District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III

1000 Rio Brazos Road, Aztec, NM 87410

1220 S. St. Francis Dr., Santa Fe, NM 87505

District IV

## 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

rered by a "general plan"? Yes 🗹 No 🗆							
w-grade tank Closure of a pit or below-grade tank	<b>V</b>						
e-mail address:							
Address:         PO BOX 2197 HOUSTON, TX 77252           Facility or well name:         NAVAJO ALLOTTED COM #001E         API #: 30-045-26276         U/L or Qtr/Qtr         I SEC 24 T 25N R 10W							
County: SAN JUAN Latitude 36.38376 Longitude -107.8415 NAD: 1927							
Below-grade tank							
Double walled, with leak detection. 165 — I het, ex	plani wily not.						
Less than 50 feet	(20 points)						
50 feet or more, but less than 100 feet	(10 points) $\underline{0}$						
100 feet of more	(0 points)						
Yes	(20 points)						
No	$(0 \text{ points})$ $\underline{0}$						
Less than 200 feet	(20 points)						
200 feet to 1,000 feet	(10 points) <u>0</u>						
Greater than 1,000 feet	(0 points)						
Ranking Score (TOTAL POINTS):	<u>0</u>						
lationship to other equipment and tanks. (2) Indicate disposal	location: (check the						
	eneral description of remedial						
	ound surface it.						
OCT I	Meter: 39619						
m 04 Re 2005							
CONSCO E							
0187.3 ON. 3							
(2/29292 V)							
knowledge and belief. I further certify that the above-describe	1						
, a general permit , or an (attached) alternative OC	D-approved plan						
1 1 / Sing wes							
gnature W/L Dub, Michael Strategy							
eve the operator of liablility should the contents of the pit or to perator of its responsibility for compliance with any other federal							
_							
	e-mail address:  26276  U/L or Qtr/Qtr I SEC  376  Longitude -107.8415   Below-grade tank  Volume: bbl Type of fluid:  Construction Material:  Double-walled, with leak detection? Yes If not, ex  Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more  Yes No  Less than 200 feet 200 feet to 1,000 feet Greater than 1,000 feet Greater than 1,000 feet  Ranking Score (TOTAL POINTS):  ationship to other equipment and tanks. (2) Indicate disposal of facility (3) Attach a greations and excavations 9 10 11 11 11 11 11 11 11 11 11 11 11 11						

### **ADDENDUM TO OCD FORM C-144**

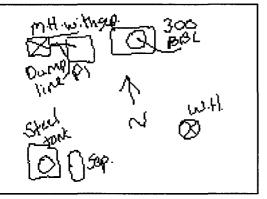
Operator: CONOCOPHILLIPS COMPANY

Well Name: NAVAJO ALLOTTED COM #001E

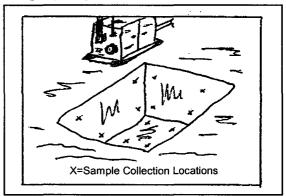
**API** <u>30-045-26276</u>

Meter: 39619

### **Facility Diagram:**



### Sampling Diagram:



Pit Dimensions

Location of Pit Center

Pit ID 396191

Length

<u>12</u> Ft.

Latitude

36.38377

Width  $\underline{12}$  Ft.

Longitude <u>-107.84176</u>

Pit Type

Depth 3 Ft.

(NAD 1927)

Separator

**Date Closure Started:** 12/10/04

**Date Closure Completed:** 12/10/04

**Closure Method:** 

Excavated, Blended, Treated Soil Returned

**Bedrock Encountered?** 

**Y** 

Cubic Yards Excavated: 47

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 **BTEX TPH** Sample Head Benzene Purpose Location Depth Date Space Total (mg/kg) DRO (mg/kg) (mg/kg) 095010DEC04 EX Confirm 12/10/04 78 1.5 0 22 Walls

095510DEC04 | 12/10/04 | 202 | 217.7 | 3.7 | 450 | EX Confirm | Flr | 7

095510DEC04 12/10/04 202 217.7 3.7 450 EX Confirm Flr 7 See Risk Analysis

100512MAR04 3/12/04 942 94 1000 ASSESS Fir



Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219

> Phone: 913.599.5665 Fax: 913.599.1759

Lab Project Number: 6080365

Client Project ID: N.M. Pit Program/Spring 2004

Lab Sample No: 606913804 Project Sample Number: 6080365-004 Date Collected: 03/12/04 10:05 Client Sample ID: 100512MAR04

