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State of New Mexico  
Energy, Minerals and Natural Resources Department

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

SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY TO  
SANTA FE OFFICE

JUN 23 1998

## PIT REMEDIATION AND CLOSURE REPORT

Operator : Devon Energy Corporation Telephone: (505) 324-0033

Address: 3300 North Butler Avenue, Suite 211, Farmington, NM 87401

Facility Or: N. E. Blanco Unit # 37A

Well Name

Location: Unit or Qtr/Qtr Sec P Sec 6 T 30N R 7W County San Juan

Pit Type: Separator X Dehydrator \_\_\_\_\_ Other Production Tank

Land Type: BLM \_\_\_\_\_ State \_\_\_\_\_ Fee X Other \_\_\_\_\_

Pit Location: Pit dimensions: Length 8 ft, width 8 ft, depth 1 ft  
(Attach diagram)

Reference: wellhead X other \_\_\_\_\_

Footage from reference: 75 ft

Direction from reference: 20 Degrees X East North \_\_\_\_\_  
of  
West South X

Depth to Ground Water: <u>246 ft</u>	Less than 50 feet	(20 points)	
(vertical distance from	50 ft to 99 feet	(10 points)	
contaminants to seasonal	<u>X</u> Greater than 100 feet	(0 points)	<u>0</u>
highwater elevation of			
ground water)			

Wellhead Protection Area:	Yes	(20 points)	
(less than 200 feet from a private	<u>X</u> No	(0 points)	<u>0</u>
domestic water source, or: less than			
1000 feet from all other water sources).			

Distance to Surface Water:	Less than 200 feet	(20 points)	
(Horizontal distance to perennial	<u>X</u> 200 feet to 1000 feet	(10 points)	
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet	(0 points)	<u>10</u>
irrigation canals and ditches.)			

P:\pits\PrC@WK3

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: N/A Date Completed: \_\_\_\_\_

Excavation \_\_\_\_\_ Approx. cubic yards \_\_\_\_\_

Landfarmed \_\_\_\_\_ Insitu Bioremediation \_\_\_\_\_

Other \_\_\_\_\_

Remediation Method: Onsite \_\_\_\_\_ Offsite \_\_\_\_\_

(Check all appropriate  
sections)

General Description of Remedial Action : Initial assessment showed soils to be clean 3' below pit  
bottom.

Ground Water Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

**Final Pit:**

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

Sample location Center of pit

Sample depth 3' below pit bottom

Sample date 5/28/97 Sample time \_\_\_\_\_

**Sample Results**

Benzene(ppm) ND

Total BTEX (PPM) 4.7

Field Headspace (ppm) 330

TPH 66.3 ppm

Ground Water Sample: Yes \_\_\_\_\_ No X (if yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETED TO THE BEST  
OF MY KNOWLEDGE AND BELIEF.

