

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  
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 ☒

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

Operator <u>McIlvann Oil &amp; Gas Properties, Inc.</u> Telephone <u>303-893-0933</u> Ex308 e-mail address <u>DebbyP@McIlvann.com</u>		
Address <u>1050 17<sup>th</sup> Street, Suite 1800, Denver, CO 80265</u>		
Facility or well name <u>Cougar Com 4 #2A</u> API # <u>30-039-26668</u> U/L or Qtr/Qtr <u>M</u> Sec <u>4</u> T <u>25N</u> R <u>2W</u>		
County <u>Rio Arriba</u> Latitude <u>36 25' 20" N</u> Longitude <u>107 03' 42" W</u> NAD 1927 <input checked="" type="checkbox"/> 1983 <input type="checkbox"/>		
Surface Owner Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input checked="" type="checkbox"/> Indian <input type="checkbox"/>		
<b>Pit</b> Type <input checked="" type="checkbox"/> Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type <u>Synthetic</u> <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume <u>15.228</u> bbl	<b>Below-grade tank</b> Volume <u>      </u> bbl Type of fluid <u>      </u> Construction material <u>      </u> Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not <u>      </u>	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water)	Less than 50 feet	(20 points)
	50 feet or more, but less than 100 feet	(10 points)
	100 feet or more	( 0 points) 0
Wellhead protection area (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)	Yes	(20 points)
	No	( 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	(20 points)
	200 feet or more, but less than 1000 feet	(10 points)
	1000 feet or more	( 0 points) 0
<b>Ranking Score (Total Points)</b>		

**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	RCVD MAY 15 '08
The Cougar Com 4 #2A was closed on 5/6/2008	OIL CONS. DIV.
2,000 ppm TPH closure standard approved by Brandon Powell on 4/29/08	DIST. 3
Risk of flow into drainage west of the pit is negligible due to slope from the pit area to the east	
EnviroTech Labs report is attached	

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 5/12/2008

Printed Name/Title Deborah Powell/Engineering Supervisor Signature Deborah Powell

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.

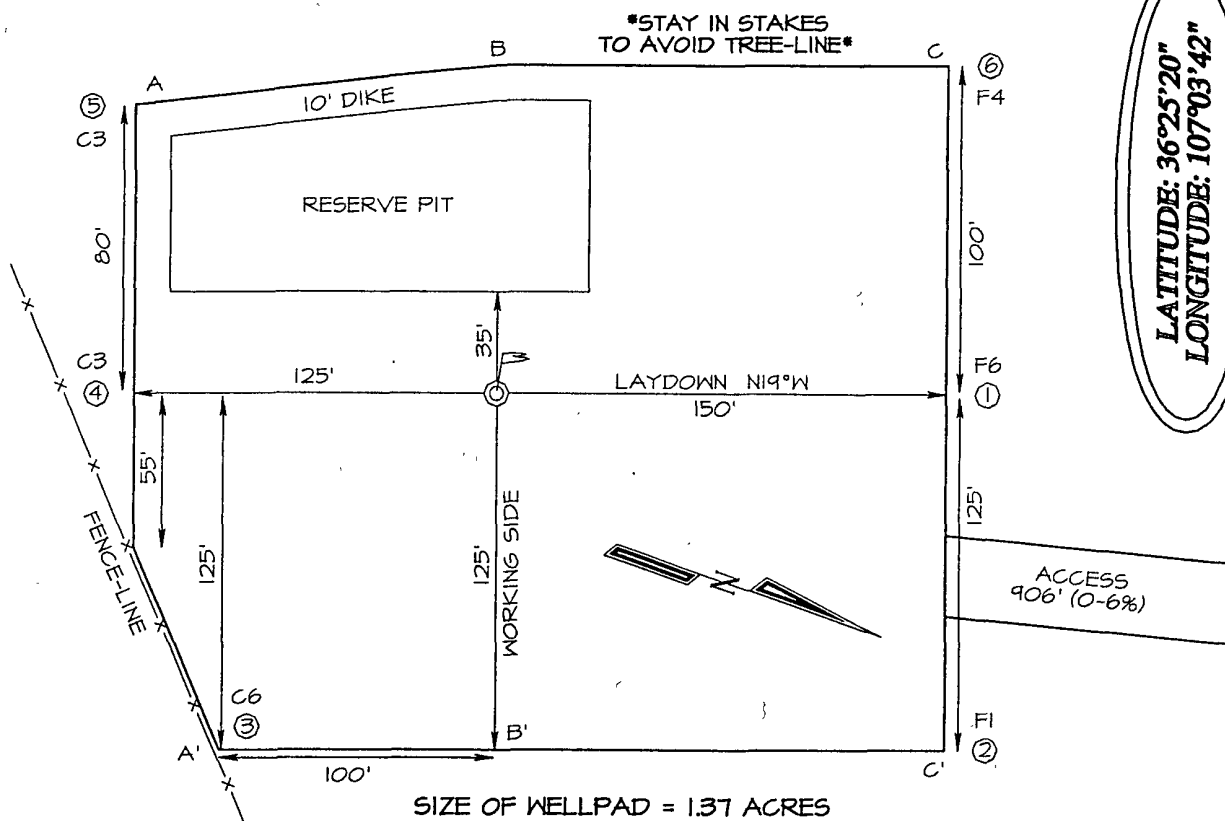
Approval Oil & Gas Inspector,  
Printed Name/Title District #3

