

*Denny E. Foust*  
DEPUTY OIL & GAS INSPECTOR

MAY 04 1998

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

OK

PIT REMEDIATION AND CLOSURE REPORT

*Approved*

**Operator:** Burlington Resources (Williams Field Services) **Telephone:** (801) 584-6361  
**Address:** P.O. Box 58900, Salt Lake City, Utah 84158-0900  
**WellName:** SJ 27-5 UNIT #71 PC ( 86462 )  
**Location:** Unit or Qtr/Qtr Sec A Sec 28 T 27N R 5W County Rio Arriba  
**PitType:** Dehydrator  
**LandType:** BLM

**Pit Location:** Pit dimensions: length 19 ft., width 16 ft., depth 8 ft.

(Attach diagram)

Reference: Wellhead

Footage from reference: 85 ft.

Direction from reference: 3 Degrees West of North

**Depth To Ground Water:**

(Vertical distance from  
contaminants to seasonal  
high water elevation of  
ground water)

Less than 50 feet	(20 points)
50 feet to 99 feet	(10 points)
Greater than 100 feet	(0 points) <u>10</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>

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**Distance To Surface Water:**

(Horizontal distance to perennial  
lakes, ponds, rivers, streams, creeks, irrigation  
canals and ditches)

Less than 200 feet	(20 points)
200 feet to 1,000 feet	(10 points) <u>0</u>

**Ranking Score (TOTAL POINTS):** 10

**Date Remediation Started:** 12/6/96**Date Completed:** 12/20/96Excavation ☒

Approx. Cubic Yard 90

Landfarmed ☒

Insitu Bioremediation

Other

Landfarmed soil after mechanical aeration.

**Remediation Location:**Onsite ☒ Offsite(ie. landfarmed onsite,  
name and location of  
offsite facility)**General Description Of Remedial Action:**

The pit was excavated to remove gross petroleum contamination. The excavated material was mechanically aerated, mixed with fertilizer, and placed into an onsite landfarm. After remediation goals were confirmed, the soil was returned to the excavation.

**Ground Water Encountered:**

No

**Final Pit:**

Sample location SJ 27-5 #71 PM V-EX-01

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

A composite sample, made up of 4 points from each excavation face, was collected..

Sample depth Up to 8 feet.

Sample date 12/9/96

Sample time

Sample Result

Benzene (ppm) &lt;0.81

Total BTEX (ppm) &lt;4.86

Field Headspace (ppm)

TPH (ppm) 152

**Ground Water Sample:**

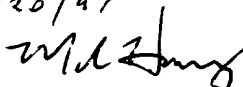
No

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

DATE

3/20/97

SIGNATURE

 For WFS

PRINTED NAME MARK HARVEY

AND TITLE PROJECT COORDINATOR

86462

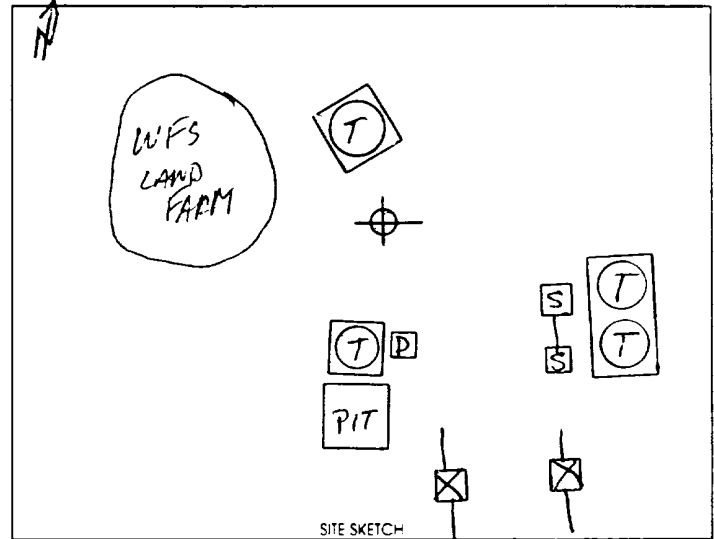
## PIT RETIREMENT FORM

Date: 12/6/96Weather CLOUDY / LIGHT WIND / 25Well Name SJ 27-5 #71 Operator BURLINGTON RESOURCES Sec 28 T27N R5W UL 1190' N 792' E

Land Type: BLM STATE FEE INDIAN

County RIO ARribaOne Call Made (505-765-1234)? (Y) NLine Marking Evident? (Y) N

## Pit Location:

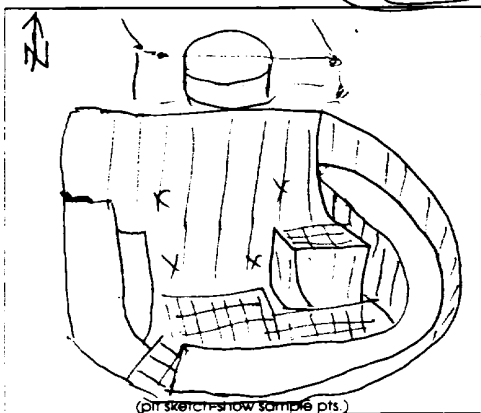
Reference Wellhead X Other \_\_\_\_\_Distance from: 85 feetDirection: 3 Degrees \_\_\_\_\_ E N Xof  
X W S \_\_\_\_\_Starting Pit Dimensions 11 x 10 x 2Final Pit Dimensions 19 x 16 x 8