DATE 2-27-98 PRINTED NAME Jim Abbey

SIGNATURE James R. Abbey and TITLE Operations Engineer

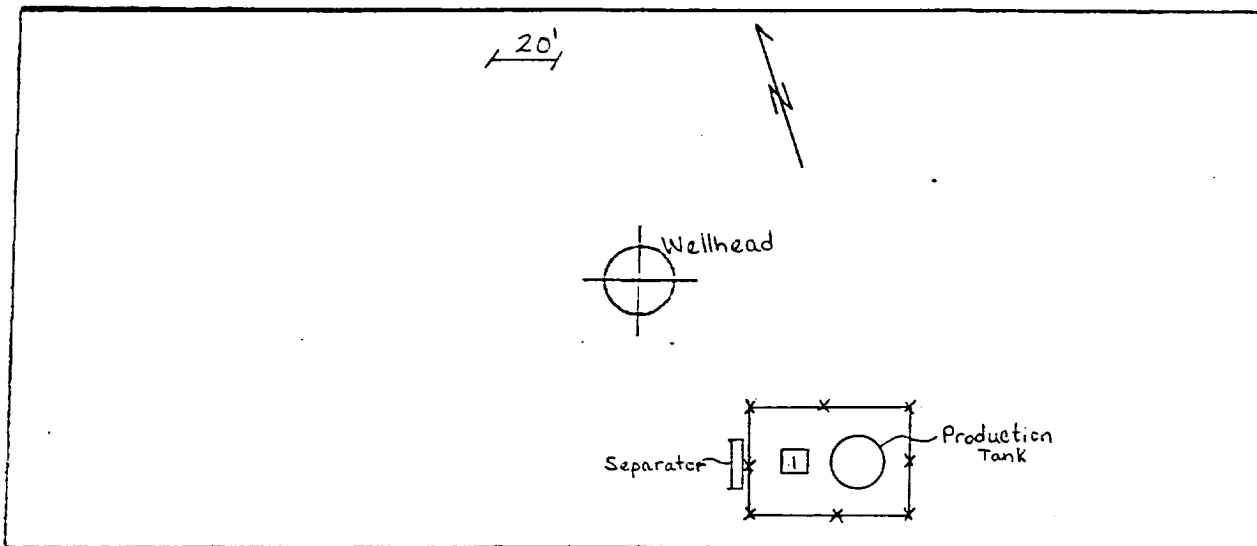
# FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: _____ Location: <u>N. E. Blanco Unit # 37A</u></p> <p>Operator #: _____ Operator Name: _____ P/L District: _____</p> <p>Coordinates: Letter: <u>P</u> Section <u>6</u> Township: <u>30N</u> Range: <u>7W</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: <u>Sep./Prod.</u></p> <p>Site Assessment Date: <u>5-28-97</u> Area: <u>Middle</u> Run: _____</p>
	SITE ASSESSMENT
REMARKS	<p>Remarks : _____</p> <p>_____</p> <p>_____</p>

## ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 160 Footage from Wellhead 75'  
b) Length : 8' Width : 8' Depth : 1'



## REMARKS

## Remarks :

Soil is brown-gray, moist clay, slight odor.

Sample from center bottom of pit @ 4' deep gave an OVM reading of 330ppm.

Sample was sent to Anaitas, Inc. for DRO/GRO 8015 and BTEX 8020 analysis.

Completed By:

Monica D. Rodahl

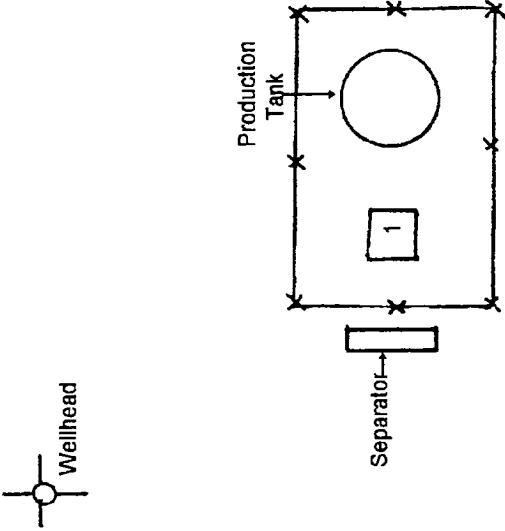

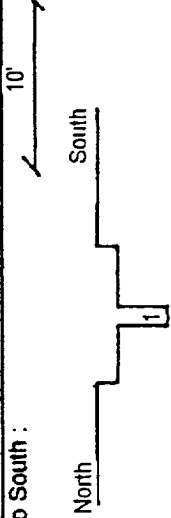
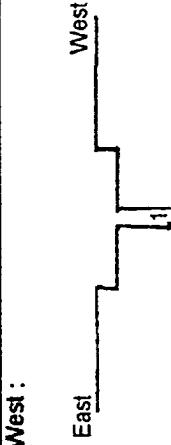
Signature

