

**2R-059**

**Final Closure**

**DATE:**

**August 19, 2010**

**Price, Wayne, EMNRD**

---

**From:** Price, Wayne, EMNRD  
**Sent:** Thursday, June 07, 2007 2:15 PM  
**To:** 'dorseyrogers@aol.com'  
**Cc:** 'eahodge@leaco.net'; Bratcher, Mike, EMNRD  
**Subject:** Cimarex Crawford #26-2 OCD case # 2R0059

Dear Mr. Rogers:

OCD is in receipt of the closure work plan for the above subject facility and hereby approves of the plan with the following conditions:

1. Notify the OCD District office of significant activities.
2. Submit a final closure report with photo for OCD approval.
3. Please use the OCD case # 2R0059 on all correspondence and include this approval in the final report.

Please be advised that OCD approval of this plan does not relieve the owner/operator of responsibility should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.





*Cimarex Energy Company of Colorado  
Dorsey Rogers  
207 South Mesa  
Carlsbad, New Mexico 8822*

# *Final Closure Report*

*Crawford #26-2 Reserve Drilling Pit, API: 30-015-33228  
Sec. 26 24S 26E – Eddy County, New Mexico  
(OCD Case #2R0059)*

*Prepared by:*

*Phoenix Environmental, LLC.*

*P.O. Box 1856  
Hobbs, New Mexico 88240*





## PHOENIX ENVIRONMENTAL LLC

P.O. Box 1856

2113 French Dr.

Hobbs, NM 88241-1856

Office 505-391-9685

Fax 505-391-9687

August 19, 2007

New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Attn: Mr. Wayne Price

Re: Cimarex Energy's Crawford #26-2 Reserve Drilling Pit **Final Closure Report**  
API: 30-015-33228 – Sec. 26 24S 26E – Eddy County, New Mexico  
**(OCD Case #2R0059)**

Dear Mr. Price:

Please let us take this time to thank you and your technical staff for your aid and assistance in the closure of Ciramex Energy's Crawford #26-2 reserve drilling pit, in Eddy County, New Mexico.

As per your instructions, monitor wells were installed and the pit closure incorporated a subsurface reinforced HDPE liner to mitigate chloride contamination or secondary environmental impact to the underlying fresh water.

This report contains information on the remediation, with work progress, sampling, testing, subsurface liner installation, bore hole drilling and testing, monitor well information and locations, along with pertinent photographs of the entire remediation and closure. It further contains your approval notification for closure along with the initial and final NMOCD C-144 Forms.

If you have any questions or desire further information, please do not hesitate to contact us at anytime.

Best regards,

PHOENIX ENVIRONMENTAL, LLC

Allen Hodge

Vice President/Operations

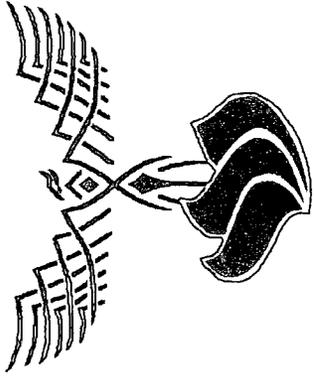
## TABLE OF CONTENTS

<u>Item</u>	<u>Pages(s)</u>
<b><u>Section - I</u></b>	
<i>Project History .....</i>	<i>1</i>
<i>Topo Map #1 – Local Area .....</i>	<i>1</i>
<i>Google Area Photo #1.....</i>	<i>2</i>
<i>Project Overview .....</i>	<i>2</i>
<i>Chronology of Initial Closure .....</i>	<i>2-9</i>
<i>Table #1 - Background Samples Analyses.....</i>	<i>3</i>
<i>Table #2 - River Water Samples Results.....</i>	<i>4</i>
<i>Table #3 - Soil Chloride Results on Sampling Grid .....</i>	<i>5</i>
<i>Table #4 - Bore Hole Soil Lithology.....</i>	<i>6</i>
<i>Table #5 - Bore Hole Chloride Results .....</i>	<i>7</i>
<i>Table #6 - Bore Hole Chloride Leachability.....</i>	<i>7</i>
<i>Table #7 - Monitor Well Positioning.....</i>	<i>8</i>
<i>Drawing #1 - Orientation of Monitor Wells at Location.....</i>	<i>8</i>
<i>Table #8 - Monitor Well Chloride Results .....</i>	<i>9</i>
<i>Chronology of Final Closure.....</i>	<i>9-10</i>
<i>Summary and Conclusions.....</i>	<i>10-11</i>
<b><u>Section - II</u></b>	
<i>Pictorial Review .....</i>	<i>12-21</i>
<b><u>Section - III</u></b>	
<i>Appendix.....</i>	<i>22-24</i>
<i>NMOCD Final Closure Approval .....</i>	<i>22</i>
<i>NMOCD Form C-144 Initial Closure Form.....</i>	<i>23</i>
<i>NMOCD Form C-144 Final Closure Form.....</i>	<i>24</i>

### **IMPORTANT NOTICE:**

*Phoenix Environmental, LLC., with offices at 2113 French Drive, Hobbs, New Mexico 88241 (the Company), has prepared this project report for final closure of the Crawford #26-2 reserve drilling pit, to the best of its ability. No warranty, expressed or implied, is made or intended. The report was prepared for Cimarex Energy Company, with offices at 207 South Mesa, Carlsbad, New Mexico 88220, (the Client). All information disclosed in this plan is for internal purposes only and is considered confidential. By accepting this document, the recipient agrees to keep confidential the information contained herein. The recipient further agrees not to copy, reproduce or distribute to any third party this project plan in whole or in part, without express written permission from the Company or Client.*





# *SECTION I*



# Final Closure Report

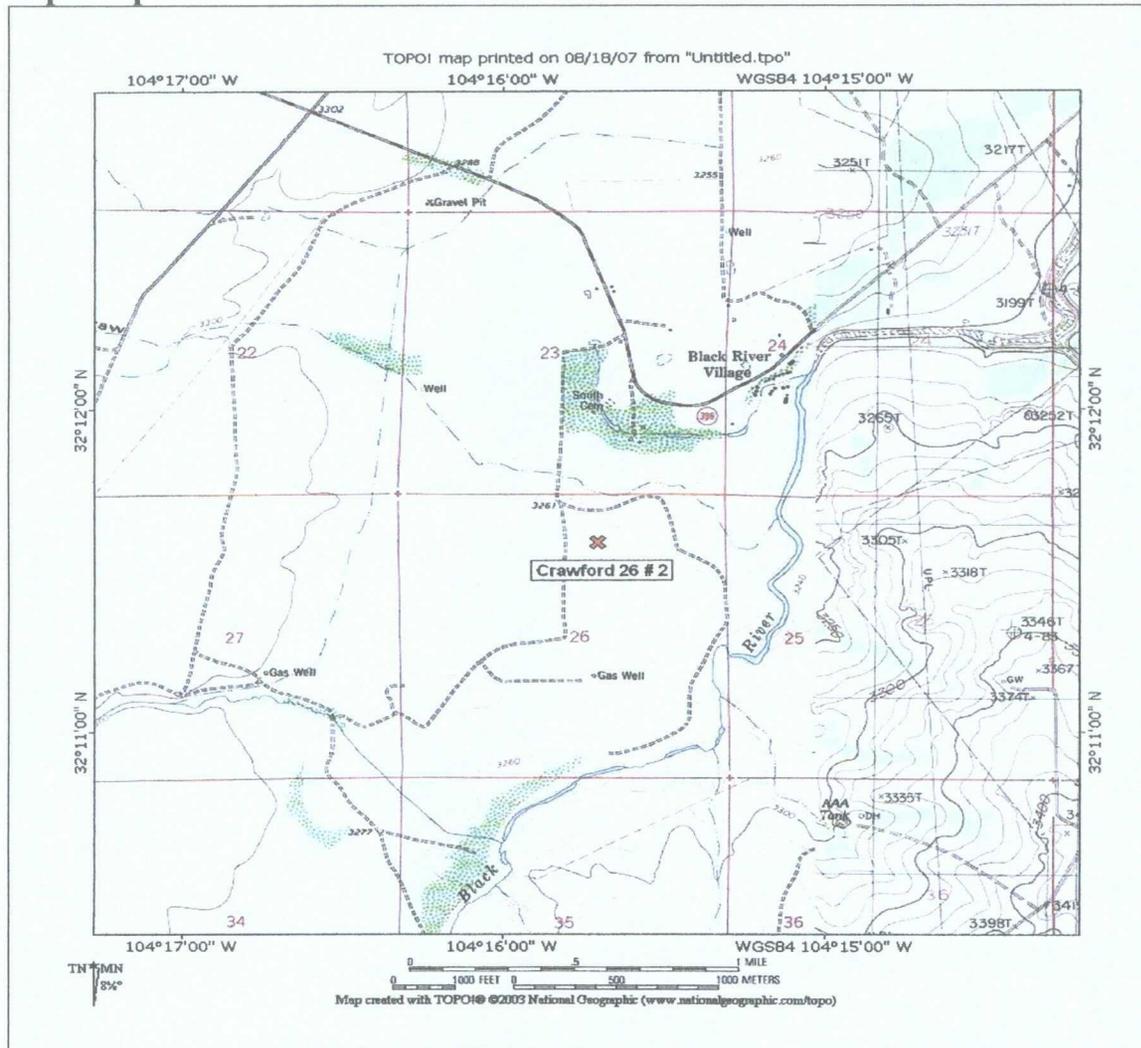
Company: Cimarex Energy Company of Colorado  
Location: Crawford #26-2 (OCD Case #2R0059)

## Project History

Gruy Petroleum Management Company based out of Irving, Texas completed the Crawford #26-2 well on August 29, 2005. A subsequent NMOCD Form C-103 filed on June 8, 2005 indicated that a reserve drilling pit had not been declared on the location. The property was transferred through normal channels utilizing NMOCD Form C-104B and approved by the NMOCD on May 15, 2006 to Cimarex Energy Company of Colorado; the pit was still open after the transfer.

