

*Denny E. Faust*  
DEPUTY OIL & GAS INSPECTOR

AUG 24 1999

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

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

PIT REMEDIATION AND CLOSURE REPORT

*Approved*  
Operator: CONOCO, INC. Telephone: (505) 324-5884  
Address: 3315 Bloomfield Hwy., Farmington, NM 87401  
Facility or Well Name: JICARILLA A #22A  
Location: Unit or Qtr/Qtr Sec P Sec 24 T 26N R 4W County RIO ARriba  
Pit Type: Separator X Dehydrator \_\_\_\_\_ Other \_\_\_\_\_  
Land Type: RANGE

Pit Location: Pit dimensions: length 22', width 28', depth \_\_\_\_\_  
(Attach diagram) Reference: wellhead X, other \_\_\_\_\_  
Footage from reference: 78'  
Direction from reference: 68 Degrees X East of North X  
\_\_\_\_\_ 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) |          |
| 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

CA 600

SEP. / PROD. TANK PIT

Date Remediation Started: \_\_\_\_\_ Date Completed: 8/12/98

Remediation Method: Excavation ☒ Approx. cubic yards 200  
Check all appropriate sections) 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.

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 5' (EAST SIDEWALK)

Sample date 8/12/98 Sample time 1255

Sample Results

|                 |       |            |                |       |       |
|-----------------|-------|------------|----------------|-------|-------|
| Soil: Benzene   | (ppm) | _____      | Water: Benzene | (ppb) | _____ |
| Total BTEX      | (ppm) | _____      | Toluene        | (ppb) | _____ |
| Field Headspace | (ppm) | <u>0.0</u> | Ethylbenzene   | (ppb) | _____ |
| TPH             | (ppm) | <u>28</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 8/12/98 PRINTED NAME Jeffrey C. Blagg, P.E. #11607

SIGNATURE Jeffrey C. Blagg AND TITLE President

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: Keith C. M... DATE: 9-9-98

3003922052

|                       |                                                                                |                                               |
|-----------------------|--------------------------------------------------------------------------------|-----------------------------------------------|
| CLIENT: <u>CONOCO</u> | BLAGG ENGINEERING, INC.<br>P.O. BOX 87, BLOOMFIELD, NM 87413<br>(505) 632-1199 | LOCATION NO: <u>CH607</u><br>C.D.C. NO: _____ |
|-----------------------|--------------------------------------------------------------------------------|-----------------------------------------------|

|                                                                                                               |  |                                                      |
|---------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------|
| FIELD REPORT: CLOSURE VERIFICATION                                                                            |  | PAGE No: <u>1</u> of <u>1</u>                        |
| LOCATION: NAME: <u>JICARILLA</u> A WELL #: <u>22A</u> PIT: <u>SEP. / PROD.</u>                                |  | DATE STARTED: <u>8/12/98</u><br>DATE FINISHED: _____ |
| QUAD/UNIT: <u>P</u> SEC: <u>24</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> |  | ENVIRONMENTAL SPECIALIST: <u>NV</u>                  |
| QTR/FOOTAGE: <u>1155' 15L / 1060' FEL</u> CONTRACTOR: <u>JVC</u>                                              |  |                                                      |

|                                                                        |                                                     |
|------------------------------------------------------------------------|-----------------------------------------------------|
| EXCAVATION APPROX. <u>22</u> FT. x <u>28</u> FT. x <u>10</u> FT. DEEP. | CUBIC YARDAGE: <u>200</u>                           |
| DISPOSAL FACILITY: <u>ON-SITE</u>                                      | REMEDIATION METHOD: <u>LANDFARM</u>                 |
| LAND USE: <u>RANGE</u>                                                 | LEASE: <u>CONTRACT #105</u> FORMATION: <u>MU/PC</u> |

|                                       |                                                                                |
|---------------------------------------|--------------------------------------------------------------------------------|
| FIELD NOTES & REMARKS:                | PIT LOCATED APPROXIMATELY <u>78</u> FT. <u>N68E</u> FROM WELLHEAD.             |
| DEPTH TO GROUNDWATER: <u>&gt;100'</u> | NEAREST WATER SOURCE: <u>&gt;1000'</u> NEAREST SURFACE WATER: <u>&gt;1000'</u> |
| NMOCB RANKING SCORE: <u>0</u>         | NMOCB TPH CLOSURE STD: <u>5000</u> PPM                                         |
| SOIL AND EXCAVATION DESCRIPTION:      |                                                                                |

