

District I

P.O. Box 1980, Hobbs, NM

District II

P.O. Drawer DD, Artesia, NM 88211

District III

1000 Rio Brazos Rd, Aztec, NM 87410

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

*Henry G. Zwart*  
*Approved*  
*7/1/97*

**PIT REMEDIATION AND CLOSURE REPORT**

Operator: Snyder Oil Corporation Telephone: 505 632-8056

Address: Post Office Box 2038, Farmington, NM 87499-2038

Facility Or: Duke 1M

Well Name \_\_\_\_\_

Location: Unit or Qtr/Qtr Sec I Sec 13 T 31N R 13W County San Juan

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

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

Pit Location: Pit dimensions: length 10', width 10', depth 3'  
(Attach diagram)

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

Footage from reference: 50'

Direction from reference: S Degrees \_\_\_\_\_ East North \_\_\_\_\_  
of \_\_\_\_\_ West South 0°

**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)

Yes (20 points)  
No (0 points) 0

RECEIVED  
OCT 29 1996

**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 1000 feet (10 points)  
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 6/14/94 Dated Completed: 9/26/95

Remediation Method: Excavation  Approx. cubic yards 1200  
(Check all appropriate sections)

Landfarmed  Insitu Bioremediation

Other \_\_\_\_\_

Remediation Location: Onsite  Offsite \_\_\_\_\_  
(ie. landfarmed onsite, name and location of offsite facility)

General Description Of Remedial Action: The extent of contamination require large volumes of soil to be excavated. The contaminated soil was farmed in phases to assure thorough remediation. Samples of the pit area and land farm were taken periodically. The land farm was sufficiently remediated on 8/31/95 with a field headspace reading of 4 ppm and a TPH of 385 ppm.

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

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

Sample location 1) N-W Corner, 2) S-W Corner, 3) W-cente

Sample depth 1) 20ft, 2) 20 ft, 3) 20 ft

Sample date 3/21/95 Sample time 9:30 am

Sample Results

Benzene(ppm) n/a

Total BTEX(ppm) n/a

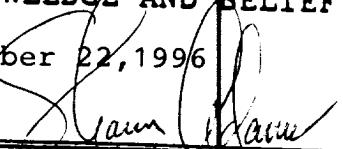
Field headspace(ppm) 1) 2500ppm, 2) 19 ppm, 3) 9.0 ppm

TPH 1) 3725 ppm, 2) 34 ppm, 3) 5 ppm

Ground Water Sample: Yes  No  (If yes, attach sample results)

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

DATE October 22, 1996

SIGNATURE 

PRINTED NAME Shawn Adams, Env. Consultant  
AND TITLE Contract Env. Services, Inc.

