District I 1625 N. French Dr., Hobbs, NM 88240 Pistrict II

†301 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

Oil Conservation Division July, For drilling and production facilities, submit to 2 appropriate NMOCD District Office.

1220 South St. Francis Dr. For downstream facilities, submit to Santa Fe Santa Fe NM 87505

Form C-144

March 12, 2004

Pit or Below-Grade Tar	nk Registration	n or Closure
Is pit or below-grade tank covered	d by a "general plar	1"? Yes X No □

Type of action: Registration of a pit or below-grade tank 🔲 Closure of a pit or below-grade tank 🛭				
Operator: <u>H.E.C. PETROLEUM</u>	Telephone:505-327-4573e-mail addres	ss:mpippin@ddbroadband.net		
Address: _c/o Agent - Mike Pippin LLC, 3104 N. Sullivan, Farmington, NM 8	7401	·		
Facility or well name: FREEMAN 11 #4 API #: 30-04	15-31596 U/L or Qtr/Qtr D Sec 11 T 31	N R 13W		
County: San Juan Latitude Longitude	NAD: 1927 1983 Surface Owner Federal St	tate 🗌 Private 🔀 Indian 🗍		
Pit	Below-grade tank			
Type: Drilling Production Disposal	Volume:bbl Type of fluid:			
Workover    Emergency	Construction material:			
Lined Unlined	Double-walled, with leak detection? Yes If not,	explain why not.		
Liner type: Synthetic Thickness 12 mil Clay Volume				
2,571 bbl				
	Less than 50 feet	(20 points) X		
Depth to ground water (vertical distance from bottom of pit to seasonal high	50 feet or more, but less than 100 feet X	(10 points)		
water elevation of ground water.)	100 feet or more	( 0 points)		
	100 feet of filore	( o points)		
Wellhead protection area: (Less than 200 feet from a private domestic	Yes X	(20 points) X		
water source, or less than 1000 feet from all other water sources.)	No	( 0 points)		
		<u> </u>		
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 or more, but less than 1000 feet X	(10 points) X		
	1000 feet or more	( 0 points)		
	Ranking Score (Total Points)	50		
If this is a pit closure: (1) attach a diagram of the facility showing the pit's re	elationship to other equipment and tanks. (2) Indicate d	isposal location:		
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 be				
a diagram of sample locations and excavations.		( )		
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 [2], a general permit [3], or an (attached) alternative OCD-approved plan [3].  Date: 6/17/04				
Printed Name/Title <u>Mike Pippin - Agent - Petroleum Engineer</u> Signatur	e Theke leppin			
Your certification and NMOCD approval of this application/closure does not resotherwise endanger public health or the environment. Nor does it relieve the operegulations.				
Approval: JUN 7 8 2001				
Date:	- DEPUTY OIL & GAS INSTECTOR	DIST JAME		
Printed Name/Title Signature Signature				
$\mathcal{U}$				

## M & G DRILLING COMPANY c/o Mike Pippin LLC 3104 N. Sullivan Farmington, NM 87401 (505) 327-4573

#### 6/17/04

## GENERAL DESCRIPTION OF DRILL PIT CLOSING FREEMAN 11 #4 FRTC D 11 31 13

### Start location rehab & pit closing 5/31/04

- 1. Take samples of mud/cuttings from the 4 corners of pit.
- 2. Remove the fencing around the drilling pit.
- 3, Cut liner off at mud level and haul off to disposal facility.
- 4. Using track-hoe, mix any soft spots & cover pit with dry soil.
- 5. Lay back slopes & all disturbed areas.
- 6. Ripped location for seeding.
- 7. Plan to disc area & re-seed with BLM mix in 3 weeks.
- 8. Complete on 6/1/04.

**ACCESS ROAD** SEPARATOR **METER** & PIPELINE 210 BBL TANK NORTH D SEC. 11 T31N R13W SAN JUAN COUNTY, NM FREEMAN 11 #4 FRTC PURE RESOURCES WELLHEAD \ PUMP JACK 5/17/04 P.M. PIPPIN RESERVE PIT 80'x30' LA PLATA RIVER ~700' 0 IRRIGATION DITCH ~200,

© SAMPLE LOCATIONS



## EC, SAR, ESP, Cl Analysis

Client:	H.E.C. Petroleum	Project #:	04089-001
Sample ID:	Freeman 11-4	Date Reported:	06-10-04
Laboratory Number:	28965	Date Sampled:	06-03-04
Chain of Custody:	12255	Date Received:	06-07-04
Sample Matrix:	Soil	Date Extracted:	06-09-04
Preservative:	Cool	Date Analyzed:	06-10-04
Condition:	Cool & Intact		

	Analytical	
Parameter	Result	Units

Conductivity @ 25° C	7.31	mmhos/cm
Calcium	110	mg/Kg
Magnesium	49.6	mg/Kg
Sodium	1,260	mg/Kg
Sodium Absorption Ratio (SAR)	35.4	ratio
Exchangeable Sodium Percent (ESP)	33.6	percent
Chloride	2,320	mg/Kg

Reference:

U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments:

**Drilling Pits.** 

Analyst Cegreen



# EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	H.E.C. Petroleum	Project #:	04089-001
Sample ID:	Freeman 11-4	Date Reported:	06-10-04
Laboratory Number:	28965	Date Sampled:	06-03-04
Chain of Custody No:	12255	Date Received:	06-07-04
Sample Matrix:	Soil	Date Extracted:	06-09-04
Preservative:	Cool	Date Analyzed:	06-09-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.0	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	1.0	0.2

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

**Drilling Pits.** 

Analyst

Mister m Waller Beview



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	H.E.C. Petroleum	Project #:	04089-001
Sample ID:	Freeman 11-4	Date Reported:	06-10-04
Laboratory Number:	28965	Date Sampled:	06-03-04
Chain of Custody:	12255	Date Received:	06-07-04
Sample Matrix:	Soil	Date Analyzed:	06-09-04
Preservative:	Cool	Date Extracted:	06-09-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
		1.0	
Benzene	32.3	1.8	
Toluene	88.7	1.7	
Ethylbenzene	42.4	1.5	
p,m-Xylene	90.1	2.2	
o-Xylene	33.9	1.0	1
Total BTEX	287		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95 %
	1,4-difluorobenzene	95 %
	Bromochlorobenzene	95 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

**Drilling Pits.** 

Analyst C. Openion

(Mistine Mallers Review



#### TRACE METAL ANALYSIS

Client:	H.E.C. Petroleum	Project #:	04089-001
Sample ID:	Freeman 11-4	Date Reported:	06-10-04
Laboratory Number:	28965	Date Sampled:	06-03-04
Chain of Custody:	12255	Date Received:	06-07-04
Sample Matrix:	Soil	Date Analyzed:	06-10-04
Preservative:	Cool	Date Digested:	06-09-04
Condition:	Cool & Intact	Analysis Needed:	RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.012	0.001	5.0
Barium	0.618	0.001	100
Cadmium	ND	0.001	1.0
Chromium	0.001	0.001	5.0
Lead	0.002	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.007	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

References:

Method 3050B, Acid Digestion of Sediments, Sludges and Soils.

SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emmision

Spectroscopy, SW-846, USEPA, December 1996.

Note:

Regulatory Limits based on 40 CFR part 261 subpart C

section 261.24, August 24, 1998.

Comments:

**Drilling Pits.** 

Analyst

Westinery Walter