SITE SKETCH

Organic Vapor Readings: Start \_\_\_\_\_ Soil Description: GRAY TO LIGHT BROWN SANDY SILT
 @ 2' \_\_\_\_\_  
 @ 4' \_\_\_\_\_  
 @ 6' \_\_\_\_\_  
 @ 8' \_\_\_\_\_  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_

 1' 1'  
 1' 1'  
 1' 1'  
 1' 1'  
 \_\_\_\_\_  
 \_\_\_\_\_
Well Proximity To: Residence, Domestic Water Well, Stock Well NONEArroyo, Wash, Lake, Stream WASH APPROX 300 feet NORTHEstimated or Known Distance to Ground Water >50' <100'

Source of Backfill (if other than processed material) \_\_\_\_\_

 Samples collected: Type Progress: Verification: ID SJ 27-5 #71 PMV-EX-01 soil / water  
 Progress: Verification: ID SJ 27-5 #71 PMV-LF-01 soil / water  
 Progress: Verification: ID \_\_\_\_\_ soil / water
Sample sent to Lab Via: Courier Hand Carried \_\_\_\_\_ Other \_\_\_\_\_ Preservative: ICE Other \_\_\_\_\_

(pit sketch - show sample pts.)

 Comments: REMOVED LINER - EXCAVATED PIT -  
PETROLEUM STAINING + SOME ODOR - EXCAVATED  
SOIL WAS PROCESSED BY SHREDDER W/ FERTILIZED  
ADDED - PROCESSED SOIL WAS LANDFARMED  
ON LOCATION. AFTER CONFIRMATION, LANDFARM  
MATERIAL WAS USED TO BACKFILL EXCAVATION

Soil Shipped to: \_\_\_\_\_

Prepared by: [Signature]

## Organic Analysis - Pit Closure

### Williams Field Services

Project ID:	OCD Pits	Report Date:	12/16/96
Sample ID:	SJ 27-5 #71 PM V-EX-01	Date Sampled:	12/09/96
Lab ID:	5910	Date Received:	12/09/96
Sample Matrix:	Soil	Date Extracted:	12/12/96
Preservative:	Cool	Date Analyzed:	12/13/96
Condition:	Intact		

Target Analyte	Concentration (mg/kg)	Detection Limit (mg/kg)
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<b>Total Aromatic Hydrocarbons</b>	<b>ND</b>	
Benzene	ND	0.81
Toluene	ND	0.81
Ethylbenzene	ND	1.62
m,p-Xylenes	ND	0.81
o-Xylene	ND	0.81

<b>Total Recoverable Petroleum Hydrocarbons</b>	<b>152</b>	<b>26.8</b>
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Quality Control:	Surrogate	Percent Recovery	Acceptance Limits
	Trifluorotoluene	98	81 - 117%
	Bromofluorobenzene	98	74 - 121%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Final Update I, July, 1992.

Method 3550 - Sonication Extraction; Test Methods for Evaluating Solid Waste, SW-846, United States Environmental Protection Agency, September, 1986;  
Method 418.1 - Petroleum Hydrocarbons, Total Recoverable; Chemical Analysis of Water and Waste, United States Environmental Protection Agency, 1978.

**Comments:**

  
Review

## Organic Analysis - Pit Closure

### Williams Field Services

Project ID:	OCD Pits	Report Date:	12/16/96
Sample ID:	SJ 27-5 #71 PM V-LF-01	Date Sampled:	12/09/96
Lab ID:	5911	Date Received:	12/09/96
Sample Matrix:	Soil	Date Extracted:	12/12/96
Preservative:	Cool	Date Analyzed:	12/13/96
Condition:	Intact		

Target Analyte	Concentration (mg/kg)	Detection Limit (mg/kg)
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<b>Total Aromatic Hydrocarbons</b>	<b>22.5</b>	
Benzene	ND	0.79
Toluene	2.29	0.79
Ethylbenzene	1.14	1.57
m,p-Xylenes	15.2	0.79
o-Xylene	5.01	0.79


<b>Total Recoverable Petroleum Hydrocarbons</b>	<b>971</b>	<b>54.9</b>
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Quality Control:	Surrogate	Percent Recovery	Acceptance Limits
	Trifluorotoluene	114	81 - 117%
	Bromofluorobenzene	113	74 - 121%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics;  
Test Methods for Evaluating Solid Wastes, SW-846, United States  
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**Comments:**

  
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