

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

Final

Form C-144
June 1, 2004

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>Cimarex Energy</u> Telephone: <u>505-628-3447</u> e-mail address: <u>dorsey.rogers@ci.com</u>							
Address: <u>7101 Dorris Rd. Carlsbad N.M.</u>							
Facility or well name: <u>Crawford 26#2</u>	API #: <u>30-015-33228</u> U/L or Q/U/Qr: <u>B</u> Sec: <u>26</u> T: <u>24S</u> R: <u>26E</u>						
County: <u>Eddy</u>	Latitude: <u>32°-11'-35.1" N</u> Longitude: <u>104°-15'-42.5" W</u> NAD: 1927 <input 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"/>							
Pit 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>12 mil</u> Clay <input type="checkbox"/> Pit Volume: <u>2400</u> bbl	Below-grade tank Volume: <u> </u> bbl Type of fluid: <u>N/A</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.) <u>20' bgs</u>	<table border="1"><tr><td>Less than 50 feet</td><td>(20 points)</td></tr><tr><td>50 feet or more, but less than 100 feet</td><td>(10 points)</td></tr><tr><td>100 feet or more</td><td>(0 points)</td></tr></table> <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)
Less than 50 feet	(20 points)						
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.)	<table border="1"><tr><td>Yes</td><td>(20 points)</td></tr><tr><td>No</td><td>(0 points)</td></tr></table> <u>20</u>	Yes	(20 points)	No	(0 points)		
Yes	(20 points)						
No	(0 points)						
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></tr><tr><td>200 feet or more, but less than 1000 feet</td><td>(10 points)</td></tr><tr><td>1000 feet or more</td><td>(0 points)</td></tr></table> <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)
Less than 200 feet	(20 points)						
200 feet or more, but less than 1000 feet	(10 points)						
1000 feet or more	(0 points)						
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: Lea Road, 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:
<u>See Attached final report</u>

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: <u> </u>	Signature: <u>[Signature]</u>
Printed Name/Title: <u>Dorsey Rogers</u>	
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: <u> </u>	Signature: <u> </u> Date: <u> </u>

Accepted for record
NMOCD

Final Report
CIMAREX 2RP-59

AUG 29 2007
OCD-ARTESIA



*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

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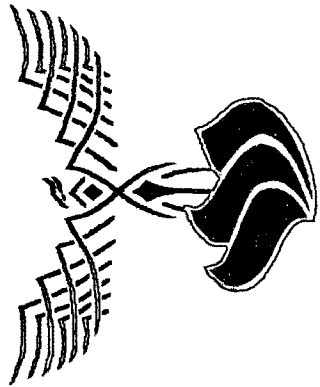
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IMPORTANT NOTICE:

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)

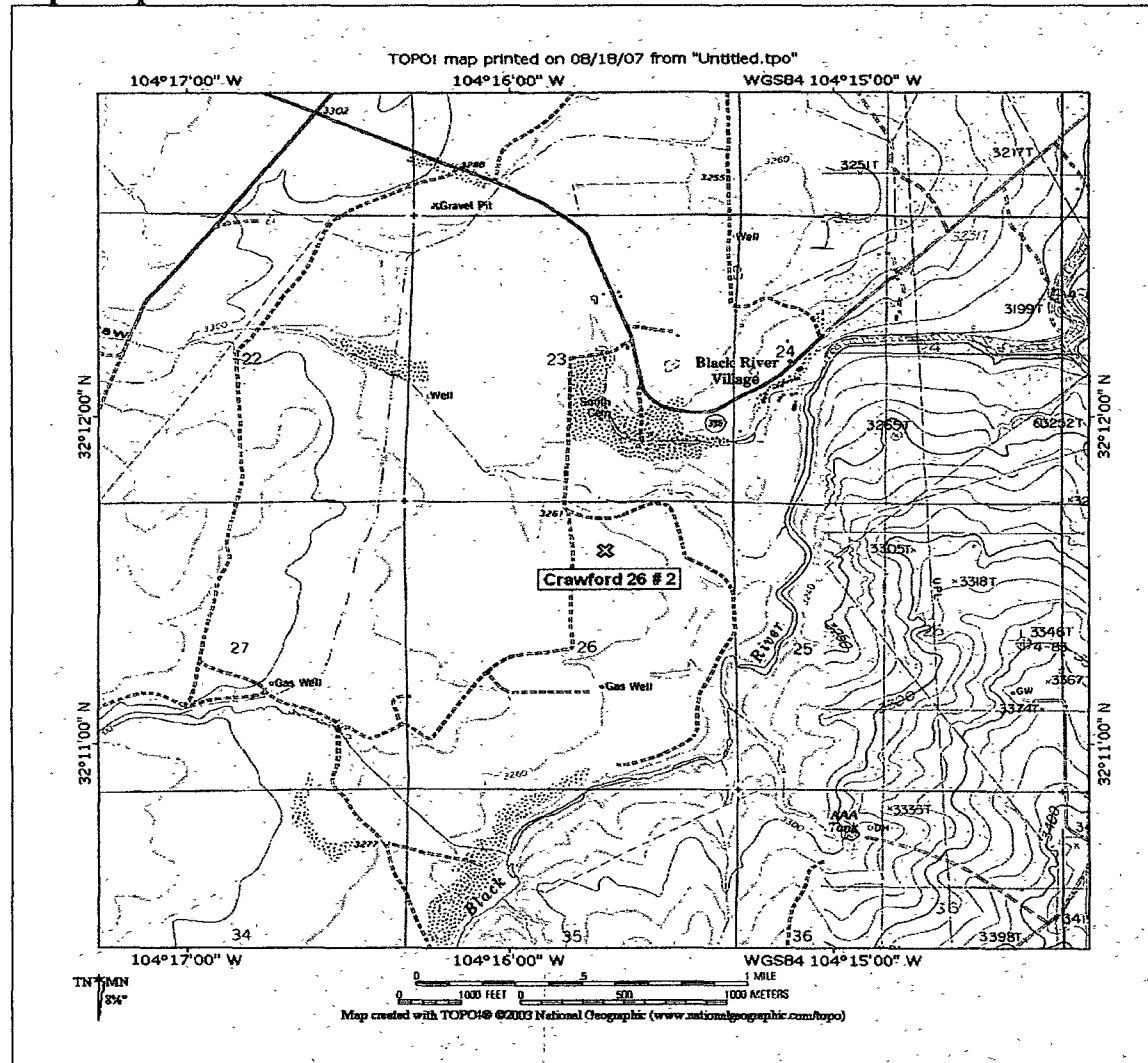
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Project History

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

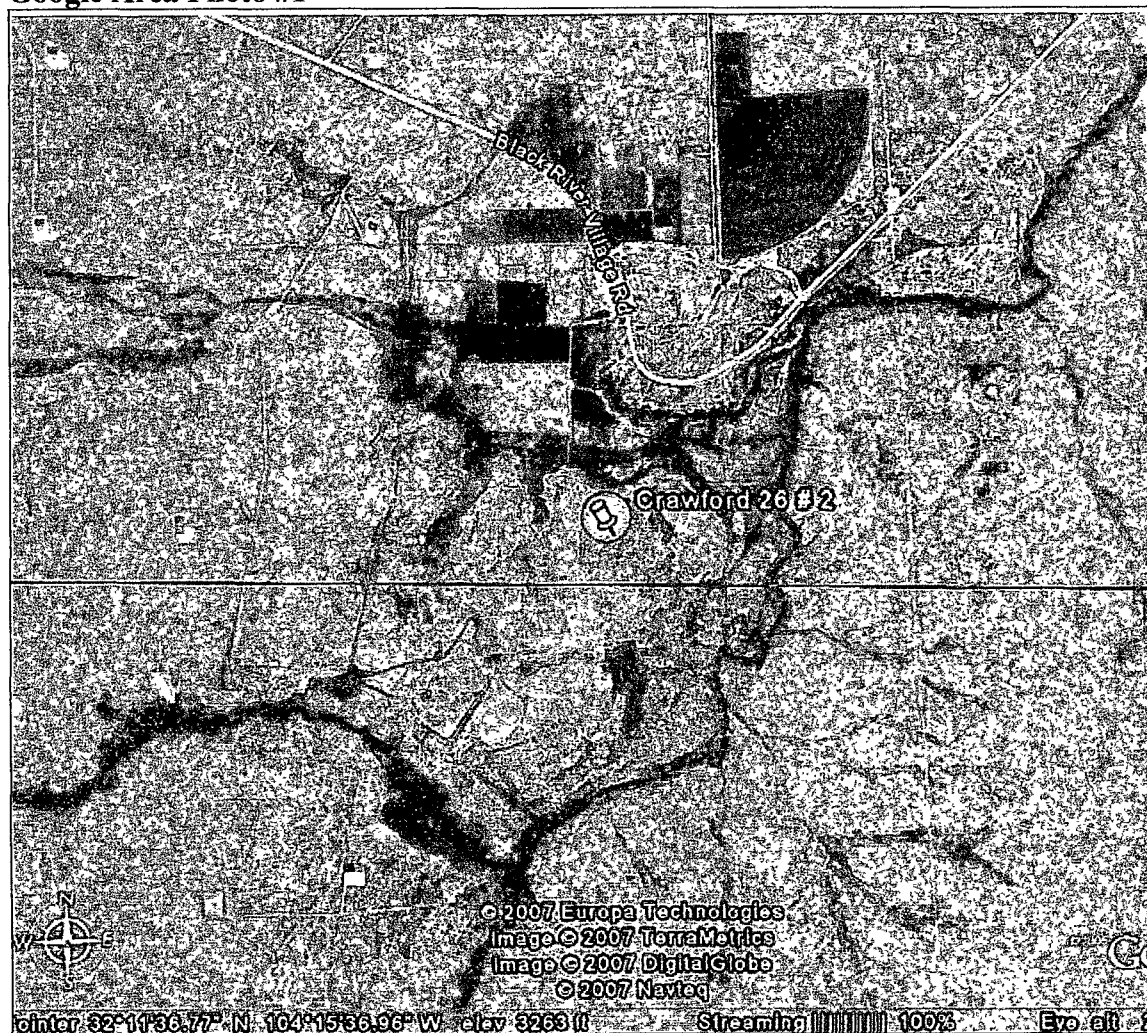


Final Closure Report

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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

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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

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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

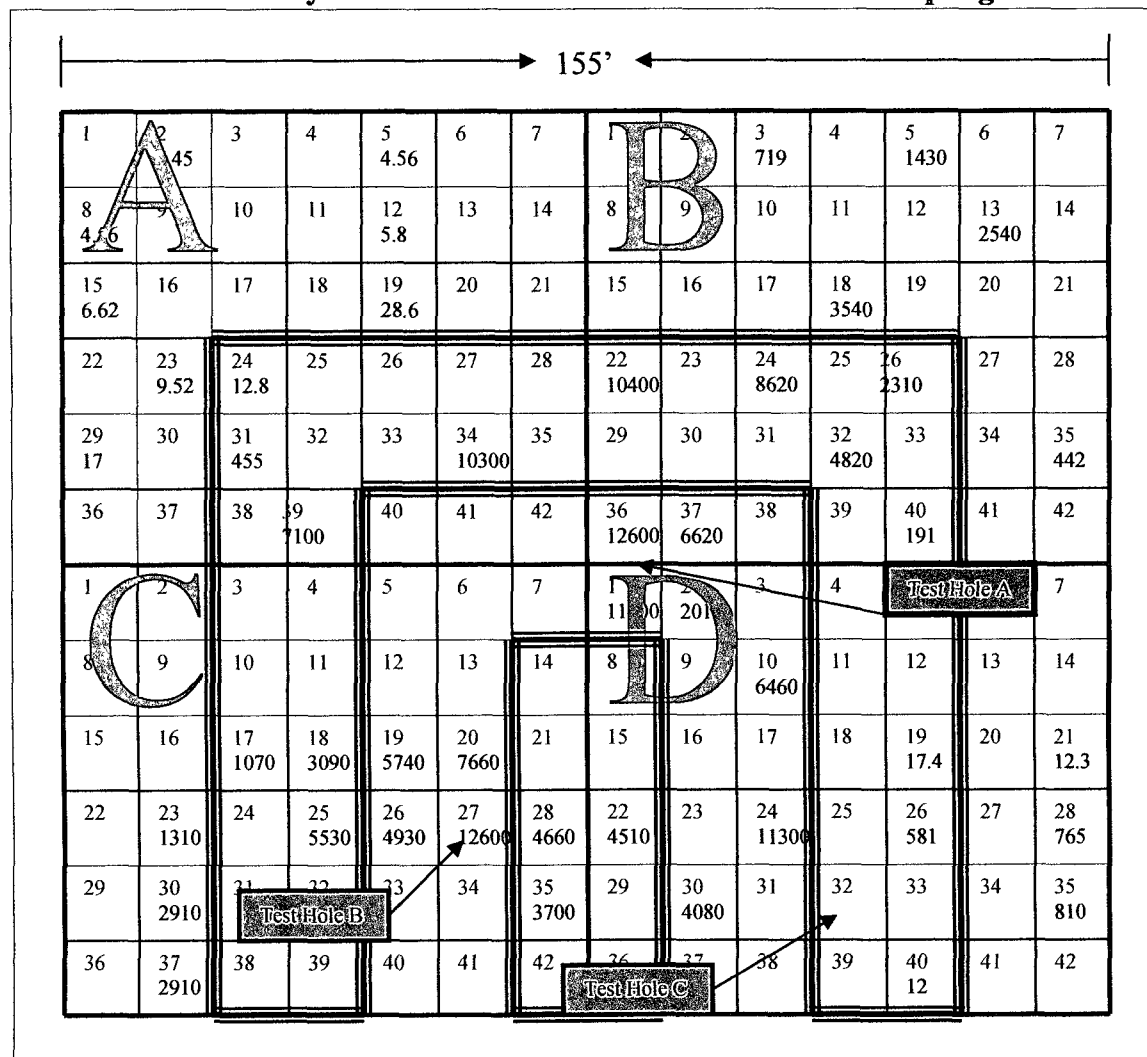


Final Closure Report

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

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



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

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

Table #4 – Bore Hole Soil Lithology

Bore Hole Depth	Lithology Description
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.

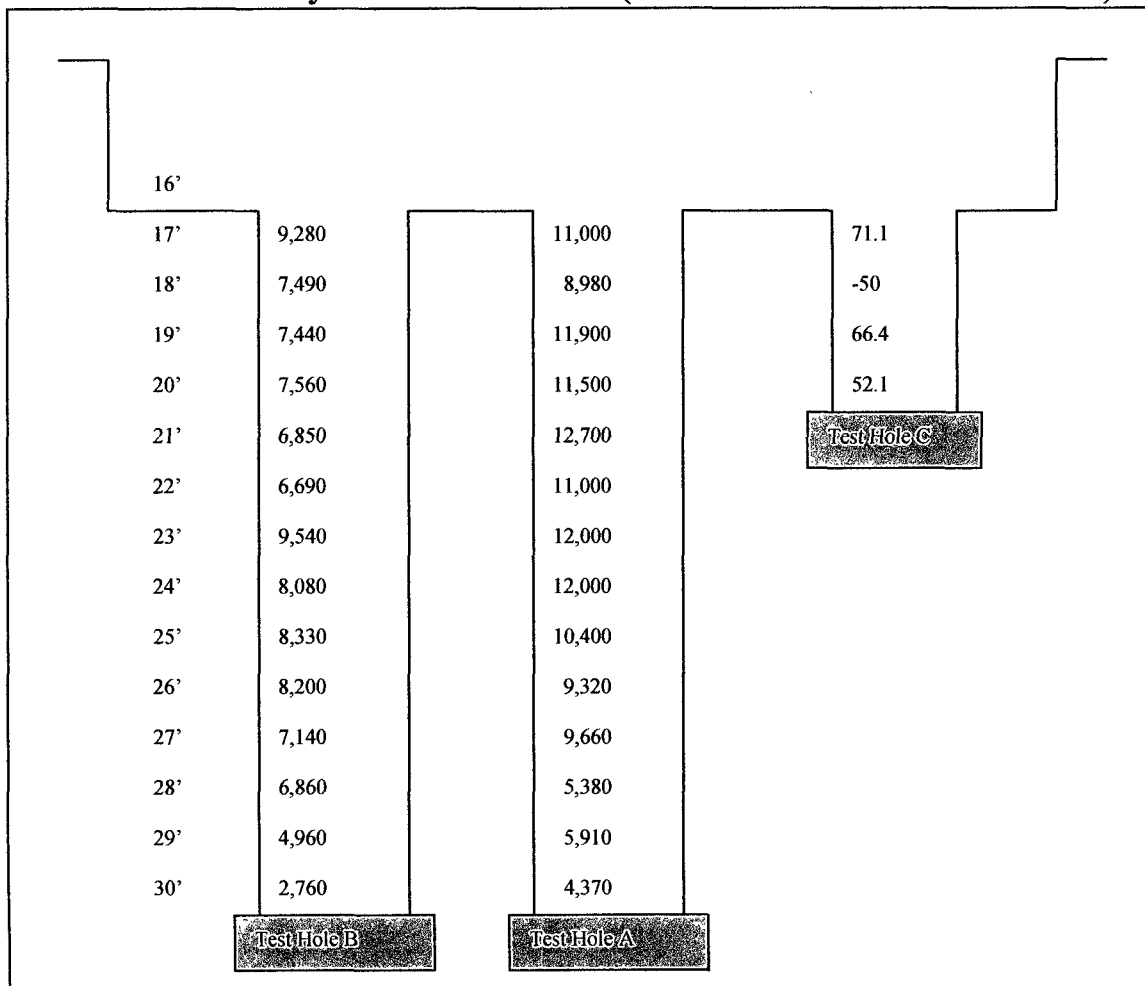
11/06/06 - Results of bore testing received and NMOCD requested two more bore holes being drilled in the pit to 4' below floor and samples to be taken at each 1' interval for analysis.

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.

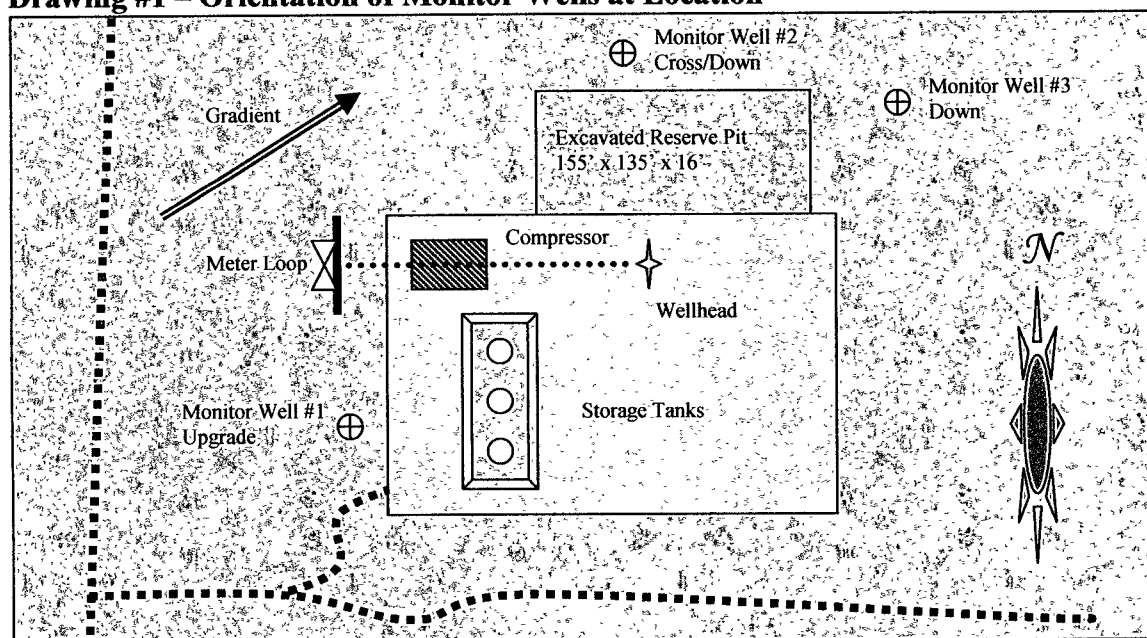
In early April 2007, a meeting was convened in at the NMOCD in Santa Fe with Technical Staff and Mr. Wayne Price. Members from Cimarex and Phoenix Environmental were in attendance where supporting data was supplied on the progress to date and to determine any further actions needed implement the Crawford #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 ₂ 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

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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 reseeded 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

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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

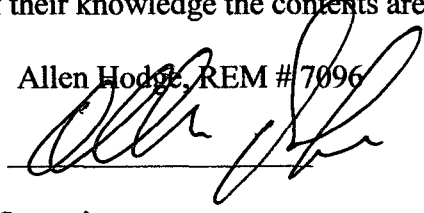
Phoenix Environmental LLC has prepared this report to the best of its ability. No other warranty expressed, implied or intended is made.