Cimarex received a Letter of Violation #20623, dated July 24, 2006, violation of Rule 50 and possible Rule 116 violation. The LOV called for corrective action on the pit with a response not later than August 24, 2006. On August 14, 2006, NMOCD form C-144 with attached Closure Plan was submitted to Mr. Mike Bratcher at the Artesia NMOCD.

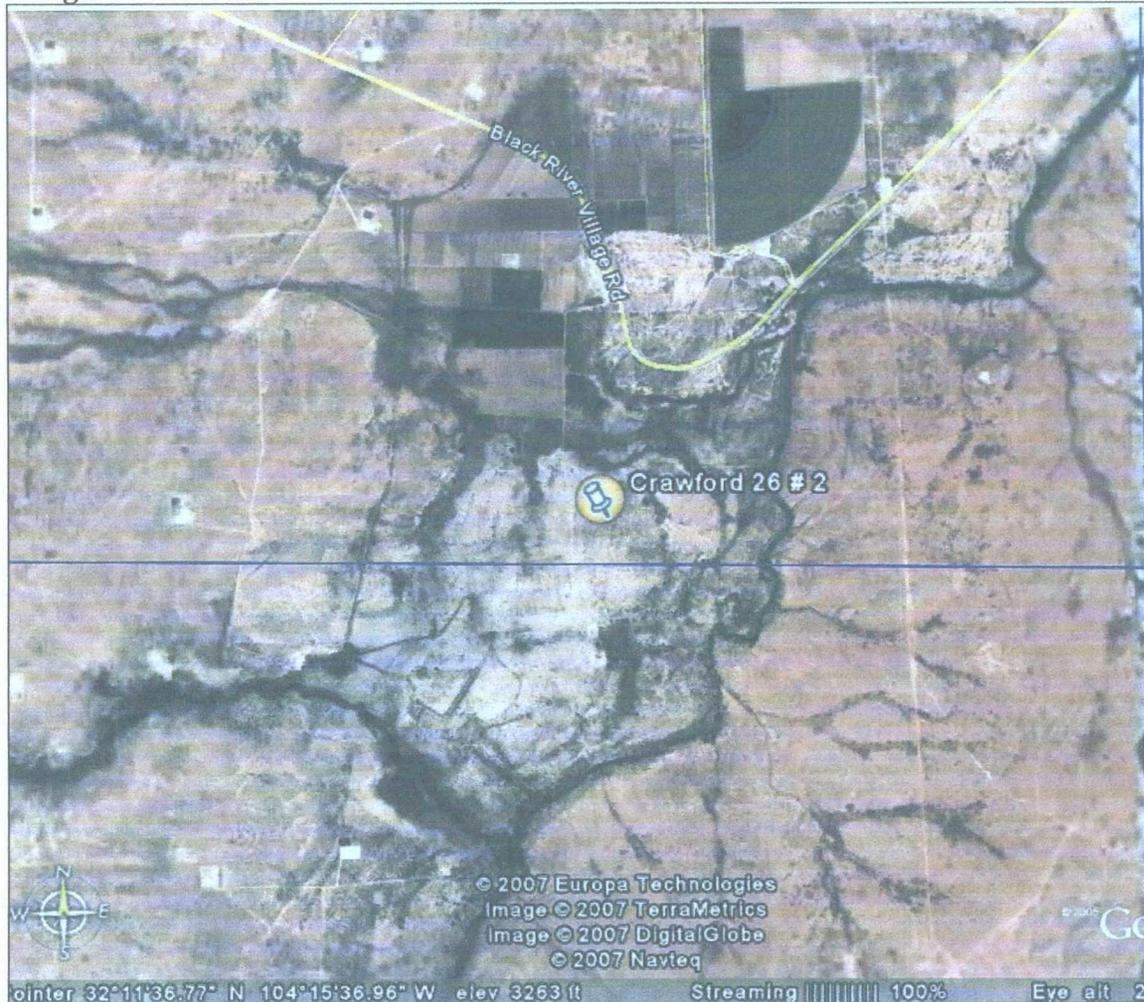
## Topo Map #1 – Local Area



## Final Closure Report

Company: Cimarex Energy Company of Colorado  
Location: Crawford #26-2 (OCD Case #2R0059)

### Google Area Photo #1



### Project Overview

Initial work on the location was scheduled to begin with notification to the NMOCD on September 24, 2006. The pit dimensions were 135' x 155' x 10' with a 12 mil liner that contained approximately 4,500 to 5,000 cubic yards of material in the pit with 60 to 70% of that volume being wet solids which would have to be stabilized with clean dry soil for transport to CRI, an approved NMOCD disposal facility.

### Chronology of Initial Closure

09/25/06 – Equipment was mobilized onto location to begin the closure activities.



**Final Closure Report**

Company: Cimarex Energy Company of Colorado  
 Location: Crawford #26-2 (OCD Case #2R0059)

09/27/06 – Background samples were taken for analysis by Trace Analysis, Inc. of Lubbock, Texas. Soil stabilization and hauling to CRI was commenced.

09/28/06 – Continued stabilization and hauling.

**Table #1 - 09/28/06 – Background Samples Analyses**

Trace #	Field Designation	Location and Depth	Chloride (mg/kg)
104521	North	350' from wellhead – 24"	15.7
104522	South	350' from wellhead – 24"	11.3
104523	East	350' from wellhead – 24"	10.3
104524	West	350' from wellhead – 24"	10.0

09/29/06 – Continued stabilization and hauling.

09/30/06 – Continued stabilization and hauling. The pit has now been excavated to 2' below the level of the liner at a total depth of 12' below surface.

10/02/06 – Random field samples taken and screened for chloride content, which indicated that additional soils would have to be removed for disposal. The dirt contractor was instructed to remove another 1' of soil from the bottom of the pit and transported for disposal.

10/03/06 - Additional samples were taken and another 3' of soils were scheduled for excavation and disposal.

10/04/06 - The pit floor is now at 16' with removal of additional 14" of the horseshoe soils removed. Additional field samples were analyzed and the remainder of the horseshoe was removed.

10/05/06 - Continued excavation and transport to disposal facility.

10/06/06 - Continued excavation and transport to disposal facility.

10/07/06 - Continued excavation and transport to disposal facility.

10/09/06 - Continued excavation and transport to disposal facility.

10/10/06 - Finished removing remainder of horseshoe and began squaring up the side of the pit and continued transporting contaminated soils to disposal.



**Final Closure Report**

Company: Cimarex Energy Company of Colorado  
Location: Crawford #26-2 (OCD Case #2R0059)

10/11/06 - Additional samples taken and transit was used to measure depth of pit.  
Northwest corner: 14' 5"  
Northeast corner: 16' 5"  
Southwest corner: 12' 5"  
Southeast corner: 16' 5"  
Center: 16' 5"

Contractor was instructed to remove additional soils from the pit walls.

10/13/06 - Samples taken and screening revealed additional wall soils needed to be removed.

10/14/06 - Continued excavating and transporting soils for disposal.

10/16/06 - Continued excavating and transporting soils for disposal.

10/17/06 and 10/18/06 – Rain event caused delay of grid placement for soil samples for third party laboratory verification.

10/19/06 - Grid was laid out for verification laboratory sampling. NMOCD was notified of sampling intent for 10/20/06.

10/20/06 - A total of 78 samples were taken from the pit and 2 water samples from the Black River and sent to Trace Analysis, Inc. for analysis. Chlorides, BTEX, TPH (GOR & DOR) was requested on the samples. To Date: 11,350 cubic yards of contaminated soils were transported to CRI for disposal.