CHECK ONE:

- ☒ PIT ABANDONED  
☐ STEEL TANK INSTALLED  
☐ FIBERGLASS TANK INSTALLED

SIDEWALLS: DK. YELL. ORANGE SAND NON COHESIVE SLIGHTLY MOIST, FIRM  
NO APPARENT STRAINING OR HC ODOR DETECTED/DETECTED  
W/IN EXCAVATION, NO APPARENT HC ODOR IN ANY OF THE OVM  
SAMPLES.

BOTTOM: BEDROCK (SANDSTONE) OLIVE GRAY IN COLOR, VERY HARD NO  
APPARENT HC ODOR ASSOCIATED W/ COLOR (POSSIBLE DECOLORATION)

BEDROCK  
BOTTOM

CLOSED

SCALE

0 FT

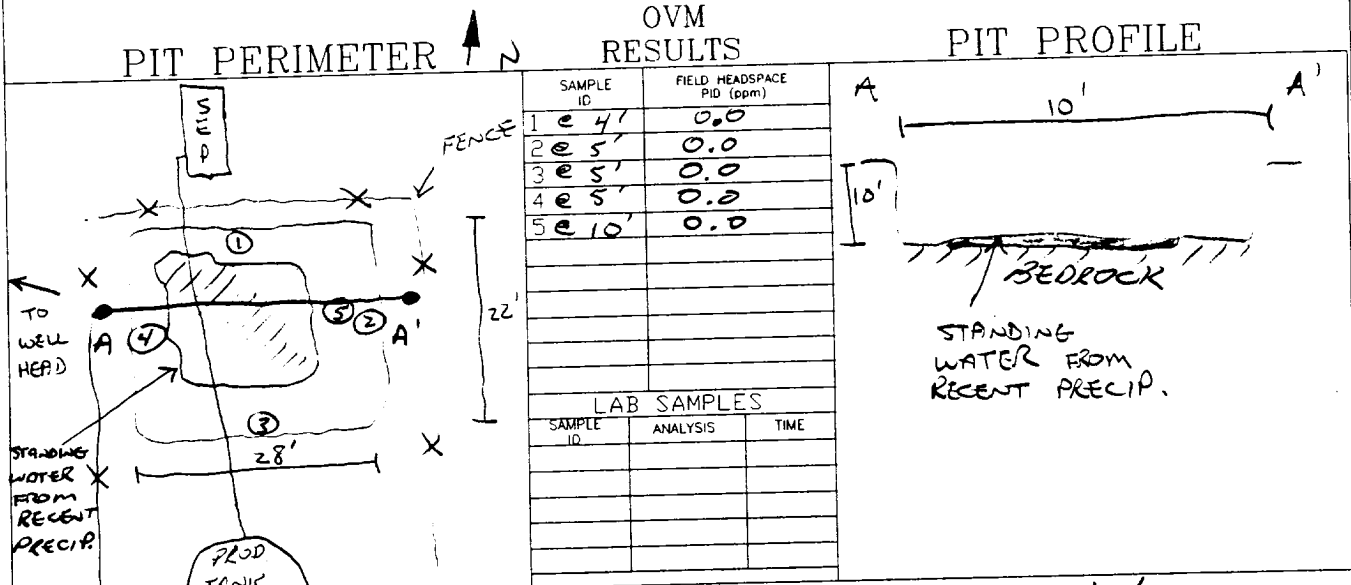
FIELD 418.1 CALCULATIONS

| TIME | SAMPLE I.D. | LAB No:  | WEIGHT (g) | mL. FREON | DILUTION | READING | CALC. ppm |
|------|-------------|----------|------------|-----------|----------|---------|-----------|
| 1255 | ② 5'        | TPH-2012 | 5          | 20        | 1:1      | 7       | 28        |
|      |             |          |            |           |          |         |           |
|      |             |          |            |           |          |         |           |
|      |             |          |            |           |          |         |           |

PIT PERIMETER

OVM  
RESULTS

PIT PROFILE



TRAVEL NOTES: CALLOUT: 8/4/98 - AFTER. ONSITE: 8/5/98 - MORN. 8/12/98 - AFTER.