5-28-97

Date

Client : Devon Energy

Date Started : 28 May 1997 Date Completed : 28 May 1997

Location : <b>NEBU # 37A</b>		Overview of Location and Sampling : 	
Quad : <b>P</b>	Section : <b>6</b>	 Wellhead	
Range : <b>7W</b>	Township : <b>30N</b>		
Pit : <b>Sep. / Prod. Tank</b>			
Reference : <b>75' N. 160°</b> from wellhead			
Initial Size : <b>8' x 8' x 1' deep</b> Final Size : <b>8' x 8' x 1' deep</b> Yds. Excavated : <b>0 cy</b>			
Depth to Groundwater: <b>246'</b>		Production Tank	
Nearest Water Source: <b>&gt;1000'</b>		Separator	
Nearest Surface Water: <b>&gt;200'</b>		1	
NMOCD Ranking Score: <b>10</b>		1	
TPH Closure Standard: <b>1000 ppm</b>		1	
Comments : <b>Brown-gray, moist clay, slight odor</b>		1	
Sent sample from bottom @ 4' to Analytas for DRO/GRO 8015 and BTEX 8020.		1	
Pit Profile : North to South : 		Pit Profile : East to West : 	

# Organic Analysis - Pit Closure

## Devon Energy Corporation

Project ID: NEBU #37A - Sep/Prod Pit  
 Sample ID: Btm @ 4'  
 Lab ID: 6963  
 Sample Matrix: Soil

Report Date: 07/03/97  
 Date Sampled: 05/28/97  
 Date Received: 05/28/97  
 Preservative: Cool  
 Condition: Intact

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

	4.7 vs. <del>2.03</del>	
Benzene	ND	0.32
Toluene	1.61	0.32
Ethylbenzene	ND	0.32
m,p-Xylenes	2.63	0.64
o-Xylene	0.46	0.32

### Total Volatile Petroleum Hydrocarbons

66.3 29.0

### Total Recoverable Petroleum Hydrocarbons

ND 27.1

Quality Control:	Surrogate	Percent Recovery	Acceptance Limits
	Trifluorotoluene	103	81 - 117%
	Trifluorotoluene	90	50 - 150 %
	o-Terphenyl	91	50 - 150%

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

EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas  
 Chromatography." Test Methods for Evaluating Solid Waste, Physical/  
 Chemical Methods, SW-846, 3rd Ed, Final Update I, July, 1992. USEPA.

### Comments:



Review

**TOTAL VOLATILE PETROLEUM HYDROCARBONS**  
Gasoline Range Organics

Devon Energy

Project ID: NEBU #37A Sep./Prod. Pit  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Intact

Report Date: 06/12/97  
Date Sampled: 05/28/97  
Date Received: 05/28/97  
Date Extracted: 06/02/97  
Date Analyzed: 06/09/97


Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
BTM @ 4'	6963	66.3	29.0

ND- Analyte not detected at the stated detection limit.

Quality Control:                      Surrogate                      % Recovery                      Acceptance Limits  
   Trifluorotoluene                      90%                      50 - 150%

Reference:                      Method for the Determination of Gasoline Range Organics,  
   State of Tennessee, Department of Environment and Conservation, Division  
   of Underground Storage Tanks.

Comments:

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review



## TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

### Diesel Range Organics

#### Devon Energy

Project ID: NEBU #37A Sep/Prod Pit  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Intact

Report Date: 06/12/97  
Date Sampled: 05/28/97  
Date Received: 05/28/97  
Date Extracted: 06/02/97  
Date Analyzed: 06/10/97

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
BTM @ 4'	6963	ND	27.1

ND- Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptance Limits</u>
	o - Terphenyl	91%	50 - 150%

Reference: EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas Chromatography." Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Ed, Final Update I, July, 1992. USEPA.

Comments:

  
Analyst

  
Review



**QUALITY CONTROL REPORT**  
**TOTAL VOLATILE PETROLEUM HYDROCARBONS**  
**Gasoline Range Organics**

**Method Blank Analysis**

Project ID: NA  
Sample Matrix: Soil  
Preservative: NA  
Condition: NA

Report Date: 06/10/97  
Date Sampled: NA  
Date Received: NA  
Date Extracted: 06/02/97  
Date Analyzed: 06/09/97

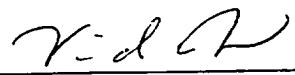
Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Method Blank	MB35583	ND	22.5

ND- Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	93%	50 - 150%

**Reference:** Method for the Determination of Gasoline Range Organics,  
State of Tennessee, Department of Environment and Conservation, Division  
of Underground Storage Tanks.