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

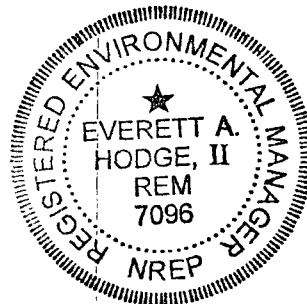
Signature: 

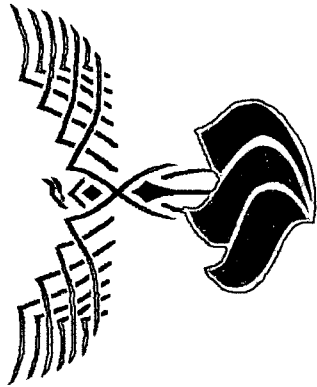
Title: VP Operations
Phoenix Environmental LLC

Name: Dorsey Rogers

Signature: 

Title: Drilling Superintendent
Cimarex Energy Company of Colorado





SECTION II



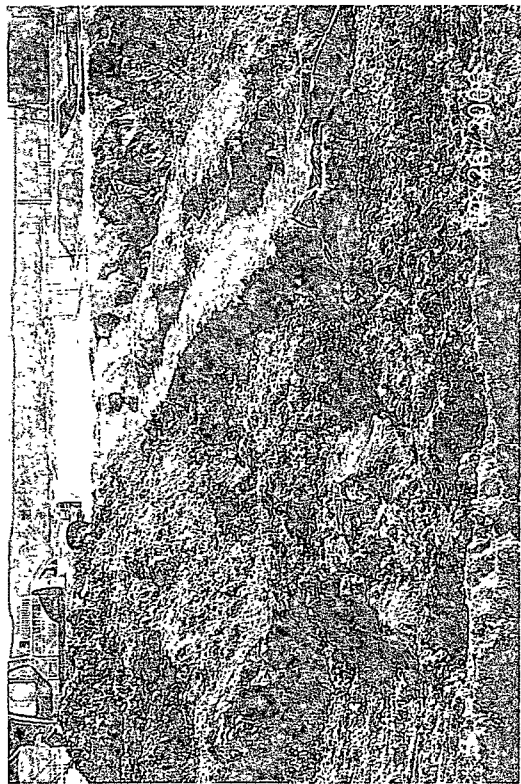


Photo #3 – Blending Soils With Wet Contents

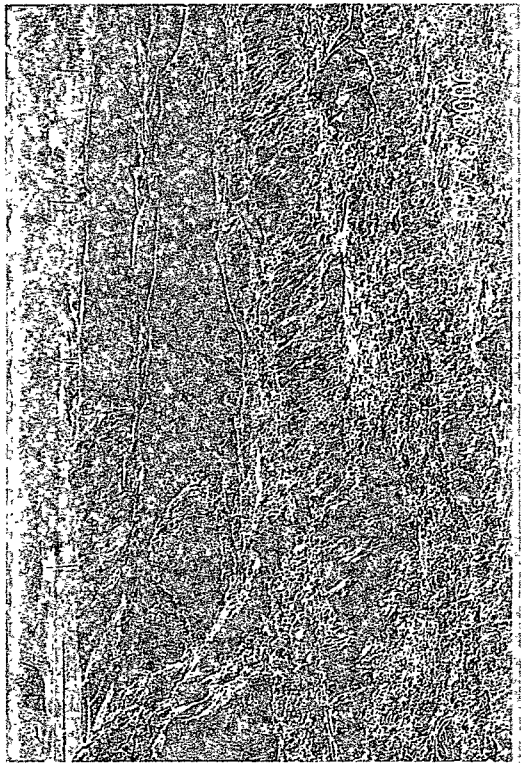


Photo #4 – Blending Soils with Wet Contents

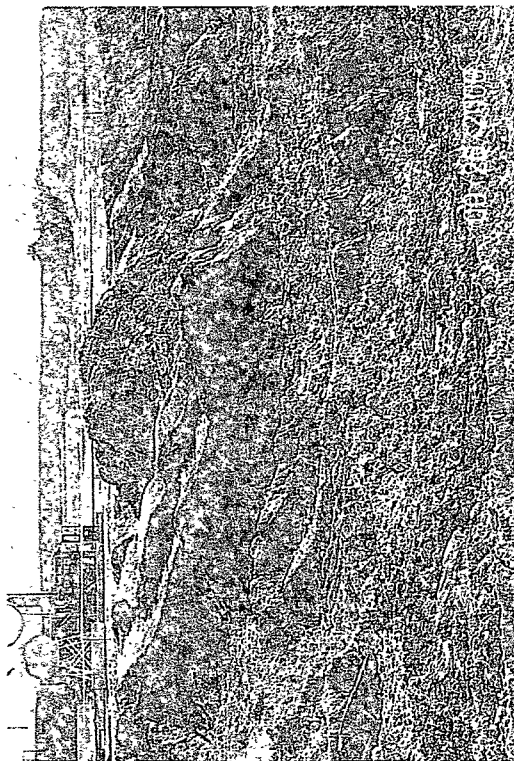


Photo #1 – Reserve Drilling Pit (Contents)

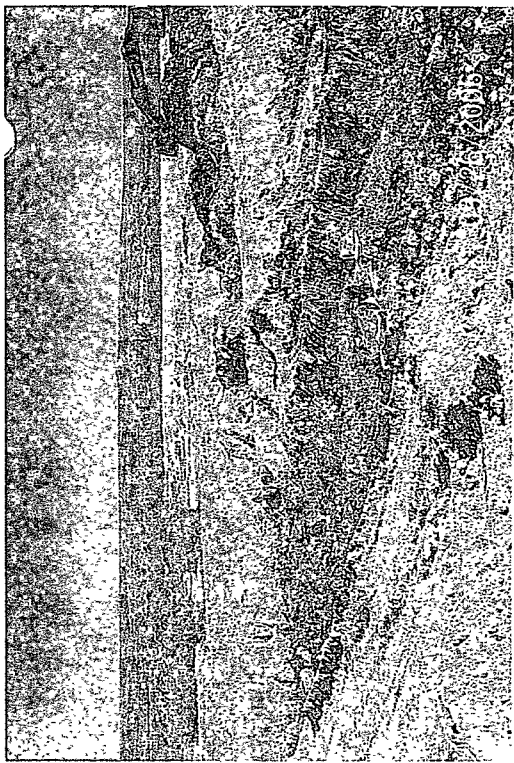


Photo #2 – Reserve Drilling Pit (Contents)



Photo #7 – Blending Contents and Excavating

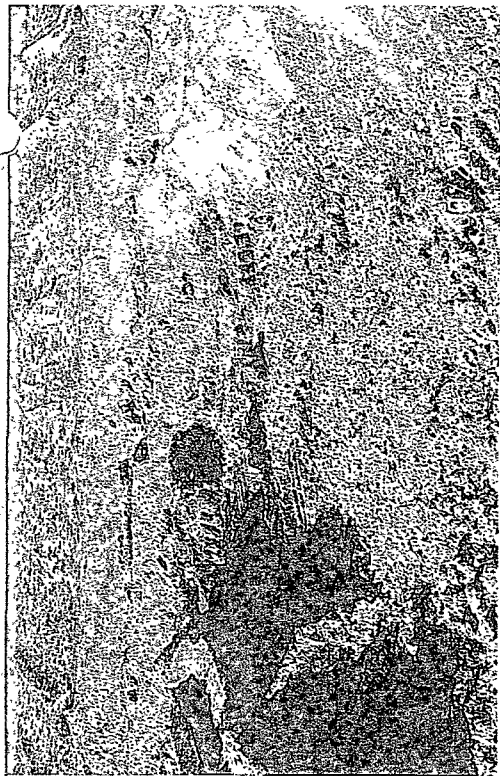


Photo #8 – Blending Contents and Excavating

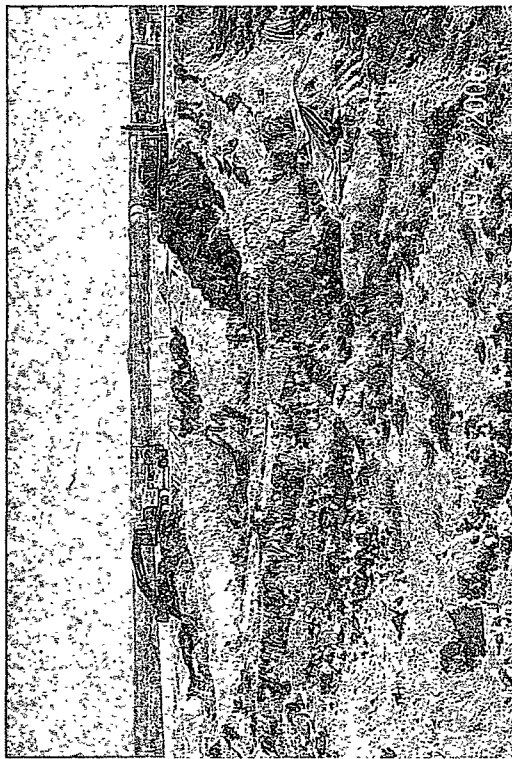


Photo #5 – Blending Contents

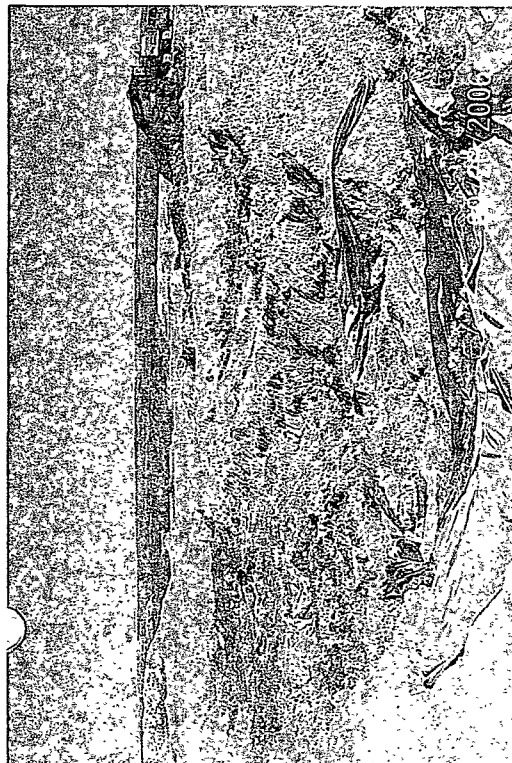


Photo #6 – Blending Contents

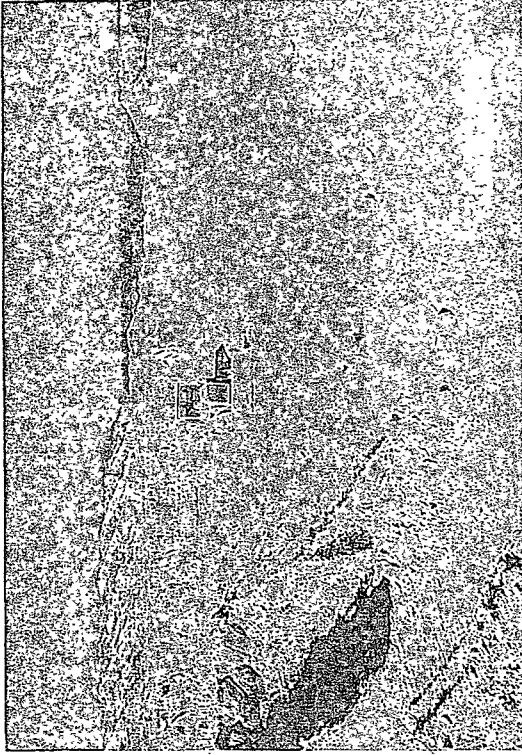


Photo #11 - Excavating

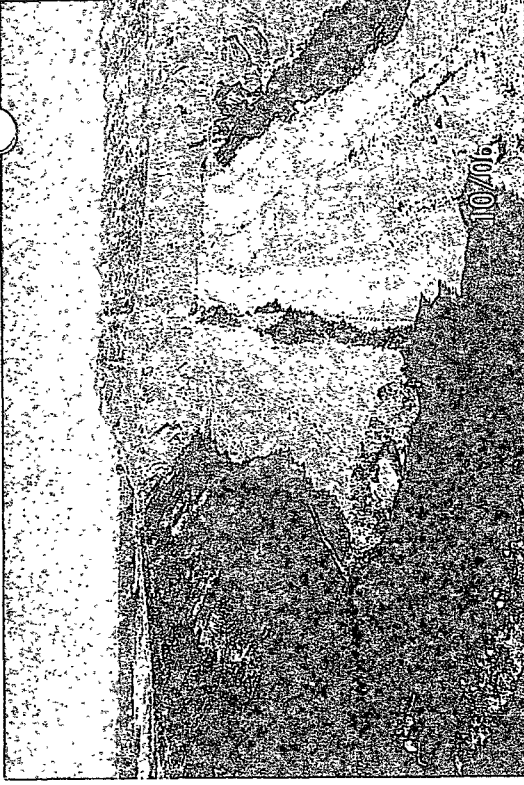


Photo #12 - Excavating



Photo #9 Blending Contents With Soils



Photo #10 View of Horseshoe



Photo #15 - Excavating



Photo #16 - Excavating



Photo #13 - Excavating

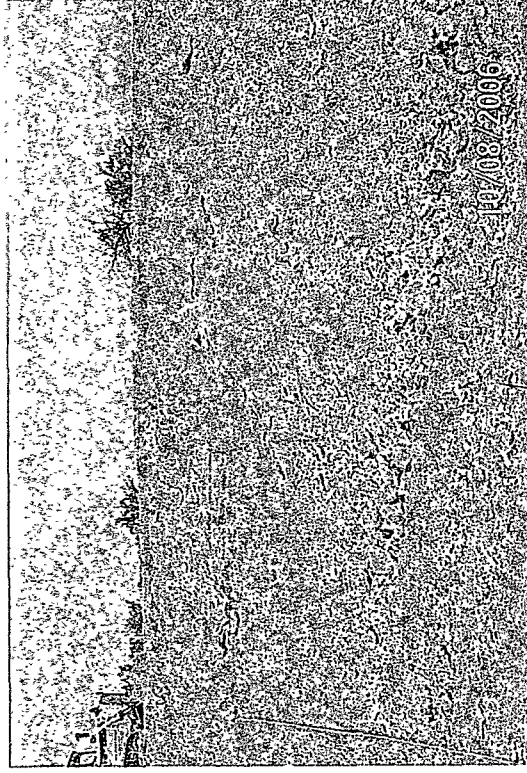


Photo #14 - Excavating

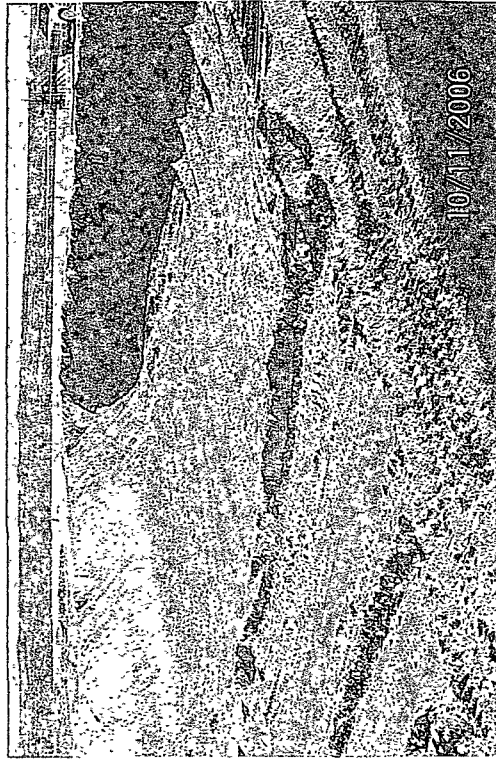


Photo #19 - Excavating

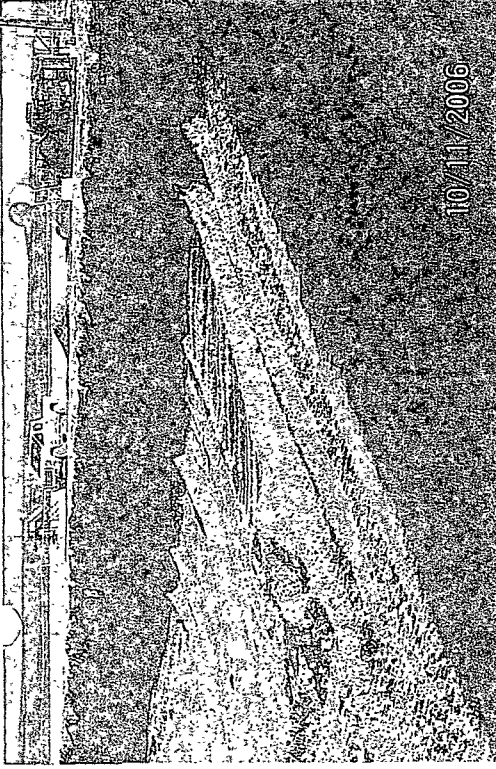


Photo #20 - Excavating

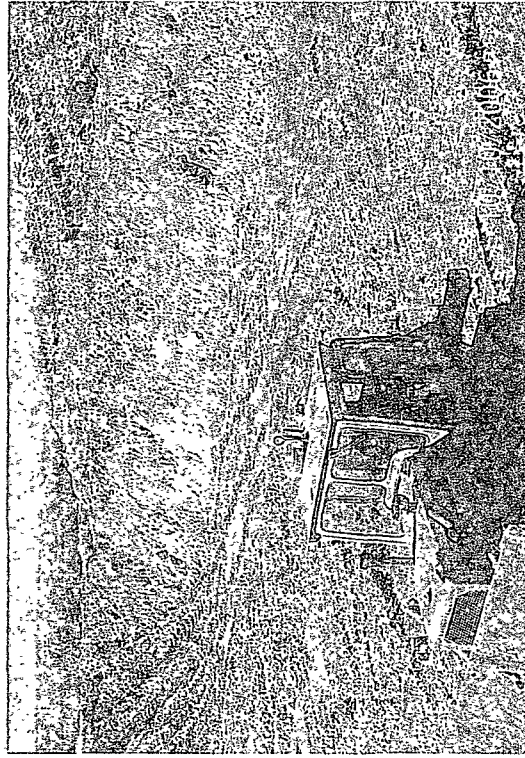


Photo #17 - Excavating



Photo #18 - Excavating

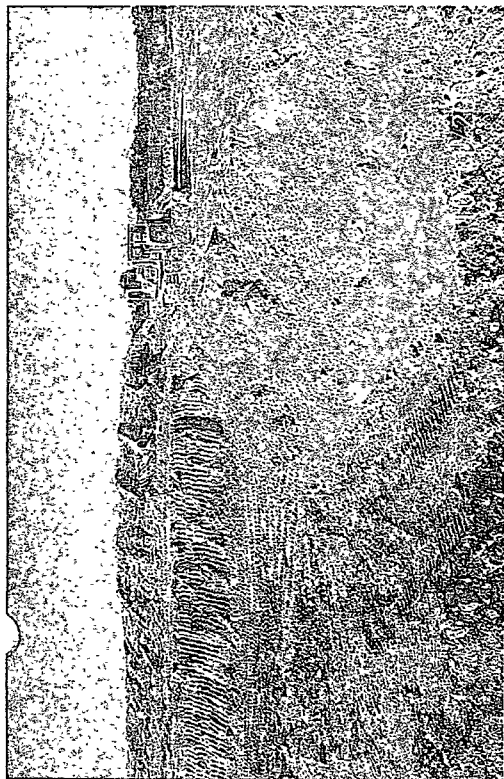


Photo #23 – Excavation



Photo #24 – Laying Out Sampling Grid

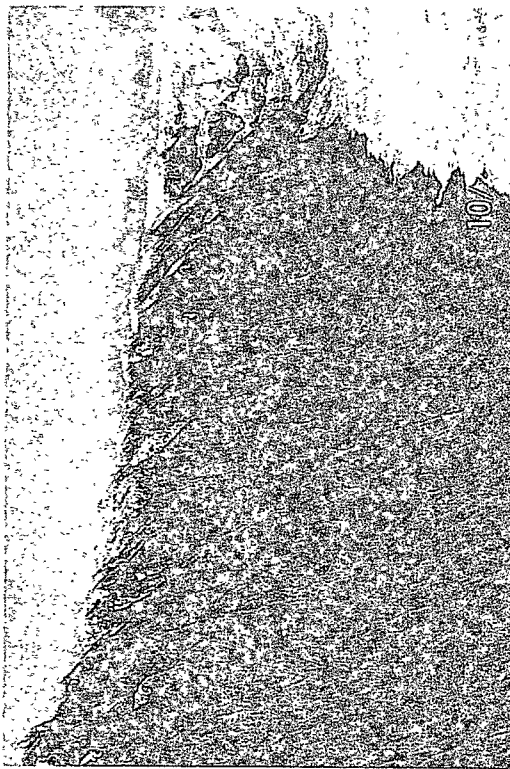


Photo #21 – Laying Out Sampling Grid

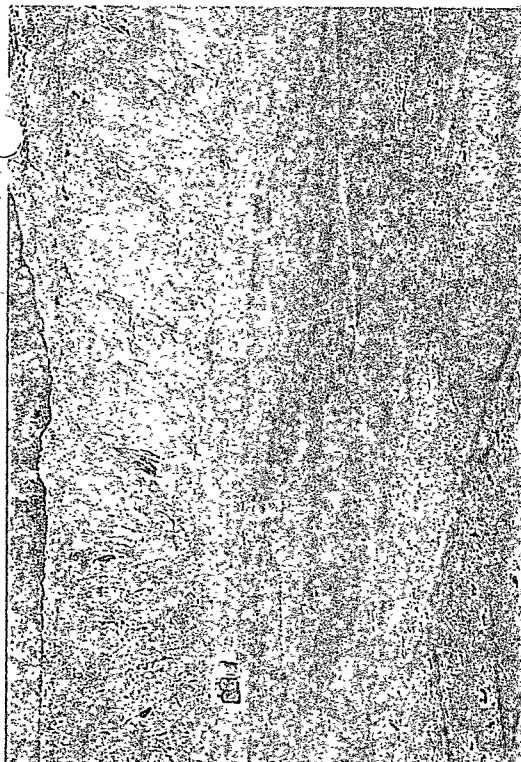


Photo #22 – Laying Out Sampling Grid

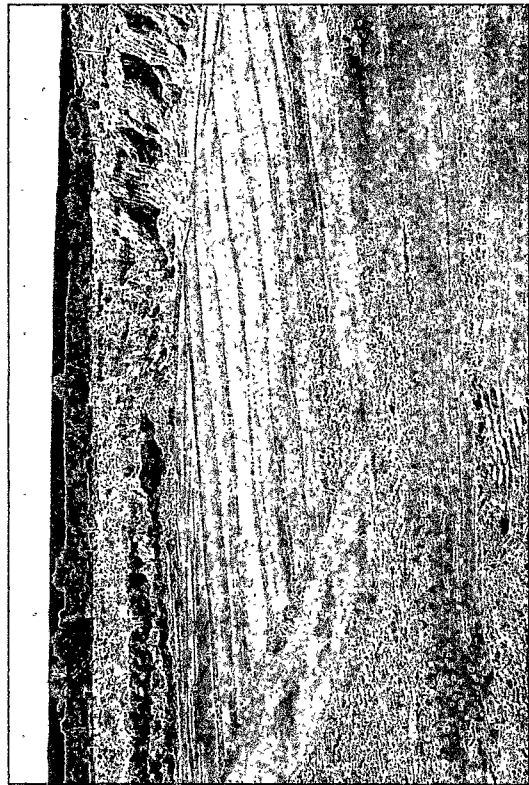


Photo #27 – Building Bottom Crown For Liner



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

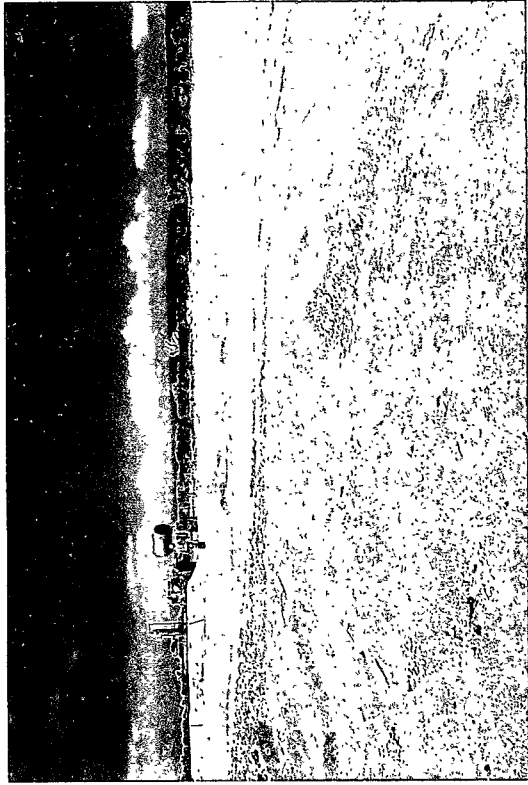


Photo #39 – Dressing Location



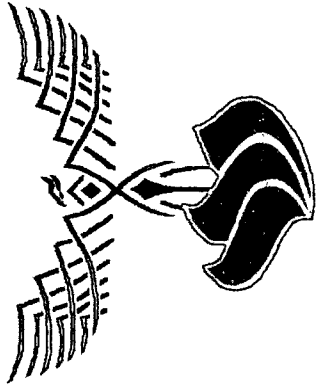
Photo #40 – Dressing Location



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.