Matrix: Soil

Date Received: 03/16/04 09:15

Parameters	Results	Units	Report Limi	t DF	Analyzed	Ву	CAS No.	Oual	RegLmt	
GC Semivolatiles						<del></del>				
Total Extractable Hydrocarbons	s Prep/Method:	OA2 / OA2								
Mineral Spirits	ND	mg/kg	12.	1.2	03/20/04 02:4	7 RMN1				
Jet Fuel	ND	mg/kg	12.	1.2	03/20/04 02:4	7 RMN1				
Kerosene	ND	mg/kg	12.	1.2	03/20/04 02:4	7 RMN1				
Diesel Fuel	1000	mg/kg	12.	1.2	03/20/04 02:4	7 RMN1	68334-30-5	6		
Fuel 011	ND	mg/kg	12.	1.2	03/20/04 02:4	7 RMN1	68334-30-5			
Motor Oil	ND	mg/kg	12.	1.2	03/20/04 02:4	7 RMN1				
n-Tetracosane (S)	86	*		1.0	03/20/04 02:4	7 RMN1	646-31-1			
p-Terphenyl (S)	122	*		1.0	03/20/04 02:4	7 RMN1	92-94-4			
Date Extracted	03/18/04	· e			03/18/04					
Organics Prep										
Percent Moisture	Method: SM 2	2540G								
Percent Moisture	16.6	%		1.0	03/18/04	DPB				
GC Volatiles										
Aromatic Volatile Organics	Prep/Method:	EPA 5030	Medium Soil /	EPA 8021						
Benzene	94000	ug/kg	2400	47.0	03/20/04 12:3	5	71-43-2			
Ethylbenzene	48000	ug/kg	2400	47.0	03/20/04 12:3	5	100-41-4			
Toluene	430000	ug/kg	2400	47.0	03/20/04 12:3	5	108-88-3			
Xylene (Total)	370000	ug/kg	5900	47.0	03/20/04 12:3	5	1330-20-7			
a,a,a-Trifluorotoluene (S)	0	*		1.0	03/20/04 12:3	5	98-08-8	7		

Date: 03/24/04

Page: 4 of 32

## **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc.

9608 Loiret Blvd. Lenexa, KS 66219

Phone: 913.599.5665 Fax: 913.599.1759

Lab Project Number: 6090504

Client Project ID: N. Mex. Pits Program

Lab Sample No: 607796299 Project Sample Number: 6090504-004 Date Collected: 12/10/04 09:50

Client Sample ID: 095010DEC04 Matrix: Soil

oil Date Received: 01/04/05 08:50

Citent Sample 10: 0950100EC04				Matirix: 3011			Date Received: 01/04/05 06:50			
Parameters	Results	Units	Report Limit	DF	Anal yzed	Ву	CAS No.	Qual	RegLmt	
GC Semivolatiles										
Total Extractable Hydrocarbons	Prep/Method:	OA2 / OA2								
Mineral Spirits	ND	mg/kg	11.	1.1 (	01/07/05 12:22	RMN1				
Jet Fuel	ND	mg/kg	11.	1.1 (	01/07/05 12:22	RMN1	•			
Kerosene	ND	mg/kg	11.	1.1 (	01/07/05 12:22	RMN1	,			
Diesel Fuel	ND	mg/kg	11.	1.1 (	01/07/05 12:22	RMN1	68334-30-5			
Fuel Oil	ND	mg/kg	11.	1.1 (	01/07/05 12:22	RMN1	68334-30-5		•	
Motor Oil	ND	mg/kg	11.	1.1 (	01/07/05 12:22	RMN1				
Total Petroleum Hydrocarbons	22.	mg/kg	11.	1.1 (	01/07/05 12:22	RMN1		4		
n-Tetracosane (S)	100	*		1.0 (	01/07/05 12:22	RMN1	646-31-1			
p-Terphenyl (S)	103	*		1.0 (	01/07/05 12:22	RMN1	92-94-4			
Date Extracted	01/05/05			(	01/05/05					
Organics Prep										
Percent Moisture	Method: SM 2	540G								
Percent Moisture	8.7	*		1.0 (	01/05/05	ALJ1				
GC Volatiles										
Aromatic Volatile Organics	Prep/Method:	EPA 5030 M	edium Soil / El	PA 8021						
Benzene	ND	ug/kg	55.		01/07/05 00:53	SHF	71-43-2			
Ethylbenzene	ND	ug/kg	55.	1.1 (	01/07/05 00:53	SHF	100-41-4			
Toluene	ND	ug/kg	55 <i>.</i>	1.1 (	01/07/05 00:53	SHF	108-88-3			
Xylene (Total)	1500	ug/kg	140	1.1 (	01/07/05 00:53	SHF	1330-20-7			
a,a,a-Trifluorotoluene (S)	93	%		1.0 (	01/07/05 00:53	SHF	98-08-8	2		

Date: 01/12/05 Page: 4 of 46

# **REPORT OF LABORATORY ANALYSIS**

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Client Sample ID: 095510DEC04

Pace Analytical Services, Inc.

