

*Denny E. Faust*  
DEPUTY OIL & GAS INSPECTOR

OIL CONSERVATION DIVISION

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

MAY 04 1998

*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 #116 ( 87052 )  
**Location:** Unit or Qtr/Qtr Sec A Sec 24 T 27N R 5W County Rio Arriba  
**PitType:** Dehydrator  
**LandType:** BLM

**Pit Location:** Pit dimensions: length 21 ft., width 18 ft., depth 10 ft.  
(Attach diagram)

Reference: Wellhead

Footage from reference: 86 ft.

Direction from reference: 36 Degrees East 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) 10

**Wellhead Protection Area:**

(Less than 200 feet from a private  
domestic water source, or; less than  
1000 feet from all other water sources)

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DIST. 3

Yes (20 points)  
No (0 points) 0

**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 0)

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

**Date Remediation Started:** 12/16/96**Date Completed:** 12/20/96Excavation ☒

Approx. Cubic Yard 140

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 27-4 #116 V-LF-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 10 feet.

Sample date 12/17/96

Sample time 14:32

Sample Result

Benzene (ppm) &lt;1.18

Total BTEX (ppm) &lt;7.08

Field Headspace (ppm)

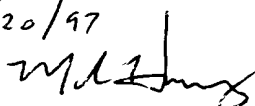
TPH (ppm) 73.6

**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 WPS

PRINTED NAME MARK HARVEY

AND TITLE PROJECT COORDINATOR

87052

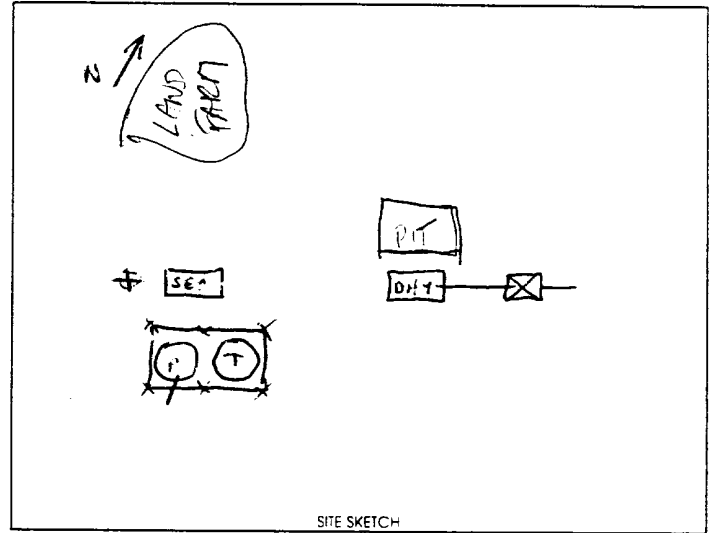
## PIT RETIREMENT FORM

Date: 12/16/96

Weather \_\_\_\_\_

Well Name SS 27-5 #116 ~~WASH~~ Operator BURLINGTONSec 24 T 22N R 5W UL 1170'NLand Type: BLM STATE FEE INDIANCounty RIO ARriba 1170'SOne Call Made (505-765-1234)? ☒ NLine Marking Evident? ☒ N

## Pit Location:

Reference Wellhead ☒ Other \_\_\_\_\_Distance from: 80'Direction: 20 Degrees 30° E N 30°  
of  
W SStarting Pit Dimensions 10' x 12' x 2'Final Pit Dimensions 18' x 21' x 10'

