

District I  
1625 N. Francis Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
June 1, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

**WFS CLOSURE**

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

Operator: QUESTAR EXPLORATION & PRODUCTION Telephone:

e-mail address:

Address: 180 EAST 100 SOUTH SALT LAKE CITY, UT 841450601

Facility or well name: KNAUFF #001E

API #: 30-045-24480

U/L or Qtr/Qtr P SEC 13 T 27N R 10W

County: SAN JUAN

Latitude 36.57044

Longitude -107.84013

NAD: 1927 ☒ 1983 ☐

Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

**Pit**

Type: Drilling ☐ Production ☒ Disposal ☐

Workover ☐ Emergency ☐

Lined ☐ Unlined ☒

Liner Type: Synthetic ☒ Thickness mil Clay ☐

Pit Volume 77 bbl

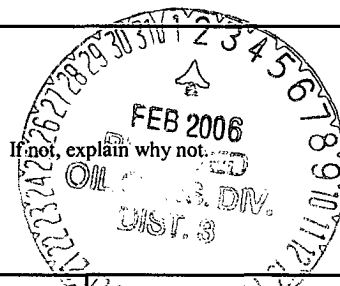
**Below-grade tank**

Volume: bbl Type of fluid:

Construction Material:

Double-walled, with leak detection? Yes ☒

If not, explain why not.



Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet  
50 feet or more, but less than 100 feet  
100 feet or more

(20 points)  
(10 points) 0  
(0 points)

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes  
No

(20 points)  
(0 points) 0

Distance to surface water: (Horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet  
200 feet to 1,000 feet  
Greater than 1,000 feet

(20 points)  
(10 points) 0  
(0 points)

**Ranking Score (TOTAL POINTS):**

0

**If this is a pit closure:** (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☒ offsite ☐ If offsite, name of facility . (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

Meter: 34977

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☒

Date: 10/3/05

Printed Name/Title Mark Harvey for Williams Field Services Signature Mark Harvey, for WFS

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval: DEPUTY OIL & GAS INSPECTOR, DIST. 3

Printed Name/Title Signature Denny Faust

Date: FEB 02 2006

## ADDENDUM TO OCD FORM C-144

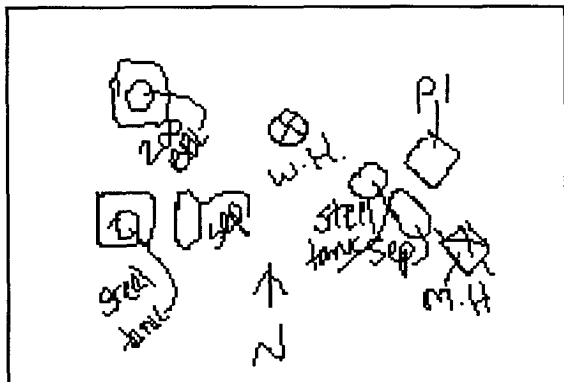
**Operator:** QUESTAR EXPLORATION & PRODUCTION CO

**API 30-045-24480**

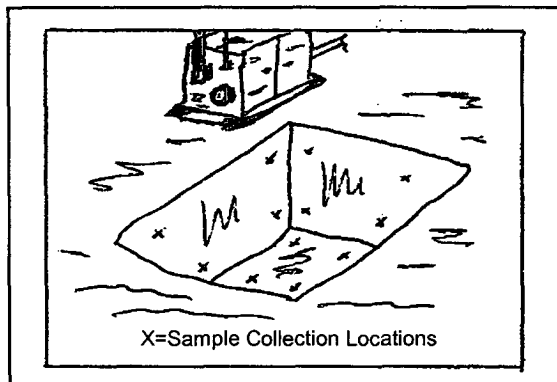
**Well Name:** KNAUFF #001E

**Meter:** 34977

**Facility Diagram:**



**Sampling Diagram:**



### Pit Dimensions

Length 12 Ft.

Width 12 Ft.

Depth 3 Ft.

### **Location of Pit Center**

Latitude 36.57037Longitude -107.83992

(NAD 1927)

## Pit ID

349771

**Pit Type**

Separator

**Date Closure Started:** 1/14/05

**Date Closure Completed:** 1/14/05

**Closure Method:** Excavated, Blended, Treated Soil Returned

**Bedrock Encountered ? ☒**

**Cubic Yards Excavated:** 37

**Vertical Extent of Equipment Reached ? ☐**

**Description Of Closure Action:**

Contaminated soil was removed and treated then returned to the excavation following sampling of the walls and floor.

**BEDROCK** limited vertical excavation and/or prevented sampling. This condition limits deleterious environmental effects.

### Pit Closure Sampling:

Sample ID	Sample Date	Head Space	BTEX Total (mg/kg)	Benzene (mg/kg)	TPH DRO (mg/kg)	Purpose	Location	Depth
133419FEB04	2/19/04		2361	61	67000	ASSESS	Flr	3
140414JAN05	1/14/05	4			81	EX Confirm	Walls	6
141514JAN05	1/14/05	330	4.42	0	240	EX Confirm	Flr	7

Lab Project Number: 6091105  
Client Project ID: N. Mex Pit Program

Lab Sample No: 607842325 Project Sample Number: 6091105-020 Date Collected: 01/14/05 14:04  
Client Sample ID: 140414JAN05 Matrix: Soil Date Received: 01/21/05 09:10