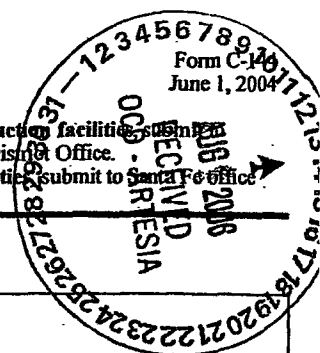
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District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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 X

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 X Private ☐ Indian ☐

Pit

Type: Drilling X Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined X Unlined ☐

Liner type: Synthetic X Thickness: 12ml HDPE liner Clay ☐

Pit Volume: 2400 bbl. Approximately

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'.

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Below-grade tank N/A

Volume: N/A bbl Type of fluid: N/A

Construction material: N/A

Double-walled, with leak detection? ☐ If not, explain why not.

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)

Yes X

(20 points) 20 pts.

No

(0 points)

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)

Ranking Score (Total Points)

60 pts.

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 X 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 X, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 14 August 2006

Printed Name/Title Dorsey Rogers, Drilling Superintendent

Signature *Dorsey Rogers*

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 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 *Mike Gratcher*

Signature *Mike Gratcher*

Date: 8/14/06

Bratcher, Mike, 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.

6/8/2007



Cimarex Energy Co. of Colorado

Drilling Department

Dorsey Rogers

207 South Mesa

Carlsbad, New Mexico 88220

505 200 6105

A wholly-owned subsidiary of Cimarex Energy Co., a NYSE Listed Company, "XEC"

Mr. Mike Bratcher

New Mexico Oil Conservation Division

District 2

1301 W. Grand Avenue

Artesia, New Mexico 88210

Re: Cimarex Energy

Crawford # 26-2

API: 30-015-33228

Sec. 26 24S 26E

Eddy Co. New Mexico

Dear Mr. Bratcher:

The following is a report of testing to verify the ground water quality after drilling three (3) monitor wells around the pit excavation the above well.

To review; Cimarex has excavated a total of 12,500 yd³ of soils and pit (drilled solids) contents after field and lab testing verified that the liner had breached. Chloride ions (Cl-) had in fact leached below the liner depth of 10 feet from ground level. Cimarex has excavated to a pit depth of 16 feet +/- from ground level in an area of approximately 200 feet². After removing the source materials we still had chloride residuals that exceeded the 250 mg/l limit as requested by NMOCD. Cimarex ran standard leachate tests on these soils to verify the theory that any further migration of chlorides or any appreciable concentrations of chlorides to leach to fresh water was improbable due to the removal of source materials and composition of in situ soils. A meeting with Wayne Price and Technical staff in Santa Fe followed, where Cimarex presented supporting data. The general consensus of this group was that Cimarex needed to verify the water quality by boring to the water level and measuring the chloride levels in place before closure.

On April 26, 2007 Cimarex contracted John White Environmental to spot and drill monitor wells to water level. The following is an outline of these borings and location. 1

Boring No.	X Coordinate	Y Coordinate	Depth of H2O	Total Depth	Position
1	433881.3 N	522313.3 E	-22.0 Feet	-40.00 Feet	Upgrade
2	433861.3 N	522313.3 E	-18.0 Feet	-40.00 Feet	Cross
3	433881.3N	522313.3 E	-19.0 Feet	-40.00 Feet	Down

1 Note: Attachment of Drilling log and litho logy per John White Environmental Co.

Sampling

Field samples of waters were taken on April 25, 2007, 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 at Lubbock, Texas. Proper sample custody documents were attached with the samples and custody transferred to lab personnel by courier.

Measurements were recorded by lab technicians and copies of results forwarded to Cimarex as well as NMOCD. 2

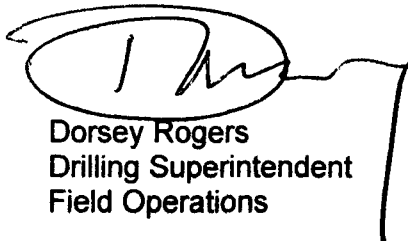
Summary:

Samples were recorded as follows: **Upgrade; 13.3 mg/l as Cl-, Downgrade 45.5 mg/l as Cl-, and 14.2 mg/l as Cl- Up and cross section.** These numbers are well below background levels of soils and water in Black River. It is apparent that no contamination has occurred to the ground water.

Closure Request

Based on the supporting data:

- All cuttings as source and soils have been removed to a depth of -16' GL.
- Groundwater has not been affected.
- It is respectfully requested that NMOCD permit the closure of this pit and excavation.
- Cimarex proposes that a 20 mil liner be installed over the floor of the excavation and that clean fill dirt be hauled to level the excavation to within 3.5 feet of ground level. The original topsoil is in place and will be used to cover, contour the surrounding soils and re seed with native grasses.



Dorsey Rogers
Drilling Superintendent
Field Operations

CC: Roger Bureau
Douglas Park
Dee Smith
Wayne Price
Tim Gumm

**Crawford 26 Fed #2
Drilling Pit
Trace Analysis Lab Results
11/9/2006**

	test hole A	test hole B	test hole C
16'			
17'	11,000	9,280	71.1
18'	8,980	7,490	-50
19'	11,900	7,440	66.4
20'	11,500	7,560	52.1
21'	12,700	6,850	
22'	11,000	6,690	
23'	12,000	9,540	
24'	12,000	8,040	
25'	10,400	8,330	
26'	9,320	8,200	
27'	9,660	7,140	
28'	5,380	6,860	
29'	5,910	4,960	
30'	4,370	2,760	

**Crawford 26 Fed #2
Drilling Pit
Trace Analysis Lab Results
11/9/2006**

	test hole A	test hole B	test hole C
16'			
17'			71.1
18'			-50
19'			66.4
20'			52.1
21'	12,700	6,850	
22'	11,000	6,690	
23'	12,000	9,540	
24'	12,000	8,040	
25'	10,400	8,330	
26'	9,320	8,200	
27'	9,660	7,140	
28'	5,380	6,860	
29'	5,910	4,960	
30'	4,370	2,760	

**Crawford 26 Fed #2
Drilling Pit
BBC International Field Sample Numbers
11/9/2006**

	test hole A	test hole B	test hole C
16'			
17'			250
18'			250
19'			250
20'			250
21'	18,000	11,000	
22'	16,000	10,000	
23'	18,000	10,000	
24'	18,000	10,000	
25'	10,000	10,000	
26'	10,000	8,000	
27'	10,000	7,500	
28'	8,000	8,000	
29'	8,000	5,500	
30'	8,000	3,300	

Report Date: November 6, 2006
Eddy County,Nm

Work Order: 6110608
Crawford 26 Fed #2

Page Number: 1 of 2
Unit B-S26-24S-26E

Summary Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: November 6, 2006

Work Order: 6110608



Project Location: Unit B-S26-24S-26E
Project Name: Crawford 26 Fed #2
Project Number: Eddy County,Nm

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
107882	1A	soil	2006-11-01	13:30	2006-11-06
107883	2A	soil	2006-11-01	13:35	2006-11-06
107884	3A	soil	2006-11-01	13:40	2006-11-06
107885	4A	soil	2006-11-01	13:45	2006-11-06
107886	1B	soil	2006-11-01	13:50	2006-11-06
107887	2B	soil	2006-11-01	13:55	2006-11-06
107888	3B	soil	2006-11-01	14:00	2006-11-06
107889	4B	soil	2006-11-01	14:05	2006-11-06

Sample: 107882 - 1A

Param	Flag	Result	Units	RL
Chloride		11000	mg/Kg	2.00

Sample: 107883 - 2A

Param	Flag	Result	Units	RL
Chloride		8980	mg/Kg	2.00

Sample: 107884 - 3A

Param	Flag	Result	Units	RL
Chloride		11900	mg/Kg	2.00

Sample: 107885 - 4A

Param	Flag	Result	Units	RL
Chloride		11500	mg/Kg	2.00

Report Date: November 6, 2006
Eddy County,Nm

Work Order: 6110608
Crawford 26 Fed #2

Page Number: 2 of 2
Unit B-S26-24S-26E

Sample: 107886 - 1B

Param	Flag	Result	Units	RL
Chloride		9280	mg/Kg	2.00

Sample: 107887 - 2B

Param	Flag	Result	Units	RL
Chloride		7490	mg/Kg	2.00

Sample: 107888 - 3B

Param	Flag	Result	Units	RL
Chloride		7440	mg/Kg	2.00

Sample: 107889 - 4B

Param	Flag	Result	Units	RL
Chloride		7560	mg/Kg	2.00

Report Date: November 14, 2006
Eddy County,Nm

Work Order: 6111012
Crawford 26 Fed #2

Page Number: 1 of 4
Unit B-S26-24S-26E

Summary Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: November 14, 2006

Work Order: 6111012



Project Location: Unit B-S26-24S-26E
Project Name: Crawford 26 Fed #2
Project Number: Eddy County,Nm

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
108545	1A-21'	soil	2006-11-09	10:25	2006-11-10
108546	2A-22'	soil	2006-11-09	10:30	2006-11-10
108547	3A-23'	soil	2006-11-09	10:35	2006-11-10
108548	4A-24'	soil	2006-11-09	10:40	2006-11-10
108549	5A-25'	soil	2006-11-09	10:45	2006-11-10
108550	6A-26'	soil	2006-11-09	10:50	2006-11-10
108551	7A-27'	soil	2006-11-09	10:55	2006-11-10
108552	8A-28'	soil	2006-11-09	11:00	2006-11-10
108553	9A-29'	soil	2006-11-09	11:05	2006-11-10
108554	10A-30'	soil	2006-11-09	11:10	2006-11-10
108555	1B-21'	soil	2006-11-09	11:30	2006-11-10
108556	2B-22'	soil	2006-11-09	11:35	2006-11-10
108557	3B-23'	soil	2006-11-09	11:40	2006-11-10
108558	4B-24'	soil	2006-11-09	11:45	2006-11-10
108559	5B-25'	soil	2006-11-09	11:50	2006-11-10
108560	6B-26'	soil	2006-11-09	11:55	2006-11-10
108561	7B-27'	soil	2006-11-09	12:00	2006-11-10
108562	8B-28'	soil	2006-11-09	12:05	2006-11-10
108563	9B-29'	soil	2006-11-09	12:10	2006-11-10
108564	10B-30'	soil	2006-11-09	12:15	2006-11-10
108565	1C-21'	soil	2006-11-09	12:45	2006-11-10
108566	2C-22'	soil	2006-11-09	12:50	2006-11-10
108567	3C-23'	soil	2006-11-09	12:55	2006-11-10
108568	4C-24'	soil	2006-11-09	13:00	2006-11-10

Sample: 108545 - 1A-21'

Param	Flag	Result	Units	RL
Chloride		12700	mg/Kg	2.00

Sample: 108546 - 2A-22'

Report Date: November 14, 2006
Eddy County,Nm

Work Order: 6111012
Crawford 26 Fed #2

Page Number: 2 of 4
Unit B-S26-24S-26E

Param	Flag	Result	Units	RL
Chloride		11000	mg/Kg	2.00

Sample: 108547 - 3A-23'

Param	Flag	Result	Units	RL
Chloride		12000	mg/Kg	2.00

Sample: 108548 - 4A-24'

Param	Flag	Result	Units	RL
Chloride		12000	mg/Kg	2.00

Sample: 108549 - 5A-25'

Param	Flag	Result	Units	RL
Chloride		10400	mg/Kg	2.00

Sample: 108550 - 6A-26'

Param	Flag	Result	Units	RL
Chloride		9320	mg/Kg	2.00

Sample: 108551 - 7A-27'

Param	Flag	Result	Units	RL
Chloride		9660	mg/Kg	2.00

Sample: 108552 - 8A-28'

Param	Flag	Result	Units	RL
Chloride		5380	mg/Kg	2.00

Sample: 108553 - 9A-29'

Param	Flag	Result	Units	RL
Chloride		6910	mg/Kg	2.00

Sample: 108554 - 10A-30'

Param	Flag	Result	Units	RL
Chloride		4370	mg/Kg	2.00

Report Date: November 14, 2006
Eddy County,Nm

Work Order: 6111012
Crawford 26 Fed #2

Page Number: 3 of 4
Unit B-S26-24S-26E

Sample: 108555 - 1B-21'

Param	Flag	Result	Units	RL
Chloride		6850	mg/Kg	2.00

Sample: 108556 - 2B-22'

Param	Flag	Result	Units	RL
Chloride		6690	mg/Kg	2.00

Sample: 108557 - 3B-23'

Param	Flag	Result	Units	RL
Chloride		9540	mg/Kg	2.00

Sample: 108558 - 4B-24'

Param	Flag	Result	Units	RL
Chloride		8040	mg/Kg	2.00

Sample: 108559 - 5B-25'

Param	Flag	Result	Units	RL
Chloride		8330	mg/Kg	2.00

Sample: 108560 - 6B-26'

Param	Flag	Result	Units	RL
Chloride		8200	mg/Kg	2.00

Sample: 108561 - 7B-27'

Param	Flag	Result	Units	RL
Chloride		7140	mg/Kg	2.00

Sample: 108562 - 8B-28'

Param	Flag	Result	Units	RL
Chloride		6860	mg/Kg	2.00

Sample: 108563 - 9B-29'

Param	Flag	Result	Units	RL
Chloride		4960	mg/Kg	2.00

Report Date: November 14, 2006
Eddy County,Nm

Work Order: 6111012
Crawford 26 Fed #2

Page Number: 4 of 4
Unit B-S26-24S-26E

Sample: 108564 - 10B-30'

Param	Flag	Result	Units	RL
Chloride		2760	mg/Kg	2.00

Sample: 108565 - 1C-21'

Param	Flag	Result	Units	RL
Chloride		71.1	mg/Kg	2.00

Sample: 108566 - 2C-22'

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

Sample: 108567 - 3C-23'

Param	Flag	Result	Units	RL
Chloride		66.4	mg/Kg	2.00

Sample: 108568 - 4C-24'

Param	Flag	Result	Units	RL
Chloride		52.1	mg/Kg	2.00

Summary Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: May 3, 2007

Work Order: 7043017



Project Location: Eddy Co.,NM
Project Name: Crawford 26-2

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
122964	Upgradient	water	2007-04-30	15:35	2007-04-30
122965	Up & Cross Gradient	water	2007-04-30	16:20	2007-04-30
122966	Down Gradient	water	2007-04-30	16:30	2007-04-30

Sample: 122964 - Upgradient

Param	Flag	Result	Units	RL
Chloride		13.3	mg/L	0.500

Sample: 122965 - Up & Cross Gradient

Param	Flag	Result	Units	RL
Chloride		14.2	mg/L	0.500

Sample: 122966 - Down Gradient

Param	Flag	Result	Units	RL
Chloride		45.5	mg/L	0.500

TRACE ANALYSIS, INC.

6701 Abercane Avenue, Suite 9 Lubbock, Texas 79424 806•376•1206 876•794•1296 FAX 806•794•1298
230 East Sunset Road, Suite 5 El Paso, Texas 79902 915•585•3443 915•585•3443 FAX 915•585•3443
5002 Basin Street, Suite A1 Midland, Texas 79703 432•682•3301 432•682•3301 FAX 432•682•3301
6315 Harris Parkway, Suite 110 Ft. Worth, Texas 76116 817•261•5260 817•261•5260
E-Mail: info@traceanalysis.com

Analytical and Quality Control Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: May 3, 2007

Work Order: 7043017



Project Location: Eddy Co., NM
Project Name: Crawford 26-2
Project Number: Crawford 26-2-Eddy County, NM

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
122964	Upgradient	water	2007-04-30	15:35	2007-04-30
122965	Up & Cross Gradient	water	2007-04-30	16:20	2007-04-30
122966	Down Gradient	water	2007-04-30	16:30	2007-04-30

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 3 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 122964 - Upgradient

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36868	Date Analyzed:	2007-04-30	Analyzed By:	ER
Prep Batch:	31983	Sample Preparation:	2007-04-30	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		13.3	mg/L	5	0.500

Sample: 122965 - Up & Cross Gradient

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36868	Date Analyzed:	2007-04-30	Analyzed By:	ER
Prep Batch:	31983	Sample Preparation:	2007-04-30	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		14.2	mg/L	5	0.500

Sample: 122966 - Down Gradient

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36868	Date Analyzed:	2007-04-30	Analyzed By:	ER
Prep Batch:	31983	Sample Preparation:	2007-04-30	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		45.5	mg/L	5	0.500

Method Blank (1) QC Batch: 36868

QC Batch:	36868	Date Analyzed:	2007-04-30	Analyzed By:	ER
Prep Batch:	31983	QC Preparation:	2007-04-30	Prepared By:	ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.172	mg/L	0.5

Laboratory Control Spike (LCS-1)

QC Batch:	36868	Date Analyzed:	2007-04-30	Analyzed By:	ER
Prep Batch:	31983	QC Preparation:	2007-04-30	Prepared By:	ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11.3	mg/L	1	12.5	<0.172	90	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11.4	mg/L	1	12.5	<0.172	91	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 122966

QC Batch: 36868
Prep Batch: 31983

Date Analyzed: 2007-04-30
QC Preparation: 2007-04-30

Analyzed By: ER
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	1270	mg/L	100	1250	45.5389	98	10 - 188

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	1220	mg/L	100	1250	45.5389	94	10 - 188	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 36868

Date Analyzed: 2007-04-30

Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.4	91	90 - 110	2007-04-30

Standard (CCV-1)

QC Batch: 36868

Date Analyzed: 2007-04-30

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.3	90	90 - 110	2007-04-30

TraceAnalysis, Inc.

email: lab@traceanalysis.com

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Lubbock, Texas 79424
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Tel (915) 585-3443
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1 (888) 588-3443

6015 Harris Pkwy., Suite 110
Ft. Worth, Texas 76132
Tel (817) 201-5260

LAB Order ID #

7043017

Page

of

Company Name:

TraceAnalysis

Address: (Street, City, Zip)

201 S Mesa Carlsbad NM 88220

Fax #:

Contact Person:

Dorsey Rogers

E-mail:

DDorsey@sherry

Invoice to:

(If different from above)

Project #:

Project Name:

Carlsbad 26.2

Project Location (including state):

Eddy County, NM

Sampler Signature:

[Signature]

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD					DATE	SAMPLING TIME	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE			NONE
122964	Up gradient			✓								✓		1535	
	Up gradient			✓								✓		1535	
	Up gradient			✓								✓		1535	
65	Up cross gradient			✓								✓		1620	
	Up cross gradient			✓								✓		1620	
	Up cross gradient			✓								✓		1620	
66	Down gradient			✓								✓		1620	
	Down gradient			✓								✓		1620	
	Down gradient			✓								✓		1620	

Relinquished by:	Date: 4-30-07	Time: 6:10	Received by:	Date: 4-30-07	Time: 6:10
Sherry J. Tucker			[Signature]		
Relinquished by:	Date: 4-30-07	Time: 10:20	Received by:	Date: 4-30-07	Time: 10:20
[Signature]			[Signature]		
Relinquished by:	Date: 4-30-07	Time: 10:20	Received at Laboratory by:	Date: 4-30-07	Time: 10:20
[Signature]			[Signature]		

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE	8021B / 602 / 8260B / 624	✓
BTEX	8021B / 602 / 8260B / 624	✓
TPH 418.1 / TX1005 / TX1005 Ext(C35)		✓
TPH 8015 GRO / DRO / TVHC		✓
PAH 8270C / 625		✓
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007		✓
TCLP Metals Ag As Ba Cd Cr Pb Se Hg		✓
TCLP Semi Volatiles		✓
TCLP Pesticides		✓
RCI		✓
GC/MS Vol. 8260B / 624		✓
GC/MS Semi. Vol. 8270C / 625		✓
PCBs 8082 / 608		✓
Pesticides 8081A / 608		✓
BOD, TSS, pH		✓
Moisture Content		✓
Turn Around Time if different from standard		✓

LAB USE ONLY	REMARKS: Hold BTEX + TPH samples. Run chlorides only for now.
Intact	Y/N
Headspace	Y/N
Temp	Y/N
Log-in-Review	Y/N

Carrier # [Signature]

Submission of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Cimarex Energy Work Phone: 972-443-6489
Contact: Dorsey Rogers Home Phone: _____
Address: PO Box 140907
City: Irving State: TX Zip: 75014-0907

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 26 Township: 24S Range: 26E N.M.P.M.
in Eddy County.

B. X = 433 861.3 N feet, Y = 522 313.3 E feet, N.M. Coordinate System
Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 11 m 38.0 s Longitude: 104 d 15 m 40.8 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Cecil Bounds

3. DRILLING CONTRACTOR

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD: Crawford 26-2/MW-1

Drilling began: 04/26/07; Completed: 04/26/07; Type tools: Air Rotary;
Size of hole: 6 1/8 in.; Total depth of well: 40.0 ft.;
Completed well is: shallow (shallow, artesian);
Depth to water upon completion of well: 32.22 ft.

File Number: _____
Form: wr-20 page 1 of 4

Trn Number: _____

File Number: _____

**NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD**

5. PRINCIPAL WATER-BEARING STRATA: Crawford 26-2/MW-1

Depth in Feet		Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
From	To			
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
2.0	Sch. 40	4.0	0.0	20.0	20.0	_____	_____	_____
2.0	.020	4.0	20.0	40.0	20.0	_____	20.0	40.0
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
From	To				
40.0	18.0	6 1/8	9.0	_____	8/16 sand
18.0	15.0	6 1/8	3/4	_____	Bentonite Pellets
15.0	0.0	6 1/8	7.0	2.795	Hand Mix - Cement
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: _____
Address: _____
Plugging Method: _____
Date Well Plugged: _____
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: _____

Form: wr-20

page 2 of 4

Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: Crawford 26-2/MW-1

[illegible]

File Number:

Form: wx-20

page 3 of 4

Trn Number:

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS: Crawford 26-2/MW-1

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

undersigned hereby certifies that the foregoing is a true and correct copy of the original as the same appears in the files of the undersigned.