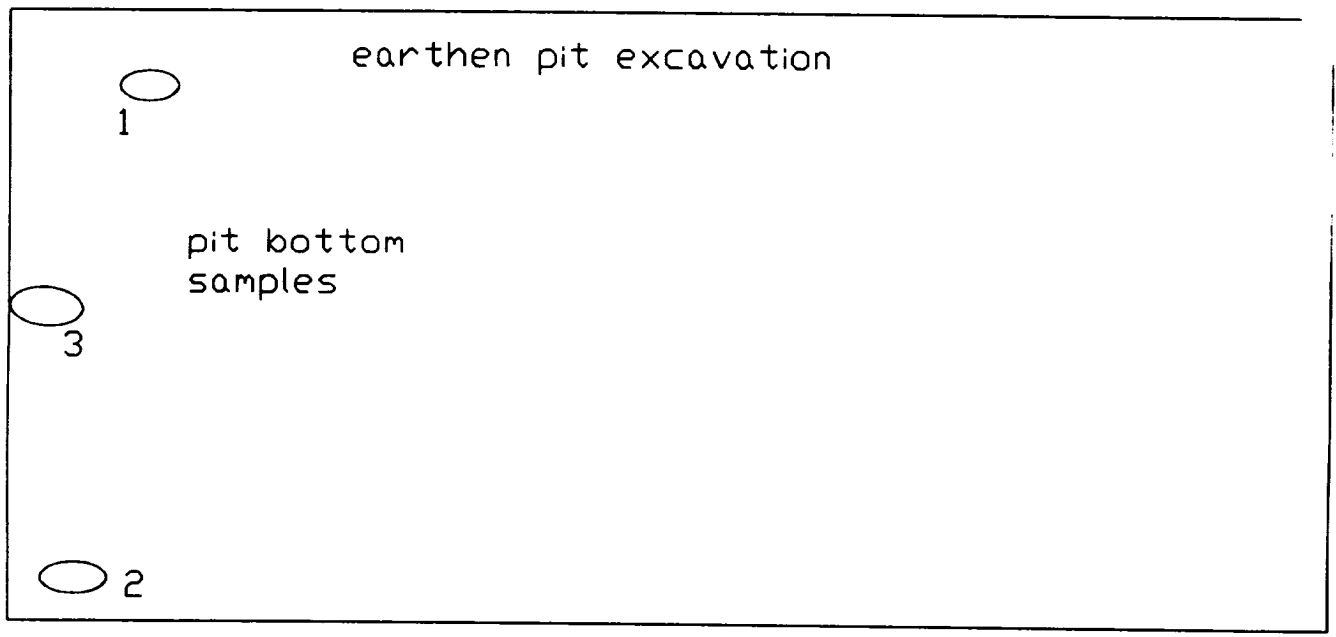
Pit Excavation Soil Log	
Wellname	Duke 1M
Depth (ft)	Description
0	Silty sand and clay
1	"
2	"
3	"
4	"
5	"
6	"
7	"
8	"
9	"
10	"
11	"
12	"
13	"
14	"



plugged  
wellhead



N



OFF: (505) 325-8786



LAB: (505) 325-5667

**TOTAL PETROLEUM HYDROCARBONS**

Attn: *Shawn Adams*  
 Company: *Contract Environmental Services, Inc.*  
 Address: *P.O. Box 505*  
 City, State: *Kirtland, NM 87417*

Date: *3/24/95*  
 COC No. *2214*  
 Sample No. *5632*  
 Job No. *2-1000*

Project Name: *Snyder Oil Corporation Duke #1M*  
 Project Location: *DUKE-500 SW Bank 3' Deep*  
 Sampled by: SA Date: *3/21/95* Time: *9:54*  
 Analyzed by: DC Date: *3/24/95*  
 Type of Sample: *Soil*

**Laboratory Analysis**

<i>Laboratory Identification</i>	<i>Sample Identification</i>	<i>Total Petroleum Hydrocarbons</i>
<i>5632-2214</i>	<i>Snyder Oil Corporation Duke #1M DUKE-500 SW Bank 3' Deep</i>	<i>3,725 mg/kg</i>

**Method** - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: *Da G*  
 Date: *3/24/95*

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**TOTAL PETROLEUM HYDROCARBONS**

Attn: *Shawn Adams*  
Company: *Contract Environmental Services, Inc.*  
Address: *P.O. Box 505*  
City, State: *Kirtland, NM 87417*

Date: *3/24/95*  
COC No. *2214*  
Sample No. *5633*  
Job No. *2-1000*

Project Name: *Snyder Oil Corporation Duke #1M*  
Project Location: *DUKE-501 S Wall 24" Deep*  
Sampled by: *SA* Date: *3/21/95* Time: *9:45*  
Analyzed by: *DC* Date: *3/24/95*  
Type of Sample: *Soil*

**Laboratory Analysis**

<b>Laboratory Identification</b>	<b>Sample Identification</b>	<b>Total Petroleum Hydrocarbons</b>
<i>5633-2214</i>	<i>Snyder Oil Corporation Duke #1M DUKE-501 S Wall 24" Deep</i>	<i>34 mg/kg</i>

**Method - EPA Method 418.1 Total Petroleum Hydrocarbons**

Approved by: *Ja Lx*  
Date: *3/24/95*

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**TOTAL PETROLEUM HYDROCARBONS**

