



Date Remediation Started: BRET CUMMINS Date Completed: 5/28/98

Remediation Method: Excavation X  
(Check all appropriate sections)

Approx. cubic yards 920

Landfarmed X

In situ Bioremediation \_\_\_\_\_

Other \_\_\_\_\_

Remediation Location: Onsite X Offsite \_\_\_\_\_  
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: REMOVED CONTAMINATED SOIL, SPREAD ON LOCATION IN SOIL FARMS AND STOCKPILES

Groundwater Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit: Sample location PIT BOTTOM - CENTER

4 BANKS N, S, E, W

Closure Sampling:  
(if multiple samples, attach sample results and diagram of sample locations and depths)

GAS ND (PPM)

Sample depth 22'

DIE 57 (PPM)

Sample date 5/28/98

Sample time 5:00 PM

METHOD: EPA 8015M

PID = 4.0 PPM

Sample Results

Soil Benzene (ppm) N/A

Water: Benzene (ppb) N/A

Total BTEX (ppm) N/A

Toluene (ppb) N/A

Field Headspace (ppm) 384

Ethylbenzene (ppb) N/A

TPH 8015M (ppm) GAS 68  
DIE 4300

Total Xylenes (ppb) N/A

Groundwater Sample: Yes \_\_\_\_\_ No X (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 6/8/98 PRINTED NAME SHAWN ADAMS

SIGNATURE Shawn Adams AND TITLE ENV. CONSULTANT

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

APPROVED: YES X NO \_\_\_\_\_ (REASON) \_\_\_\_\_

SIGNED: Kurt Marshall DATE: 6-9-98

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 08-Jun-98

|                    |                                       |                            |                                   |
|--------------------|---------------------------------------|----------------------------|-----------------------------------|
| <b>Client:</b>     | Contract Environmental Services, Inc. | <b>Client Sample Info:</b> | Jicarilla 362 GD 3                |
| <b>Work Order:</b> | 9805087                               | <b>Client Sample ID:</b>   | 3623-704; Pit Bottom Center 22ft. |
| <b>Lab ID:</b>     | 9805087-05A                           | <b>Matrix:</b>             | SOIL                              |
| <b>Project:</b>    | Pit Remediation                       | <b>Collection Date:</b>    | 5/28/98 5:00:00 PM                |
|                    |                                       | <b>COC Record:</b>         | 4357                              |

| Parameter                      | Result | PQL           | Qual | Units | DF | Date Analyzed      |
|--------------------------------|--------|---------------|------|-------|----|--------------------|
| <b>DIESEL RANGE ORGANICS</b>   |        | <b>SW8015</b> |      |       |    | <b>Analyst: HR</b> |
| T/R Hydrocarbons: C10-C28      | 4300   | 25            |      | mg/Kg | 1  | 6/3/98             |
| <b>GASOLINE RANGE ORGANICS</b> |        | <b>SW8015</b> |      |       |    | <b>Analyst: DC</b> |
| T/R Hydrocarbons: C6-C10       | 68     | 9             |      | mg/Kg | 50 | 6/2/98             |

**Qualifiers:**

PQL - Practical Quantitation Limit

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B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Sur: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 08-Jun-98

**Client:** Contract Environmental Services, Inc.  
**Work Order:** 9805087  
**Lab ID:** 9805087-06A     **Matrix:** SOIL  
**Project:** Pit Remediation

**Client Sample Info:** Jicarilla 362 GD 3  
**Client Sample ID:** 3623-705; 4 Banks NSEW  
**Collection Date:** 5/28/98 5:03:00 PM  
**COC Record:** 4357

| Parameter                      | Result | PQL           | Qual | Units | DF | Date Analyzed         |
|--------------------------------|--------|---------------|------|-------|----|-----------------------|
| <b>DIESEL RANGE ORGANICS</b>   |        | <b>SW8015</b> |      |       |    |                       |
| T/R Hydrocarbons: C10-C28      | 57     | 25            |      | mg/Kg | 1  | Analyst: HR<br>6/3/98 |
| <b>GASOLINE RANGE ORGANICS</b> |        | <b>SW8015</b> |      |       |    |                       |
| T/R Hydrocarbons: C6-C10       | ND     | 0.18          |      | mg/Kg | 1  | Analyst: DC<br>6/2/98 |

