

Denny E. Foust
DEPUTY OIL & GAS INSPECTOR

Energy, Minerals and Natural Resources Department

JUN 23 1998

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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: Rattlesnake Canyon # 3 (85767)
Location: Unit or Qtr/Qtr Sec **I** Sec 20 T 32 R 8 County san Juan
PitType Dehydrator
LandType: State

Pit Location: Pit dimensions: length 17 ft., width 16 ft., depth 6 ft.
(Attach diagram)

Reference: Wellhead

Footage from reference: 71 ft.

Direction from reference: 330 Degrees East of North

Depth To Ground Water: Less than 50 feet (20 points)
(Vertical distance from 50 feet to 99 feet (10 points)
contaminants to seasonal Greater than 100 feet (0 points) 0
high water elevation of
ground water)

Wellhead Protection Area: Yes (20 points)
(Less than 200 feet from a private No (0 points) 0
domestic water source, or; less than
1000 feet from all other water sources)

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DIST. 3

Distance To Surface Water: Less than 200 feet (20 points)
(Horizontal distance to perennial 200 feet to 1,000 feet (10 points)
lakes, ponds, rivers, streams, creeks, Greater than 1,000 feet (0 points) 0
irrigation canals and ditches)

Ranking Score (TOTAL POINTS): 0

Date Remediation Started: 10/31/97

Date Completed: 10/31/97

Remediation Method: Excavation ☒

Approx. Cubic Yard 60

(check all appropriate sections)

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 and placed into an onsite landfarm.

Ground Water Encountered: 0

Final Pit:

Sample location Rattlesnake Canyon # 3-V-EXFL-01

Closure Sampling:

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

Two samples were collected, one sample from the excavation bottom and the second sample was made up of 4 points from each excavation wall.

Sample depth 6 FEET

Sample date 10/31/97

Sample time 18:01

Sample Result

Benzene (ppm) <0.10

Total BTEX (ppm) <0.40

Field Headspace (ppm)

TPH (ppm) <2.0

Ground Water Sample: 0

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

DATE 3/6/98

SIGNATURE

PRINTED NAME Mark Harvey for Williams Field Services
AND TITLE

PIT RETIREMENT FORM

85767

Date: 10.31.97

Weather SUNNY 60's

Well Name RATTLESNAKE CANYON #3 Operator BURLINGTON RESOURCES Sec 20 T 32 R 8 UL

Land Type: BLM STATE FEE INDIAN

County SAN JUAN

One Call Made (505-765-1234)? (Y) N

Line Marking Evident? (Y) N

Pit Location:

Reference Wellhead x Other

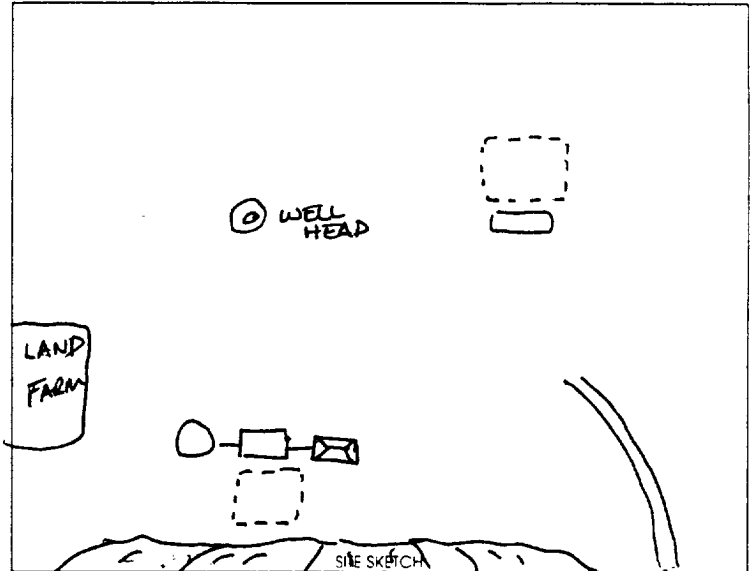
Distance from: 71'

Direction: 330° Degrees x E N x

of
W S

Starting Pit Dimensions 14 x 14 x 1

Final Pit Dimensions 17 x 16 x 6



Organic Vapor Readings: Start
@ 2'
@ 4'
@ 6'
@ 8'
@
@

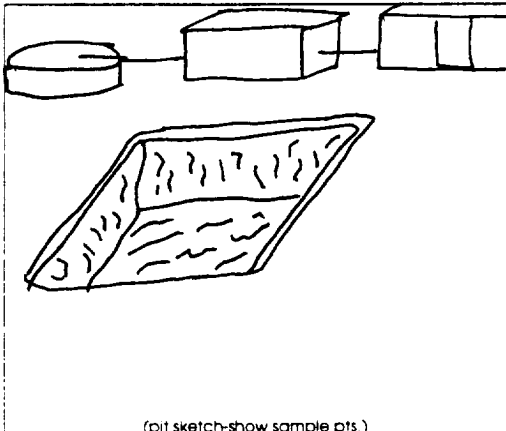
Soil Description: BROKEN CLAY
" "
" "
CLAYSTONE