Signature Bob Powell

Date

MAY 30 2008

**McELVAIN OIL & GAS PROPERTIES COUGAR COM 4 #2A**  
**935' FSL, 835' FWL, SECTION 4, T25N, R2W, NMPM**  
**RIO ARriba COUNTY, NM, GROUND ELEVATION: 7513'**



LATITUDE: 36°25'20"  
LONGITUDE: 107°03'42"

A-A'						
7523'						
7513'						
7503'						
B-B'						
7523'						
7513'						
7503'						
C-C'						
7523'						
7513'						
7503'						

# ENVIROTECH LABS

**PRACTICAL SOLUTIONS FOR A BETTER TOMORROW**

## **EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons**

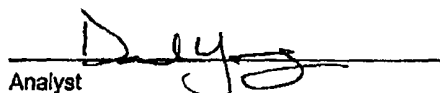
Client:	McElvain Oil	Project #:	06039-008
Sample ID:	Composite #1	Date Reported:	04-14-08
Laboratory Number:	44905	Date Sampled:	04-11-08
Chain of Custody No:	4196	Date Received:	04-11-08
Sample Matrix:	Soil	Date Extracted:	04-11-08
Preservative:	Cool	Date Analyzed:	04-14-08
Condition:	Intact	Analysis Requested:	8015 TPH

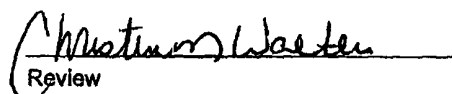
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	1,770	0.1
Total Petroleum Hydrocarbons	1,770	0.2

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: **Cougar Com 4 #2A.**

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: McElvain Oil  
Sample ID: Composite #2  
Laboratory Number: 44906  
Chain of Custody No: 4196  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Intact

Project #: 06039-008  
Date Reported: 04-14-08  
Date Sampled: 04-11-08  
Date Received: 04-11-08  
Date Extracted: 04-11-08  
Date Analyzed: 04-14-08  
Analysis Requested: 8015 TPH

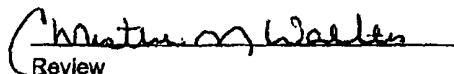
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.0	0.2
Diesel Range (C10 - C28)	192	0.1
Total Petroleum Hydrocarbons	193	0.2

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: Cougar Com 4 #2A.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	McElvain Oil	Project #:	06039-008
Sample ID:	Composite #3	Date Reported:	04-14-08
Laboratory Number:	44907	Date Sampled:	04-11-08
Chain of Custody No:	4196	Date Received:	04-11-08
Sample Matrix:	Soil	Date Extracted:	04-11-08
Preservative:	Cool	Date Analyzed:	04-14-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	102	0.1
Total Petroleum Hydrocarbons	102	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: Cougar Com 4 #2A.

Analyst

Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

### Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-14-08 QA/QC	Date Reported:	04-14-08
Laboratory Number:	44880	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-14-08
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	9.9482E+002	9.9522E+002	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.9744E+002	9.9784E+002	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

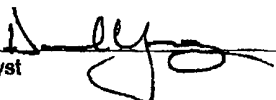
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	15.6	15.5	0.6%	0 - 30%
Diesel Range C10 - C28	17.7	17.6	0.6%	0 - 30%

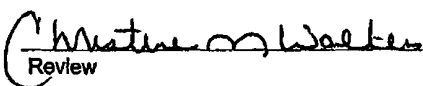
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	15.6	250	262	98.5%	75 - 125%
Diesel Range C10 - C28	17.7	250	267	99.6%	75 - 125%

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: QA/QC for Samples 44880, 44886, 44890 - 44892 and 44905 - 44907.

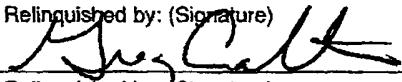

Analyst 

Review 

# CHAIN OF CUSTODY RECORD

4196

USA

Client: <b>McElvain Oil</b>			Project Name / Location: <b>Cougar Corn 4 #2A</b>			ANALYSIS / PARAMETERS														
Client Address:			Sampler Name: <b>G. Crabtree</b>			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)					Sample Cool	Sample Intact
Client Phone No.:			Client No.: <b>06039-008</b>																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative H <sub>2</sub> O <sub>2</sub> HNO <sub>3</sub> Cool														
Composite #1	4/11/08	1202	44905	Soil	1-4oz		✓	✓												
Composite #2	✓	1215	44906	✓	✓		✓	✓												
Composite #3	✓	1230	44907	✓	✓		✓	✓												
Relinquished by: (Signature) 						Date 4/11/08	Time 1610	Received by: (Signature) 						Date 4/11/08	Time 1610					
Relinquished by: (Signature)								Received by: (Signature)												
Relinquished by: (Signature)								Received by: (Signature)												
<b>ENVIROTECH INC.</b> 5796 U.S. Highway 64 • Farmington, New Mexico 87401 • (505) 632-0615																				