Driller

5/1/07
(mm/dd/year)

FOR STATE ENGINEER USE ONLY

Quad _____; FWL _____; FSL _____; Use _____; Location No. _____

File Number: _____
Form: wr-20 page 4 of 4

Trn Number:

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Climarex Energy Work Phone: 972-443-6489
Contact: Dorsey Rogers Home Phone: _____
Address: PO Box 140907
City: Irving State: TX Zip: 75014-0907

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 26 Township: 24S Range: 26E N.M.P.M.
in Eddy County.

B. X = 433 861.3 N feet, Y = 522 313.3 E feet, N.M. Coordinate System
Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 11 m 38.0 s Longitude: 104 d 15 m 40.8 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Cecil Bounds

3. DRILLING CONTRACTOR

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD: Crawford 26-2/MW-2

Drilling began: 04/26/07; Completed: 04/26/07; Type tools: Air Rotary;
Size of hole: 6 1/8 in.; Total depth of well: 39.0 ft.;
Completed well is: shallow (shallow, artesian);
Depth to water upon completion of well: 29.40 ft.

File Number: _____ page 1 of 4
Form: wr-20

Trn Number: _____

File Number: _____

**NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD**

5. PRINCIPAL WATER-BEARING STRATA: Crawford 26-2/MW-2

Depth in Feet		Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
From	To			
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
2.0	Sch. 40	4.0	0.0	19.0	19.0			
2.0	.020	4.0	19.0	39.0	20.0		19.0	39.0
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
From	To				
39.0	17.0	6 1/8	11.0		8/16 sand
17.0	14.0	6 1/8	3/4		Bentonite Pellets
14.0	0.0	6 1/8	7.0	2.795	Hand Mix - Cement
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: _____
Address: _____
Plugging Method: _____
Date Well Plugged: _____
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: _____ Form: wr-20 page 2 of 4 Trn Number: _____

WELL RECORD

9. LOG OF HOLE: Crawford 26-2/MW-2

[illegible]

page 3 of 4

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Cimarex Energy Work Phone: 972-443-8489
Contact: Dorsey Rogers Home Phone: _____
Address: PO Box 140907
City: Irving State: TX Zip: 75014-0907

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 26 Township: 24S Range: 26E N.M.P.M.
in Eddy County.

B. X = 433 861.3 N feet, Y - 522 313.3 E feet, N.M. Coordinate System
Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 11 m 38.0 s Longitude: 104 d 15 m 40.8 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Cecil Bounds

3. DRILLING CONTRACTOR

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD: Crawford 26-2/MW-3

Drilling began: 04/26/07; Completed: 04/26/07; Type tools: Air Rotary;
Size of hole: 6 1/8 in.; Total depth of well: 39.0 ft.;
Completed well is: shallow (shallow, artesian);
Depth to water upon completion of well: 27.20 ft.

File Number: _____
Form: wr-20 page 1 of 4

Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: Crawford 26-2/MW-3

Depth in Feet		Thickness	Description of	Estimated Yield
From	To	in feet	water-bearing formation	(GPM)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
2.0	Sch. 40	4.0	0.0	19.0	19.0		19.0	39.0
2.0	.020	4.0	19.0	39.0	20.0			
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
39.0	17.0	6 1/8	11.0		8/16 sand
17.0	14.0	6 1/8	3/4		Bentonite Pellets
14.0	0.0	6 1/8	7.0	2.795	Hand Mix - Cement
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: _____
Address: _____
Plugging Method: _____
Date Well Plugged: _____
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: _____
Form: wr-20

Trn Number: _____

page 2 of 4

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: Crawford 26-2/MW-3

[illegible]

File Number: _____
Form: wr-20 _____ page 3 of 4

Trn Number: _____

Summary Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: April 30, 2007

Work Order: 7043017



Project Location: Eddy Co.,NM
Project Name: Crawford 26-2

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
122964	Upgradient	water	2007-04-30	15:35	2007-04-30
122965	Up & Cross Gradient	water	2007-04-30	16:20	2007-04-30
122966	Down Gradient	water	2007-04-30	16:30	2007-04-30

Sample: 122964 - Upgradient

Param	Flag	Result	Units	RL
Chloride		13.3	mg/L	0.500

Sample: 122965 - Up & Cross Gradient

Param	Flag	Result	Units	RL
Chloride		14.2	mg/L	0.500

Sample: 122966 - Down Gradient

Param	Flag	Result	Units	RL
Chloride		45.5	mg/L	0.500



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200 East Sunset Road, Suite 8 El Paso, Texas 79922 HO • 915 • 585 • 3113 FAX 915 • 585 • 3113
4000 Basin Street, Suite A1 Mesquite, Texas 75703 409 • 699 • 0307 FAX 409 • 699 • 0307
655 E. Frank's Parkway, Suite 110 Ft. Worth, Texas 76132 817 • 211 • 5276 FAX 817 • 211 • 5276
E-Mail: info@traceanalysis.com

Analytical and Quality Control Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: April 30, 2007

Work Order: 7043017



Project Location: Eddy Co., NM
Project Name: Crawford 26-2
Project Number: Crawford 26-2-Eddy County, NM

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
122964	Upgradient	water	2007-04-30	15:35	2007-04-30
122965	Up & Cross Gradient	water	2007-04-30	16:20	2007-04-30
122966	Down Gradient	water	2007-04-30	16:30	2007-04-30

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project 'Crawford 26-2' were received by TraceAnalysis, Inc. on 2007-04-30 and assigned to work order 7043017. Samples for work order 7043017 were received damaged at a temperature of C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
Chloride (IC)	E 300.0

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring; however, it may not pertain to the samples for work order 7043017 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 122964 - Upgradient

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36868	Date Analyzed:	2007-04-30	Analyzed By:	ER
Prep Batch:	31983	Sample Preparation:	2007-04-30	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		13.3	mg/L	5	0.500

Sample: 122965 - Up & Cross Gradient

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36868	Date Analyzed:	2007-04-30	Analyzed By:	ER
Prep Batch:	31983	Sample Preparation:	2007-04-30	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		14.2	mg/L	5	0.500

Sample: 122966 - Down Gradient

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36868	Date Analyzed:	2007-04-30	Analyzed By:	ER
Prep Batch:	31983	Sample Preparation:	2007-04-30	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		45.5	mg/L	5	0.500

Method Blank (1) QC Batch: 36868

QC Batch:	36868	Date Analyzed:	2007-04-30	Analyzed By:	ER
Prep Batch:	31983	QC Preparation:	2007-04-30	Prepared By:	ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.172	mg/L	0.5

Laboratory Control Spike (LCS-1)

QC Batch:	36868	Date Analyzed:	2007-04-30	Analyzed By:	ER
Prep Batch:	31983	QC Preparation:	2007-04-30	Prepared By:	ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11.3	mg/L	1	12.5	<0.172	90	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11.4	mg/L	1	12.5	<0.172	91	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 122966

QC Batch: 36868
Prep Batch: 31983

Date Analyzed: 2007-04-30
QC Preparation: 2007-04-30

Analyzed By: ER
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	1270	mg/L	100	1250	45.5389	98	10 - 188

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	1220	mg/L	100	1250	45.5389	94	10 - 188	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 36868

Date Analyzed: 2007-04-30

Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.4	91	90 - 110	2007-04-30

Standard (CCV-1)

QC Batch: 36868

Date Analyzed: 2007-04-30

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.3	90	90 - 110	2007-04-30

5002 Basin Street Suite A1
Midland, Texas 79703
tel (432) 699-6301
Fax (432) 699-6313

Phone #:

Travel

Address: (Street, City, Zip) 201 S Mesa Carlsbad NM 88220 Fax #:

Invoice to: Dorsey Rogers
Contact Person: Dorsey Rogers
Email: Dorsey.Dorsey@Shuey.com

(If different from above)

Project Name: Gruford 26.2
Sampler Signature: [Signature]

Project Location (including state):
Eddy County, NM

Sampler Signature: *[Signature]*

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD					DATE	SAMPLING TIME
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE		
122964	Up gradient			✓						✓				1535
	Up gradient			✓						✓				1535
	Up gradient			✓						✓				1530
15	Up cross gradient			✓						✓				11020
	Up cross gradient			✓						✓				11020
	Up cross gradient			✓						✓				11020
46	Down gradient			✓						✓				11020
	Down gradient			✓						✓				11030
	Down gradient			✓						✓				11020

Received by:	Date:	Time:
--------------	-------	-------

Vici
Luz
Vici

0.30

Received by: 22 Date: _____ Time: _____

0

Received at Laboratory by: _____ Date: _____ Time: _____

10

Remained with 9-30-07. 10:20

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ANALYSIS REQUEST

[illegible]

REMARKS:

55

1

☐ Dry 

TRRP

☐ Check

Limits



Report Date: October 24, 2006
Unit B-S26-25S-26E

Work Order: 6102302
Crawford 26-2

Page Number: 1 of 1
Blackriver-New Mexico

Summary Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: October 24, 2006

Work Order: 6102302



Project Location: Blackriver-New Mexico
Project Name: Crawford 26-2
Project Number: Unit B-S26-25S-26E

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
106545	River 1	Water	2006-10-20	18:20	2006-10-21
106546	River 2	Water	2006-10-20	18:25	2006-10-21

Sample: 106545 - River 1

Param	Flag	Result	Units	RL
Chloride		18.2	mg/L	0.500

Sample: 106546 - River 2

Param	Flag	Result	Units	RL
Chloride		18.0	mg/L	0.500

Report Date: October 27, 2006
Eddy County,Nm

Work Order: 6102301
Crawford 26 Fed #2

Page Number: 1 of 12
Unit B-S26-24S-26E

Summary Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: October 27, 2006

Work Order: 6102301



Project Location: Unit B-S26-24S-26E
Project Name: Crawford 26 Fed #2
Project Number: Eddy County,Nm

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
106468	A-2	soil	2006-10-20	12:00	2006-10-21
106469	A-5	soil	2006-10-20	12:05	2006-10-21
106470	A-8	soil	2006-10-20	12:10	2006-10-21
106471	A-12	soil	2006-10-20	12:15	2006-10-21
106472	A-15	soil	2006-10-20	12:20	2006-10-21
106473	A-19	soil	2006-10-20	12:25	2006-10-21
106474	A-23	soil	2006-10-20	12:35	2006-10-21
106475	A-24	soil	2006-10-20	12:40	2006-10-21
106476	A-29	soil	2006-10-20	12:45	2006-10-21
106477	A-31	soil	2006-10-20	12:50	2006-10-21
106478	A-34	soil	2006-10-20	12:55	2006-10-21
106479	A-39	soil	2006-10-20	13:00	2006-10-21
106480	C-17	soil	2006-10-20	13:25	2006-10-21
106481	C-18	soil	2006-10-20	13:30	2006-10-21
106482	C-19	soil	2006-10-20	13:35	2006-10-21
106483	C-20	soil	2006-10-20	13:37	2006-10-21
106484	C-23	soil	2006-10-20	13:40	2006-10-21
106485	C-25	soil	2006-10-20	13:45	2006-10-21
106486	C-26	soil	2006-10-20	13:50	2006-10-21
106487	C-27	soil	2006-10-20	13:55	2006-10-21
106488	C-28	soil	2006-10-20	14:00	2006-10-21
106489	C-30	soil	2006-10-20	14:05	2006-10-21
106490	C-35	soil	2006-10-20	14:15	2006-10-21
106491	C-37	soil	2006-10-20	14:20	2006-10-21
106492	D-1	soil	2006-10-20	14:25	2006-10-21
106493	D-2	soil	2006-10-20	14:30	2006-10-21
106494	D-10	soil	2006-10-20	14:33	2006-10-21
106495	D-19	soil	2006-10-20	14:35	2006-10-21
106496	D-21	soil	2006-10-20	14:50	2006-10-21
106497	D-22	soil	2006-10-20	14:55	2006-10-21
106498	D-24	soil	2006-10-20	15:00	2006-10-21
106499	D-26	soil	2006-10-20	15:05	2006-10-21
106500	D-28	soil	2006-10-20	15:10	2006-10-21
106501	D-30	soil	2006-10-20	15:15	2006-10-21
106502	D-35	soil	2006-10-20	15:20	2006-10-21
106503	D-40	soil	2006-10-20	15:25	2006-10-21

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
106504	B-3	soil	2006-10-20	16:00	2006-10-21
106505	B-5	soil	2006-10-20	16:05	2006-10-21
106506	B-13	soil	2006-10-20	16:10	2006-10-21
106507	B-18	soil	2006-10-20	16:15	2006-10-21
106508	B-22	soil	2006-10-20	16:20	2006-10-21
106509	B-24	soil	2006-10-20	16:25	2006-10-21
106510	B-26	soil	2006-10-20	16:30	2006-10-21
106511	B-32	soil	2006-10-20	16:35	2006-10-21
106512	B-35	soil	2006-10-20	16:45	2006-10-21
106513	B-36	soil	2006-10-20	16:47	2006-10-21
106514	B-37	soil	2006-10-20	16:50	2006-10-21
106515	B-40	soil	2006-10-20	16:55	2006-10-21
106516	E-13	soil	2006-10-20	17:10	2006-10-21
106517	E-7	soil	2006-10-20	17:19	2006-10-21
106518	E-8	soil	2006-10-20	17:22	2006-10-21
106519	E-12	soil	2006-10-20	17:24	2006-10-21
106520	E-4	soil	2006-10-20	17:17	2006-10-21
106521	E-16	soil	2006-10-20	17:15	2006-10-21
106522	E-24	soil	2006-10-20	17:26	2006-10-21
106523	S-7	soil	2006-10-20	17:28	2006-10-21
106524	S-8	soil	2006-10-20	17:29	2006-10-21
106525	S-14	soil	2006-10-20	17:35	2006-10-21
106526	S-22	soil	2006-10-20	17:30	2006-10-21
106527	S-23	soil	2006-10-20	17:31	2006-10-21
106528	S-24	soil	2006-10-20	17:32	2006-10-21
106529	S-25	soil	2006-10-20	17:33	2006-10-21
106530	S-27	soil	2006-10-20	17:34	2006-10-21
106531	W-3	soil	2006-10-20	17:36	2006-10-21
106532	W-5	soil	2006-10-20	17:37	2006-10-21
106533	W-6	soil	2006-10-20	17:38	2006-10-21
106534	W-7	soil	2006-10-20	17:39	2006-10-21
106535	W-11	soil	2006-10-20	17:41	2006-10-21
106536	W-20	soil	2006-10-20	17:40	2006-10-21
106537	W-24	soil	2006-10-20	17:42	2006-10-21
106538	N-4	soil	2006-10-20	17:45	2006-10-21
106539	N-5	soil	2006-10-20	17:46	2006-10-21
106540	N-6	soil	2006-10-20	17:48	2006-10-21
106541	N-12	soil	2006-10-20	17:51	2006-10-21
106542	N-19	soil	2006-10-20	17:47	2006-10-21
106543	N-21	soil	2006-10-20	17:49	2006-10-21
106544	N-24	soil	2006-10-20	17:50	2006-10-21

Sample - Field Code	BTEX				MTBE	TPH DRO	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	MTBE (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
106468 - A-2	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106469 - A-5	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106470 - A-8	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106471 - A-12	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106472 - A-15	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106473 - A-19	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106474 - A-23	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106475 - A-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106476 - A-29	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106477 - A-31	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00

continued ...

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Sample - Field Code	BTEX				MTBE MTBE (mg/Kg)	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)			
106478 - A-34	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106479 - A-39	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106480 - C-17	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106481 - C-18	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106482 - C-19	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106483 - C-20	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106484 - C-23	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106485 - C-25	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106486 - C-26	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106487 - C-27	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106488 - C-28	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106489 - C-30	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106490 - C-35	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106491 - C-37	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106492 - D-1	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106493 - D-2	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106494 - D-10	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106495 - D-19	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106496 - D-21	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106497 - D-22	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106498 - D-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106499 - D-26	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106500 - D-28	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106501 - D-30	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106502 - D-35	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106503 - D-40	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106504 - B-3	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106505 - B-5	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106506 - B-13	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106507 - B-18	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106508 - B-22	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106509 - B-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106510 - B-26	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106511 - B-32	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106512 - B-35	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106513 - B-36	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106514 - B-37	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106515 - B-40	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106516 - E-13	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106517 - E-7	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106518 - E-8	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106519 - E-12	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106520 - E-4	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106521 - E-16	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106522 - E-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106523 - S-7	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106524 - S-8	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106525 - S-14	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106526 - S-22	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106527 - S-23	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106528 - S-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106529 - S-25	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106530 - S-27	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106531 - W-3	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106532 - W-5	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106533 - W-6	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00

continued...

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Sample - Field Code	BTEX				MTBE MTBE (mg/Kg)	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)			
106534 - W-7	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106535 - W-11	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106536 - W-20	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106537 - W-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106538 - N-4	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106539 - N-5	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106540 - N-6	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106541 - N-12	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106542 - N-19	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106543 - N-21	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106544 - N-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00