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
<b>GC Semivolatiles</b>									
Total Extractable Hydrocarbons	Prep/Method: OA2 / OA2								
Mineral Spirits	ND	mg/kg	11.		1.1 01/25/05 09:26 RMN1				
Jet Fuel	ND	mg/kg	11.		1.1 01/25/05 09:26 RMN1				
Kerosene	ND	mg/kg	11.		1.1 01/25/05 09:26 RMN1				
Diesel Fuel	ND	mg/kg	11.		1.1 01/25/05 09:26 RMN1		68334-30-5		
Fuel Oil	ND	mg/kg	11.		1.1 01/25/05 09:26 RMN1		68334-30-5		
Motor Oil	ND	mg/kg	11.		1.1 01/25/05 09:26 RMN1				
Total Petroleum Hydrocarbons	81.	mg/kg	11.		1.1 01/25/05 09:26 RMN1			10	
n-Tetracosane (S)	123	%			1.0 01/25/05 09:26 RMN1		646-31-1		
p-Terphenyl (S)	121	%			1.0 01/25/05 09:26 RMN1		92-94-4		
Date Extracted	01/24/05				01/24/05				

#### Organics Prep

Percent Moisture Method: SM 2540G  
Percent Moisture 7.2 % 1.0 01/26/05 ALJ1

## REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6091105  
Client Project ID: N. Mex Pit Program

Lab Sample No: 607842333 Project Sample Number: 6091105-021 Date Collected: 01/14/05 14:15  
Client Sample ID: 141514JAN05 Matrix: Soil Date Received: 01/21/05 09:10

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
<b>GC Semivolatiles</b>									
Total Extractable Hydrocarbons	Prep/Method: OA2 / OA2								
Mineral Spirits	ND	mg/kg	11.	1.1	01/25/05 09:43	RMN1			
Jet Fuel	ND	mg/kg	11.	1.1	01/25/05 09:43	RMN1			
Kerosene	ND	mg/kg	11.	1.1	01/25/05 09:43	RMN1			
Diesel Fuel	ND	mg/kg	11.	1.1	01/25/05 09:43	RMN1	68334-30-5		
Fuel Oil	ND	mg/kg	11.	1.1	01/25/05 09:43	RMN1	68334-30-5		
Motor Oil	ND	mg/kg	11.	1.1	01/25/05 09:43	RMN1			
Total Petroleum Hydrocarbons	240	mg/kg	11.	1.1	01/25/05 09:43	RMN1		5.	
n-Tetracosane (S)	145	%		1.0	01/25/05 09:43	RMN1	646-31-1		
p-Terphenyl (S)	127	%		1.0	01/25/05 09:43	RMN1	92-94-4		
Date Extracted	01/24/05				01/24/05				

#### Organics Prep

Percent Moisture	Method: SM 2540G								
Percent Moisture	10.1	%		1.0	01/25/05	ALJ1			

#### GC Volatiles

Aromatic Volatile Organics	Prep/Method: EPA 5030 Medium Soil / EPA 8021								
Benzene	ND	ug/kg	55.	1.1	01/24/05 23:52		71-43-2		
Ethylbenzene	130	ug/kg	55.	1.1	01/24/05 23:52		100-41-4		
Toluene	190	ug/kg	55.	1.1	01/24/05 23:52		108-88-3		
Xylene (Total)	4100	ug/kg	140	1.1	01/24/05 23:52		1330-20-7		
a,a,a-Trifluorotoluene (S)	80	%		1.0	01/24/05 23:52		98-08-8		

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Lab Project Number: 6079526

Client Project ID: NM Pit Program

Lab Sample No: 606847192  
Client Sample ID: 133419FEB04

Project Sample Number: 6079526-011  
Matrix: Soil

Date Collected: 02/19/04 13:34  
Date Received: 02/24/04 09:30

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
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**GC Semivolatiles**

Total Extractable Hydrocarbons Prep/Method: OA2 / OA2

Mineral Spirits	ND	mg/kg	320	32.2	03/02/04 14:54	RMN1			
Jet Fuel	ND	mg/kg	320	32.2	03/02/04 14:54	RMN1			
Kerosene	ND	mg/kg	320	32.2	03/02/04 14:54	RMN1			
Diesel Fuel	67000	mg/kg	320	32.2	03/02/04 14:54	RMN1	68334-30-5	4	
Fuel Oil	ND	mg/kg	320	32.2	03/02/04 14:54	RMN1	68334-30-5		
Motor Oil	ND	mg/kg	320	32.2	03/02/04 14:54	RMN1			
n-Tetracosane (S)	0	%		1.0	03/02/04 14:54	RMN1	646-31-1	5	
p-Terphenyl (S)	0	%		1.0	03/02/04 14:54	RMN1	92-94-4	5	
Date Extracted	02/25/04				02/25/04				

**Organics Prep**

Percent Moisture	Method: SM 2540G								
Percent Moisture	23.9	%		1.0	02/25/04	DPB			

**GC Volatiles**

Aromatic Volatile Organics	Prep/Method: EPA 5030 Medium Soil / EPA 8021								
Benzene	61000	ug/kg	6000	121	02/27/04 11:38		71-43-2		
Ethylbenzene	140000	ug/kg	6000	121	02/27/04 11:38		100-41-4		
Toluene	560000	ug/kg	6000	121	02/27/04 11:38		108-88-3		
Xylene (Total)	1600000	ug/kg	15000	121	02/27/04 11:38		1330-20-7		
a,a,a-Trifluorotoluene (S)	99	%		1.0	02/27/04 11:38		98-08-8		

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