1000 Rio Brazos Road, Aztec, NM 87410

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

District III

District IV

### State of New Mexico Energy Minerals and Natural Resources

Form C-144 June 1, 2004

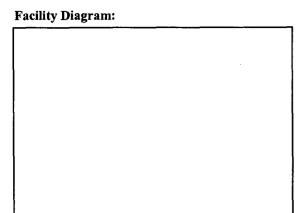
Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office

# Pit or Below-Grade Tank Registration or Closure Is pit or below-grade tank covered by a "general plan"? Yes V No

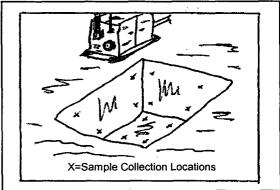
WFS CLOSURE Type of action: Registration of a pit or belo	w-grade tank Closure of a pit or below-grade tank	<u> </u>
Operator: XTO ENERGY, INC. Telephone:	e-mail address:	
Address: 2700 FARMINGTON AVENUE FARMINGTON, NM 87401		
Facility or well name: HANSON #003 API #: 30-045	<u>i-21428</u> U/L or Qtr/Qtr <u>D</u> SEC	<u>5</u> T <u>25N</u> R <u>10W</u>
County: SAN JUAN Latitude	Longitude	NAD: 1927 🗹 1983 🗌
Surface Owner: Federal 🗹 State 🗌 Private 🗌 Indian 🗍		20211197
<u>Pit</u>	Below-grade tank	1879 30 X
Type: Drilling ☐ Production ✓ Disposal ☐	Volume: bbl Type of fluid:	FED. O
Workover	Construction Material:  Double-walled, with leak detection? Yes  If not, ex	iplain why not CEIVED
Lined ☐ Unlined ☑	Double-wanted, with leak detection: 1es 🖃 11 not, ex	S COME S
Liner Type: Synthetic 🖾 Thickness mil Clay 👩		E DIST. S
Pit Volume 77 bbl		
Depth to ground water (vertical distance from bottom of pit to seasonal high	Less than 50 feet	(20 points) // 9  5  V
water elevation of ground water.)	50 feet or more, but less than 100 feet	(10 points) 0
	100 feet or more	(0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water	Yes	(20 points)
source, or less than 1000 feet from all other water sources.)	No	0 points) $0$
Distance to surface water: (Horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	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>
	elationship to other equipment and tanks. (2) Indicate disposa	-
onsite box if your are burying in place) onsite $\mathbf{V}$ offsite $\mathbf{I}$ If offsite, nam action taken including remediation start date and end date. (4)Groundwater encountry		general description of remedial
and attach sample results. (5)Attach soil sample results and a diagram of sample		round surface It.
Additional Comments:		Meter: 33151
reditional Comments.		Wieter: <u>55151</u>
	Bedvock	
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-describe	ed nit or below-grade
	$\Box$ , a general permit $\Box$ , or an (attached) alternative OC	
Date:10/3/05	1	
	MIZ FOR WES	
	ignature	
Your certification and NMOCD approval of this application/closure does not reli or otherwise endanger public health or the environment. Nor does it relieve the or regulations.	eve the operator of liability should the contents of the pit or to operator of its responsibility for compliance with any other fed	ank contaminate ground water eral, state, or local laws and/or
Approval: OR & GAS INSPECTOR, DIST.		ምምስ ለ ስ ለብለብ
Printed Name/Title Sig	nature Dent Jary	Date:

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

Operator: XTO ENERGY, INC. API 30-045-21428 Well Name: HANSON #003 Meter: 33151







**Location of Pit Center** Pit ID Pit Dimensions 331511 Latitude 36.43509 Length 12 Ft. Width 12 Ft. Longitude <u>-107.92514</u> Pit Type Depth 3 Ft. (NAD 1927)

**Date Closure Completed:** 8/26/05 **Date Closure Started:** 8/26/05

**Bedrock Encountered? Closure Method:** Excavated, Blended, Treated Soil Returned

Cubic Yards Excavated: 64

Vertical Extent of Equipment Reached?

**Unknown** 

### **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.

Vertical extent of excavation limited by equipment

Pit Closure S	ampling:								
Sample ID	Sample Date	Head Space	BTEX Total (mg/kg)	Benzene (mg/kg)	TPH DRO (mg/kg)	Purpose	Location	Depth	
110326AUG05	8/26/05	0			0	EX Confirm	Walls	10	
111026AUG05	8/26/05		142.4	2.5	2700	EX Confirm	Flr	12	See Risk Analysis
134911MAR04	3/11/04		285	27	10000	ASSESS	Flr	3	



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

Phone: 913.599.5665 Fax: 913.599.1759

Lab Project Number: 6099307

Client Project ID: N. Mex Pit Program Summer 2005

Lab Sample No:

608514618

Project Sample Number: 6099307-020

Date Collected: 08/26/05 11:03

Client Sample ID: 110326AUG05

Matrix: Soil

Date Received: 09/02/05 08:30

Cirett Sample ID. 110320A0003				ridti i.	x. 3011		Date Neceive	a. 05/0E/05 00.50
Parameters	Results	<u>Units</u>	Report Limit	DF	Analyzed	Ву	CAS No.	Qual RegLmt
GC Semivolatiles								
Total Extractable Hydrocarbons	Prep/Method:	: OA2 / OA2						
Mineral Spirits	ND	mg/kg	10.	1.0	09/07/05 09:50	CPR		
Jet Fuel	ND	mg/kg	10.	1.0	09/07/05 09:50	CPR	94114-58-6	
Kerosene	ND	mg/kg	10.	1.0	09/07/05 09:50	CPR		
Diesel Fuel	ND	mg/kg	10.	1.0	09/07/05 09:50	CPR	68553-00-4	
Fuel Oil	ND	mg/kg	10.	1.0	09/07/05 09:50	CPR	68553-00-4	
Motor 0il	ND	mg/kg	10.	1.0	09/07/05 09:50	CPR		
n-Tetracosane (S)	101	×		1.0	09/07/05 09:50	CPR	646-31-1	
p-Terphenyl (S)	91	X		1.0	09/07/05 09:50	CPR	92-94-4	•
Date Extracted	09/06/05				09/06/05			
Organics Prep								
Percent Moisture	Method: SM 2	2540G						
Percent Moisture	4.9	X		1.0	09/06/05	JDM		

Date: 09/13/05

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### **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: 6099307

Client Project ID: N. Mex Pit Program Summer 2005

Lab Sample No:

608514634

Project Sample Number: 6099307-021

Date Collected: 08/26/05 11:10

Client Sample ID: 111026AUG05				Matrix: Soil		Date Received	1: 09/02/	05 08:30
Parameters	Results	Units	Report Limit	DF Analyz	ed By	CAS No.	Qual R	RegLmt
GC Semivolatiles								
Total Extractable Hydrocarbons	Prep/Method:	OA2 / OA2						
Mineral Spirits	ND	mg/kg	12.	1.1 09/07/05 0	0:30 CPR			
Jet Fuel	ND	mg/kg	12.	1.1 09/07/05 0	0:30 CPR	94114-58-6		
Kerosene	ND	mg/kg	12.	1.1 09/07/05 0	0:30 CPR	-		
Diesel Fuel	ND	mg/kg	12.	1.1 09/07/05 0	0:30 CPR	68553-00-4	•	
Fuel Oil	ND	mg/kg	12.	1.1 09/07/05 0	0:30 CPR	68553-00-4		
Motor 0il	ND	mg/kg	12.	1.1 09/07/05 0	0:30 CPR			
Total Petroleum Hydrocarbons	2700	mg/kg	12.	1.1 09/07/05 0	0:30 CPR		6	
n-Tetracosane (S)	292	X		1.0 09/07/05 0	0:30 CPR	646-31-1	7	
p-Terphenyl (S)	96	X		1.0 09/07/05 0	0:30 CPR	92-94-4		
Date Extracted	09/06/05			09/06/05				
Organics Prep								
Percent Moisture	Method: SM 2	540G						
Percent Moisture	14.4	*		1.0 09/06/05	JDM			
GC Volatiles								
Aromatic Volatile Organics	Prep/Method:	EPA 5030	Medium Soil / E	PA 8021				
Benzene	2500	ug/kg	1200	23.1 09/07/05 1	10:42 SHF	71-43-2		
Ethylbenzene	8900	ug/kg	1200	23.1 09/07/05 1	L0:42 SHF	100-41-4		
Toluene	19000	ug/kg	1200	23.1 09/07/05 1	10:42 SHF	108-88-3		
Xylene (Total)	130000	ug/kg	3000	23.1 09/07/05 1	L0:42 SHF	1330-20-7		
a,a,a-Trifluorotoluene (S)	109	*		1.0 09/07/05 1	L0:42 SHF	98-08-8		

Date: 09/13/05

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### **REPORT OF LABORATORY ANALYSIS**

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606913879

Lab Sample No:

Client Sample ID: 134911MAR04

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

Project Sample Number: 6080365-011
Matrix: Soil

Date Collected: 03/11/04 13:49

trix: Soil Date Received: 03/16/04 09:15

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	62.	6.2	03/20/04 06:24	RMN1		
Jet Fuel	ND	mg/kg	62.	6.2	03/20/04 06:24	RMN1		
Kerosene	ND	mg/kg	62.	6.2	03/20/04 06:24	RMN1		
Diesel Fuel	10000	mg/kg	62.	6.2	03/20/04 06:24	RMN1	68334-30-5	1
Fuel Oil	ND	mg/kg	62.	6.2	03/20/04 06:24	RMN1	68334-30-5	
Motor Oil	ND	mg/kg	62.	6.2	03/20/04 06:24	RMN1		
n-Tetracosane (S)	616	*		1.0	03/20/04 06:24	RMN1	646-31-1	14
p-Terphenyl (S)	897	*		1.0	03/20/04 06:24	RMN1	92-94-4	15
Date Extracted	03/18/04				03/18/04			
Organics Prep								
Percent Moisture	Method: SM 2	540G						
Percent Moisture	21.6	*		1.0	03/18/04	DPB		
GC Volatiles								
Aromatic Volatile Organics	Prep/Method:	EPA 5030 N	dedium Soil / E	PA 8021	l			
Benzene	27000	ug/kg	6300	126	03/18/04 23:02	ARF	71-43-2	
Ethylbenzene	15000	ug/kg	6300	126	03/18/04 23:02	ARF	100-41-4	
Toluene	83000	ug/kg	6300	126	03/18/04 23:02	ARF	108-88-3	
Xylene (Total)	160000	ug/kg	16000	126	03/18/04 23:02	ARF	1330-20-7	
a,a,a-Trifluorotoluene (S)	240	x		1.0	03/18/04 23:02	ARF	98-08-8	3,4

Date: 03/24/04

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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:

- 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.