Sample: 106468 - A-2

Param	Flag	Result	Units	RL
Chloride		7.45	mg/Kg	2.00

Sample: 106469 - A-5

Param	Flag	Result	Units	RL
Chloride		4.56	mg/Kg	2.00

Sample: 106470 - A-8

Param	Flag	Result	Units	RL
Chloride		4.56	mg/Kg	2.00

Sample: 106471 - A-12

Param	Flag	Result	Units	RL
Chloride		5.80	mg/Kg	2.00

Sample: 106472 - A-15

Param	Flag	Result	Units	RL
Chloride		6.62	mg/Kg	2.00

Sample: 106473 - A-19

Param	Flag	Result	Units	RL
Chloride		28.6	mg/Kg	2.00

Sample: 106474 - A-23

Param	Flag	Result	Units	RL
Chloride		9.52	mg/Kg	2.00

Sample: 106475 - A-24

Param	Flag	Result	Units	RL
Chloride		12.8	mg/Kg	2.00

Sample: 106476 - A-29

Param	Flag	Result	Units	RL
Chloride		17.0	mg/Kg	2.00

Sample: 106477 - A-31

Param	Flag	Result	Units	RL
Chloride		455	mg/Kg	2.00

Sample: 106478 - A-34

Param	Flag	Result	Units	RL
Chloride		10300	mg/Kg	2.00

Sample: 106479 - A-39

Param	Flag	Result	Units	RL
Chloride		7100	mg/Kg	2.00

Sample: 106480 - C-17

Param	Flag	Result	Units	RL
Chloride		1070	mg/Kg	2.00

Sample: 106481 - C-18

Param	Flag	Result	Units	RL
Chloride		3090	mg/Kg	2.00

Sample: 106482 - C-19

Param	Flag	Result	Units	RL
Chloride		5740	mg/Kg	2.00

Report Date: October 27, 2006
Eddy County,Nm

Work Order: 6102301
Crawford 26 Fed #2

Page Number: 6 of 12
Unit B-S26-24S-26E

Sample: 106483 - C-20

Param	Flag	Result	Units	RL
Chloride		7660	mg/Kg	2.00

Sample: 106484 - C-23

Param	Flag	Result	Units	RL
Chloride		1310	mg/Kg	2.00

Sample: 106485 - C-25

Param	Flag	Result	Units	RL
Chloride		5530	mg/Kg	2.00

Sample: 106486 - C-26

Param	Flag	Result	Units	RL
Chloride		4930	mg/Kg	2.00

Sample: 106487 - C-27

Param	Flag	Result	Units	RL
Chloride		12600	mg/Kg	2.00

Sample: 106488 - C-28

Param	Flag	Result	Units	RL
Chloride		4660	mg/Kg	2.00

Sample: 106489 - C-30

Param	Flag	Result	Units	RL
Chloride		2910	mg/Kg	2.00

Sample: 106490 - C-35

Param	Flag	Result	Units	RL
Chloride		3700	mg/Kg	2.00

Sample: 106491 - C-37

Param	Flag	Result	Units	RL
Chloride		2910	mg/Kg	2.00

Sample: 106492 - D-1

Param	Flag	Result	Units	RL
Chloride		11500	mg/Kg	2.00

Sample: 106493 - D-2

Param	Flag	Result	Units	RL
Chloride		2010	mg/Kg	2.00

Sample: 106494 - D-10

Param	Flag	Result	Units	RL
Chloride		6460	mg/Kg	2.00

Sample: 106495 - D-19

Param	Flag	Result	Units	RL
Chloride		17.4	mg/Kg	2.00

Sample: 106496 - D-21

Param	Flag	Result	Units	RL
Chloride		12.3	mg/Kg	2.00

Sample: 106497 - D-22

Param	Flag	Result	Units	RL
Chloride		4510	mg/Kg	2.00

Sample: 106498 - D-24

Param	Flag	Result	Units	RL
Chloride		11300	mg/Kg	2.00

Sample: 106499 - D-26

Param	Flag	Result	Units	RL
Chloride		581	mg/Kg	2.00

Sample: 106500 - D-28

Param	Flag	Result	Units	RL
Chloride		765	mg/Kg	2.00

Report Date: October 27, 2006
Eddy County,Nm

Work Order: 6102301
Crawford 26 Fed #2

Page Number: 8 of 12
Unit B-S26-24S-26E

Sample: 106501 - D-30

Param	Flag	Result	Units	RL
Chloride		4080	mg/Kg	2.00

Sample: 106502 - D-35

Param	Flag	Result	Units	RL
Chloride		810	mg/Kg	2.00

Sample: 106503 - D-40

Param	Flag	Result	Units	RL
Chloride		12.0	mg/Kg	2.00

Sample: 106504 - B-3

Param	Flag	Result	Units	RL
Chloride		719	mg/Kg	2.00

Sample: 106505 - B-5

Param	Flag	Result	Units	RL
Chloride		1430	mg/Kg	2.00

Sample: 106506 - B-13

Param	Flag	Result	Units	RL
Chloride		2540	mg/Kg	2.00

Sample: 106507 - B-18

Param	Flag	Result	Units	RL
Chloride		3450	mg/Kg	2.00

Sample: 106508 - B-22

Param	Flag	Result	Units	RL
Chloride		10400	mg/Kg	2.00

Sample: 106509 - B-24

Param	Flag	Result	Units	RL
Chloride		8620	mg/Kg	2.00

Sample: 106510 - B-26

Param	Flag	Result	Units	RL
Chloride		2310	mg/Kg	2.00

Sample: 106511 - B-32

Param	Flag	Result	Units	RL
Chloride		4820	mg/Kg	2.00

Sample: 106512 - B-35

Param	Flag	Result	Units	RL
Chloride		442	mg/Kg	2.00

Sample: 106513 - B-36

Param	Flag	Result	Units	RL
Chloride		12600	mg/Kg	2.00

Sample: 106514 - B-37

Param	Flag	Result	Units	RL
Chloride		6620	mg/Kg	2.00

Sample: 106515 - B-40

Param	Flag	Result	Units	RL
Chloride		191	mg/Kg	2.00

Sample: 106516 - E-13

Param	Flag	Result	Units	RL
Chloride		172	mg/Kg	2.00

Sample: 106517 - E-7

Param	Flag	Result	Units	RL
Chloride		6.90	mg/Kg	2.00

Sample: 106518 - E-8

Param	Flag	Result	Units	RL
Chloride		7.55	mg/Kg	2.00

Sample: 106519 - E-12

Param	Flag	Result	Units	RL
Chloride		153	mg/Kg	2.00

Sample: 106520 - E-4

Param	Flag	Result	Units	RL
Chloride		12.2	mg/Kg	2.00

Sample: 106521 - E-16

Param	Flag	Result	Units	RL
Chloride		21.6	mg/Kg	2.00

Sample: 106522 - E-24

Param	Flag	Result	Units	RL
Chloride		9.80	mg/Kg	2.00

Sample: 106523 - S-7

Param	Flag	Result	Units	RL
Chloride		2190	mg/Kg	2.00

Sample: 106524 - S-8

Param	Flag	Result	Units	RL
Chloride		226	mg/Kg	2.00

Sample: 106525 - S-14

Param	Flag	Result	Units	RL
Chloride		201	mg/Kg	2.00

Sample: 106526 - S-22

Param	Flag	Result	Units	RL
Chloride		7160	mg/Kg	2.00

Sample: 106527 - S-23

Param	Flag	Result	Units	RL
Chloride		1220	mg/Kg	2.00

Sample: 106528 - S-24

Param	Flag	Result	Units	RL
Chloride		5800	mg/Kg	2.00

Sample: 106529 - S-25

Param	Flag	Result	Units	RL
Chloride		2360	mg/Kg	2.00

Sample: 106530 - S-27

Param	Flag	Result	Units	RL
Chloride		1720	mg/Kg	2.00

Sample: 106531 - W-3

Param	Flag	Result	Units	RL
Chloride		26.5	mg/Kg	2.00

Sample: 106532 - W-5

Param	Flag	Result	Units	RL
Chloride		18.4	mg/Kg	2.00

Sample: 106533 - W-6

Param	Flag	Result	Units	RL
Chloride		87.7	mg/Kg	2.00

Sample: 106534 - W-7

Param	Flag	Result	Units	RL
Chloride		14.5	mg/Kg	2.00

Sample: 106535 - W-11

Param	Flag	Result	Units	RL
Chloride		12.4	mg/Kg	2.00

Sample: 106536 - W-20

Param	Flag	Result	Units	RL
Chloride		195	mg/Kg	2.00

Report Date: October 27, 2006
Eddy County,Nm

Work Order: 6102301
Crawford 26 Fed #2

Page Number: 12 of 12
Unit B-S26-24S-26E

Sample: 106537 - W-24

Param	Flag	Result	Units	RL
Chloride		13.8	mg/Kg	2.00

Sample: 106538 - N-4

Param	Flag	Result	Units	RL
Chloride		6.71	mg/Kg	2.00

Sample: 106539 - N-5

Param	Flag	Result	Units	RL
Chloride		5.24	mg/Kg	2.00

Sample: 106540 - N-6

Param	Flag	Result	Units	RL
Chloride		9.22	mg/Kg	2.00

Sample: 106541 - N-12

Param	Flag	Result	Units	RL
Chloride		20.3	mg/Kg	2.00

Sample: 106542 - N-19

Param	Flag	Result	Units	RL
Chloride		5.45	mg/Kg	2.00

Sample: 106543 - N-21

Param	Flag	Result	Units	RL
Chloride		8.60	mg/Kg	2.00

Sample: 106544 - N-24

Param	Flag	Result	Units	RL
Chloride		1850	mg/Kg	2.00

Report Date: November 14, 2006
Eddy County,Nm

Work Order: 6111012
Crawford 26 Fed #2

Page Number: 1 of 2
Unit B-S26-24S-26E

Summary Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: November 14, 2006

Work Order: 6111012



Project Location: Unit B-S26-24S-26E
Project Name: Crawford 26 Fed #2
Project Number: Eddy County,Nm

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
108545	1A-21'	soil	2006-11-09	10:25	2006-11-10
108550	6A-26'	soil	2006-11-09	10:50	2006-11-10
108554	10A-30'	soil	2006-11-09	11:10	2006-11-10
108555	1B-21'	soil	2006-11-09	11:30	2006-11-10
108560	6B-26'	soil	2006-11-09	11:55	2006-11-10
108564	10B-30'	soil	2006-11-09	12:15	2006-11-10

Sample: 108545 - 1A-21'

Param	Flag	Result	Units	RL
SPLP Chloride		1330	mg/Kg	0.500

Sample: 108550 - 6A-26'

Param	Flag	Result	Units	RL
SPLP Chloride		873	mg/Kg	0.500

Sample: 108554 - 10A-30'

Param	Flag	Result	Units	RL
SPLP Chloride		488	mg/Kg	0.500

Sample: 108555 - 1B-21'

Param	Flag	Result	Units	RL
SPLP Chloride		695	mg/Kg	0.500

Report Date: November 14, 2006
Eddy County,Nm

Work Order: 6111012
Crawford 26 Fed #2

Page Number: 2 of 2
Unit B-S26-24S-26E

Sample: 108560 - 6B-26'

Param	Flag	Result	Units	RL
SPLP Chloride		783	mg/Kg	0.500

Sample: 108564 - 10B-30'

Param	Flag	Result	Units	RL
SPLP Chloride		342	mg/Kg	0.500

TraceAnalysis, Inc.

email: lab@traceanalysis.com

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1 (800) 378-1296

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Tel (432) 689-6301
Fax (432) 689-6313

6015 Harris Pkwy., Suite 110
Ft. Worth, Texas 76132
Tel (817) 201-5260

Company Name: **Amare**

Address: **201 S Mesa**

Contact Person: **Dorsey Rogers**

Invoice to: **Dorsey Rogers**

(If different from above)

Phone #: **208-200-5345**

Fax #: **208-200-5345**

E-mail: **valleyenergy@statecapital.com**

Project #:

Project Name: **FORNI #3**

Project Location (including state): **adair county NM**

Project Location (including state): **15-22S-27E API 30015-33350**

Sample Signature: **[Signature]**

Sample Signature: **[Signature]**

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE					SAMPLING	
				WATER	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE	DATE	TIME
109357	W2	1	4oz	✓									11/14/06	800
58	W10	1	4oz	✓									11/14/06	810
59	W15	1	4oz	✓									11/14/06	820
60	W17	1	4oz	✓									11/14/06	830
61	W18	1	4oz	✓									11/14/06	840
62	W19	1	4oz	✓									11/14/06	850
63	W24	1	4oz	✓									11/14/06	900
64	W28	1	4oz	✓									11/14/06	910
65	C1	1	4oz	✓									11/14/06	920
66	C8	1	4oz	✓									11/14/06	930
67	C10	1	4oz	✓									11/14/06	940

Relinquished by: **[Signature]**

Relinquished by: **[Signature]**

Relinquished by: **[Signature]**

Date: **11-17-06**

Date: **11-17-06**

Date: **11-17-06**

Time: **11:00 AM**

Time: **11:00 AM**

Time: **11:00 AM**

Received at Laboratory by: **[Signature]**

Received at Laboratory by: **[Signature]**

Received at Laboratory by: **[Signature]**

Date: **11-17-06**

Date: **11-17-06**

Date: **11-17-06**

Time: **3:40**

Time: **3:40**

Time: **3:40**

ANALYSIS REQUEST

(Circle or Specify Method No.)

[illegible]

REMARKS:

LAB USE

ONLY

<input type="checkbox"/>	Dry Weight Basis Required
<input type="checkbox"/>	TRRP Report Required
<input type="checkbox"/>	Check If Special Reporting Limits Are Needed
..	

Intact Y N
Headspace RM Y N
Temp _____
On-in: Review _____

TraceAnalysis, Inc.

email: lab@traceanalysis.com

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6015 Harris Pkwy, Suite 110
Ft. Worth, Texas 76132
Tel (817) 201-5260

Company Name:

Cimarron

Phone #:

75-20-5345

Address:

201 S Mesa Carlsbad, NM 88800

Contact Person:

Dorsey Rogers

E-mail:

valleyenergy@spiatechnical.net

Invoice to:

(If different from above)

Project #:

Project Name:

Eddy County - NM Corral #3

Project Location (including state):

B-205-27E APL 30015-3330

Sampler Signature:

[Signature]

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD						SAMPLING		Turn Around Time	Hold
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE	DATE	TIME		
109368	C14	1	4oz	✓										11/14/06	9:50	MTBE 8021B / 6021B BTEX 8021B / 6021B TPH 418.1 / TX100 TPH 8015 GRO / C PAH 8270C / 625 Total Metals Ag As Ba TCLP Metals Ag As TCLP Volatiles TCLP Semi Volatile TCLP Pesticides RCI GC/MS Vol. 8260B GC/MS Semi Vol. PCB's 8082 / 608 Pesticides 8081A / BOD, TSS, pH Moisture Content Chlorides	11/15/06
69	C18	1	2oz	✓										11/14/06	9:55		
70	C21	1	2oz	✓										11/14/06	10:00		
71	C24	1	2oz	✓										11/14/06	10:10		
72	C21	1	2oz	✓										11/14/06	10:20		
73	C24	1	2oz	✓										11/14/06	10:40		
74	C24	1	2oz	✓										11/14/06	10:50		
75	Water, I	1		✓										11/14/06	5:00		

ANALYSIS REQUEST**(Circle or Specify Method No.)**

MTBE	8021B / 602 / 8260B / 624	
BTEX	8021B / 602 / 8260B / 624	
TPH	418.1 / TX1005 / TX1005 EXT(C35)	
TPH	8015 GRO / DRO / TVHC	
PAH	8270C / 625	
Total Metals	Ag As Ba Cd Cr Pb Se Hg 6010B/2007	
TCLP Metals	Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles		
TCLP Semi Volatiles		
TCLP Pesticides		
RCI		
GC/MS Vol.	8260B / 624	
GC/MS Semi Vol.	8270C / 625	
PCB's	8082 / 608	
Pesticides	8081A / 608	
BOD, TSS, pH		
Moisture Content		
Turn Around Time	if different from standard	

REMARKS:**LAB USE ONLY**

- ☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Intact Y / N
 Headspace Y / N
 Temp 24
 Log-in-Review 24

Analytical Report

Sample: 108545 - 1A-21'

Analysis:	SPLP Cl	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	32052	Date Analyzed:	2006-11-19	Analyzed By:	WB
Prep Batch:	27922	Sample Preparation:	2006-11-19	Prepared By:	JS
		SPLP Extraction:	2006-11-19	Prepared By:	JS

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Chloride		1330	mg/Kg	100	0.500

Sample: 108550 - 6A-26'

Analysis:	SPLP Cl	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	32052	Date Analyzed:	2006-11-19	Analyzed By:	WB
Prep Batch:	27922	Sample Preparation:	2006-11-19	Prepared By:	JS
		SPLP Extraction:	2006-11-19	Prepared By:	JS

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Chloride		873	mg/Kg	50	0.500

Sample: 108554 - 10A-30'

Analysis:	SPLP Cl	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	32052	Date Analyzed:	2006-11-19	Analyzed By:	WB
Prep Batch:	27922	Sample Preparation:	2006-11-19	Prepared By:	JS
		SPLP Extraction:	2006-11-19	Prepared By:	JS

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Chloride		488	mg/Kg	10	0.500

Sample: 108555 - 1B-21'

Analysis:	SPLP Cl	Analytical Method:	E 300.0	Prep Method:	SPLP 1312
QC Batch:	32052	Date Analyzed:	2006-11-19	Analyzed By:	WB
Prep Batch:	27922	Sample Preparation:	2006-11-19	Prepared By:	JS
		SPLP Extraction:	2006-11-19	Prepared By:	JS

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Chloride		695	mg/Kg	50	0.500

Sample: 108560 - 6B-26'

Analysis: SPLP Cl	Analytical Method: E 300.0	Prep Method: SPLP 1312
QC Batch: 32052	Date Analyzed: 2006-11-19	Analyzed By: WB
Prep Batch: 27922	Sample Preparation: 2006-11-19	Prepared By: JS
	SPLP Extraction: 2006-11-19	Prepared By: JS

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Chloride		783	mg/Kg	50	0.500

Sample: 108564 - 10B-30'

Analysis: SPLP Cl	Analytical Method: E 300.0	Prep Method: SPLP 1312
QC Batch: 32052	Date Analyzed: 2006-11-19	Analyzed By: WB
Prep Batch: 27922	Sample Preparation: 2006-11-19	Prepared By: JS
	SPLP Extraction: 2006-11-19	Prepared By: JS

Parameter	Flag	RL Result	Units	Dilution	RL
SPLP Chloride		342	mg/Kg	10	0.500

Matrix Blank (1) QC Batch: 32052

QC Batch: 32052	Date Analyzed: 2006-11-19	Analyzed By: WB
Prep Batch: 27922	QC Preparation: 2006-11-18	Prepared By: WB

Parameter	Flag	MDL Result	Units	RL
SPLP Chloride		1.39	mg/Kg	0.5

Laboratory Control Spike (LCS-1)

QC Batch: 32052	Date Analyzed: 2006-11-19	Analyzed By: WB
Prep Batch: 27922	QC Preparation: 2006-11-18	Prepared By: WB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Chloride	12.6	mg/Kg	1	12.5	1.39	90	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
SPLP Chloride	13.7	mg/Kg	1	12.5	1.39	98	90 - 110	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 108564

QC Batch: 32052
Prep Batch: 27922

Date Analyzed: 2006-11-19
QC Preparation: 2006-11-18

Analyzed By: WB
Prepared By: WB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
SPLP Chloride	455	mg/Kg	10	125	342	90	49.8 - 149

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
SPLP Chloride	470	mg/Kg	10	125	342	102	49.8 - 149	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 32052

Date Analyzed: 2006-11-19

Analyzed By: WB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chloride		mg/Kg	12.5	12.3	98	90 - 110	2006-11-19

Standard (CCV-1)

QC Batch: 32052

Date Analyzed: 2006-11-19

Analyzed By: WB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP Chloride		mg/Kg	12.5	12.1	97	90 - 110	2006-11-19

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LAB Order ID # 4111012Page 1 of 3**TraceAnalysis, Inc.**

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Fax (915) 585-4944
1 (888) 588 34436015 Harris Pkwy., Suite 110
Ft. Worth, Texas 76132
Tel (817) 201-5260

Company Name: <u>Cimarron</u>		Phone #: <u>505-200 5345</u>	
Address: (Street, City, Zip) <u>207 S Mesa Carlsbad, nm 88580</u>		Fax #: <u>---</u>	
Contact Person: <u>Dorsey Rogers</u>		E-mail: <u>valleyenergy@plateauenergy.com</u>	
Invoice to: (If different from above)		Project Name: <u>Crawford 26 Fed #2</u>	
Project #: <u>---</u>		Sampler Signature: <u>[Signature]</u>	
Project Location (including state): <u>Unit B S26-24S-26E Eddy County, NM</u>			

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD					SAMPLING		MTBE 8021B / 802 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418 1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 60109/2007	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol 8260B / 624	GC/MS Semi Vol 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold			
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE	DATE																				TIME		
108545	1A-21CL	1	4oz																																	
46	2A-22FE	1	4oz																																	
47	3A-23FE	1	4oz																																	
48	4A-24FE	1	4oz																																	
49	5A-25FE	1	4oz																																	
50	6A-26FE	1	4oz																																	
51	7A-27FE	1	4oz																																	
52	8A-28FE	1	4oz																																	
53	9A-29FE	1	4oz																																	
54	10A-30FE	1	4oz																																	
55	1B-21FL	1	4oz																																	

Relinquished by: <u>[Signature]</u> Date: <u>11-9-06</u> Time: <u>4:15</u>	Received by: <u>[Signature]</u> Date: <u>11-9-06</u> Time: <u>4:50</u>	LAB USE ONLY Intact <u>Y</u> / N Headspace <u>Y</u> / N Temp <u>27</u> Log-in-Review <u>[Signature]</u>	REMARKS: <input type="checkbox"/> Dry Weight Basis Required <input type="checkbox"/> TRRP Report Required <input type="checkbox"/> Check If Special Reporting Limits Are Needed
Relinquished by:	Received by:		
Relinquished by:	Received at Laboratory by: <u>[Signature]</u> Date: <u>11-10-06</u> Time: <u>10:10</u>		

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C O C

Carrier # UPS21114455 5915Report Date: November 14, 2006
Eddy County, NMWork Order: 6111012
Crawford 26 Fed #2Page Number: 6 of 8
Unit B-S26-24S-26E

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LAB Order ID # 6111012 Page 2 of 3

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Lubbock, Texas 79424
Tel (806) 794-1236
Fax (806) 794-1238
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6300
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

Company Name: <u>Unadum</u>		Phone #: <u>505 300 5345</u>													
Address: <u>207 S Mesa Carlsbad NM 88320</u>		Fax #: <u></u>													
Contact Person: <u>Dorsey Rogers</u>		E-mail: <u>unadum@traceanalysis.com</u>													
Invoice to: <u></u>		Project Name: <u></u>													
(If different from above)															
Project #:															
Project Location (including state): <u>Unit B S26-24S-26E Eddy County</u>															
Sampler Signature: <u>[Signature]</u>															
LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX			PRESERVATIVE METHOD			SAMPLING					
				WATER	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE	DATE	TIME	
108556	ZB-22FL	1	402									11/9/06	1135		
57	3B-23FL	1	402									11/9/06	1140		
58	4B-24FL	1	402									11/9/06	1145		
59	5B-25FE	1	402									11/9/06	1150		
60	6B-26FL	1	402									11/9/06	1155		
61	7B-27FL	1	402									11/9/06	1200		
62	8B-28FL	1	402									11/9/06	1205		
63	9B-29FL	1	402									11/9/06	1210		
64	10B-30FE	1	402									11/9/06	1215		
65	1C-21FE	1	402									11/9/06	1245		
66	2C-22FL	1	402									11/9/06	1250		
Relinquished by: <u>[Signature]</u>		Date: <u>11-9-06</u>	Time: <u>415P</u>	Received by: <u>UP5</u>		Date: <u>11-9-06</u>	Time: <u>415P</u>								
Relinquished by:		Date:	Time:	Received by:		Date:	Time:								
Relinquished by:		Date:	Time:	Received at Laboratory by: <u>[Signature]</u>		Date: <u>11-10-06</u>	Time: <u>10:00 P.M.</u>								
Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C															
ANALYSIS REQUEST (Circle or Specify Method No.)								LAB USE ONLY							
								Intact <u>(X)</u> N <u></u> Headspace <u>Y</u> N <u></u> Temp <u>21</u> Log-in Review <u>34</u> Carrier # <u>UP5 S26-24S-26E</u>							
Moisture Content								Dry Weight Basis Required <input type="checkbox"/>							
								TRRP Report Required <input type="checkbox"/>							
Turn Around Time if different from standard								Check if Special Reporting Limits Are Needed <input type="checkbox"/>							

ORIGINAL COPY

LAB Order ID #

Page 3 of 3

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1296
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

Company Name: <u>Linarell</u>		Phone #: <u>805-300-5345</u>	
Address: <u>1701 Mesa Carlsbad NM 88500</u>		Fax #: <u></u>	
Contact Person: <u>Dorsey Kowers</u>		E-mail: <u>linarell@traceanalysis.com</u>	
Invoice to: <u></u>		(If different from above)	
Project #:		Project Name: <u>Crawford 26 Fed #2</u>	
Project Location (including state): <u>Carlsbad NM 88500</u>		Sampler Signature: <u>[Signature]</u>	

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX			PRESERVATIVE METHOD					SAMPLING		
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE	DATE
108567	30-23FE	1	4oz	✓									11/9/06	1255
08	40-24FE	1	4oz	✓									11/9/06	100pm

ANALYSIS REQUEST (Circle or Specify Method No.)														
<input type="checkbox"/> MTBE 8021B / 602 / 8260B / 624 <input type="checkbox"/> BTEX 8021B / 602 / 8260B / 624 <input type="checkbox"/> TPH 418 / 1 / TX1005 / TX1005 EXI(C35) <input type="checkbox"/> TPH 8015 GRO / DRO / TVHC <input type="checkbox"/> PAH 8270C / 625 <input type="checkbox"/> Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007 <input type="checkbox"/> TCLP Metals Ag As Ba Cd Cr Pb Se Hg <input type="checkbox"/> TCLP Volatiles <input type="checkbox"/> TCLP Semi Volatiles <input type="checkbox"/> TCLP Pesticides <input type="checkbox"/> RCI <input type="checkbox"/> GC/MS Vol 8260B / 624 <input type="checkbox"/> GC/MS Semi Vol 8270C / 625 <input type="checkbox"/> PCB's 8082 / 608 <input type="checkbox"/> Pesticides 8081A / 808 <input type="checkbox"/> BOD TSS pH <input type="checkbox"/> Moisture Content <input type="checkbox"/> Turn Around Time if different from standard														

LAB USE ONLY		REMARKS:	
Intact <u>Y/N</u>	Headspace <u>Y/N</u>	<input type="checkbox"/> Dry Weight Basis Required <input type="checkbox"/> TRRP Report Required <input type="checkbox"/> Check if Special Reporting Limits Are Needed	
Temp <u>21</u>	Log-in-Review <u>88</u>	Carrier # <u>UP 53104 915 591 5</u>	

Relinquished by: <u>[Signature]</u>	Date: <u>11-9-06</u>	Time: <u>4:45</u>	Received by: <u>UPB</u>	Date: <u>11-9-06</u>	Time: <u>4:50</u>
Relinquished by: <u>[Signature]</u>	Date: <u>11-9-06</u>	Time: <u>4:45</u>	Received by: <u>[Signature]</u>	Date: <u>11-10-06</u>	Time: <u>10:10</u>

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C O C

Bratcher, Mike, EMNRD

From: Bratcher, Mike, EMNRD
Sent: Thursday, December 07, 2006 2:41 PM
To: 'Zeno Farris'
Subject: RE: Crawford 26-2 NMOCD Order 11-30--06

Zeno,

Your request for an extension of time to commence delineation is approved to January 12, 2007 unless otherwise instructed by Mr. Price.

Sincerely,

Mike Bratcher
NMOCD District 2

From: Zeno Farris [mailto:zfarris@cimarex.com]
Sent: Thursday, December 07, 2006 2:05 PM
To: Bratcher, Mike, EMNRD
Subject: FW: Crawford 26-2 NMOCD Order 11-30--06

Mike we are putting together our sample data and want to schedule a meeting with Mr. Price in Santa Fe concerning the referenced pit reclamation. Can we postpone delineation operations until after we meet with Mr. Price? Dorsey is coming in next week to discuss this with us.