**Table #2 – Trace Analysis River Water Sample Results**

Trace #	Description	Matrix	Chloride (mg/L)
10645	River #1	Water	18.2
10646	River #2	Water	18.0



**Table #3 - Trace Analysis – Soil Chloride Results Indicated on Sampling Grid**

← 155' →													
1	2	3	4	5	6	7	8	9	10	11	12	13	14
4.56	45			4.56			719		1430				
8	9	10	11	12	13	14	15	16	17	18	19	20	21
				5.8						3540		2540	
15	16	17	18	19	20	21	22	23	24	25	26	27	28
6.62				28.6			10400		8620		2310		
22	23	24	25	26	27	28	29	30	31	32	33	34	35
	9.52	12.8					17			4820			442
29	30	31	32	33	34	35	36	37	38	39	40	41	42
		455			10300						191		
36	37	38	39	40	41	42	43	44	45	46	47	48	49
			7100				12600	6620					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
							11	201					
8	9	10	11	12	13	14	15	16	17	18	19	20	21
											17.4		12.3
15	16	17	18	19	20	21	22	23	24	25	26	27	28
		1070	3090	5740	7660		4510		11300		581		765
22	23	24	25	26	27	28	29	30	31	32	33	34	35
	1310		5530	4930	12600	4660	3700	4080					810
29	30	31	32	33	34	35	36	37	38	39	40	41	42
	2910										12		
36	37	38	39	40	41	42	43	44	45	46	47	48	49
	2910												

Drilling Pit Floor Is Approximately 155' x 135' x 16' Deep (Squares – Approx 11' x 11')

10/30/06 - Representatives for Cimarex and Mike Bratcher (NMOCD) met at the pit to discuss sampling results and options for closure. It was determined to drill a 30' hole outside of the pit for lithology directly outside the pit.

10/31/06 - Drilled a 30' test hole. Representative samples were taken at each 1' interval and sent for analysis. Hole left open to check for water intrusion.



**Final Closure Report**

Company: Cimarex Energy Company of Colorado

Location: Crawford #26-2 (OCD Case #2R0059)

**Table #4 – Bore Hole Soil Lithology**

<b>Bore Hole Depth</b>	<b>Lithology Description</b>
0 – 5'	SOIL LTRD TN CRM VFXLN – CALCARIOUS MARL – NO VIS CARB OR ORGANIC MATERIL SM SILTY SUBRNDD QTZ SM IMBDD ANHY INCLSN
5 – 10'	SOIL CRM LTN VFXLN MARL – STRONG ACID REACT TN AMORPH CLAR RESIDUE – SM SILTY / SD SIZE ANHY CLAST SM AS INCLSN DRY WHEN COLLECTED – SFT SLICK MUSHY TACKY WHEN MOISTENED – NO VIS ORGANIC ALOCHEM
10 – 15'	SOIL TN LTGYTN CRM VFG – CALCAREIOUS MARL SM ANHYDRC – SM W/GYP INCL – DRY WHEN COLLECTED – STRONG REACTION TO ACID GYP & GELLATNOUS CLARY RESIDUE – NO VIS ORGANIC ALLOCHEM - POWDERY
15 – 20'	SOIL A/A CLAY LTTN OFFWH LTGY – AMORPH ANHYDRC CALC IP SLIGHTLY MOIST @ COLLECTION
20 – 25'	CLAY LTGYTN CRM OFFWH – SFT PLASTIC NON REACT TO ACID – SM ANHY INCLS DEFORMS WELL
25 – 30'	SOIL A/A ABNT SML ANHY – GLASSY PARTICALS SM AS INCLSN DRY WHEN SAMPLED SOIL LTGYTN CLAY SM ANHYDRN IP PLASTIC CALCARIOUS IP PLASTIC TD NOTE NO FLUID INTRY AFTER 24 HOURS

11/01/06 - No water intrusion was observed.

11/06/06 - Results of bore testing received and NMOCD requested two more bore holes being drilled in the pit to 4' below floor and samples to be taken at each 1' interval for analysis.

11/08/06 - NMOCD informed of soil sample results and per NMOCD bore holes were deepened to 30' below surface level with samples taken at 1' intervals for analysis.

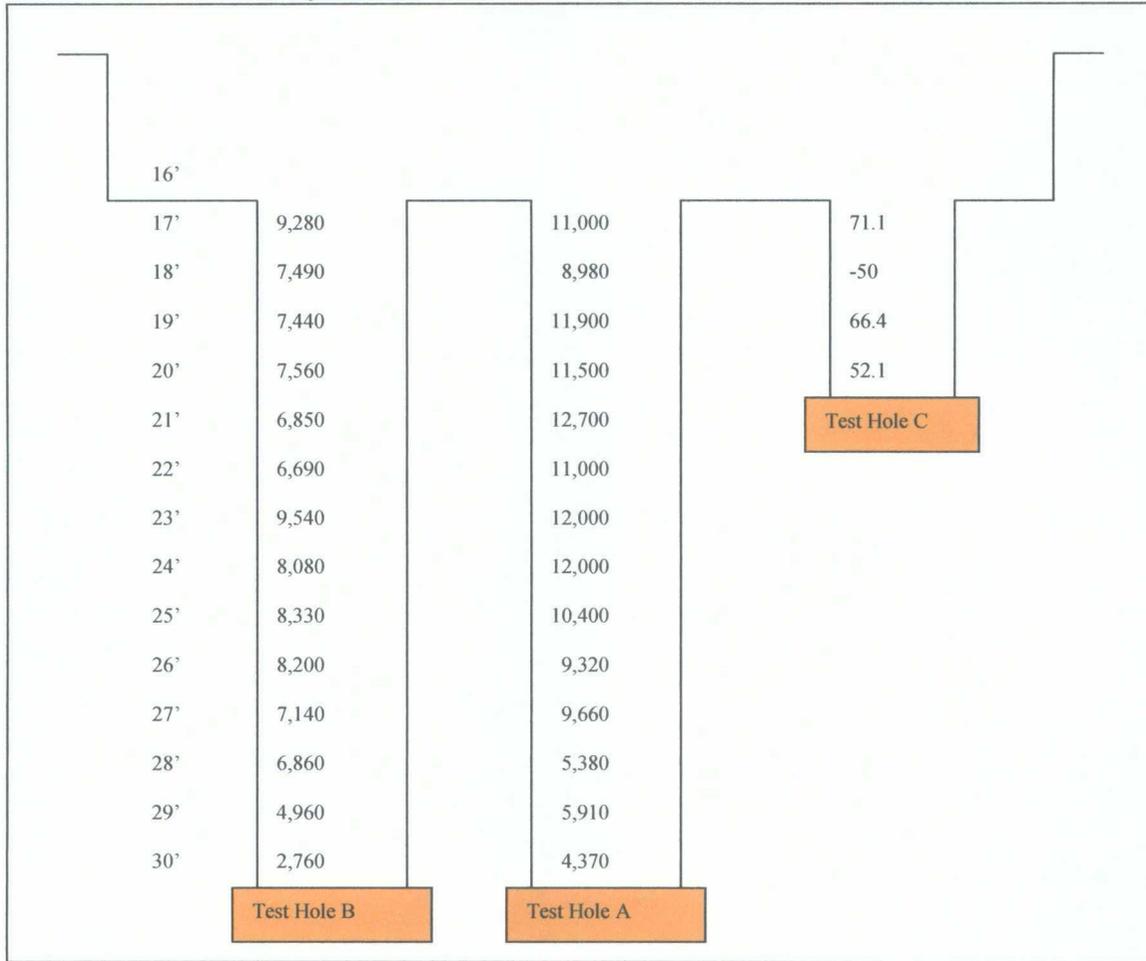


**Final Closure Report**

Company: Cimarex Energy Company of Colorado

Location: Crawford #26-2 (OCD Case #2R0059)

**Table #5 – Trace Analysis Bore Hole Results** (Please refer to Table #2 for locations)



11/09/06 - With assistance from BBC International as instructed, samples were taken and delivered to Trace Analysis, Inc. for analysis.

**Table #6 - 11/20/06 – Trace Analysis Bore Hole Chloride Leachability**

Trace #	Field Code and Depth	Total Cl- (mg/kg)	SPLP (mg/L)	% Leachable
108545	1A-21'	12,700	1,330	10
108550	6A-26'	9,320	873	9
108554	10A-30'	4,370	488	11
108555	1B-21'	6,850	695	10
108560	6B-26'	8,200	783	10
108564	10B-30'	2,760	342	12

11/21/06 - Dorsey Rogers (Cimarex Representative) met with Mike Bratcher (NMOCD) to layout the proposal to close the pit per NMOCD Rule 50.



**Final Closure Report**

Company: Cimarex Energy Company of Colorado  
 Location: Crawford #26-2 (OCD Case #2R0059)

The NMOCD out of Santa Fe replied back that the pit needed to be delineated to 250 mg/ml for chlorides, the contaminant of concern since hydrocarbons were nil at this stage of the excavation. Cimarex Energy decided to adjudicate this pit and meet with the NMOCD in Santa Fe to present the facts regarding this pit and present a proposal to close in accordance to the NMOCD Pit Rule 50.