**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: CONOCO  
Sample ID: 2 @ 5'  
Project Location: Jicarilla A # 22A  
Laboratory Number: TPH-2012

Project #:  
Date Analyzed: 08-12-98  
Date Reported: 08-12-98  
Sample Matrix: Soil

| Parameter                                   | Result, mg/kg | Detection<br>Limit, mg/kg |
|---------------------------------------------|---------------|---------------------------|
| Total Recoverable<br>Petroleum Hydrocarbons | 28            | 20                        |

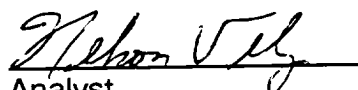
ND = Not Detectable at stated detection limits.

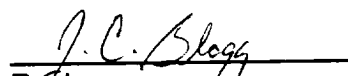
| QA/QC: | QA/QC Sample<br>TPH mg/kg | Duplicate<br>TPH mg/kg | %<br>*Diff. |
|--------|---------------------------|------------------------|-------------|
|        | 228                       | 244                    | 6.78        |

\*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: Separator / Production Tank Pit - CA600

  
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:

Sample ID:

Project Location:

Laboratory Number:

CONOCO

2 @ 5'

Jicarilla A # 22A

TPH-2012

Project #:

Date Analyzed:

Date Reported:

Sample Matrix:

08-12-98

08-12-98

Soil

Sample Weight:

5.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

7 mg/kg

TPH Result:

28.0 mg/kg

Reported TPH Result:

28 mg/kg

Actual Detection Limit:

20.0 mg/kg

Reported Detection Limit:

20 mg/kg

QA/QC:

Original  
TPH mg/kg

-----

228

Duplicate  
TPH mg/kg

-----

244

%  
Diff.

-----

6.78

Comments:

\*\*\*\*\*Max Characters\*\*\*\*\*

Comments:

Separator / Production Tank Pit - CA600

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

CA600

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

ON-SITE SOIL REMEDIATION REPORT

|                                                                                                                                                      |                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Operator: <u>Conoco, Inc.</u> Telephone: <u>(505) 324-5884</u>                                                                                       |                                                 |
| Address: <u>3315 Bloomfield Hwy., Farmington, NM 87401</u>                                                                                           |                                                 |
| Facility or Well Name: <u>JICARILLA A # 22A</u>                                                                                                      |                                                 |
| Location: Unit or Qtr/Qtr Sec <u>P</u> Sec <u>24</u> T <u>26N</u> R <u>4W</u> County <u>RIO ARRIBA</u>                                               |                                                 |
| Land Type: <u>RANGE</u>                                                                                                                              |                                                 |
| Date Remediation Started: <u>8/5/98</u> Date Completed: <u>4/15/99</u>                                                                               |                                                 |
| Remediation Method: Landfarmed <u>/</u> Approx. cubic yards <u>200</u>                                                                               |                                                 |
| Composted <u>      </u>                                                                                                                              |                                                 |
| Other <u>      </u>                                                                                                                                  |                                                 |
| Depth To Groundwater: (pts.) <u>0</u>                                                                                                                | <b>Final Closure Sampling:</b>                  |
| Distance to an Ephemeral Stream (pts.) <u>0</u>                                                                                                      | Sampling Date: <u>4/13/99</u> Time: <u>1400</u> |
| Distance to Nearest Lake, Playa, or Watering Pond (pts.) <u>0</u>                                                                                    | Sample Results:                                 |
| Wellhead Protection Area: (pts.) <u>0</u>                                                                                                            | Field Headspace (ppm) <u>248</u>                |
| Distance To Surface Water: (pts.) <u>0</u>                                                                                                           | TPH (ppm) <u>507</u> Method <u>8015</u>         |
| RANKING SCORE (TOTAL POINTS): <u>0</u>                                                                                                               | Other <u>BENZENE - 0.086 PPM</u>                |
| TOTAL BTEX - <u>1.490 PPM</u>                                                                                                                        |                                                 |
| I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF                                              |                                                 |
| DATE <u>4/15/99</u> PRINTED NAME <u>Jeffrey C. Blagg, P.E. #11607</u>                                                                                |                                                 |
| SIGNATURE <u>Jeffrey C. Blagg</u> AND TITLE <u>President</u>                                                                                         |                                                 |
| AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE. |                                                 |
| APPROVED: YES <u>X</u> NO <u>      </u> (REASON) <u>      </u>                                                                                       |                                                 |
| SIGNED: <u>K. C. Mamm</u> DATE: <u>6-3-99</u>                                                                                                        |                                                 |