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

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

ON-SITE SOIL REMEDIATION REPORT

**APPROVED**

|                                                                                                                                                      |  |                                                    |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------|--|
| Operator: <u>ELM RIDGE RESOURCES</u>                                                                                                                 |  | Telephone: <u>(505) 326-7099</u>                   |  |
| Address: <u>312 W. LA PLATA STREET, FARMINGTON, NM 87401</u>                                                                                         |  |                                                    |  |
| Facility or Well Name: <u>JICARILLA APACHE 362 GD #3</u>                                                                                             |  |                                                    |  |
| Location: Unit or Qtr/Qtr Sec <u>NE/NE</u> Sec <u>8</u> T <u>23N</u> R <u>4W</u> County <u>Rio ARIZONA</u>                                           |  |                                                    |  |
| Land Type: _____                                                                                                                                     |  |                                                    |  |
| Date Remediation Started: <u>BRET Cummins</u>                                                                                                        |  | Date Completed: <u>5/28/98</u>                     |  |
| Remediation Method: Landfilled <u>X</u>                                                                                                              |  | Approx. cubic yards <u>920</u>                     |  |
| Composted _____                                                                                                                                      |  | _____                                              |  |
| Other _____                                                                                                                                          |  | _____                                              |  |
| Depth To Groundwater: (pts.) <u>0</u>                                                                                                                |  | Final Closure Sampling:                            |  |
| Distance to an Ephemeral Stream (pts.) <u>0</u>                                                                                                      |  | Sampling Date: <u>5/28/98</u> Time: <u>5:15pm</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>10.0/5.3</u>              |  |
| Distance To Surface Water: (pts.) <u>0</u>                                                                                                           |  | TPH (ppm) <u>645</u> <u>ND</u> Method <u>8015m</u> |  |
| RANKING SCORE (TOTAL POINTS): <u>0</u>                                                                                                               |  | Other <u>DIE 61</u>                                |  |
| HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF                                                |  |                                                    |  |
| DATE <u>6/9/98</u>                                                                                                                                   |  | PRINTED NAME <u>SHAWN ADAMS</u>                    |  |
| SIGNATURE <u>Shawn Adams</u>                                                                                                                         |  | AND TITLE <u>ENV. CONSULTANT</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 _____ (REASON) <u>use as Backfill</u>                                                                                      |  |                                                    |  |
| SIGNED: <u>Ken C. Ma...</u>                                                                                                                          |  | DATE: <u>6-9-98</u>                                |  |

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 08-Jun-98

|                    |                                       |                            |                             |
|--------------------|---------------------------------------|----------------------------|-----------------------------|
| <b>Client:</b>     | Contract Environmental Services, Inc. | <b>Client Sample Info:</b> | Jicarilla 362 GD 3          |
| <b>Work Order:</b> | 9805087                               | <b>Client Sample ID:</b>   | 3623-706; Soil Farm North C |
| <b>Lab ID:</b>     | 9805087-07A                           | <b>Matrix:</b>             | SOIL                        |
| <b>Project:</b>    | Pit Remediation                       | <b>Collection Date:</b>    | 5/28/98 5:05:00 PM          |
|                    |                                       | <b>COC Record:</b>         | 4357                        |

| Parameter                      | Result | PQL           | Qual | Units | DF | Date Analyzed         |
|--------------------------------|--------|---------------|------|-------|----|-----------------------|
| <b>DIESEL RANGE ORGANICS</b>   |        | <b>SW8015</b> |      |       |    |                       |
| T/R Hydrocarbons: C10-C28      | 100    | 25            |      | mg/Kg | 1  | Analyst: HR<br>6/3/98 |
| <b>GASOLINE RANGE ORGANICS</b> |        | <b>SW8015</b> |      |       |    |                       |
| T/R Hydrocarbons: C6-C10       | ND     | 0.18          |      | mg/Kg | 1  | Analyst: DC<br>6/2/98 |