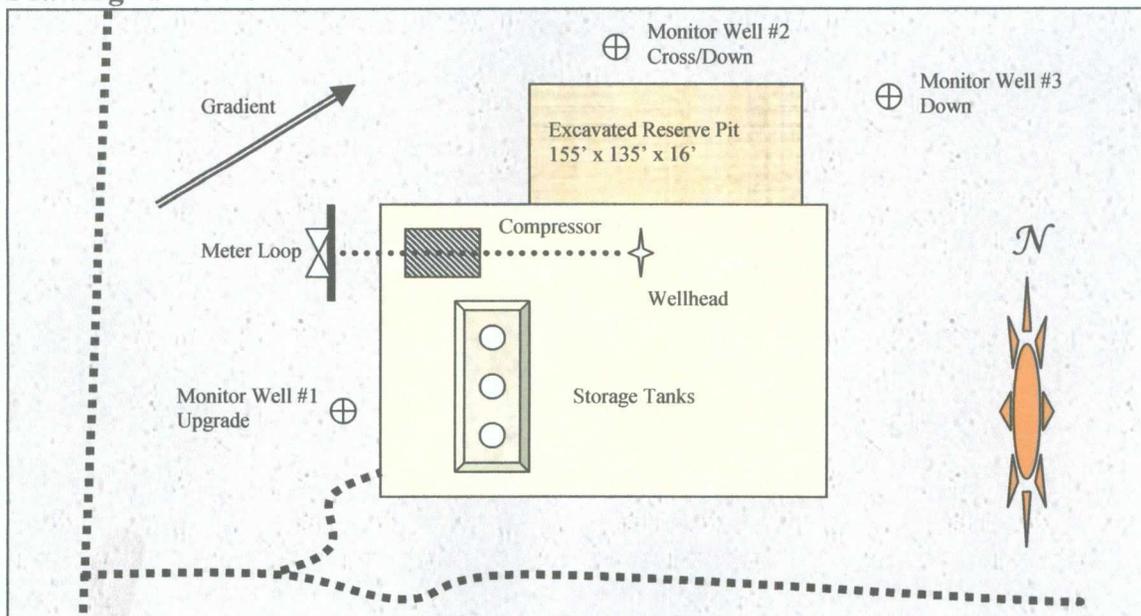
In early April 2007, a meeting was convened in at the NMOCD in Santa Fe with Technical Staff and Mr. Wayne Price. Members from Cimarex and Phoenix Environmental were in attendance where supporting data was supplied on the progress to date and to determine any further actions needed implement the Crawford #26-2 pit closure. It was determined at that meeting that three monitor wells would have to be installed around the pit to determine if any primary environmental impact had occurred at the site to prevailing groundwater.

On April 26, 2007 Cimarex contracted John White Environmental to drill monitor wells to water level being spotted by Allen Hodge of Phoenix Environmental.

**Table #7 – Monitor Well Positioning**

Boring #	X:Coordinate	Y:Coordinate	Depth to H <sub>2</sub> O	Total Depth	Position
1	433881.3 N	522313.3 E	22.0 Feet	40.0 Feet	Upgrade
2	433861.3 N	522313.3 E	18.0 Feet	40.0 Feet	Cross/Down
3	433881.3 N	522313.3 E	19.0 Feet	40.0 Feet	Down

**Drawing #1 – Orientation of Monitor Wells at Location**



## Final Closure Report

Company: Cimarex Energy Company of Colorado

Location: Crawford #26-2 (OCD Case #2R0059)

Field samples of waters were taken after well completion, following EPA SWA-846 sampling protocol. Disposable bailers were purged and rinsed with de-ionized water and lowered to below the water level. Samples were taken in preserved bottles and iced to transport to Trace Analysis Laboratory in Lubbock, Texas. Proper sample custody documents were attached with the samples and custody transferred to lab personnel by courier. Measurement were recorded by lab technicians and copies of results forwarded to Cimarex as well as NMOCD.

**Table #8– Trace Analysis Monitor Well Chloride Results**

Boring #	Location	Chloride (mg/L)
1	Upgrade	13.3
2	Cross/Down	14.2
3	Down	45.5

On June 7, 2007, a meeting was scheduled in Santa Fe at the NMOCD with Mr. Wayne Price with members from Cimarex and Phoenix Environmental to submit a Closure Work Plan for the Crawford #26-2 (OCD Case #2R0059). Mr. Price approved the closure utilizing a subsurface liner to mitigate chloride contamination to groundwater.

### Chronology of Final Closure

- 06/25/07 - NMOCD District Office was notified and Phoenix mobilized onto site and began building a crown in the pit with clean soils for placement of the subsurface liner.
- 06/26/07 - Finished crowning procedure in the bottom of the pit and pushed up backfill for the pit closure.
- 06/27/07 - Installed subsurface liner in the bottom of the pit over the crown with a 20 mil Reinforced HDPE Geomembrane liner which was trench anchored on the outside edge of the excavated pit to encourage shedding of any hydrostatic water permeating down to the liner to the outside of the affected area. Put a foot of clean soil over the liner and hauled in 34 loads of clean backfill material.
- 06/28/07 - Pushed up backfill and backfilled clean soils into the reserve drilling pit.
- 06/29/07 - Hauled in 37 loads of clean backfill and continued backfilling reserve drilling pit.



## Final Closure Report

Page 10 of 24

Company: Cimarex Energy Company of Colorado

Location: Crawford #26-2 (OCD Case #2R0059)

- 07/02/07 - Hauled in 65 loads of clean backfill and continued backfilling reserve drilling pit.
- 07/03/07 - Hauled in 69 loads of clean backfill and continued backfilling reserve drilling pit.
- 07/05/07 - Continued pushing up backfill and hauled in 102 loads of clean backfill and continued backfilling reserve drilling pit.
- 07/09/07 - Continued pushing up backfill and hauled in 91 loads of clean backfill and continued backfilling reserve drilling pit.
- 07/10/07 - Pushed up backfill and hauled in and hauled in 74 loads of clean backfill and continued backfilling reserve drilling pit.
- 07/11/07 - Pushed up backfill and backfilled reserve drilling pit.
- 07/12/07 - Continued pushing up backfill and hauled in 120 loads of clean backfill and continued backfilling reserve drilling pit.
- 07/13/07 - Pushed in stockpiled backfill material in reserve drilling pit.
- 07/23/07 - Hauled in 84 loads of clean backfill and continued backfilling reserve drilling pit.
- 07/24/07 - Hauled in 105 loads of clean backfill and continued backfilling reserve drilling pit.
- 07/25/07 - Hauled in 88 loads of clean backfill and continued backfilling reserve drilling pit and began dressing the location with a slight crown on the surface to impede any ponding problems due to rain.
- 07/26/07 - Finished dressing the location and prepped for reseeding of indigenous grasses over the location.

### Summary and Conclusions

Cimarex excavated approximately 12,500 cubic yards of soils and reserve drilling pit contents and disposed of the soils and contents at Control Recovery, Inc. (CRI), an approved NMOCD facility. Due to the close proximity to ground water and surface water (Black River) the location of the pit is in a sensitive area. A breach was found in the liner of the pit, which explains the voluminous amount of chloride contaminated material that had to be excavated for disposal.



**Final Closure Report**

Company: Cimarex Energy Company of Colorado  
Location: Crawford #26-2 (OCD Case #2R0059)

The pit was excavated to a depth of 16 +/- from ground level removing the source of the chloride contamination. Cimarex ran standard lechate tests on these soils to verify the theory that any further migration of chlorides or any appreciable concentration of chlorides to leach to fresh water was improbable due to this removal of source materials and composition of insitu soils.

As directed by the NMOCD, Cimarex installed three monitor wells to verify that area groundwater had not be impacted and the pit closure could proceed with the installation of a 20 mil subsurface liner at the bottom of the excavation. Phoenix Environmental completed the closure and installed the industry standard liner to alleviate any secondary environmental impact to groundwater.

**Limitations**

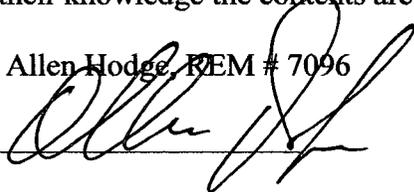
Phoenix Environmental LLC has prepared this report to the best of its ability. No other warranty expressed, implied or intended is made.

This report has been prepared for Cimarex Energy Company of Colorado our client. The information contained in this report including all exhibits and attachments, may not be used by any other party without the express consent from Phoenix Environmental LLC and/or the client.

**Certification**

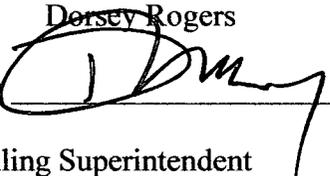
The following Phoenix/Cimarex personnel have reviewed this report and verify that to the best of their knowledge the contents are true and correct.

