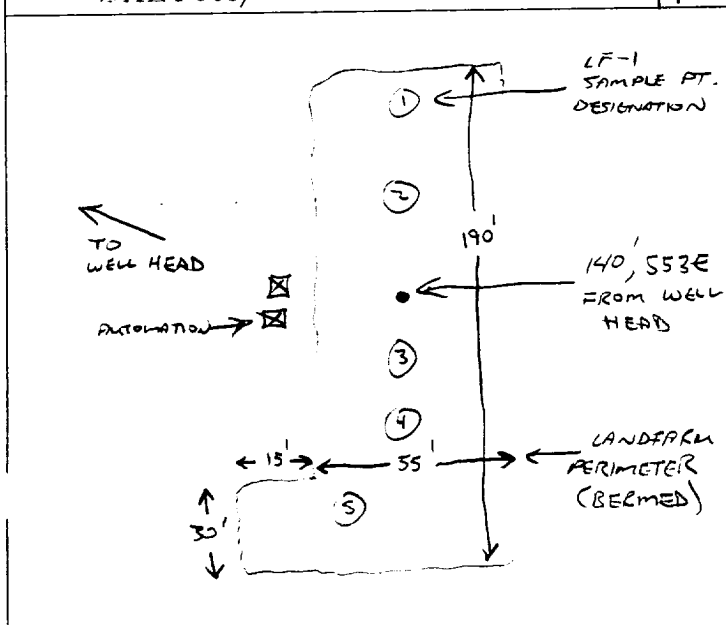
| | | |
|---|--|---|
| FIELD NOTES & REMARKS: | | |
| DEPTH TO GROUNDWATER: <u>>100'</u> | NEAREST WATER SOURCE: <u>>1000'</u> | NEAREST SURFACE WATER: <u>>1000'</u> |
| 12/30/96 | | |
| NMOC D RANKING SCORE: <u>0</u> NMOC D TPH CLOSURE STD: <u>5000 PPM</u> SOIL MOSTLY SAND W/ SOME GRAVEL & MINOR AMOUNT OF CLAY, MOSTLY DR. YEL. ORANGE SOME LT. GRAY/DIRTY RED NON COHESIVE, SLIGHTLY MOIST, FIRM NO APPARENT STAINING OR HC ODOOR OBSERVED/DETECTED ON LANDFARM SURFACE OR @ ANY OF THE SAMPLE PTS. SAMPLING DEPTHS RANGE FROM 6" - 1 1/2', COLLECTED 5 PT. COMPOSITE SAMPLE FOR LAB ANALYSIS. | | |

CLOSED

FIELD 418.1 CALCULATIONS

| SAMP. TIME | SAMPLE I.D. | LAB No: | WEIGHT (g) | mL. FREON | DILUTION | READING | CALC. ppm |
|------------|-------------|---------|------------|-----------|----------|---------|-----------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

SKETCH/SAMPLE LOCATIONS ↑ N



OVM RESULTS

LAB SAMPLES

| SAMPLE ID | FIELD HEADSPACE PID (ppm) | SAMPLE ID | ANALYSIS | TIME | RESULTS |
|-----------|---------------------------|-----------|------------|------|---------|
| LF-1 | 0.0 | LF-1 | TPH (8015) | 1230 | 4.4 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

SCALE

 0 FT

| | |
|----------------------------------|------------------------|
| TRAVEL NOTES: CALLOUT: <u>NA</u> | ONSITE: <u>7/21/98</u> |
|----------------------------------|------------------------|

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

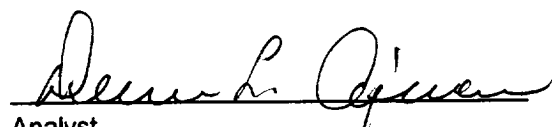
| | | | |
|----------------------|-----------------|---------------------|----------|
| Client: | Blagg / AMOCO | Project #: | 04034-10 |
| Sample ID: | LF - 1 | Date Reported: | 07-23-98 |
| Laboratory Number: | D676 | Date Sampled: | 07-21-98 |
| Chain of Custody No: | 6107 | Date Received: | 07-21-98 |
| Sample Matrix: | Soil | Date Extracted: | 07-22-98 |
| Preservative: | Cool | Date Analyzed: | 07-22-98 |
| 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) | 4.4 | 0.1 |
| Total Petroleum Hydrocarbons | 4.4 | 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: Jicarilla Contract #146 - 17 Landfarm. 5 Pt. Composite.


Analyst


Review

6107

[illegible]