District I Form C-144 State of New Mexico 1625 N. French Dr., Hobbs, NM 88240 June 1, 2004 **Energy Minerals and Natural Resources** District II 1301 W. Grand Avenue, Artesia, NM 88210 District III For drilling and production facilities, submit to **Oil Conservation Division** 1000 Rio Brazos Road, Aztec, NM 87410 appropriate NMOCD District Office. 1220 South St. Francis Dr. District IV For downstream facilities, submit to Santa Fe 1220 S. St. Francis Dr., Santa Fe, NM 87505 office Santa Fe, NM 87505 Pit or Below-Grade Tank Registration or Closure Is pit or below-grade tank covered by a "general plan"? Yes 🗹 No 🗌 Type of action: Registration of a pit or below-grade tank \square \checkmark WFS CLOSURE) Closure of a pit or below-grade tank Operator: BURLINGTON RESOURCES OIL & GAS CO Telephone: e-mail address: Address: 801 CHERRY ST FORT WORTH, TX 76102 Facility or well name: SAN JUAN 30 6 UNIT #054A API #: 30-039-21940 U/L or Qtr/Qtr SEC 21 Т 30N 6W County: RIO ARRIBA Latitude 36.79582 NAD: 1927 🖌 1983 🗌 Longitude -107.46509 Surface Owner: Federal 🗹 State 🗌 Private 🗌 Indian Pit **Below-grade tank** Type: Volume: bbl Type of fluid: Drilling Production V Disposal Construction Material: Workover Emergency Double-walled, with leak detection? Yes 📓 If not, explain why not. Lined Unlined 🗸 Clay Liner Type: Synthetic Thickness Pit Volume 282 bbl Depth to ground water (vertical distance from bottom of pit to seasonal high (20 points) Less than 50 feet (10 points) water elevation of ground water.) 50 feet or more, but less than 100 feet 0 100 feet or more (0 points) (20 points) Wellhead protection area: (Less than 200 feet from a private domestic water Yes 0 source, or less than 1000 feet from all other water sources.) (0 points) No Less than 200 feet Distance to surface water: (Horizontal distance to all wetlands, playas, (20 points) irrigation canals, ditches, and perennial and ephemeral watercourses.) 200 feet to 1,000 feet (10 points) 0 Greater than 1,000 feet (0 points) 0 **Ranking Score (TOTAL POINTS):** (1)Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the If this is a pit closure: onsite box if your 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: 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: _ 9/9/05 MIZ Printed Name/Title Mark Harvey for Williams Field Services Signature Your certification and NMOCD approval of this application/closure does not relieve the operator of liablility 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: OCT 1 2 2005 Printed Name/Title DEPUTY UIL & JAS INSPECTOR, DIST. Signature Date:

••• • • • •

ADDENDUM TO OCD FORM C-144

Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP

Well Name: SAN JUAN 30 6 UNIT #054A

API: <u>30-039-21940</u>

Meter: <u>85274</u>

Facility Diagram:		Sampling Diagram:						
ANTI PITTO		X=Sample Collection Locations						
Pit Dimensions	Location of Pit Center	Pit ID						
Length 24 Ft.	Latitude 36.79598	852741						
Width 22 Ft.	Longitude -107.46522							
Depth 3 Ft.	(NAD 1927)	Pit Type						
	(1112 1)2/)	Glycol Dehydrator						
Date Closure Started: 4/17/03 Date Closure Completed: 4/17/03 Closure Method: Excavated, Blended, Treated Soil Returned Bedrock Encountered ? Cubic Yards Excavated: 156 Vertical Extent of Equipment Reached ? Image: Completed:								
Description Of Closure Action: Contaminated soil was removed and treated t Vertical extent of excavation limited by equip		g sampling of the walls and floor.						
Pit Closure Sampling:								
Sample ID Sample Head BTEX Date Space Total (mg/kg)	Benzene TPH Purpose Locati (mg/kg) DRO (mg/kg)	on Depth						
123810JUN02 6/10/02 500.3	8.3 4500 ASSESS	3						
153717APR03 4/17/03 1992 334	0 2700 EX Confirm Flr	12 See Risk Analysis						
154317APR03 4/17/03 1718 0.734	0 EX Confirm Walls	i 12 See Risk Analysis						

Pace	Analytic	al™					Pace		ervices, Inc. 8 Loiret Blvd. a, KS 66219
/ 400/	•	100 Mar 1993 - 11 - 12 - 12 - 12 - 12 - 12 - 12 - 1						Phone: 9	13.599.5665
	www.pacelabs.	com						Fax: 9	13.599.1759
		200311-111 Archite		1	Lab Project Num				
					Client Project	: ID:	NM PIT ASSES	SMENTS	
Lab Sample No:	605193069			Project Sample	Number: 605968	85-003	Date Co	llected: 06	/10/02 12:38
Client Sample ID:	123810JUNE02			•	Matrix: Soil		Date R	eceived: O6	/13/02 09:15
Parameters		Results	Units	Report Limit	Analyzed	By	CAS No.	Qual Reg	Lmt
GC Semivolati	les								
Total Extractabl	e Hydrocarbons	Prep/Method:	0A2 / 0A2						
Mineral Spirits		ND	mg/kg	59.	06/19/02 07:37	WAW			
Jet Fuel 🔬		ND	mg/kg	59.	06/19/02 07:37	WAW			
Kerosene	•	ND	mg/kg	59.	06/19/02 07:37	WAW			
Diesel Fuel		4500	mg/kg	59.	06/19/02 07:37	WAW	68334-30-5	1	
Fue]@011		ND	mg/kg	59.	06/19/02 07:37	WAW	68334-30-5		
Motor 0il		ND	mg/kg	59.	06/19/02 07:37	WAW			
n-Tetracosane (S)	103	*		06/19/02 07:37	WAW	646-31-1		
p-Terphenyl (S)		70	*		06/19/02 07:37	WAW	92-94-4		
Date Extracted					06/13/02		-		