Thanks

Zeno

From: dorseyrogers@aol.com [mailto:dorseyrogers@aol.com]
Sent: Thursday, November 30, 2006 1:50 PM
To: Dee Smith; Zeno Farris
Subject: Crawford 26-2 NMOCD Order 11-30--06

12/7/2006



TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
155 McCutcheon, Suite H

Lubbock, Texas 79424
El Paso, Texas 79932

800•378•1296

888•588•3443

806•794•1296

915•585•3443

FAX 806•794•1298

FAX 915•585•4944

E-Mail: lab@traceanalysis.com

November 20, 2006

CIMAREX

207 S. Mesa

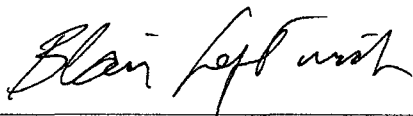
Carlsbad, NM 88220

Attention: Dorsey Rogers

RE: Crawford 26 Fed #2

TRACE #	FIELD CODE	TOTAL Cl- (mg/kg)	SPLP Cl- (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

Above are bore hole sample results for chloride and SPLP chloride representing various high concentration levels at Crawford 26 Fed #2. The data shows that only 9-12% of the total chlorides are leachable. If rainfall were such that the site could pond and leach the concentration of leachable chlorides may not significantly alter the groundwater quality depending on the concentration of chlorides in the groundwater. It is reported that the depth of the excavation is 16-17' deep. The data shows significantly high chlorides at 21-30' deep. Additional excavation is of little value if leachability can be controlled by other measures. Because of the depth of chlorides the additional excavation should be stopped, the pit lined with an impermeable liner, the pit backfilled with low chloride soil and the pit capped with a dome of compacted soil. This procedure should negate the possibility of chlorides leaching to groundwater.



Director, Dr. Blair Leftwich

11-20-06

DATE

Crawford 26 #2 Drilling Pit
Floor -- 11/9/06

A

155'

B

135'



N

Legend:

Each square is
11' x 11'
approx

Drilling pit floor
is approx 155'
x 135' x 16'

Shaded area =
original
horse shoe

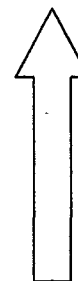
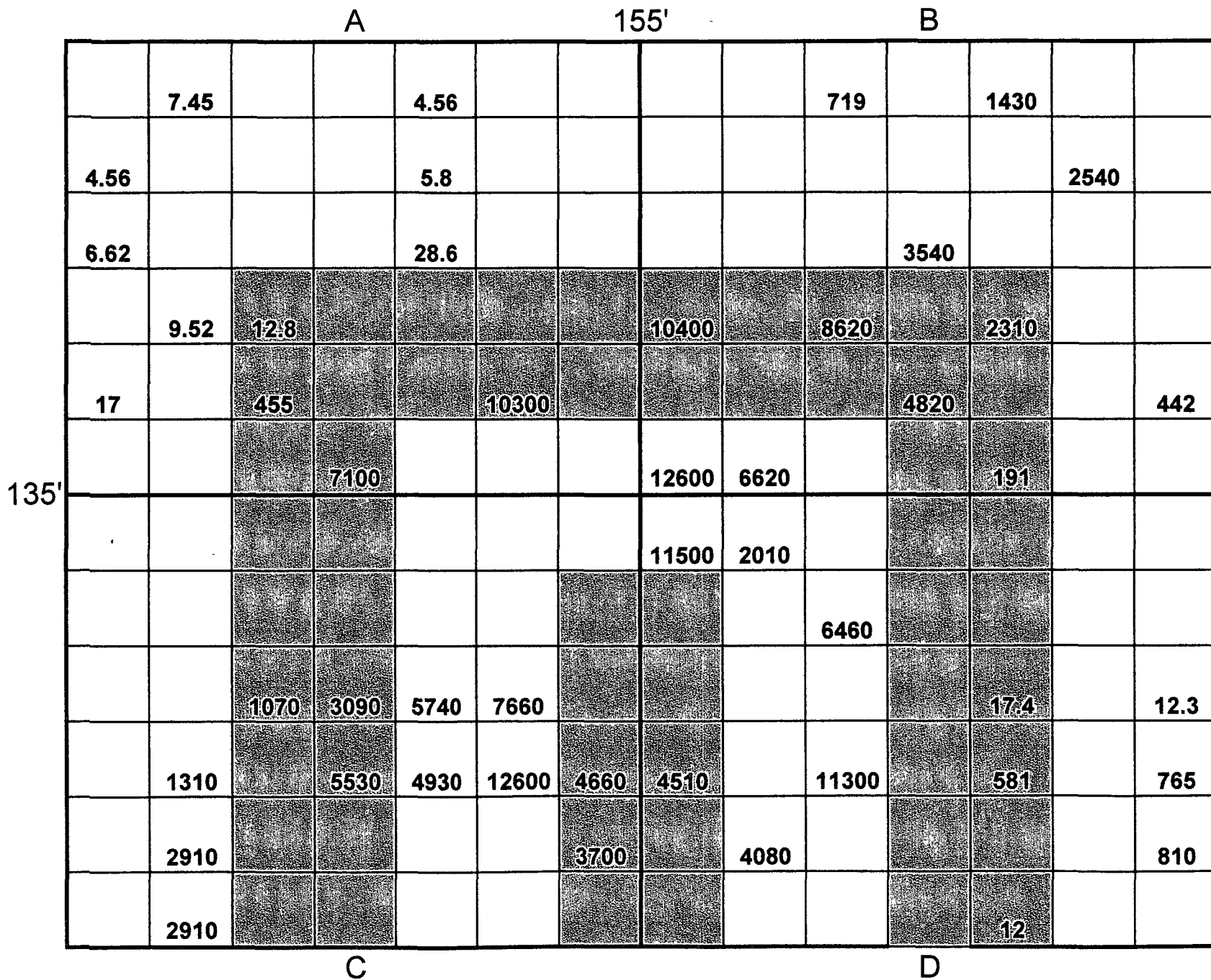
Samples were
taken 1' below
floor surface

	7.45			4.56					719		1430		
4.56				5.8								2540	
6.62				28.6							3540		
	9.52	12.8						10400		8620		2310	
17		455				10300					4820		442
			7100					12600	6620			191	
								11500	2010				
										6460			
		1070	3090	5740		7660						17.4	12.3
	1310		5530	4930	12600	4660	4510		11300		581		765
	2910					3700			4080				810
	2910												

C

D

Crawford 26 #2 Drilling Pit
Floor -- 10/20/06



N

Legend:

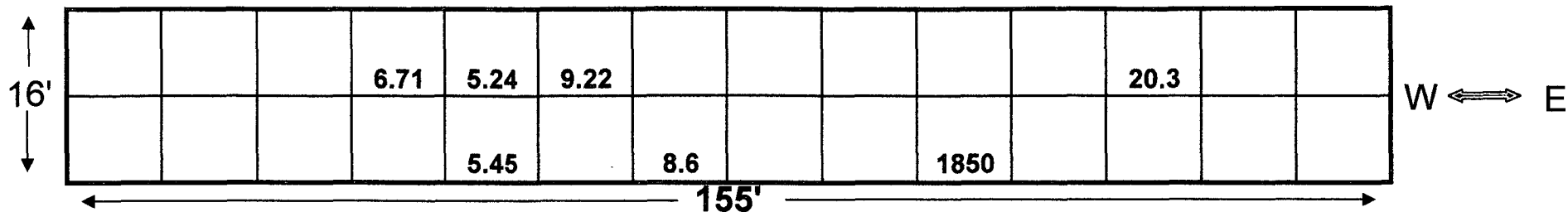
Each square is
11' x 11'
approx

Drilling pit floor
is approx 155'
x 135' x 16'

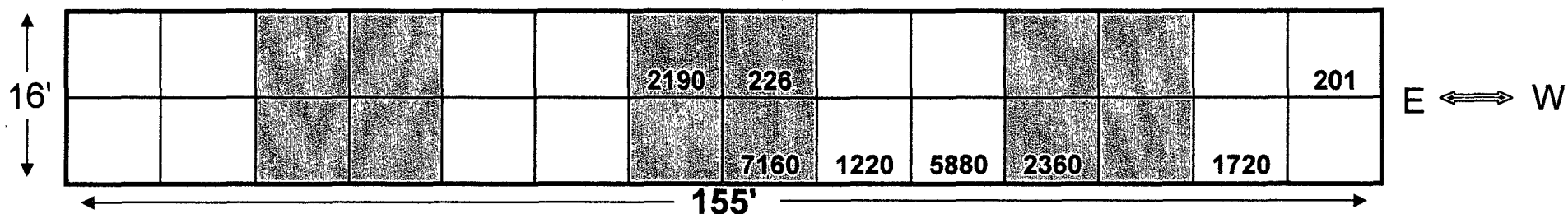
Shaded area =
original
horse shoe

Samples were
taken 1' below
floor surface

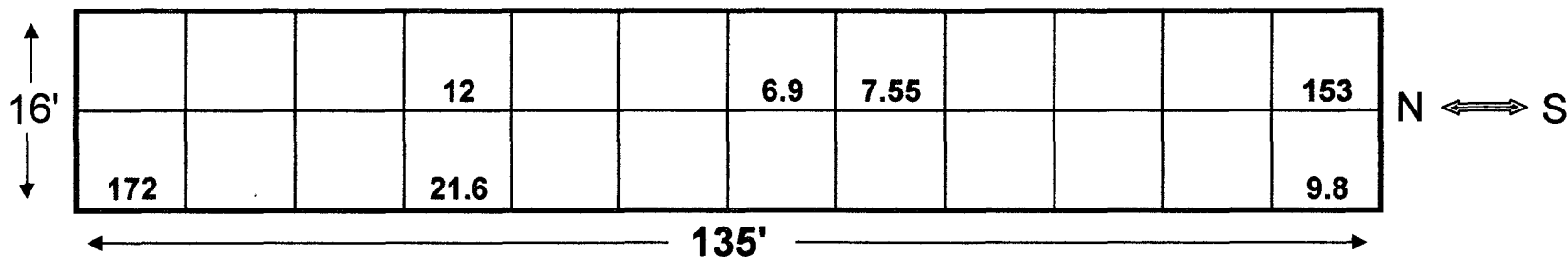
Crawford 26 #2 Drilling Pit
Walls -- 10/20/06
North Wall



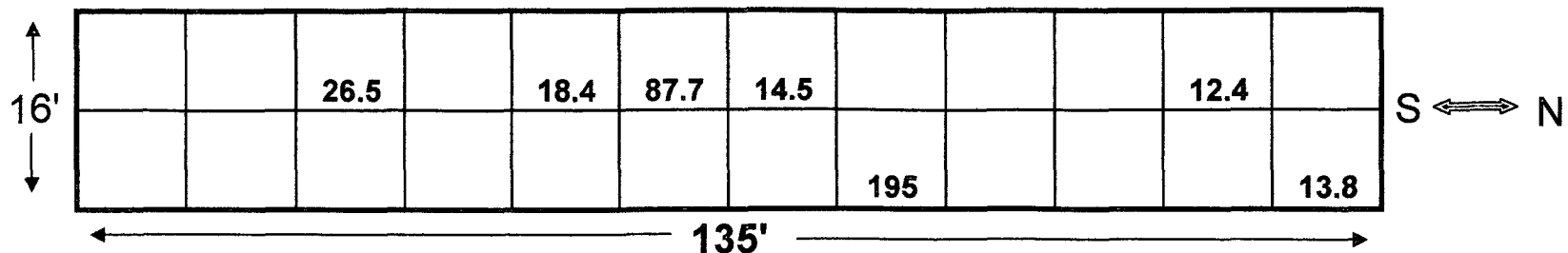
South Wall



East Wall



West Wall



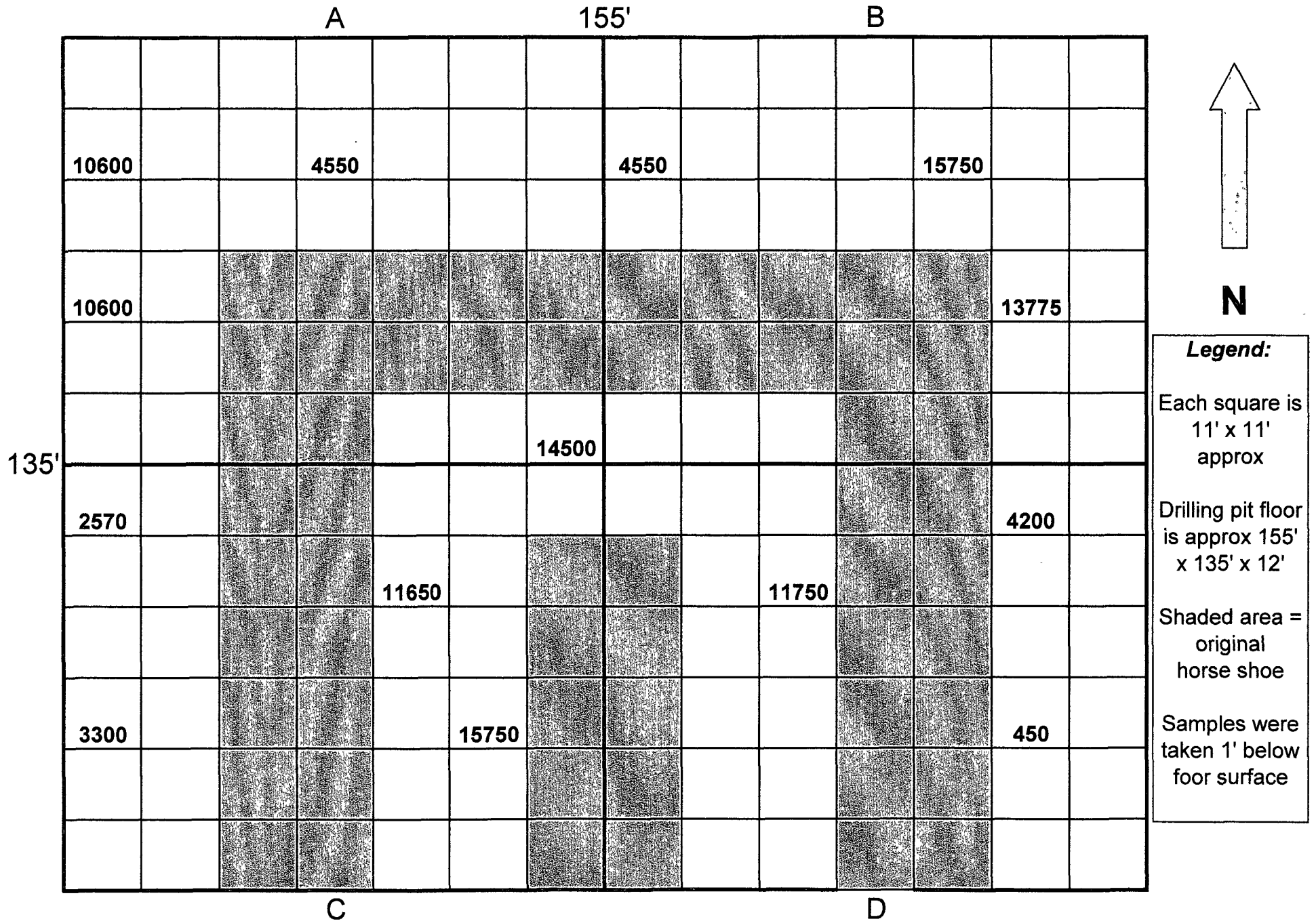
Wall Legend:

Each square is
approx 8' x 11'

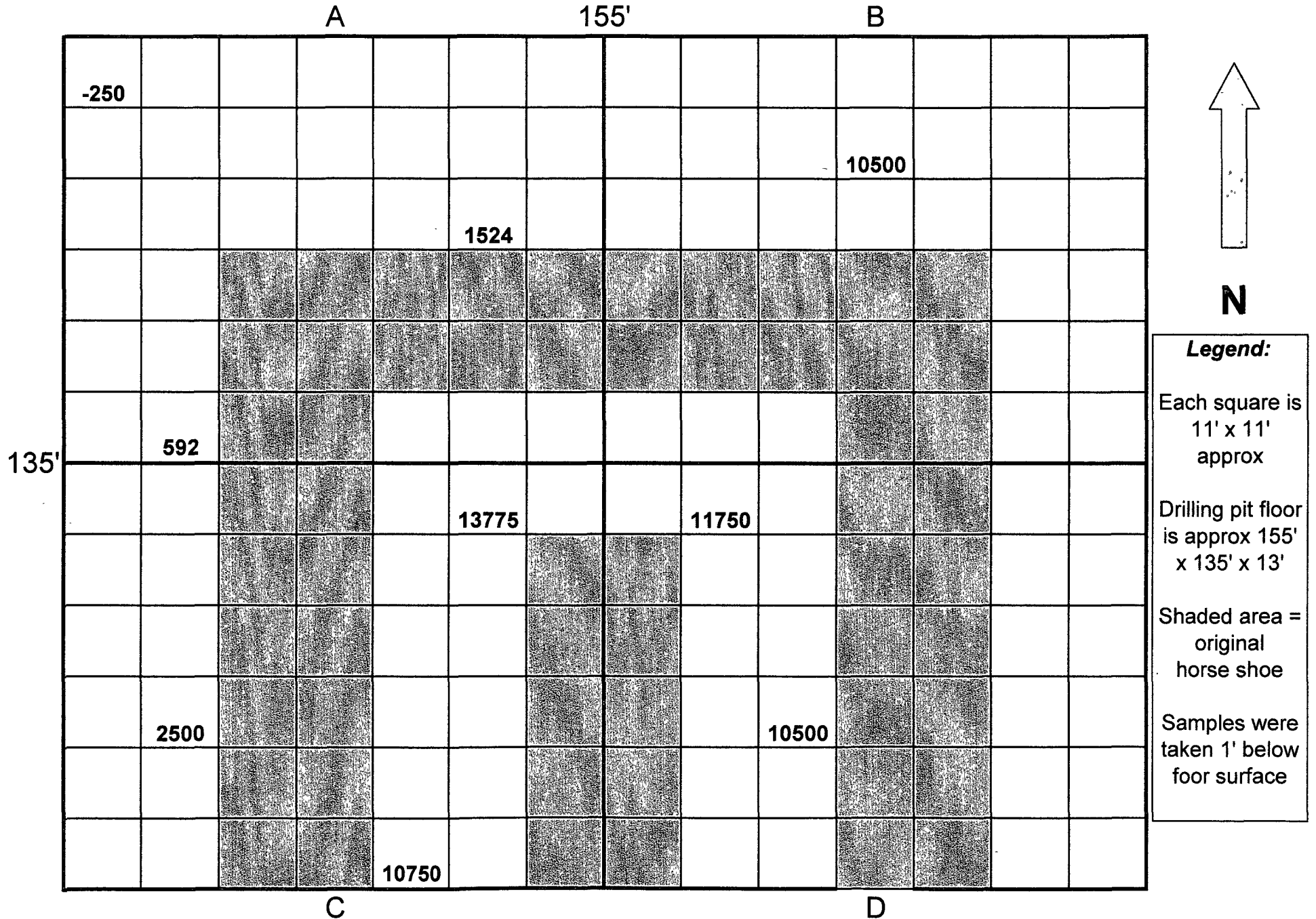
South wall
shaded area =
original horse
shoe

Samples were
taken 6" into wall

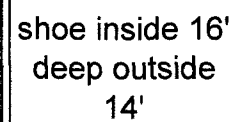
Crawford 26 #2 Drilling Pit
Floor -- 10-2-06



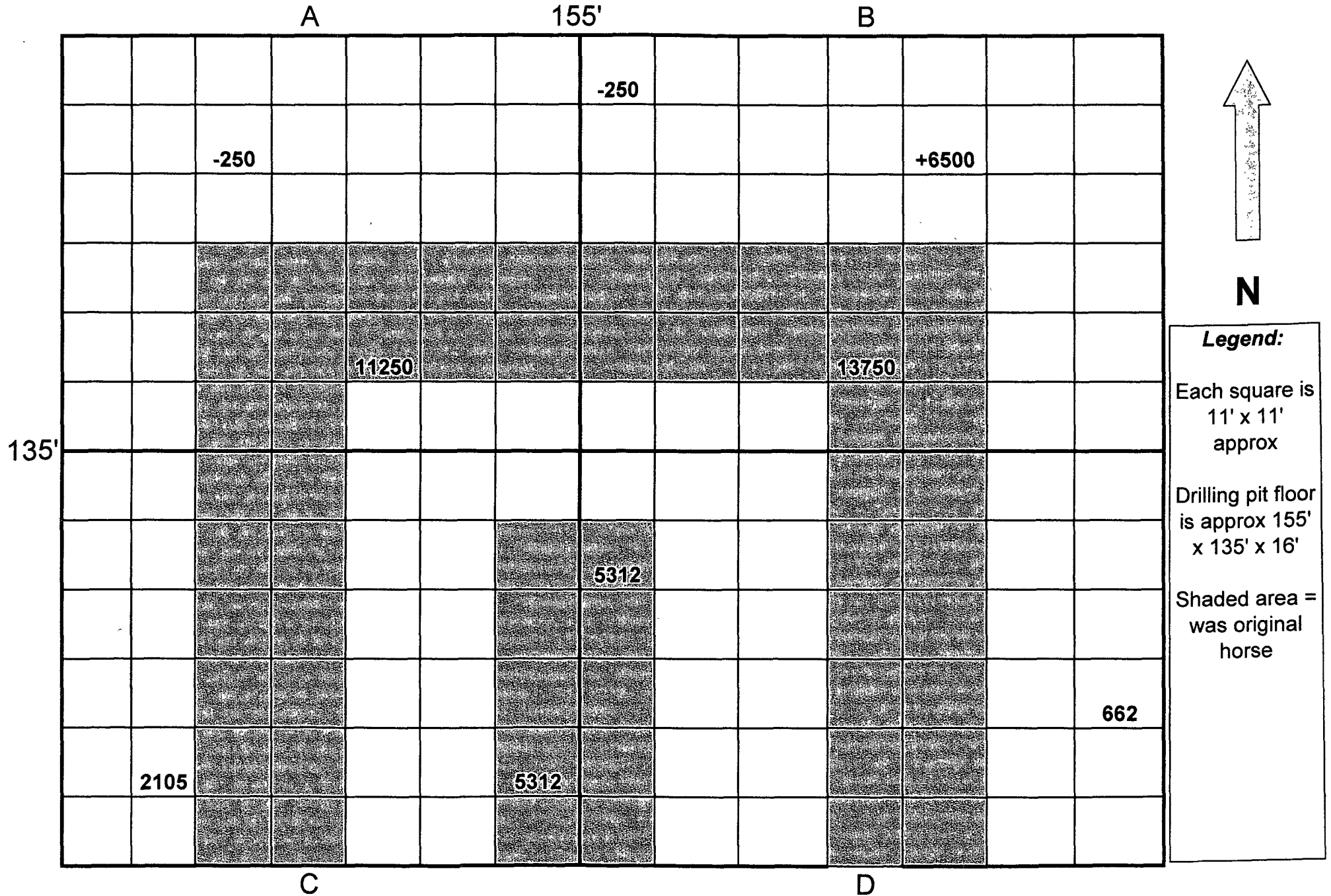
Crawford 26 #2 Drilling Pit
Floor -- 10-3-06