Name: Allen Hodge, REM # 7096

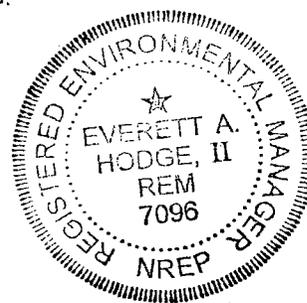
Signature: 

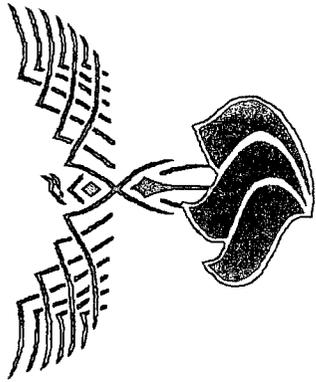
Title: VP Operations  
Phoenix Environmental LLC

Name: Dersey Rogers

Signature: 

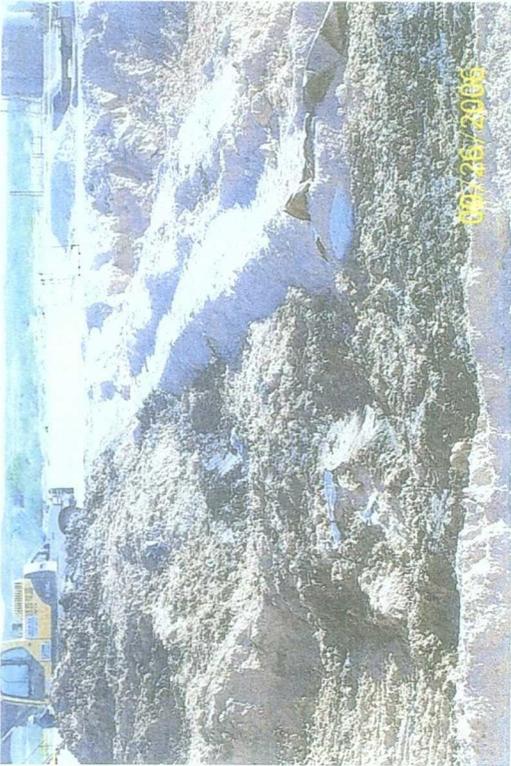
Title: Drilling Superintendent  
Cimarex Energy Company of Colorado



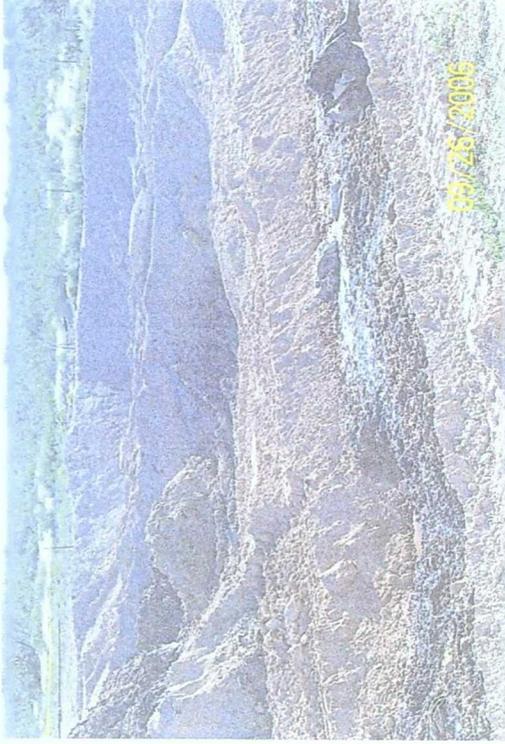


# SECTION II

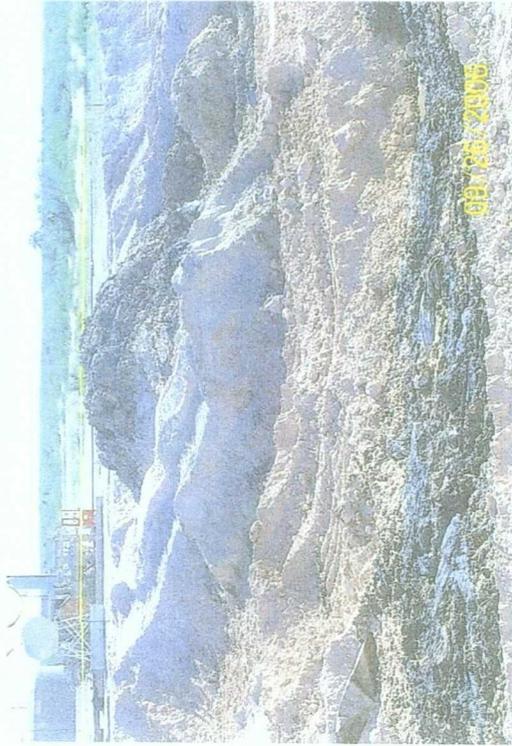




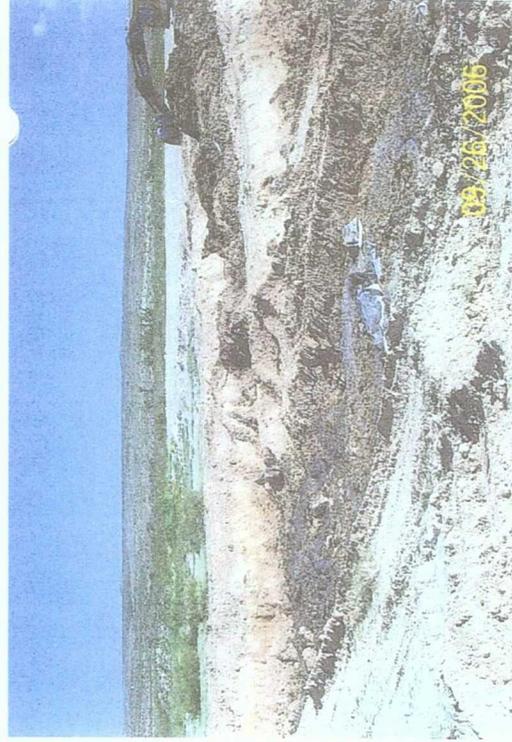
**Photo #3 – Blending Soils With Wet Contents**



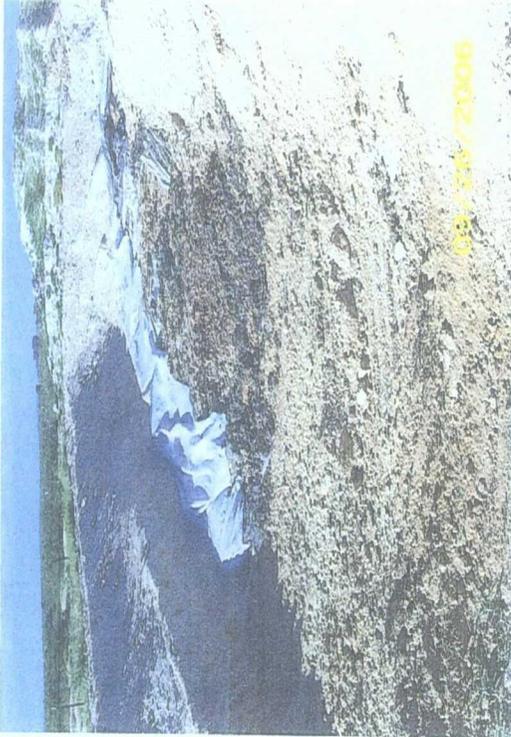
**Photo #4 – Blending Soils with Wet Contents**



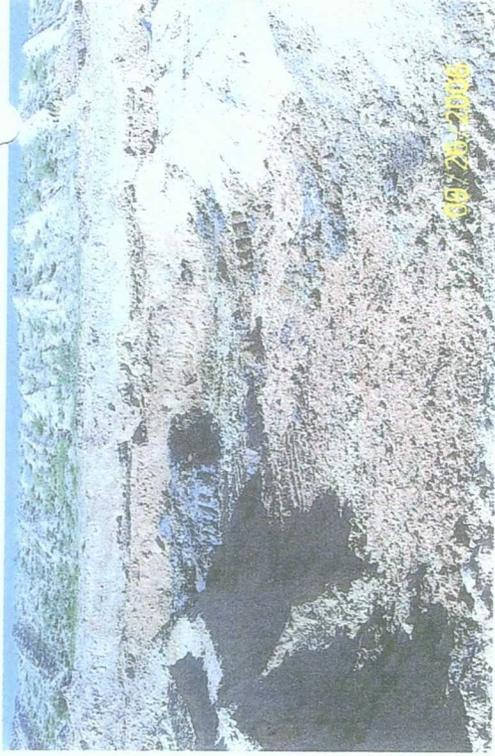
**Photo #1 – Reserve Drilling Pit (Contents)**



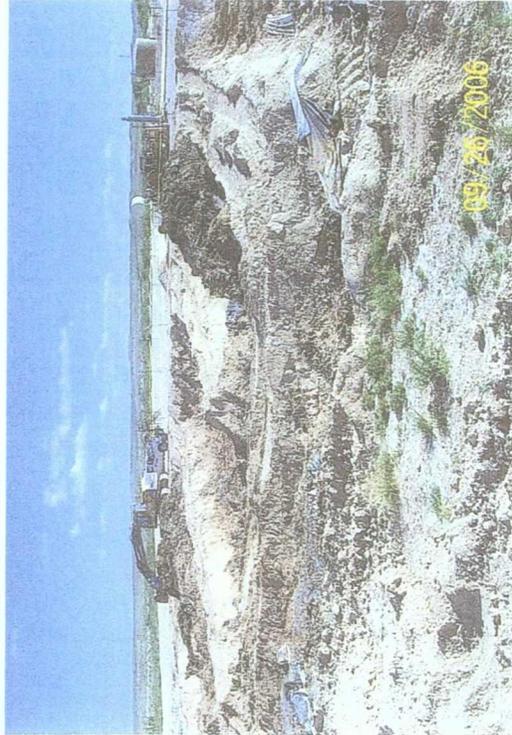
**Photo #2 – Reserve Drilling Pit (Contents)**