SITE SKETCH

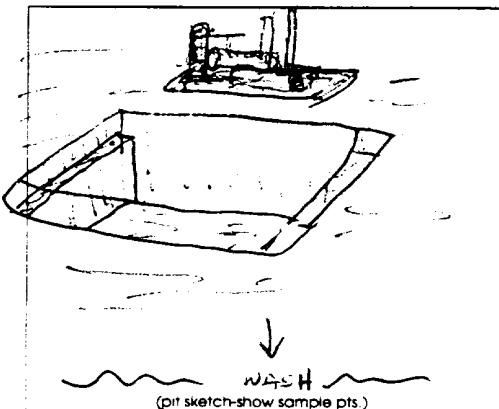
Organic Vapor Readings: Start \_\_\_\_\_ Soil Description: SILT & CLAY w/ SAND  
 @ 2' \_\_\_\_\_  
 @ 4' \_\_\_\_\_  
 @ 6' \_\_\_\_\_  
 @ 8' \_\_\_\_\_  
 @ 10' \_\_\_\_\_  
 @ \_\_\_\_\_

Well Proximity To: Residence, Domestic Water Well, Stock Well \_\_\_\_\_  
 Arroyo, Wash, Lake, Stream WASH ~ 1200' NORTH  
 Estimated or Known Distance to Ground Water > 50 < 100

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

Samples collected: Type Progress: Verification: ID SS 27-5 #116-V-EX-01 soil / water  
 Progress: Verification: ID SS 27-5 #116-V-PLF-01 soil / water  
 Progress: Verification: ID \_\_\_\_\_ soil / water

Sample sent to Lab Via: Courier Hand Carried Other \_\_\_\_\_ Preservative: ICE Other \_\_\_\_\_



Comments: SET UP + BEGIN EXCAVATING - PREDOMINANTLY CLAY  
MATERIAL 0-5' - STAINING + HYDROCARBON ODORS STRONG AT  
2-6' - STAINING ON FLOOR DIMINISHES TO LT BROWN COLORED SAND -  
SLIGHT STAINING REMAINS ON DHT WALL - OTHER 3 WALLS CLEAN -  
MIX + SHRED SOIL - ADD FERTILIZER - CEASE DIGGING @ 10' -  
CUT TERRACE + BEGIN PIT -

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

Prepared by: M. J. J.

**Organic Analysis - Pit Closure**

**Williams Field Services**

Project ID: OCD Pits  
Sample ID: SJ 27-5 #116 V-EX-01  
Lab ID: 5999  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Intact

Report Date: 12/18/96  
Date Sampled: 12/17/96  
Date Received: 12/17/96  
Date Extracted: 12/18/96  
Date Analyzed: 12/18/96

Target Analyte	Concentration (mg/kg)	Detection Limit (mg/kg)
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**Total Aromatic Hydrocarbons**

ND

Benzene

ND

1.31

Toluene

ND

1.31

Ethylbenzene

ND

1.31

m,p-Xylenes

ND

2.62

o-Xylene

ND

1.31

**Total Recoverable Petroleum Hydrocarbons**

**58.6**

**23.6**

**Quality Control:**

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

99

81 - 117%

Bromofluorobenzene

95

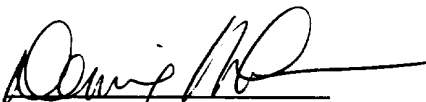
74 - 121%

**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  
Sample ID: SJ 27-4 #116 V-LF-01  
Lab ID: 5995  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Intact

Report Date: 12/18/96  
Date Sampled: 12/17/96  
Date Received: 12/17/96  
Date Extracted: 12/18/96  
Date Analyzed: 12/18/96

Target Analyte	Concentration (mg/kg)	Detection Limit (mg/kg)
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**Total Aromatic Hydrocarbons****ND**

Benzene	ND	1.18
Toluene	ND	1.18
Ethylbenzene	ND	1.18
m,p-Xylenes	ND	2.37
o-Xylene	ND	1.18

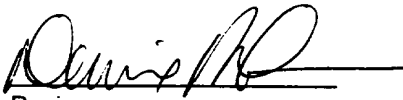
**Total Recoverable Petroleum Hydrocarbons****73.6****26.8**

Quality Control:	Surrogate	Percent Recovery	Acceptance Limits
	Trifluorotoluene	104	81 - 117%
	Bromofluorobenzene	102	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.

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**Comments:**

  
Review