|                      |                                                                                |                                                     |
|----------------------|--------------------------------------------------------------------------------|-----------------------------------------------------|
| CLIENT <u>CONOCO</u> | BLAGG ENGINEERING, INC.<br>P.O. BOX 87, BLOOMFIELD, NM 87413<br>(505) 632-1199 | LOCATION NO: <u>CA600</u><br>C.O.C. NO: <u>6643</u> |
|----------------------|--------------------------------------------------------------------------------|-----------------------------------------------------|

## FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

|                                                                                                               |                                                      |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| LOCATION NAME: <u>JICARILLA</u> <u>A</u> WELL #: <u>22A</u> PITS: <u>SEP./PROD</u>                            | DATE STARTED: <u>4/13/99</u><br>DATE FINISHED: _____ |
| QUAD/UNIT: <u>P</u> SEC: <u>24</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> | ENVIRONMENTAL SPECIALIST: <u>NV</u>                  |
| STR/FOOTAGE: <u>SE/4 SE/4</u> CONTRACTOR: <u>JVC</u>                                                          |                                                      |

### SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM APPROX. CUBIC YARDAGE: 200  
LAND USE: RANGE LIFT DEPTH (ft): 2

### FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER >100' NEAREST WATER SOURCE: 21000' NEAREST SURFACE WATER >1000'  
NMOSD RANKING SCORE: 0 NMOSD TPH CLOSURE STD: 5000 PPM 8/5/98

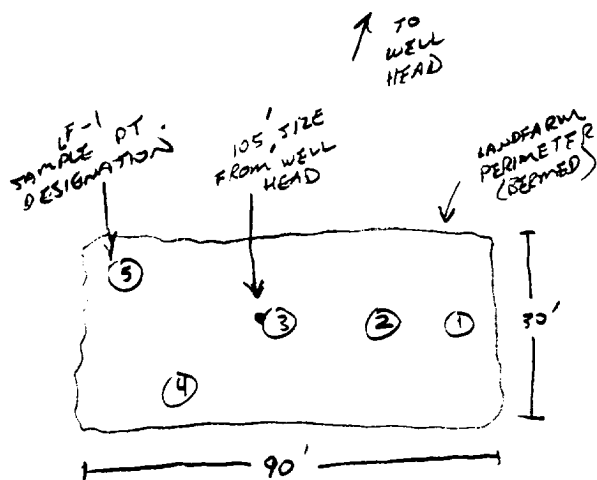
SOIL MOSTLY DK. YEL. BROWN SAND TO SILTY SAND, NON COHESIVE, SLIGHTLY MOIST TO MOIST, FIRM, SAMPLING DEPTHS RANGE FROM 6-18 INCHES, MED. GRAY DISCOLORATION (w/HC ODOOR) OBSERVED @ ALL SAMPLE PTS., NO APPARENT STAINING OBSERVED ON LANDFARM SURFACE, COLLECTED 5 FT. COMPOSITE SAMPLE FOR LAB ANALYSIS.