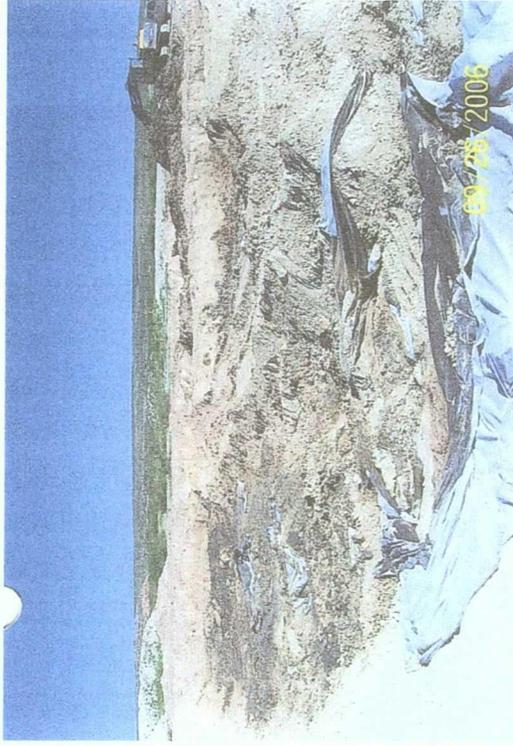
*Photo #7 – Blending Contents and Excavating*



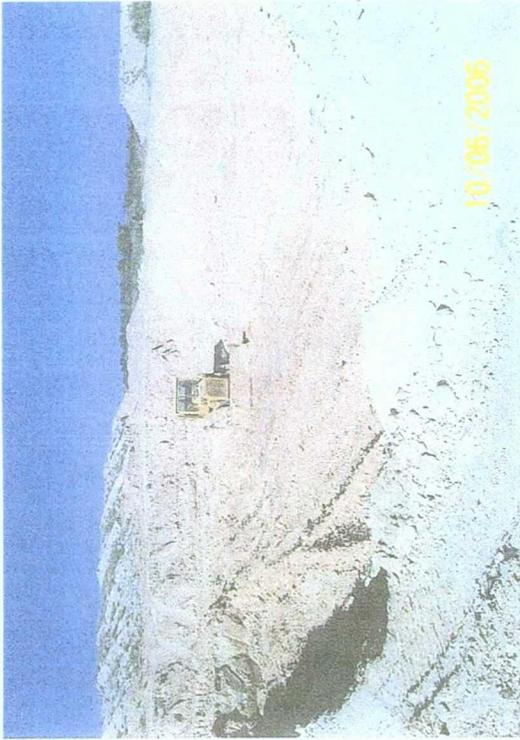
*Photo #8 – Blending Contents and Excavating*