Well Proximity To: Residence, Domestic Water Well, Stock Well NONE
Arroyo, Wash, Lake, Stream > 500'
Estimated or Known Distance to Ground Water > 100'

Source of Backfill (if other than processed material)

Samples collected: Type Progress: Verification: ID RATTLESNAKE CANYON #3.V.EXWA.01 (soil) water
Progress: Verification: ID RATTLESNAKE CANYON #3.V.EXFL.01 (soil) water
Progress: Verification: ID soil / water

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



Comments: SITE HAD SLIGHT STAINING AND MINIMAL
ODOR - SOIL CONSISTED OF BROKEN CLAYSTONE - HIT
CLAYSTONE FLOOR AT 6 FEET - SOIL / CLAY LANDFARMED
ON SITE

Soil Shipped to: ON SITE LANDFARM

Prepared by: [Signature]



ORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Williams Field Services
Date Sampled: October 31, 1997
Date Received: November 12, 1997

Contact: Mark Harvey
Date Extracted: November 11, 1997
Date Analyzed: November 12, 1997

Analysis Requested:
Total Petroleum Hydrocarbons
Volatile Aromatics

Method Ref. Number:
SW-846 #8015/8020 modified
(Extraction - GC/PID-FID)

Field Sample ID:
RATTLESNAKE CANYON #3-V-EXFL-01 @ 18:01/85767
JICARILLA PIT REMEDIATION

Lab Sample ID:
L31468-2

Analytical Results

BTX/TPH-E

Units = mg/kg(ppm)

<u>Compound:</u>	<u>Reporting Limit:</u>	<u>Amount Detected:</u>
Benzene	0.10	< 0.10
Toluene	0.10	< 0.10
Ethylbenzene	0.10	< 0.10
Total Xylene	0.10	< 0.10
Total Petroleum Hydrocarbons	2.0	< 2.0

% Moisture

5.0%

* All compounds are reported on a dry weight basis.

Released By: _____


Laboratory Supervisor

Report Date: November 19, 1997

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ORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Williams Field Services
Date Sampled: October 31, 1997
Date Received: November 12, 1997

Contact: Mark Harvey
Date Extracted: November 11, 1997
Date Analyzed: November 12, 1997

Analysis Requested:
Total Petroleum Hydrocarbons
Volatile Aromatics

Method Ref. Number:
SW-846 #8015/8020 modified
(Extraction - GC/PID-FID)

Field Sample ID:
RATTLESNAKE CANYON #3-V-EXWA-01 @ 17:56/85767
JICARILLA PIT REMEDIATION

Lab Sample ID:
L31468-1

Analytical Results

BTX/TPH-E

Units = mg/kg(ppm)

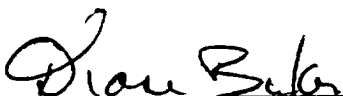
<u>Compound:</u>	<u>Reporting Limit:</u>	<u>Amount Detected:</u>
Benzene	0.10	< 0.10
Toluene	0.10	< 0.10
Ethylbenzene	0.10	< 0.10
Total Xylene	0.10	< 0.10
Total Petroleum Hydrocarbons	2.0	< 2.0

% Moisture

2.0%

* All compounds are reported on a dry weight basis.

Released By:


Laboratory Supervisor

Report Date: November 19, 1997

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ORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Williams Field Services
Date Sampled: November 21, 1997
Date Received: November 24, 1997

Contact: Mark Harvey
Date Extracted: November 24, 1997
Date Analyzed: November 25, 1997

Analysis Requested:
Total Petroleum Hydrocarbons

Method Ref. Number:
SW-846 #8015 modified
(Extraction - GC/FID)

Field Sample ID:
RATTLESNAKE CANYON #3-V-LF-01 @ 9:39/85767 19 PPM
JICARILLA PIT REMEDIATION

Lab Sample ID:
L31589-20

Analytical Results

TPH-E

Units = mg/kg(ppm)

<u>Compound:</u>	<u>Reporting Limit:</u>	<u>Amount Detected:</u>
Total Petroleum Hydrocarbons	2.0	< 2.0

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686

Toll Free (888) 263-8686

Fax (801) 263-8687

% Moisture

11.%

* All compounds are reported on a dry weight basis.

Released By:

Diana Baker
Laboratory Supervisor

Report Date: November 26, 1997

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LANDFARM