CLOSED

### FIELD 418.1 CALCULATIONS

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

### SKETCH/SAMPLE LOCATIONS



### OVM RESULTS

### LAB SAMPLES

| SAMPLE ID | FIELD HEADSPACE PID (ppm) | SAMPLE ID | ANALYSIS   | TIME | RESULTS    |
|-----------|---------------------------|-----------|------------|------|------------|
| LF-1      | 248                       | LF-1      | TPH (8015) | 1400 | 507        |
|           |                           | "         | BENZENE    | "    | 0.0816 ppm |
|           |                           | "         | TOT. BTEX  | "    | 1.490 ppm  |
|           |                           |           |            |      |            |
|           |                           |           |            |      |            |
|           |                           |           |            |      |            |

SCALE



TRAVEL NOTES: CALLOUT: NA ONSITE: 4/13/99

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

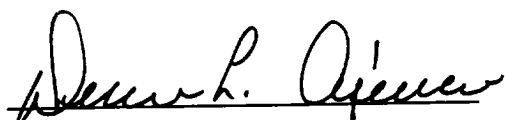
|                      |                 |                     |          |
|----------------------|-----------------|---------------------|----------|
| Client:              | Blagg / CONOCO  | Project #:          | 403410   |
| Sample ID:           | LF - 1          | Date Reported:      | 04-15-99 |
| Laboratory Number:   | F022            | Date Sampled:       | 04-13-99 |
| Chain of Custody No: | 6643            | Date Received:      | 04-13-99 |
| Sample Matrix:       | Soil            | Date Extracted:     | 04-14-99 |
| Preservative:        | Cool            | Date Analyzed:      | 04-15-99 |
| Condition:           | Cool and Intact | Analysis Requested: | 8015 TPH |

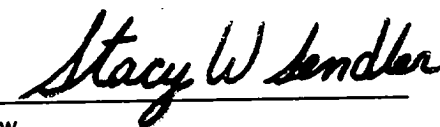
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 55.6                     | 0.2                      |
| Diesel Range (C10 - C28)     | 451                      | 0.1                      |
| Total Petroleum Hydrocarbons | 507                      | 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 A #22A Landfarm. 5 Pt. Composite.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

|                    |                |                     |          |
|--------------------|----------------|---------------------|----------|
| Client:            | Blagg / CONOCO | Project #:          | 403410   |
| Sample ID:         | LF - 1         | Date Reported:      | 04-15-99 |
| Laboratory Number: | F022           | Date Sampled:       | 04-13-99 |
| Chain of Custody:  | 6643           | Date Received:      | 04-13-99 |
| Sample Matrix:     | Soil           | Date Analyzed:      | 04-15-99 |
| Preservative:      | Cool           | Date Extracted:     | 04-14-99 |
| Condition:         | Cool & Intact  | Analysis Requested: | BTEX     |

| Parameter    | Concentration<br>(ug/Kg) | Det.<br>Limit<br>(ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene      | 81.6                     | 8.8                      |
| Toluene      | 505                      | 8.4                      |
| Ethylbenzene | 272                      | 7.6                      |
| p,m-Xylene   | 438                      | 10.8                     |
| o-Xylene     | 193                      | 5.2                      |
| Total BTEX   | 1,490                    |                          |

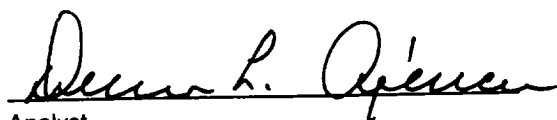
ND - Parameter not detected at the stated detection limit.

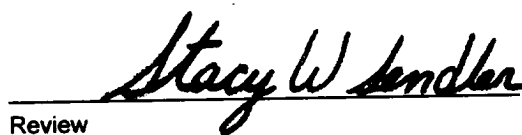
| Surrogate Recoveries: | Parameter          | Percent Recovery |
|-----------------------|--------------------|------------------|
|                       | Trifluorotoluene   | 98 %             |
|                       | Bromofluorobenzene | 98 %             |

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: Jicarilla A #22A Landfarm. 5 Pt. Composite.

  
Analyst

  
Review

6643

[illegible]