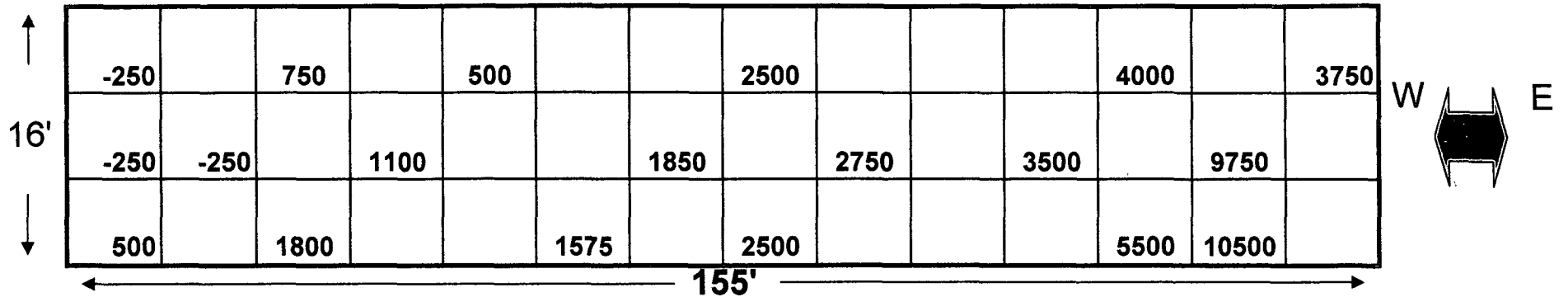
B



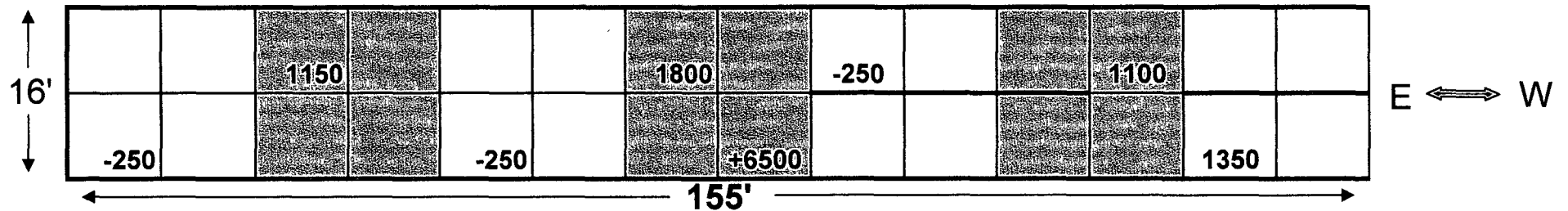
Crawford 26 #2 Drilling Pit
Floor -- 10-11-06



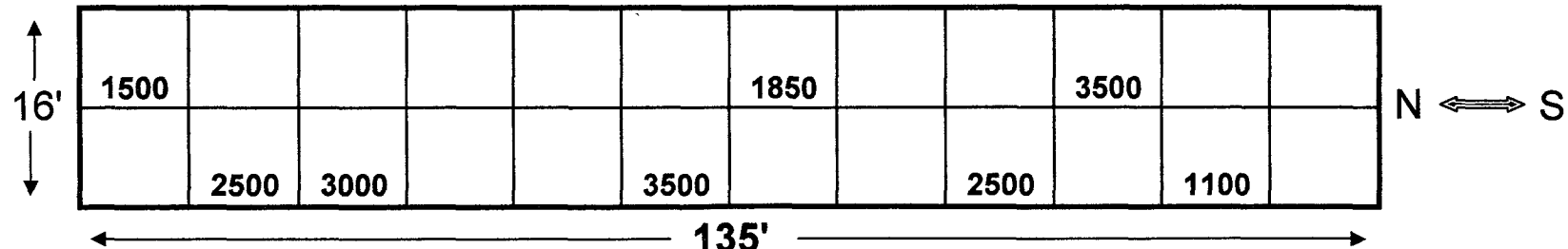
Crawford 26 #2 Drilling Pit
Walls -- 10/11/06
North Wall



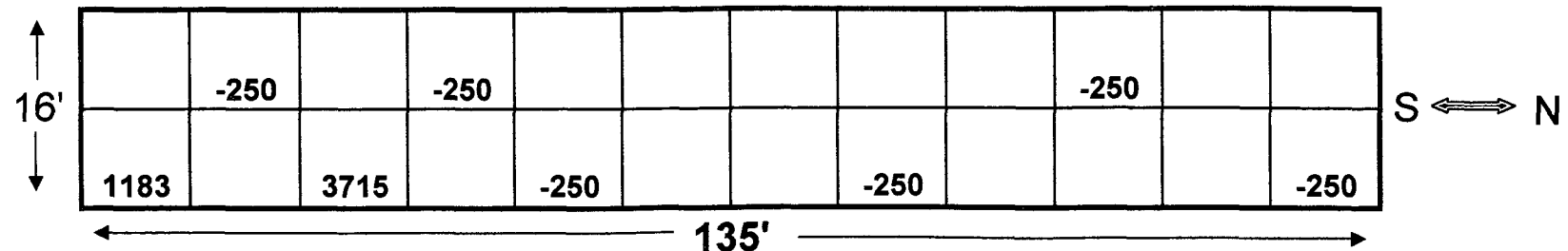
South Wall



East Wall



West Wall



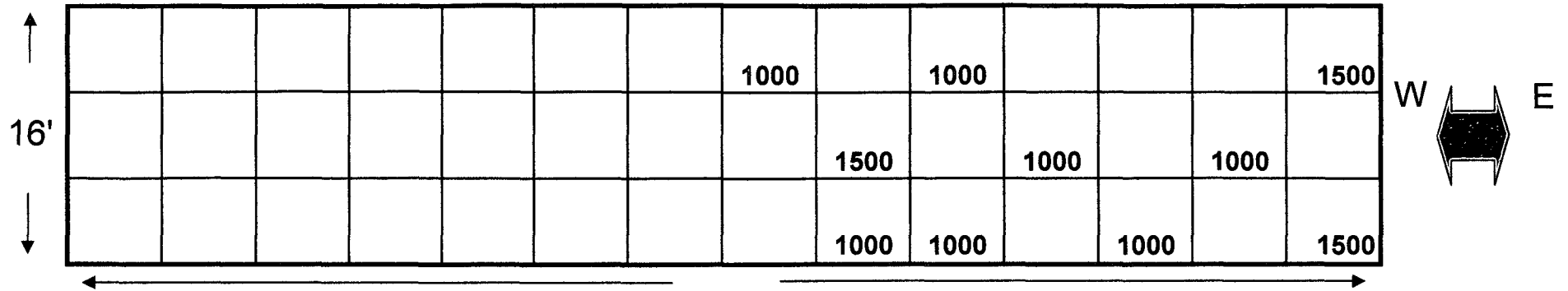
Wall Legend:

Each square is
approx 8' x 11'

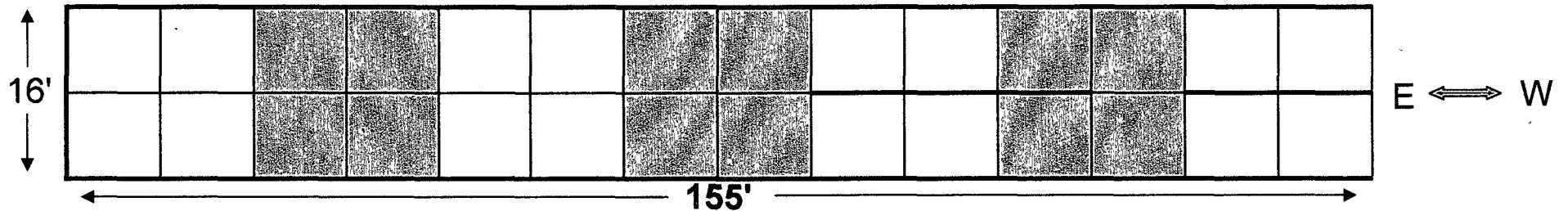
South wall
shaded area =
original horse
shoe

Samples were
taken 6" into wall

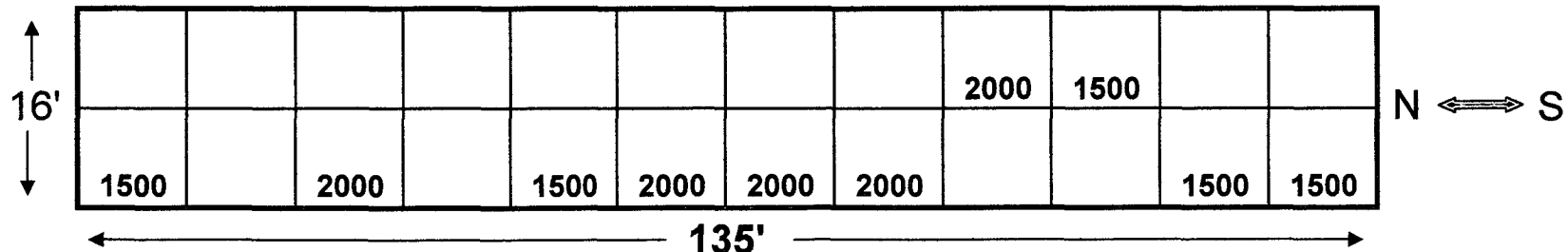
Crawford 26 #2 Drilling Pit
Walls -- 10/13/06
North Wall



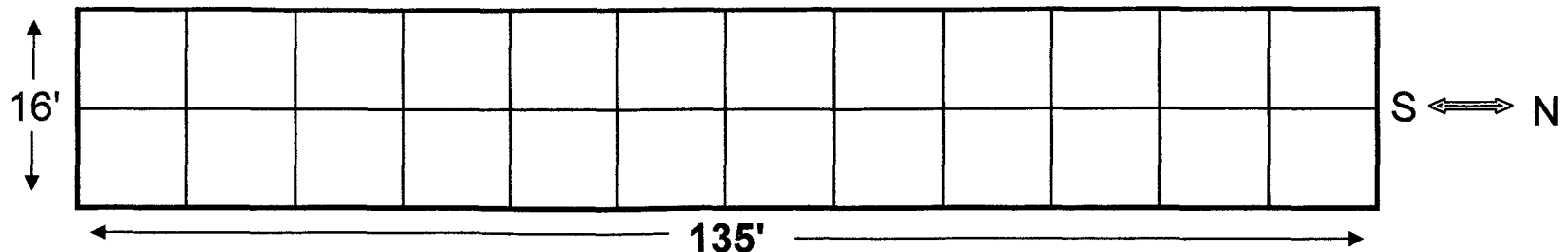
South Wall



East Wall



West Wall



Wall Legend:

Each square is
approx 8' x 11'

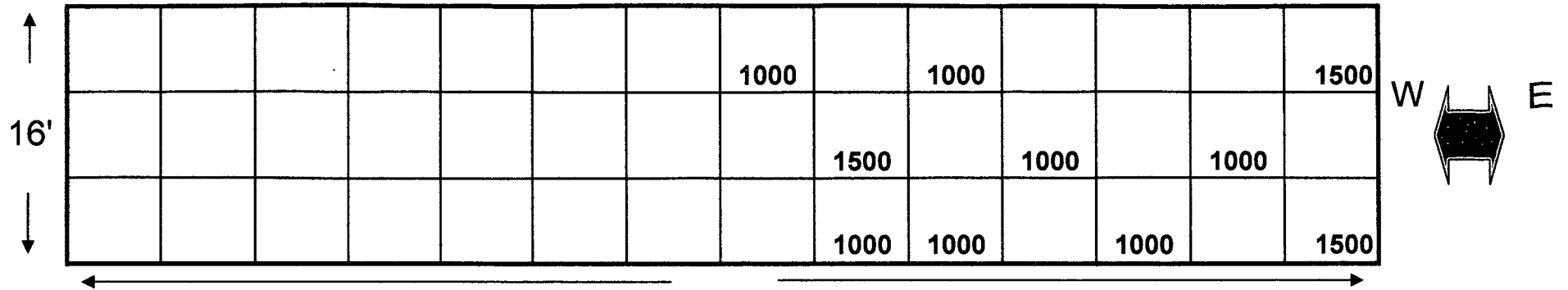
South wall
shaded area =
original horse
shoe

Samples were
taken 6" into wall

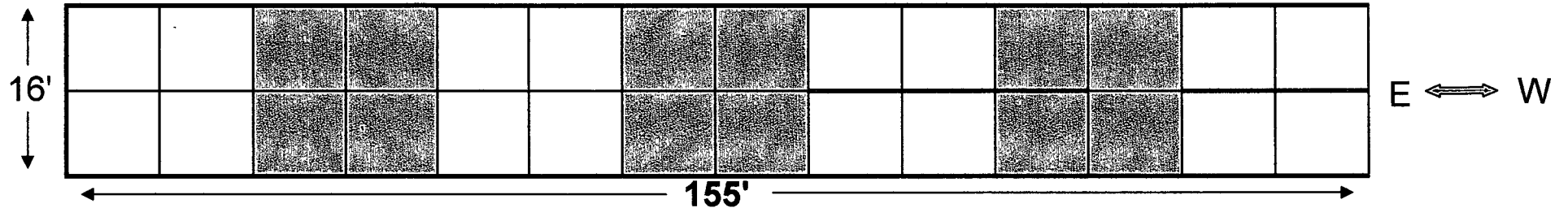
Crawford 26 #2 Drilling Pit

Walls -- 10/13/06

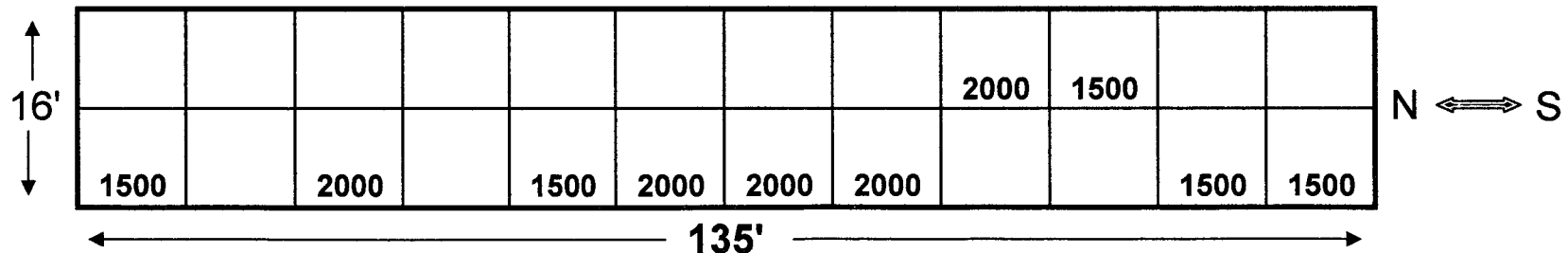
North Wall



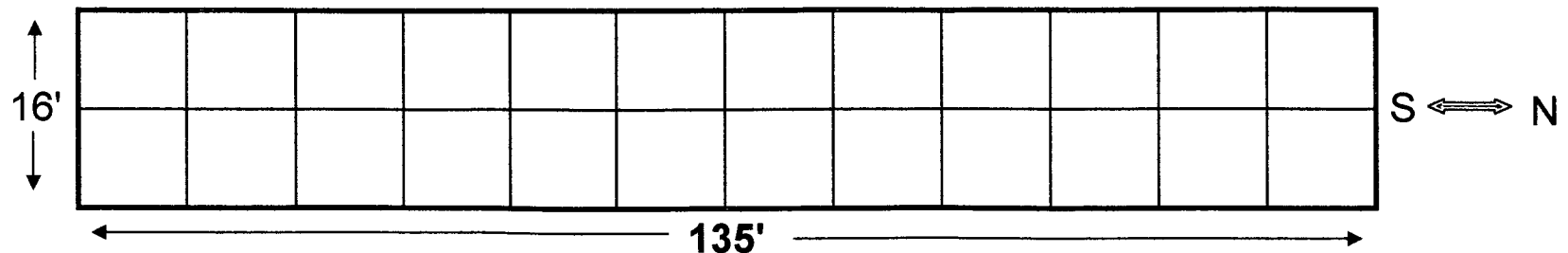
South Wall



East Wall



West Wall



Wall Legend:

Each square is approx 8' x 11'

South wall shaded area = original horse shoe

Samples were taken 6" into wall

DISCOVERY LOGGING INC.

P.O. Box 80531

HYDROCARBON LOGGING

MIDLAND, TX 79701

WELLSITE CONSULTING

(432) 687-1823

COMPANY: CIMAREX ENERGY

WELL: CRAWFORD 26-2

FIELD: WHITE CITY PENN

COUNTY: EDDY NM

STATE:

LOCATION:

Spud Date:

Logging Personnel:

Started: At: 0

MIKE FARLEIGH

Ended: At: 30

CONSULTING GEOLOGIST

Api No.:

Unit No.:

G.L.:

Rig:

K.B.:

Filename: CIMAREX-CRAWFORD26-2 SOI Geologist: FOR DORSEY RODGERS

Abbreviations:

NB...New Bit DST...Drill Stem Test
CO...Circ Out DS...Directional Survey
NR...No Returns CG...Connection Gas
TG...Trip Gas LAT...Logged After Trip
WOB...Wt on Bit PP...Pump Pressure
RPM...Rev/Min SPM...Strokes/Min
SG...Survey Gas DTG...Down Time Gas

Lithology Symbols:

Anhydrit Salt Granite
Siltston Chert Sandstone
Dolomite Conglomer Limestone
Coal Shale Bentonite
Carb Shale Granite Wash Quartz Wash
Accessories
Glaucous Pyrit Fossil Oolites
Fractures

Gas Chromatograph Analysis

HW
C1
C2
C3
IC4
NC4

Mud Data

WT...Weight V...Viscosity
PH...Acidity F...Filtrate
CHL...Chloride SC...Solids Content

Drilling Rate

MIN/FT

Vis
Por
Oil Cut
Flu
Lithology
Tr
p
f
g

Descriptions/Remark

Total Gas/Chromatograph

SOIL PROFILE FROM PITS
SAMPLES FROM AUGER DRILL

SOIL LTRD IN CRM VFXLN
CALCAREOUS MARL -NO
VIS CARB OR ORGANIC
MATERIAL & SILTY
SUBSOIL IS IMBED
ANY INCLIN

SOIL LTRD IN CRM VFXLN
SILTY AND HEAVY IN
AUGER DRILL
SILTY & SILTY MARL
LAST 20 AS INCLIN
DRY WHEN COLLECTED
SFT SLICK MUSHY TACKY
WHEN MOISTENED NO VIS
ORGANIC ALOCHER

10
SOIL TN LTGYTN CRM VEG
CALCARETIOUS MARL SM
ANHYDRIC SM W/GYP INCL
DRY WHEN COLLECTED
STRNG REACTION TO
ACID GYP & GELLATNOUS
CLAY RESUIDUE NO
VIS ORGANIC ALLOCHEM
POWDERY

19
SOIL A/A

20
CLAY LTIN OFFWH LTGY
AMORPH ANHYDRIC CALC
IP SLIGHTLY MOIST @
COLLECTION

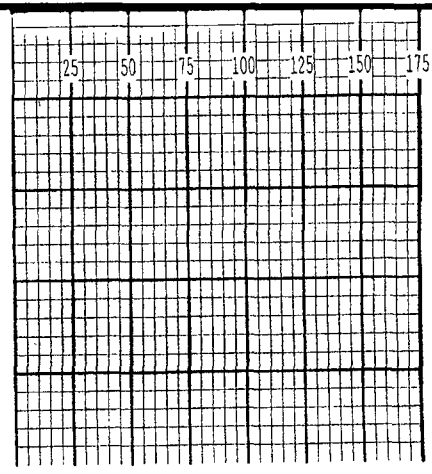
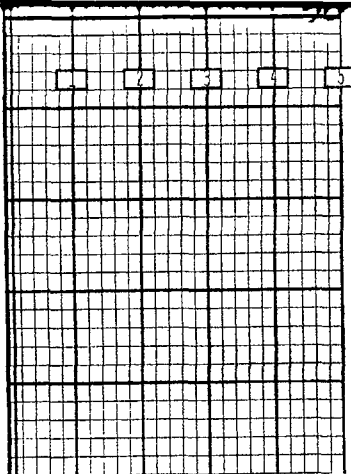
20
CLAY LTGYTN CRM OFFWH
SFT PLASTIC NON REACT
TO ACID SM ANHY INCLS
DEFORMS WELL

25
SOIL OFFWH LTCRM POWDER
DRY WHEN COLLECTED
CALCARIOUS MARL PROB
ARAGONITE /VADOS?

25
SOIL A/A ABNDT SML ANHY
GLASSY PARTICALS SM
AS INCLSN DRY WHEN
SAMPLED

30
SOIL LTGYTN CLAY SM
ANHYDRN IP PLASTIC
CALCARIOUS IP PLASTIC

TD NOTE NO FLUID INTRY
AFTR 24 HRS*****



Summary Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: November 14, 2006

Work Order: 6111012



Project Location: Unit B-S26-24S-26E
Project Name: Crawford 26 Fed #2
Project Number: Eddy County, Nm

30-015-33228

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
108545	1A-21'	soil	2006-11-09	10:25	2006-11-10
108546	2A-22'	soil	2006-11-09	10:30	2006-11-10
108547	3A-23'	soil	2006-11-09	10:35	2006-11-10
108548	4A-24'	soil	2006-11-09	10:40	2006-11-10
108549	5A-25'	soil	2006-11-09	10:45	2006-11-10
108550	6A-26'	soil	2006-11-09	10:50	2006-11-10
108551	7A-27'	soil	2006-11-09	10:55	2006-11-10
108552	8A-28'	soil	2006-11-09	11:00	2006-11-10
108553	9A-29'	soil	2006-11-09	11:05	2006-11-10
108554	10A-30'	soil	2006-11-09	11:10	2006-11-10
108555	1B-21'	soil	2006-11-09	11:30	2006-11-10
108556	2B-22'	soil	2006-11-09	11:35	2006-11-10
108557	3B-23'	soil	2006-11-09	11:40	2006-11-10
108558	4B-24'	soil	2006-11-09	11:45	2006-11-10
108559	5B-25'	soil	2006-11-09	11:50	2006-11-10
108560	6B-26'	soil	2006-11-09	11:55	2006-11-10
108561	7B-27'	soil	2006-11-09	12:00	2006-11-10
108562	8B-28'	soil	2006-11-09	12:05	2006-11-10
108563	9B-29'	soil	2006-11-09	12:10	2006-11-10
108564	10B-30'	soil	2006-11-09	12:15	2006-11-10
108565	1C-21'	soil	2006-11-09	12:45	2006-11-10
108566	2C-22'	soil	2006-11-09	12:50	2006-11-10
108567	3C-23'	soil	2006-11-09	12:55	2006-11-10
108568	4C-24'	soil	2006-11-09	13:00	2006-11-10