Organics Prep

State Links

Percent Moisture	Method:		
Percent Moisture	16.8	*	06/14/02 MIM

GC Volatiles

Aromatic Volatile Organics	Prep/Metho	d: EPA 5030 Me	dium Soil /	EPA 8021			
Benzene	8300	ug/kg	810	06/14/02 08:03	SHF	71-43-2	
Ethylbenzene	22000	ug/kg	810	06/14/02 08:03	SHF	100-41-4	
Toluene	120000	ug/kg	810	06/14/02 08:03	SHF	108-88-3	
Xylene (Total)	350000	ug/kg	2000	06/14/02 08:03	SHF	1330-20-7	
a,a,a-Trifluorotoluene (S)	137	*		06/14/02 08:03	SHF	98-08-8	2,3

Date: 06/20/02

Page: 3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.





Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Phone: 913.599.5665 Fax: 913.599.1759

Lab Project Number: 6069944 Client Project ID: NM PIT PROGRAM

Lab Sample No: 606028116	and and a second se		Project Sample	Number	r: 6069944-008	3 [Date Collecter	1: 04/17/03 15:
Client Sample ID: 153717APR03	16-6 97 8			Matri	x: Soil		Date Received	i: 04/29/03 09:
Parameters	Results	Units	Report Limit	DE	Analyzed	By	CAS No.	Qual RegLmt
GC Semivolatiles	Resultes		<u>Report Limre</u>		Anutyzeu			YUAI KEYLIN
Total Extractable Hydrocarbons	Prep/Method:	0A2 / 0A2						
Mineral Spirits	ND	mg/kg	11.	1.1	05/01/03 03:1	2 MIM		
Jet Fuel	ND	mg/kg	11.		05/01/03 03:1			
Kerosene	ND	mg/kg	11.	1.1	05/01/03 03:1	2 MIM		
Diesel Fuel	ND	mg/kg	11.	1.1	05/01/03 03:1	2 MIN	68334-30-5	
Fuel 011	ND	mg/kg	11.	1.1	05/01/03 03:1	2 MIM	68334-30-5	,
Motor 011	ND	mg/kg	11.	1.1	05/01/03 03:1	2 MIM		
Total Petroleum Hydrocarbons	2700	mg/kg	11.	1.1	05/01/03 03:1	2 MIM		1
n-Tetracosane (S)	112	%		1.0	05/01/03 03:1	2 MIM	646-31-1	
p-Terphenyl (S)	104	*			05/01/03 03:1			
Date Extracted	04/30/03				04/30/03			
Organics Prep		·						
Percent Moisture	Method: SM 2	540G						· •
Percent Moisture	12.3	*		1.0	05/01/03	MAM		
GC Volatiles								
Aromatic Volatile Organics	Prep/Method:	EPA 5030 M	edium Soil / El	PA 802	1			
Benzene	ND	ug/kg	2200	44.7	05/01/03 13:3	3	71-43-2	
Ethylbenzene	18000	ug/kg	2200	44.7	05/01/03 13:3	3	100-41-4	
Toluene	36000	ug/kg	2200	44.7	05/01/03 13:3	3	108-88-3	
Xylene (Total)	280000	ug/kg	5600	44.7	05/01/03 13:3	3.	1330-20-7	
a,a,a-Trifluorotoluene (S)	70	*		1.0	05/01/03 13:3	3	98-08-8	2

Date: 05/02/03

Page: 8 of 15

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.





Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Phone: 913.599.5665 Fax: 913.599.1759

Lab Project Number: 6069944 Client Project ID: NM PIT PROGRAM

Lab Sample No: 606028108 Client Sample ID: 154317APR03			Project Sample		r: 6069944-((: Soil		Date Collecte Date Receive		
Parameters		Units	<u>Report Limit</u>	DF	Analyze	ed By	CAS No.	Qual	RegLmt
Organics Prep									
Percent Moisture	Method: SM 2	540G							
Percent Moisture	13.9	*		1.0	05/01/03	MAM			
GC Volatiles									
Aromatic Volatile Organics	Prep/Method:	EPA 5030	Medium Soil / E	PA 8021	L				
Benzene	ND	ug/kg	58.	1.1	04/30/03 22	2:30	71-43-2		
Ethylbenzene	ND	ug/kg	58.	1.1	04/30/03 22	2:30	100-41-4		
Toluene	84.	ug/kg	58.	1.1	04/30/03 22	2:30	108-88-3		
Xylene (Total)	650	ug/kg	150	1.1	04/30/03 22	2:30	1330-20-7		
a,a,a-Trifluorotoluene (S)	91	%		1.0	04/30/03 22	2:30	98-08-8		

Date: 05/02/03

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.





Environmental Services 188 CR 4900 Bloomfield, NM 87413

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

 \sim

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.

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 cessation of discharge and regional climatic conditions.
- 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.

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 (compared to documented risk exposure information) and the fact that recommended 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.*