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## ANALYTICAL REPORT

Date: 08-Jun-98

|                    |                                       |                            |                             |
|--------------------|---------------------------------------|----------------------------|-----------------------------|
| <b>Client:</b>     | Contract Environmental Services, Inc. | <b>Client Sample Info:</b> | Jicarilla 362 GD 3          |
| <b>Work Order:</b> | 9805087                               | <b>Client Sample ID:</b>   | 3623-707; Soil Farm South C |
| <b>Lab ID:</b>     | 9805087-08A                           | <b>Matrix:</b>             | SOIL                        |
| <b>Project:</b>    | Pit Remediation                       | <b>Collection Date:</b>    | 5/28/98 5:15:00 PM          |
|                    |                                       | <b>COC Record:</b>         | 4357                        |

| Parameter                      | Result | PQL           | Qual | Units | DF | Date Analyzed         |
|--------------------------------|--------|---------------|------|-------|----|-----------------------|
| <b>DIESEL RANGE ORGANICS</b>   |        | <b>SW8015</b> |      |       |    |                       |
| T/R Hydrocarbons: C10-C28      | 61     | 25            |      | mg/Kg | 1  | Analyst: HR<br>6/3/98 |
| <b>GASOLINE RANGE ORGANICS</b> |        | <b>SW8015</b> |      |       |    |                       |
| T/R Hydrocarbons: C6-C10       | ND     | 0.18          |      | mg/Kg | 1  | Analyst: DC<br>6/2/98 |

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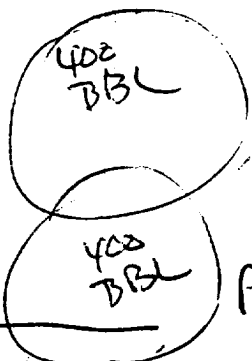
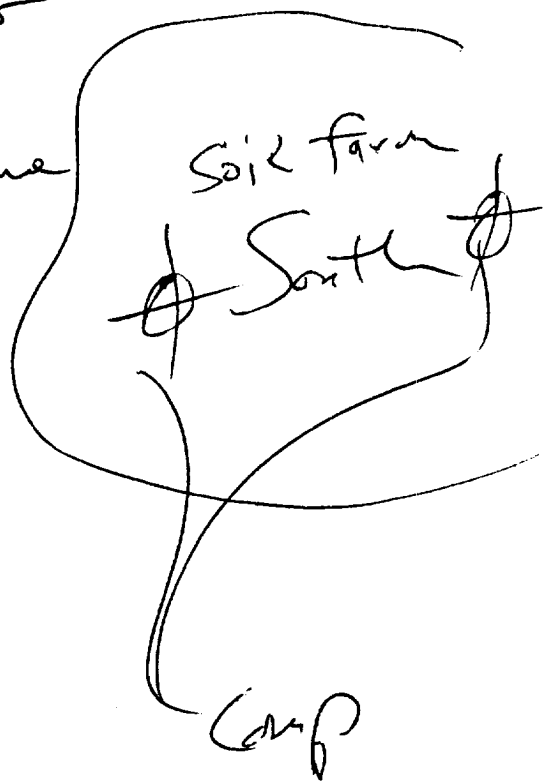
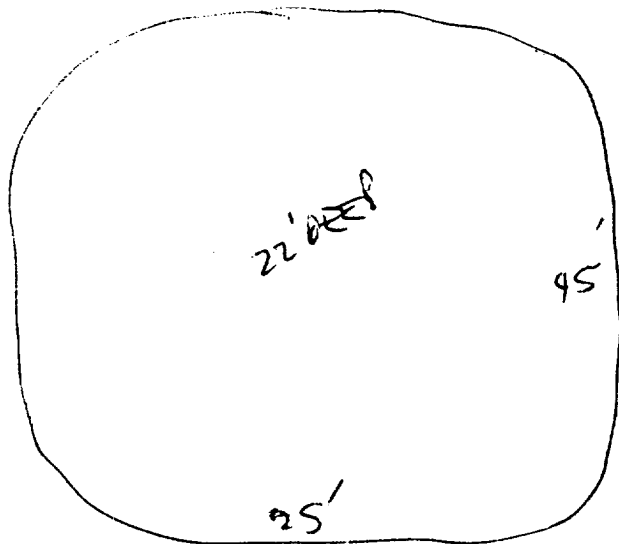
E - Value above quantitation range

Surr: - Surrogate

5/28/98  
JIC 362 G03

NE/NE Sec 8 T23N R4W  
Rio Arriba Cty

150P 100P Propane



with end  
© P.

| Sample # | Description           | P10 (ppm) |
|----------|-----------------------|-----------|
| 3623-704 | Bottom Pit Center 22' | 384       |
| 3623-705 | Banks N, SE, W 18-22' | 4.0       |
| 3623-706 | Soil farm N           | 10.0      |
| 3623-707 | Soil farm S           | 5.3       |