Date Received: 01/04/05 08:50

9608 Loiret Blvd. Lenexa, KS 66219

Phone: 913.599.5665 Fax: 913.599.1759

Lab Project Number: 6090504

21.3 01/07/05 00:25 SHF

21.3 01/07/05 00:25 SHF

1.0 01/07/05 00:25 SHF

108-88-3

1330-20-7

2,3

98-08-8

Client Project ID: N. Mex. Pits Program

Lab Sample No: 607796281 Project Sample Number: 6090504-003 Date Collected: 12/10/04 09:55

Matrix: Soil

**Parameters** Results Units Report Limit DF Analyzed Ву CAS No. Qual RegLmt GC Semivolatiles Total Extractable Hydrocarbons Prep/Method: OA2 / OA2 Mineral Spirits ND mg/kg 11. 1.1 01/06/05 18:08 RMN1 Jet Fuel ND mg/kg 11. 1.1 01/06/05 18:08 RMN1 Kerosene ND mg/kg 11. 1.1 01/06/05 18:08 RMN1 Diesel Fuel ND mg/kg 11. 1.1 01/06/05 18:08 RMN1 68334-30-5 Fuel 0il ND mg/kg 11. 1.1 01/06/05 18:08 RMN1 68334-30-5 Motor 0il ND 11. 1.1 01/06/05 18:08 RMN1 mg/kg Total Petroleum Hydrocarbons 450 mg/kg 11. 1.1 01/06/05 18:08 RMN1 1 n-Tetracosane (S) 103 X 1.0 01/06/05 18:08 RMN1 646-31-1 p-Terphenyl (S) 107 % 1.0 01/06/05 18:08 RMN1 92-94-4 Date Extracted 01/05/05 01/05/05 Organics Prep Method: SM 2540G Percent Moisture Percent Moisture 8.2 1.0 01/05/05 ALJ1 GC Volatiles Aromatic Volatile Organics Prep/Method: EPA 5030 Medium Soil / EPA 8021 Benzene 3700 ug/kg 1100 21.3 01/07/05 00:25 SHF 71-43-2 Ethylbenzene 15000 ug/kg 1100 21.3 01/07/05 00:25 SHF 100-41-4

1100

2800

Date: 01/12/05

Toluene

Xylene (Total)

a,a,a-Trifluorotoluene (S)

69000

130000

121

ug/kg

ug/kg

%

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## REPORT OF LABORATORY ANALYSIS

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Environmental Services 188 CR 4900 Bloomfield, NM 8413

#### Pit Closure and Retirement Addendum- Risk Assessment

This site is located in the NMOCD / USBLM defined "Non Vulnerable Area". These agencies have predetermined that historical use of unlined pits in this area have limited potential to adversely affect ground water. This is primarily due to the depth to ground water, lack of vertical migration of contaminants, and distant proximity to river drainages.

The sample analyzed for confirmation at this site exhibited elevated levels of total petroleum hydrocarbons (TPH) and / or BTEX. Toxicity information indicates that the measured levels pose little risk to human health and the environment. This conclusion is based in part on the information below:

#### **Toxicity Information**

Toxicity values for TPH have not been established due to the variability of the chemical makeup of TPH. Normally, the toxicity is based on the toxicity of particular constituents of concern that may be present and which are evaluated based on health-based standards. The most common constituents examined include benzene, ethylbenzene, toluene, and xylene.

In the absence of constituents of concern or when the concentrations of the constituents of concern are low, the acceptable level of TPH is established by considering the following:

- No liquid product should remain in the soil
- The TPH should not harm vegetation
- The TPH concentrations should not create an odor nuisance
- Hydrocarbon vapors which may emanate from the impacted soil should not generate harmful or explosive vapors
- Site monitoring should indicate that TPH levels are stable or declining

#### **Environmental and Site Conditions**

Based on an evaluation of site topography and available well data, this site is believed to have ground water greater than 100' below ground surface. The absence of continuous transport mechanisms limits continued migration of contaminants in soil. Notwithstanding, **bedrock** was discovered at the pit (i.e. excavation) bottom. This condition retards vertical migration of contaminants and serves to significantly limit potential groundwater impact.

While residual TPH and/or BTEX exists at this site, closure of this site is warranted for the following reasons:

- 1. The majority of soils that exhibited high levels of TPH and BTEX have been treated to enhance degradation in-situ.
- 2. Residual TPH concentrations are below levels considered problematic based on the criteria above.
- 3. Discharge at the site has been eliminated to prevent any future impacts to soils.
- 4. Depth to groundwater is estimated at greater than 100'.
- 5. Vertical migration of contamination is limited due to bedrock.
- 6. TPH / BTEX concentrations will not increase and will degrade over time from natural and enhanced processes occurring in-situ.
- 7. Further excavation at the site is not practicable due to bedrock.

Since there are no nearby receptors or domestic water sources, this site poses little risk to human health and the environment. Closure is justified based on the relatively low total petroleum hydrocarbon (TPH) concentration and the fact that all closure criteria cannot be practically attained. Additional information may be found in the Technical Background Document titled: Risk Based Closure of Unlined Surface Impoundment Sites, San Juan Basin, New Mexico.