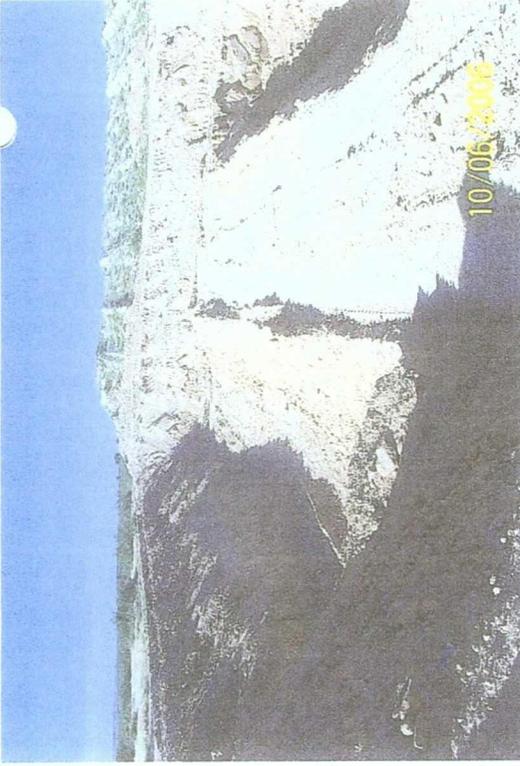
*Photo #5 – Blending Contents*



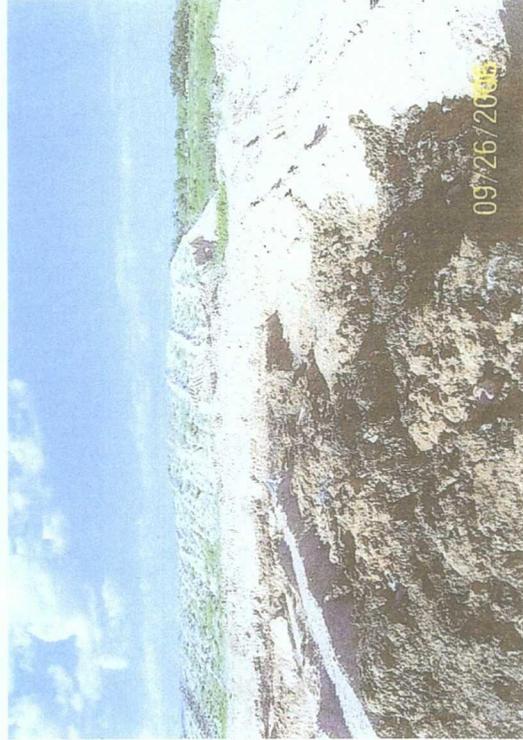
*Photo #6 – Blending Contents*



*Photo #11 - Excavating*



*Photo #12 - Excavating*



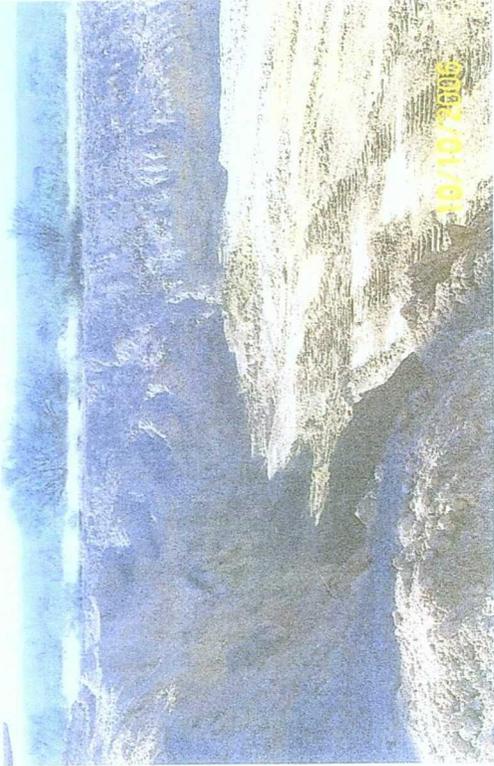
*Photo #9 Blending Contents With Soils*



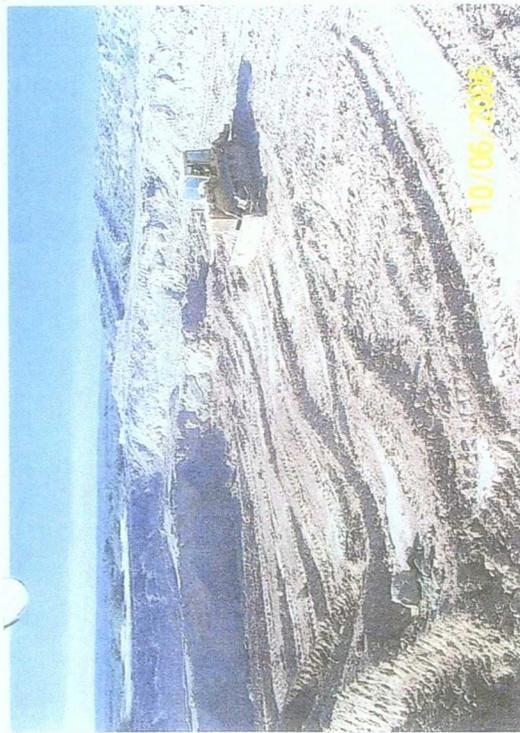
*Photo #10 View of Horseshoe*



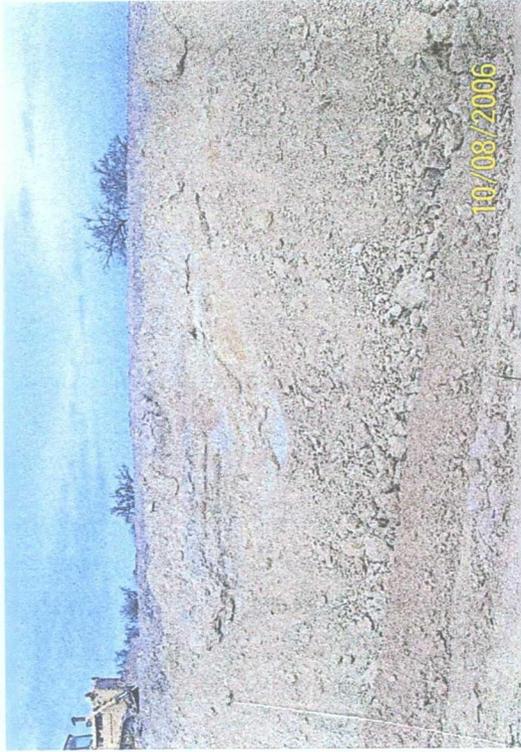
*Photo #15 - Excavating*



*Photo #16 - Excavating*

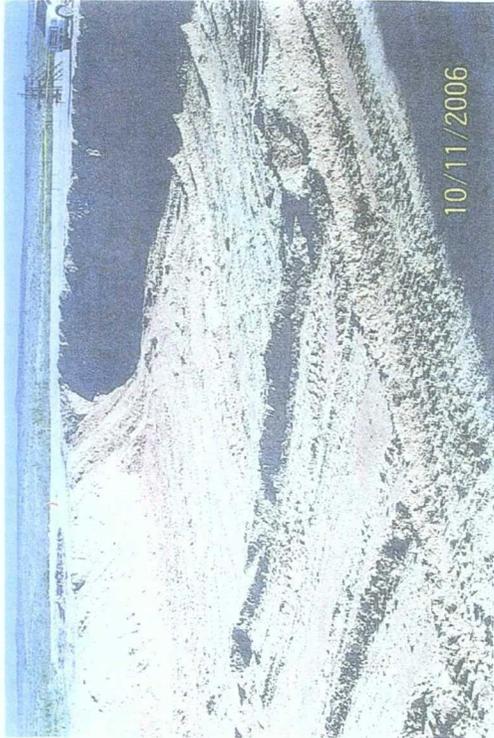


*Photo #13 - Excavating*

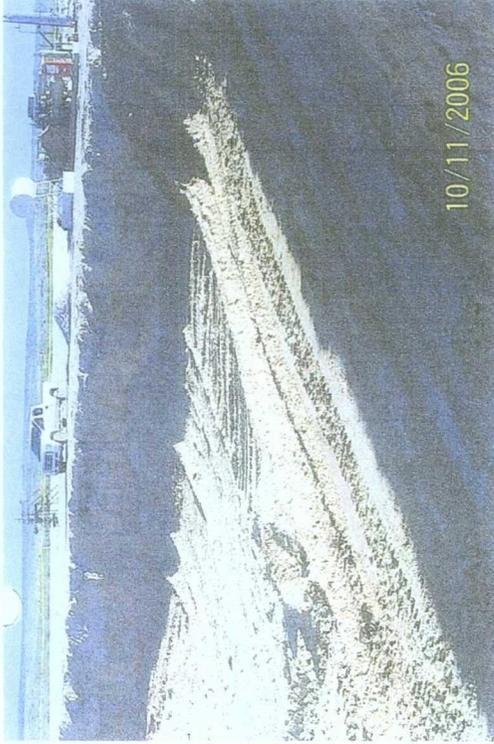


*Photo #14 - Excavating*





**Photo #19 - Excavating**



**Photo #20 - Excavating**

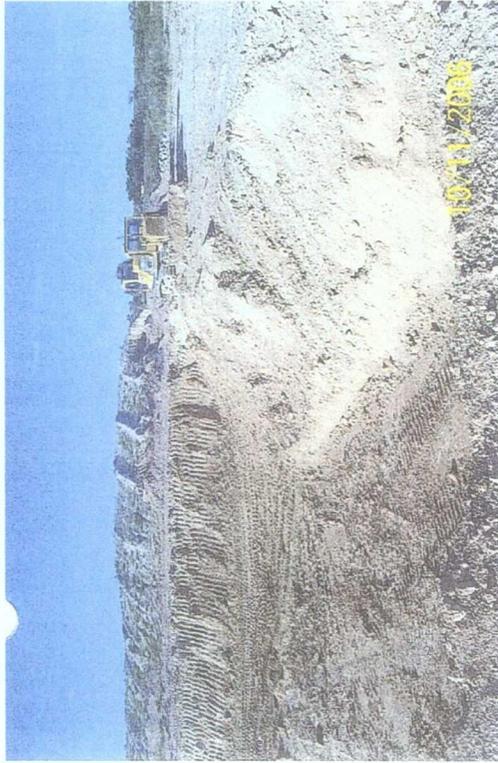


**Photo #17 - Excavating**



**Photo #18 - Excavating**

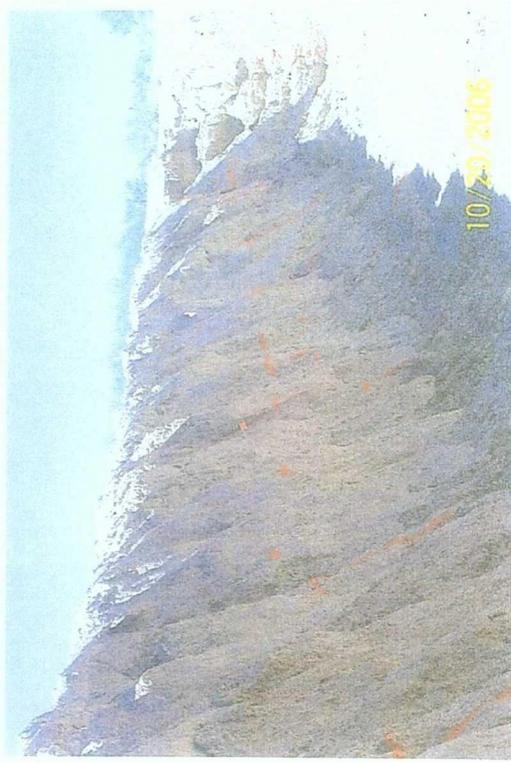




*Photo #23 - Excavation*



*Photo #24 - Laying Out Sampling Grid*



*Photo #21 - Laying Out Sampling Grid*



*Photo #22 - Laying Out Sampling Grid*



**Photo #27 – Building Bottom Crown For Liner**



**Photo #28 – Building Bottom Crown For Liner**



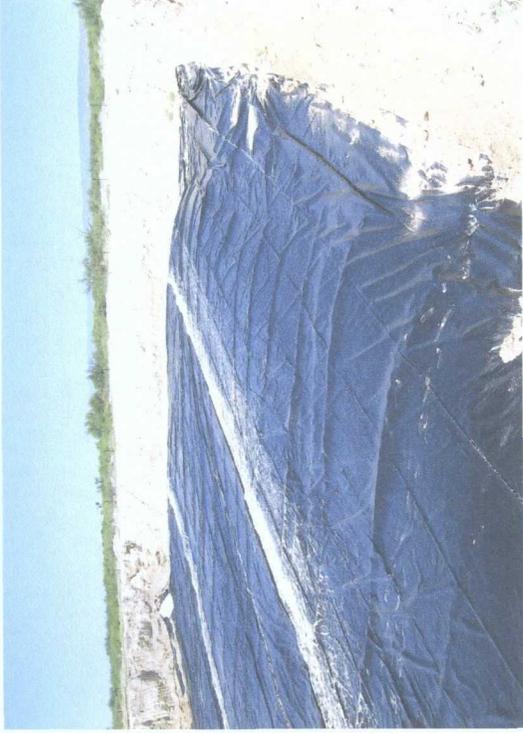
**Photo #25 – Building Bottom Crown For Liner**



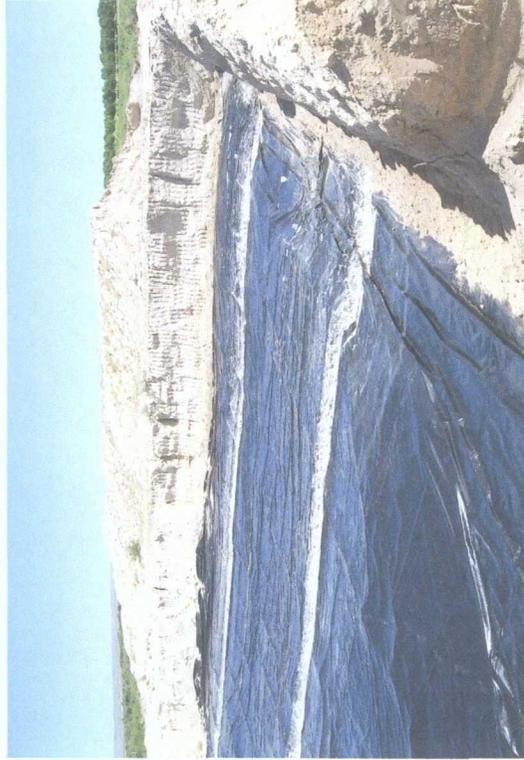
**Photo #26 – Building Bottom Crown For Liner**