Attn: *Shawn Adams*  
 Company: *Contract Environmental Services, Inc.*  
 Address: *P.O. Box 505*  
 City, State: *Kirtland, NM 87417*

Date: *3/24/95*  
 COC No. *2214*  
 Sample No. *5634*  
 Job No. *2-1000*

Project Name: *Snyder Oil Corporation Duke #1M*  
 Project Location: *DUKE-502 N Wall 18" Deep*  
 Sampled by: SA Date: *3/21/95* Time: *9:30*  
 Analyzed by: DC Date: *3/24/95*  
 Type of Sample: *Soil*

**Laboratory Analysis**

<i>Laboratory Identification</i>	<i>Sample Identification</i>	<i>Total Petroleum Hydrocarbons</i>
<i>5634-2214</i>	<i>Snyder Oil Corporation Duke #1M DUKE-502 N Wall 18" Deep</i>	<i>5 mg/kg</i>

**Method** - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: *Jag*  
 Date: *3/24/95*

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**TOTAL PETROLEUM HYDROCARBONS**

Attn: *Shawn Adams*  
Company: *Contract Environmental Services, Inc.*  
Address: *P.O. Box 505*  
City, State: *Kirtland, NM 87417*

Date: 6-Sep-95  
COC No.: 3178  
Sample No. 8038  
Job No. 2-1000

Project Name: *Synder Oil Corporation - Duke 1M*  
Project Location: *DUKE-204 Soil Farm*  
Sampled by: SA Date: 31-Aug-95 Time: 14:33  
Analyzed by: BV Date: 5-Sep-95  
Type of Sample: *Soil*

**Laboratory Analysis**

<b>Laboratory Identification</b>	<b>Sample Identification</b>	<b>Total Petroleum Hydrocarbons</b>
8038-3178	<i>Synder Oil Corporation - Duke 1M</i> <i>DUKE-204 Soil Farm</i>	202 mg/kg

**Method** - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: *JaH*  
Date: *9/6/95*

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**TOTAL PETROLEUM HYDROCARBONS**

Attn: *Shawn Adams*  
 Company: *Contract Environmental Services, Inc.*  
 Address: *P.O. Box 505*  
 City, State: *Kirtland, NM 87417*

Date: *6-Sep-95*  
 COC No.: *3178*  
 Sample No. *8039*  
 Job No. *2-1000*

Project Name: *Synder Oil Corporation - Duke 1M*  
 Project Location: *DUKE-205 Soil Farm*  
 Sampled by: *SA* Date: *31-Aug-95*  
 Analyzed by: *BV* Date: *5-Sep-95*  
 Type of Sample: *Soil*

Time: *14:33*

**Laboratory Analysis**

<b>Laboratory Identification</b>	<b>Sample Identification</b>	<b>Total Petroleum Hydrocarbons</b>
<i>8039-3178</i>	<i>Synder Oil Corporation - Duke 1M DUKE-205 Soil Farm</i>	<i>291 mg/kg</i>

**Method** - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: *Jah*  
 Date: *9/6/95*

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OFF: (505) 325-8786



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**TOTAL PETROLEUM HYDROCARBONS**

Attn: *Shawn Adams*  
Company: *Contract Environmental Services, Inc.*  
Address: *P.O. Box 505*  
City, State: *Kirtland, NM 87417*

Date: 6-Sep-95  
COC No.: 3178  
Sample No. 8040  
Job No. 2-1000

Project Name: *Synder Oil Corporation - Duke 1M*  
Project Location: *DUKE-207 Soil Farm*  
Sampled by: SA Date: 31-Aug-95 Time: 14:34  
Analyzed by: BV Date: 5-Sep-95  
Type of Sample: *Soil*

**Laboratory Analysis**

<b>Laboratory Identification</b>	<b>Sample Identification</b>	<b>Total Petroleum Hydrocarbons</b>
8040-3178	<i>Synder Oil Corporation - Duke 1M</i> <i>DUKE-207 Soil Farm</i>	385 mg/kg

**Method - EPA Method 418.1 Total Petroleum Hydrocarbons**

Approved by: *Jah*  
Date: *9/6/95*

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