**Comments:**

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review

**QUALITY CONTROL REPORT**  
**TOTAL VOLATILE PETROLEUM HYDROCARBONS**  
**Gasoline Range Organics**

**Matrix Spike Analysis**

Project ID: NA  
Sample Matrix: Soil  
Preservative: NA  
Condition: NA

Report Date: 06/10/97  
Date Sampled: NA  
Date Received: NA  
Date Extracted: 06/02/97  
Date Analyzed: 06/09/97


Lab ID	Spike Added (mg/kg)	Original Conc. (mg/kg)	Spike Conc. (mg/kg)	Percent Recovery
MBSPK35590	4,220	ND	3,010	71%

ND- Analyte not detected at the stated detection limit.

<b>Quality Control:</b>	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	108%	50 - 150%

**Reference:** Method for the Determination of Gasoline Range Organics,  
State of Tennessee, Department of Environment and Conservation,  
Division of Underground Storage Tanks.

**Comments:**

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review

**QUALITY CONTROL REPORT**  
**TOTAL RECOVERABLE PETROLEUM HYDROCARBONS**  
**Diesel Range Organics**

**Method Blank Analysis**

Project ID: NA  
Sample Matrix: Soil  
Preservative: NA  
Condition: NA

Report Date: 06/12/97  
Date Sampled: NA  
Date Received: NA  
Date Extracted: 06/02/97  
Date Analyzed: 06/10/97

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Method Blank	MB35583	ND	20.0


ND- Analyte not detected at the stated detection limit.

<b>Quality Control:</b>	<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptance Limits</u>
	o - Terphenyl	106%	50 - 150%

**Reference:** EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas Chromatography." Test Methods for Evaluating Solid Waste. Physical/ Chemical Methods, SW-846, 3rd Ed, Final Update I, July, 1992. USEPA.

**Comments:**

  
Analyst

  
Review

**QUALITY CONTROL REPORT**  
**TOTAL RECOVERABLE PETROLEUM HYDROCARBONS**  
**Diesel Range Organics**

**Matrix Spike Analysis**

Project ID: NA  
Sample Matrix: Soil  
Preservative: NA  
Condition: NA

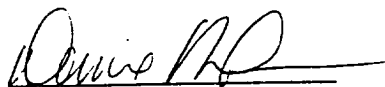
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Date Received: NA  
Date Extracted: 06/02/97  
Date Analyzed: 06/10/97

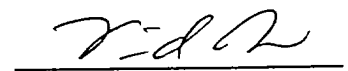
Lab ID	Spike Added (mg/kg)	Original Conc. (mg/kg)	Spike Conc. (mg/kg)	Percent Recovery
MBSPK35591	2,620	ND	2,690	103%

ND- Analyte not detected at the stated detection limit.


**Reference:** EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas Chromatography." Test Methods for Evaluating Solid Waste. Physical/Chemical Methods, SW-846, 3rd Ed, Final Update I, July, 1992. USEPA.

**Comments:**

  
Analyst

  
Review

[illegible]

Sampled By:		Relinquished By:		Relinquished By:	
Signature	Date:	Signature	Date:	Signature	Date:
Monica D. Rodale	5-23-97	Monica D. Rodale	5-23-97		
Company:	Time:	Company:	Time:	Company:	Time:
Emaron	1106	Emaron	1707		
Received By:		Received By:		Received By:	
Signature	Date:	Signature	Date:	Signature	Date:
					1707
Company:	Time:	Company:	Time:	Company:	Time:

Please Fill Out Thoroughly.

Shaded areas  
for lab use only.

White/Yellow: Analas  
Pink: Client

White/Yellow: Anaitas  
Pink: Client