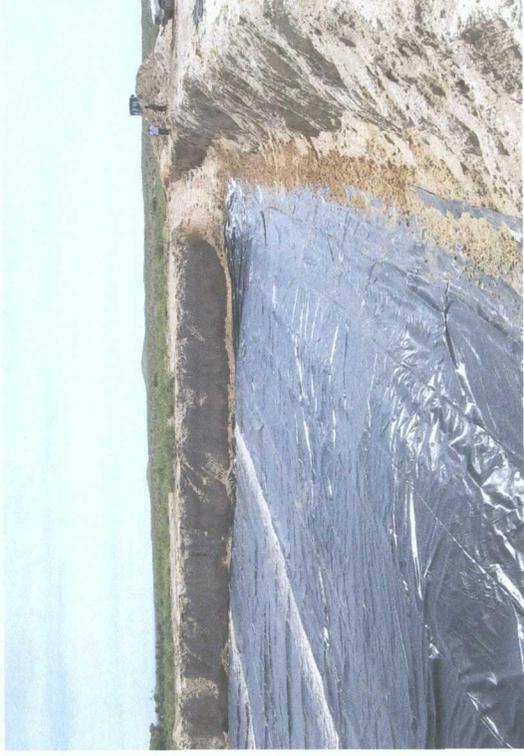
*Photo #31 – Installing Liner Over Crown*



*Photo #32 – Installing Liner Over Crown*



*Photo #29 – Installing Liner Over Crown*



*Photo #30 – Installing Liner Over Crown*



*Photo #35 - Backfilling Over Liner Crown*



*Photo #36 - Backfilling*



*Photo #33 - Backfilling Over Liner Crown*



*Photo #34 - Backfilling Over Liner Crown*

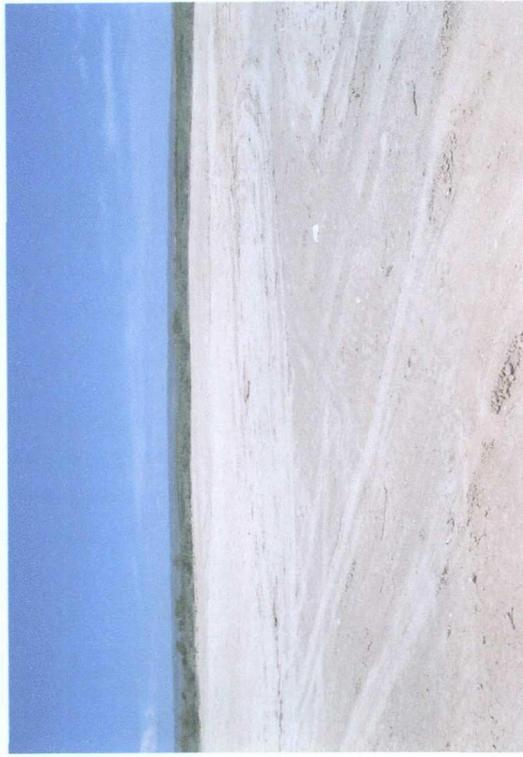




*Photo #39 – Dressing Location*



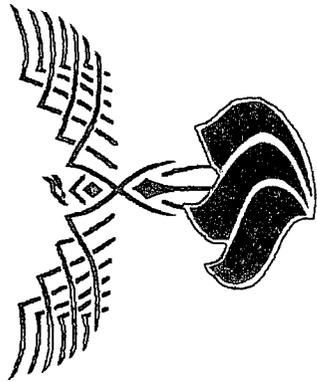
*Photo #40 – Dressing Location*



*Photo #37 – Dressing Location*



*Photo #38 – Dressing Location*



# *SECTION III*



**Allen Hodge**

---

**From:** "Price, Wayne, EMNRD" <wayne.price@state.nm.us>  
**To:** <dorseyrogers@aol.com>  
**Cc:** <eahodge@leaco.net>; "Bratcher, Mike, EMNRD" <mike.bratcher@state.nm.us>  
**Sent:** Thursday, June 07, 2007 2:15 PM  
**Subject:** Cimarex Crawford #26-2 OCD case # 2R0059

Dear Mr. Rogers:

OCD is in receipt of the closure work plan for the above subject facility and hereby approves of the plan with the following conditions:

1. Notify the OCD District office of significant activities.
2. Submit a final closure report with photo for OCD approval.
3. Please use the OCD case # 2R0059 on all correspondence and include this approval in the final report.

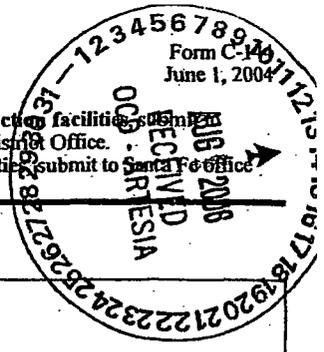
Please be advised that OCD approval of this plan does not relieve the owner/operator of responsibility should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

**Confidentiality Notice:** This e-mail, including all attachments is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been scanned by the Sybari - Antigen Email System.

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  
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: Cimarex Energy Co. Telephone: 432-682-4429 e-mail address: kemm@naguss.com

Address: 7101 Norris Road, Carlsbad, NM 88220

Facility or well name: Crawford 26 No. 2 API #: 30-015-33228 U/L or Qtr/Qtr Lot B Sec 26 T24S R26E 990'FNL and 1980' FEL

County: Eddy Latitude N Longitude W NAD: 1927  1983

Surface Owner: Federal State  Private  Indian

<b>Pit</b> Type: 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: Synthetic <input checked="" type="checkbox"/> Thickness: 12ml HDPE liner Clay <input type="checkbox"/> Pit Volume: 2400 bbl. Approximately	<b>Below-grade tank</b> N/A Volume: N/A bbl Type of fluid: N/A Construction material: N/A Double-walled, with leak detection? <input type="checkbox"/> If not, explain why not.
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of groundwater.) High water elevation of groundwater range to approximately 20'.	Less than 50 feet (20 points) 20 pts. 50 feet or more, but less than 100 feet (10 points) 100 feet or more (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes <input checked="" type="checkbox"/> (20 points) 20 pts. No (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points) 20 pts. 200 feet or more, but less than 1000 feet (10 points) 1000 feet or more (0 points)
	<b>Ranking Score (Total Points)</b> 60 pts.

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks(submitted with Closure Report). Digital Photos shall be submitted for before and after remediation activity. (2) Indicate disposal location: Lea Land, Inc. offsite X If offsite, name of facility: Lea Land, Inc. (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: Please refer to the attached letter for detailed "Closure Plan" information and LOV 20623. Digital photos and sample location diagram shall be submitted in final closure documents.

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: 14 August 2006  
Printed Name/Title Dorsey Rogers, Drilling Superintendent Signature *for Dorsey Rogers by C. Hindler*  
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: Mike Gratchko ASST Signature *Mike Gratchko* Date: 8/14/06

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

*Final*

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: Cemorex Energy Telephone: 505-628-3447 e-mail address: dorsey.rogers@ad.com  
 Address: 7101 Dorris Rd. Lordsburg N.M.  
 Facility or well name: Crawford 26#2 API #: 30-015-33228 U/L or Q/L or Q/R: B Sec: 26 T: 24S R 26E  
 County: Eddy Latitude: 32°-11'-35.1" N Longitude: 104°-15'-42.5" W NAD: 1927  1983   
 Surface Owner: Federal  State  Private  Indian

<b>Pit</b> Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>2</u> mil Clay <input type="checkbox"/> Pit Volume: <u>2400</u> bbl	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: <u>N/A</u> Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____									
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) <u>20' bgs</u>	<table border="1"> <tr> <td>Less than 50 feet</td> <td>(20 points)</td> <td></td> </tr> <tr> <td>50 feet or more, but less than 100 feet</td> <td>(10 points)</td> <td></td> </tr> <tr> <td>100 feet or more</td> <td>(0 points)</td> <td><u>20</u></td> </tr> </table>	Less than 50 feet	(20 points)		50 feet or more, but less than 100 feet	(10 points)		100 feet or more	(0 points)	<u>20</u>
Less than 50 feet	(20 points)									
50 feet or more, but less than 100 feet	(10 points)									
100 feet or more	(0 points)	<u>20</u>								
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	<table border="1"> <tr> <td><u>Yes</u></td> <td>(20 points)</td> <td></td> </tr> <tr> <td>No</td> <td>(0 points)</td> <td><u>20</u></td> </tr> </table>	<u>Yes</u>	(20 points)		No	(0 points)	<u>20</u>			
<u>Yes</u>	(20 points)									
No	(0 points)	<u>20</u>								
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	<table border="1"> <tr> <td>Less than 200 feet</td> <td>(20 points)</td> <td></td> </tr> <tr> <td>200 feet or more, but less than 1000 feet</td> <td>(10 points)</td> <td></td> </tr> <tr> <td>1000 feet or more</td> <td>(0 points)</td> <td><u>20</u></td> </tr> </table>	Less than 200 feet	(20 points)		200 feet or more, but less than 1000 feet	(10 points)		1000 feet or more	(0 points)	<u>20</u>
Less than 200 feet	(20 points)									
200 feet or more, but less than 1000 feet	(10 points)									
1000 feet or more	(0 points)	<u>20</u>								
Ranking Score (Total Points) <u>60</u>										

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: Lealand, Inc. (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:  
See Attached final report

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: \_\_\_\_\_  
 Printed Name/Title: Dorsey Rogers Duty Signature: [Signature]

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:  
 Printed Name/Title: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_