

Denny & Faust
DEPUTY OIL & GAS INSPECTOR

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

MAY 04 1998

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 27-4 UNIT #4 (71326)
Location: Unit or Qtr/Qtr Sec A Sec 31 T 27N R 4W County Rio Arriba
PitType: Dehydrator
LandType: Forest

Pit Location: Pit dimensions: length 22 ft., width 20 ft., depth 3 ft.

(Attach diagram)

Reference: Wellhead

Footage from reference: 72 ft.

Direction from reference: 9 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) 0

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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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 points) 0

Ranking Score (TOTAL POINTS): 0

Date Remediation Started: 12/13/96

Date Completed: 12/20/96

Excavation ☒

Approx. Cubic Yard 50

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 #4 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.. 3 ~~pts~~

Sample depth Up to 3 feet.

Sample date 12/17/96

Sample time 13:56

Sample Result

Benzene (ppm) <1.65

Total BTEX (ppm) 8.67

Field Headspace (ppm)

TPH (ppm) 49.2

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 *Mark Harvey* FOR WFS

PRINTED NAME MARK HARVEY
AND TITLE PROJECT COORDINATOR

Weather _____

County RIO ARriba

Line Marking Evident? ☒ Y ☐ N

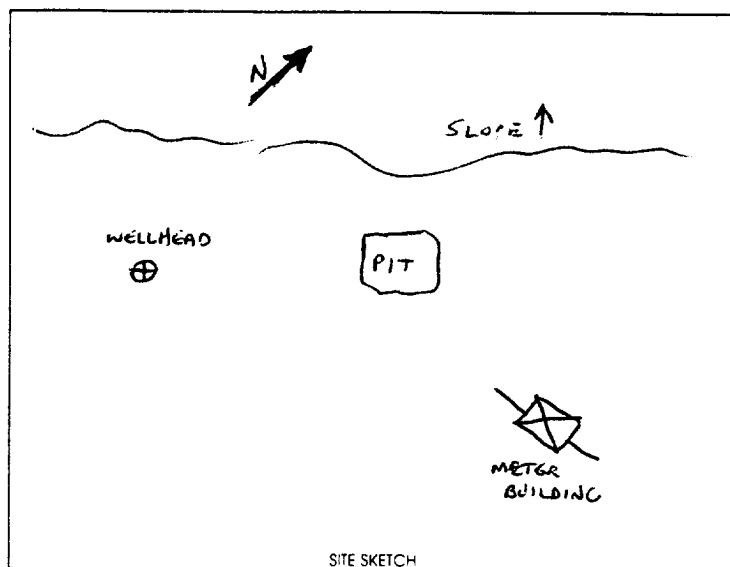
Reference Wellhead X Other

Direction: 9 Degrees X E N X

_____ of _____
W S

Starting Pit Dimensions 10' x 10' x 1 1/2'

Final Pit Dimensions 20' x 22' x 3'



Organic Vapor Readings: Start _____ Soil Description: SILTY SAND
 @ 2' _____
 @ 4' _____
 @ 6' _____
 @ 8' _____
 @ _____
 @ _____

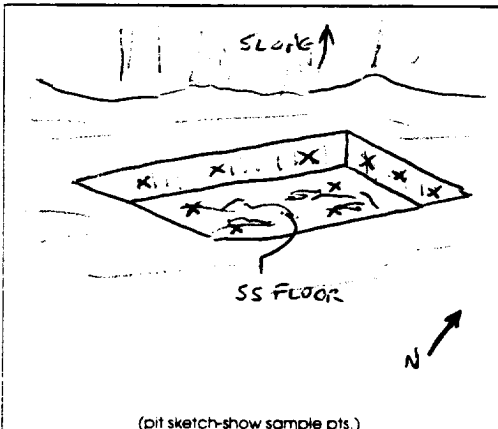
FINE GRAINED SANDSTONE

Well Proximity To: Residence, Domestic Water Well, Stock Well < 1 mile
Arroyo, Wash, Lake, Stream _____
Estimated or Known Distance to Ground Water > 100'

Source of Backfill (if other than processed material) _____

Samples collected:	Type	Progress:	Verification:	ID	<u>ST-27-4#4-V-EX01</u>	<u>soil</u>	water
		Progress:	Verification:	ID	<u>ST-27-4#4-V-LF01</u>	<u>soil</u>	water
		Progress:	Verification:	ID		soil /	water

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



Comments: PIT IS ~ 40-60' HIGHER ELEVATION THAN
SJ 27-4 #50 +23 — (MAY BE LISTED IN ERROR) — EXCAVATE TO 3'
WHERE BEDROCK ENCOUNTERED — SHRED SILTY SAND/CLAY + MIX IN
FERTILIZER — LITTLE STAINING — SAMPLE W/ 3 FT COMPOSITES FROM
EACH SIDEWALL DUE TO DEPTH OF EXCAVATION —

Soil Shipped to: _____

Prepared by: M. Kung

Organic Analysis - Pit Closure

Williams Field Services

Project ID: OCD Pits
Sample ID: SJ 27-4 #4 V-EX-01
Lab ID: 5996
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**8.67**

Benzene	ND	1.65
Toluene	ND	1.65
Ethylbenzene	ND	1.65
m,p-Xylenes	6.81	3.30
o-Xylene	1.86	1.65

Total Recoverable Petroleum Hydrocarbons**49.2****23.7**

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	98	81 - 117%
	Bromofluorobenzene	96	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 #4 V-LF-01
Lab ID: 6000
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	1.72
Toluene	ND	1.72
Ethylbenzene	ND	1.72
m,p-Xylenes	ND	3.44
o-Xylene	ND	1.72

Total Recoverable Petroleum Hydrocarbons

64.1

24.5

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene
Bromofluorobenzene

95
96

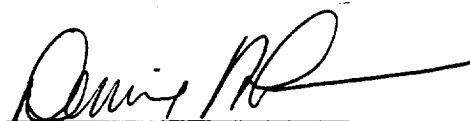
81 - 117%
74 - 121%

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Comments:



Review