Sample: 108545 - 1A-21'

Param	Flag	Result	Units	RL
Chloride		12700	mg/Kg	2.00

Sample: 108546 - 2A-22'

Report Date: November 14, 2006
Eddy County, Nm

Work Order: 6111012
Crawford 26 Fed #2

Page Number: 2 of 4
Unit B-S26-24S-26E

Param	Flag	Result	Units	RL
Chloride		11000	mg/Kg	2.00

Sample: 108547 - 3A-23'

Param	Flag	Result	Units	RL
Chloride		12000	mg/Kg	2.00

Sample: 108548 - 4A-24'

Param	Flag	Result	Units	RL
Chloride		12000	mg/Kg	2.00

Sample: 108549 - 5A-25'

Param	Flag	Result	Units	RL
Chloride		10400	mg/Kg	2.00

Sample: 108550 - 6A-26'

Param	Flag	Result	Units	RL
Chloride		9320	mg/Kg	2.00

Sample: 108551 - 7A-27'

Param	Flag	Result	Units	RL
Chloride		9660	mg/Kg	2.00

Sample: 108552 - 8A-28'

Param	Flag	Result	Units	RL
Chloride		5380	mg/Kg	2.00

Sample: 108553 - 9A-29'

Param	Flag	Result	Units	RL
Chloride		6910	mg/Kg	2.00

Sample: 108554 - 10A-30'

Param	Flag	Result	Units	RL
Chloride		4370	mg/Kg	2.00

Sample: 108555 - 1B-21'

Param	Flag	Result	Units	RL
Chloride		6850	mg/Kg	2.00

Sample: 108556 - 2B-22'

Param	Flag	Result	Units	RL
Chloride		6690	mg/Kg	2.00

Sample: 108557 - 3B-23'

Param	Flag	Result	Units	RL
Chloride		9540	mg/Kg	2.00

Sample: 108558 - 4B-24'

Param	Flag	Result	Units	RL
Chloride		8040	mg/Kg	2.00

Sample: 108559 - 5B-25'

Param	Flag	Result	Units	RL
Chloride		8330	mg/Kg	2.00

Sample: 108560 - 6B-26'

Param	Flag	Result	Units	RL
Chloride		8200	mg/Kg	2.00

Sample: 108561 - 7B-27'

Param	Flag	Result	Units	RL
Chloride		7140	mg/Kg	2.00

Sample: 108562 - 8B-28'

Param	Flag	Result	Units	RL
Chloride		6860	mg/Kg	2.00

Sample: 108563 - 9B-29'

Param	Flag	Result	Units	RL
Chloride		4960	mg/Kg	2.00

Report Date: November 14, 2006
Eddy County, Nm

Work Order: 6111012
Crawford 26 Fed #2

Page Number: 4 of 4
Unit B-S26-24S-26E

Sample: 108564 - 10B-30'

Param	Flag	Result	Units	RL
Chloride		2760	mg/Kg	2.00

Sample: 108565 - 1C-21'

Param	Flag	Result	Units	RL
Chloride		71.1	mg/Kg	2.00

Sample: 108566 - 2C-22'

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

Sample: 108567 - 3C-23'

Param	Flag	Result	Units	RL
Chloride		66.4	mg/Kg	2.00

Sample: 108568 - 4C-24'

Param	Flag	Result	Units	RL
Chloride		52.1	mg/Kg	2.00



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Analytical and Quality Control Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: November 14, 2006

Work Order: 6111012



Project Location: Unit B-S26-24S-26E
Project Name: Crawford 26 Fed #2
Project Number: Eddy County,Nm

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
108545	1A-21'	soil	2006-11-09	10:25	2006-11-10
108546	2A-22'	soil	2006-11-09	10:30	2006-11-10
108547	3A-23'	soil	2006-11-09	10:35	2006-11-10
108548	4A-24'	soil	2006-11-09	10:40	2006-11-10
108549	5A-25'	soil	2006-11-09	10:45	2006-11-10
108550	6A-26'	soil	2006-11-09	10:50	2006-11-10
108551	7A-27'	soil	2006-11-09	10:55	2006-11-10
108552	8A-28'	soil	2006-11-09	11:00	2006-11-10
108553	9A-29'	soil	2006-11-09	11:05	2006-11-10
108554	10A-30'	soil	2006-11-09	11:10	2006-11-10
108555	1B-21'	soil	2006-11-09	11:30	2006-11-10
108556	2B-22'	soil	2006-11-09	11:35	2006-11-10
108557	3B-23'	soil	2006-11-09	11:40	2006-11-10
108558	4B-24'	soil	2006-11-09	11:45	2006-11-10
108559	5B-25'	soil	2006-11-09	11:50	2006-11-10
108560	6B-26'	soil	2006-11-09	11:55	2006-11-10
108561	7B-27'	soil	2006-11-09	12:00	2006-11-10
108562	8B-28'	soil	2006-11-09	12:05	2006-11-10
108563	9B-29'	soil	2006-11-09	12:10	2006-11-10
108564	10B-30'	soil	2006-11-09	12:15	2006-11-10
108565	1C-21'	soil	2006-11-09	12:45	2006-11-10
108566	2C-22'	soil	2006-11-09	12:50	2006-11-10
108567	3C-23'	soil	2006-11-09	12:55	2006-11-10
108568	4C-24'	soil	2006-11-09	13:00	2006-11-10

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc

A handwritten signature in black ink, appearing to read "Taylor", is positioned above a horizontal line.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 108545 - 1A-21'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31861	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27745	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Chloride		12700	mg/Kg	25	2.00

Sample: 108546 - 2A-22'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31861	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27745	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Chloride		11000	mg/Kg	25	2.00

Sample: 108547 - 3A-23'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31861	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27745	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Chloride		12000	mg/Kg	25	2.00

Sample: 108548 - 4A-24'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31861	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27745	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Chloride		12000	mg/Kg	25	2.00

Sample: 108549 - 5A-25'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31861	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27745	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		10400	mg/Kg	25	2.00

Sample: 108550 - 6A-26'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31861	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27745	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		9320	mg/Kg	25	2.00

Sample: 108551 - 7A-27'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31861	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27745	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		9660	mg/Kg	25	2.00

Sample: 108552 - 8A-28'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31861	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27745	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5380	mg/Kg	25	2.00

Sample: 108553 - 9A-29'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31861	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27745	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6910	mg/Kg	25	2.00

Sample: 108554 - 10A-30'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31861	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27745	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		4370	mg/Kg	25	2.00

Sample: 108555 - 1B-21'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31862	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27746	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6850	mg/Kg	25	2.00

Sample: 108556 - 2B-22'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31862	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27746	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6690	mg/Kg	25	2.00

Sample: 108557 - 3B-23'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31862	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27746	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		9540	mg/Kg	25	2.00

Sample: 108558 - 4B-24'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31862	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27746	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		8040	mg/Kg	25	2.00

Sample: 108559 - 5B-25'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31862	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27746	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		8330	mg/Kg	25	2.00

Sample: 108560 - 6B-26'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31862	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27746	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		8200	mg/Kg	25	2.00

Sample: 108561 - 7B-27'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31862	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27746	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		7140	mg/Kg	25	2.00

Sample: 108562 - 8B-28'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31862	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27746	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6860	mg/Kg	25	2.00

Sample: 108563 - 9B-29'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31862	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27746	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		4960	mg/Kg	25	2.00

Sample: 108564 - 10B-30'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31862	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27746	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2760	mg/Kg	25	2.00

Sample: 108565 - 1C-21'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31859	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27743	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		71.1	mg/Kg	25	2.00

Sample: 108566 - 2C-22'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31859	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27743	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	25	2.00

Sample: 108567 - 3C-23'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31859	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27743	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		66.4	mg/Kg	25	2.00

Sample: 108568 - 4C-24'

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31859	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27743	Sample Preparation:	2006-11-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		52.1	mg/Kg	25	2.00

Method Blank (1) QC Batch: 31859

QC Batch: 31859
Prep Batch: 27743

Date Analyzed: 2006-11-13
QC Preparation: 2006-11-13

Analyzed By: SM
Prepared By: SM

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Method Blank (1) QC Batch: 31861

QC Batch: 31861
Prep Batch: 27745

Date Analyzed: 2006-11-13
QC Preparation: 2006-11-13

Analyzed By: SM
Prepared By: SM

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Method Blank (1) QC Batch: 31862

QC Batch: 31862
Prep Batch: 27746

Date Analyzed: 2006-11-13
QC Preparation: 2006-11-13

Analyzed By: SM
Prepared By: SM

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Laboratory Control Spike (LCS-1)

QC Batch: 31859
Prep Batch: 27743

Date Analyzed: 2006-11-13
QC Preparation: 2006-11-13

Analyzed By: SM
Prepared By: SM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	96.5	mg/Kg	1	100	<0.500	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<0.500	100	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 31861
Prep Batch: 27745

Date Analyzed: 2006-11-13
QC Preparation: 2006-11-13

Analyzed By: SM
Prepared By: SM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	95.2	mg/Kg	1	100	<0.500	95	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	96.7	mg/Kg	1	100	<0.500	97	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 31862
Prep Batch: 27746

Date Analyzed: 2006-11-13
QC Preparation: 2006-11-13

Analyzed By: SM
Prepared By: SM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.0	mg/Kg	1	100	<0.500	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	105	mg/Kg	1	100	<0.500	105	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 108568

QC Batch: 31859
Prep Batch: 27743

Date Analyzed: 2006-11-13
QC Preparation: 2006-11-13

Analyzed By: SM
Prepared By: SM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	2390	mg/Kg	25	2500	52.133	94	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	2230	mg/Kg	25	2500	52.133	87	70 - 130	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 108554

QC Batch: 31861
Prep Batch: 27745

Date Analyzed: 2006-11-13
QC Preparation: 2006-11-13

Analyzed By: SM
Prepared By: SM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	6510	mg/Kg	25	2500	4372.69	85	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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Eddy County,Nm

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Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	6770	mg/Kg	25	2500	4372.69	96	70 - 130	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 108564

QC Batch: 31862
Prep Batch: 27746

Date Analyzed: 2006-11-13
QC Preparation: 2006-11-13

Analyzed By: SM
Prepared By: SM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	5300	mg/Kg	25	2500	2757.32	102	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	5090	mg/Kg	25	2500	2757.32	93	70 - 130	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 31859

Date Analyzed: 2006-11-13

Analyzed By: SM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.2	98	85 - 115	2006-11-13

Standard (CCV-1)

QC Batch: 31859

Date Analyzed: 2006-11-13

Analyzed By: SM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2006-11-13

Standard (ICV-1)

QC Batch: 31861

Date Analyzed: 2006-11-13

Analyzed By: SM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2006-11-13

Standard (CCV-1)

QC Batch: 31861

Date Analyzed: 2006-11-13

Analyzed By: SM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.5	98	85 - 115	2006-11-13

Standard (ICV-1)

QC Batch: 31862

Date Analyzed: 2006-11-13

Analyzed By: SM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2006-11-13

Standard (CCV-1)

QC Batch: 31862

Date Analyzed: 2006-11-13

Analyzed By: SM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.2	99	85 - 115	2006-11-13

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LAB Order ID # 4111012 Page 1 of 3

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TraceAnalysis, Inc.		505-200 5345		307 S Mesa Carlsbad, nm 88800				valleyenergy@plateauenergy.com		Crawford 26 Fed #2		Unit B S26-24S-26E														
Contact Person:		Dorsey Rogers		Invoice to		(If different from above)		Project #:		Project Location (including state):		Unit B S26-24S-26E														
LAB #	LAB USE ONLY	FIELD CODE	# CONTAINERS	VOLUME / AMOUNT	MATRIX	PRESERVATIVE METHOD	DATE	TIME	ANALYSIS REQUEST (Circle or Specify Method No.)																	
108545		1A-210E	1	40L	WATER	HCl	11/9/06	10:35	MTBE 8021B / 602 / 8260B / 624	TPH 418 1 / TX1005 / TX1005 EX(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200 7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol 8260B / 624	GC/MS Semi Vol 8270C / 625	PCBs 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	
46		2A-220E	1	40L	WATER	HCl	11/9/06	10:30																		
47		3A-230E	1	40L	WATER	HCl	11/9/06	10:35																		
48		4A-240E	1	40L	WATER	HCl	11/9/06	10:40																		
49		5A-250E	1	40L	WATER	HCl	11/9/06	10:45																		
50		6A-260E	1	40L	WATER	HCl	11/9/06	10:50																		
51		7A-270E	1	40L	WATER	HCl	11/9/06	10:55																		
52		8A-280E	1	40L	WATER	HCl	11/9/06	11:00																		
53		9A-290E	1	40L	WATER	HCl	11/9/06	11:05																		
54		10A-300E	1	40L	WATER	HCl	11/9/06	11:10																		
55		11B-310E	1	40L	WATER	HCl	11/9/06	11:20A																		
Relinquished by:		Date:		Time:		Received by:		Date:		Time:		LAB USE ONLY		REMARKS:												
Shelly J. Taylor		11/9/06		4:15		VPB		11/9/06		4:50		Intact <input checked="" type="checkbox"/> N Headspace <input checked="" type="checkbox"/> Y / N Temp <input checked="" type="checkbox"/> 27 Log-in-Review <input checked="" type="checkbox"/> 48		Dry Weight Basis Required <input type="checkbox"/> TRRP Report Required <input type="checkbox"/> Check if Special Reporting Limits Are Needed <input type="checkbox"/>												
Relinquished by:		Date:		Time:		Received by:		Date:		Time:		Received at Laboratory by:		Date:		Time:										
Shelly J. Taylor		11/9/06		4:15		VPB		11/9/06		4:50		Shelly J. Taylor		11-0-06		10:10										
Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C O C																										

ORIGINAL COPY

LAB Order ID #

Page

3 of 3

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street Suite A1
Midland, Texas 79703
Tel (432) 689 6301
Fax (432) 689 6313
1 (888) 588-3443

6015 Harris Pkwy - Suite 110
Ft Worth, Texas 76132
Tel (817) 201-5260

Company Name: <u>Unarell</u>		Phone #: <u>805-380-5345</u>	
Address: <u>2015 Mesa Carlsbad Nm 88800</u>		Fax #: <u></u>	
Contact Person: <u>Dorsey Dowers</u>		E-mail: <u>dorsey@unarell.com</u>	
Invoice to: <u></u>			
Project #: <u></u>		Project Name: <u>Crawford 26 Fed #2</u>	
Project Location (including state): <u>Unad. Sec 26-24S-26E</u>		Sampler Signature: <u>[Signature]</u>	

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX			PRESERVATIVE METHOD					SAMPLING		
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE	DATE
10867	3C-23FE	1	4oz	✓									11-10-06	10:55
68	4C-24FE	1	4oz	✓									11-10-06	10:00 PM

ANALYSIS REQUEST (Circle or Specify Method No.)													
<input type="checkbox"/> MTBE 8021B / 602 / 8260B / 624 <input type="checkbox"/> BTEX 8021B / 602 / 8260B / 624 <input type="checkbox"/> TPH 418 1 / TX1005 / TX1005 EX(C35) <input type="checkbox"/> TPH 8015 GRO / DRO / TVHC <input type="checkbox"/> PAH 8270C / 625 <input type="checkbox"/> Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007 <input type="checkbox"/> TCLP Metals Ag As Ba Cd Cr Pb Se Hg <input type="checkbox"/> TCLP Volatiles <input type="checkbox"/> TCLP Semi Volatiles <input type="checkbox"/> TCLP Pesticides <input type="checkbox"/> RCI <input type="checkbox"/> GC/MS Vol 8260B / 624 <input type="checkbox"/> GC/MS Semi Vol 8270C / 625 <input type="checkbox"/> PCB's 8082 / 608 <input type="checkbox"/> Pesticides 8081A / 608 <input type="checkbox"/> BOD TSS PH <input type="checkbox"/> Moisture Content <input type="checkbox"/> Turn Around Time if different from standard													

LAB USE ONLY		REMARKS:	
Intact: <u>Y/N</u>	Headspace: <u>Y/N</u>	<input type="checkbox"/> Dry Weight Basis Required <input type="checkbox"/> TRRP Report Required <input type="checkbox"/> Check if Special Reporting Limits Are Needed	
Temp: <u>27</u>	Log-In-Review: <u>SP</u>		
Carrier # <u>UP 50104. 515 5915</u>			

Relinquished by: <u>[Signature]</u>	Date: <u>11-10-06</u>	Time: <u>4:55</u>	Received by: <u>UPB</u>	Date: <u>11-10-06</u>	Time: <u>4:55</u>
Relinquished by: <u>[Signature]</u>	Date: <u>11-10-06</u>	Time: <u>4:55</u>	Received by: <u>[Signature]</u>	Date: <u>11-10-06</u>	Time: <u>10:10</u>
Relinquished by: <u>[Signature]</u>	Date: <u>11-10-06</u>	Time: <u>4:55</u>	Received at Laboratory by: <u>[Signature]</u>	Date: <u>11-10-06</u>	Time: <u>10:10</u>

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C O C

Report Date: November 6, 2006
Eddy County,Nm

Work Order: 6110608
Crawford 26 Fed #2

Page Number: 1 of 2
Unit B-S26-24S-26E

Summary Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: November 6, 2006

Work Order: 6110608



Project Location: Unit B-S26-24S-26E
Project Name: Crawford 26 Fed #2
Project Number: Eddy County,Nm

30-015-33228

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
107882	1A	soil	2006-11-01	13:30	2006-11-06
107883	2A	soil	2006-11-01	13:35	2006-11-06
107884	3A	soil	2006-11-01	13:40	2006-11-06
107885	4A	soil	2006-11-01	13:45	2006-11-06
107886	1B	soil	2006-11-01	13:50	2006-11-06
107887	2B	soil	2006-11-01	13:55	2006-11-06
107888	3B	soil	2006-11-01	14:00	2006-11-06
107889	4B	soil	2006-11-01	14:05	2006-11-06

Sample: 107882 - 1A

Param	Flag	Result	Units	RL
Chloride		11000	mg/Kg	2.00

Sample: 107883 - 2A

Param	Flag	Result	Units	RL
Chloride		8980	mg/Kg	2.00

Sample: 107884 - 3A

Param	Flag	Result	Units	RL
Chloride		11900	mg/Kg	2.00

Sample: 107885 - 4A

Param	Flag	Result	Units	RL
Chloride		11500	mg/Kg	2.00

Report Date: November 6, 2006
Eddy County, Nm

Work Order: 6110608
Crawford 26 Fed #2

Page Number: 2 of 2
Unit B-S26-24S-26E

Sample: 107886 - 1B

Param	Flag	Result	Units	RL
Chloride		9280	mg/Kg	2.00

Sample: 107887 - 2B

Param	Flag	Result	Units	RL
Chloride		7490	mg/Kg	2.00

Sample: 107888 - 3B

Param	Flag	Result	Units	RL
Chloride		7440	mg/Kg	2.00

Sample: 107889 - 4B

Param	Flag	Result	Units	RL
Chloride		7560	mg/Kg	2.00



6701 Aberdeen Avenue, Suite 9
155 McCutcheon, Suite H

Lubbock, Texas 79424
El Paso, Texas 79932

800•378•1296
888•588•3443
E-Mail lab@traceanalysis.com

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

Analytical and Quality Control Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: November 6, 2006

Work Order: 6110608



Project Location: Unit B-S26-24S-26E
Project Name: Crawford 26 Fed #2
Project Number: Eddy County, Nm

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
107882	1A	soil	2006-11-01	13:30	2006-11-06
107883	2A	soil	2006-11-01	13:35	2006-11-06
107884	3A	soil	2006-11-01	13:40	2006-11-06
107885	4A	soil	2006-11-01	13:45	2006-11-06
107886	1B	soil	2006-11-01	13:50	2006-11-06
107887	2B	soil	2006-11-01	13:55	2006-11-06
107888	3B	soil	2006-11-01	14:00	2006-11-06
107889	4B	soil	2006-11-01	14:05	2006-11-06

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 107882 - 1A

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31552	Date Analyzed:	2006-11-06	Analyzed By:	SM
Prep Batch:	27478	Sample Preparation:	2006-11-06	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		11000	mg/Kg	25	2.00

Sample: 107883 - 2A

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31552	Date Analyzed:	2006-11-06	Analyzed By:	SM
Prep Batch:	27478	Sample Preparation:	2006-11-06	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		8980	mg/Kg	25	2.00

Sample: 107884 - 3A

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31552	Date Analyzed:	2006-11-06	Analyzed By:	SM
Prep Batch:	27478	Sample Preparation:	2006-11-06	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		11900	mg/Kg	25	2.00

Sample: 107885 - 4A

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31552	Date Analyzed:	2006-11-06	Analyzed By:	SM
Prep Batch:	27478	Sample Preparation:	2006-11-06	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		11500	mg/Kg	25	2.00

Sample: 107886 - 1B

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31552	Date Analyzed:	2006-11-06	Analyzed By:	SM
Prep Batch:	27478	Sample Preparation:	2006-11-06	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		9280	mg/Kg	25	2.00

Sample: 107887 - 2B

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31552	Date Analyzed:	2006-11-06	Analyzed By:	SM
Prep Batch:	27478	Sample Preparation:	2006-11-06	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		7490	mg/Kg	25	2.00

Sample: 107888 - 3B

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31552	Date Analyzed:	2006-11-06	Analyzed By:	SM
Prep Batch:	27478	Sample Preparation:	2006-11-06	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		7440	mg/Kg	25	2.00

Sample: 107889 - 4B

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	31552	Date Analyzed:	2006-11-06	Analyzed By:	SM
Prep Batch:	27478	Sample Preparation:	2006-11-06	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		7560	mg/Kg	25	2.00

Method Blank (1) QC Batch: 31552

QC Batch:	31552	Date Analyzed:	2006-11-06	Analyzed By:	SM
Prep Batch:	27478	QC Preparation:	2006-11-06	Prepared By:	SM

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Laboratory Control Spike (LCS-1)

QC Batch:	31552	Date Analyzed:	2006-11-06	Analyzed By:	SM
Prep Batch:	27478	QC Preparation:	2006-11-06	Prepared By:	SM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	96.4	mg/Kg	1	100	<0.500	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	97.7	mg/Kg	1	100	<0.500	98	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 107888

QC Batch: 31552
Prep Batch: 27478

Date Analyzed: 2006-11-06
QC Preparation: 2006-11-06

Analyzed By: SM
Prepared By: SM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	¹ 8970	mg/Kg	25	2500	7441.51	61	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	² 9070	mg/Kg	25	2500	7441.51	65	70 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 31552

Date Analyzed: 2006-11-06

Analyzed By: SM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.1	99	85 - 115	2006-11-06

Standard (CCV-1)

QC Batch: 31552

Date Analyzed: 2006-11-06

Analyzed By: SM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2006-11-06

¹Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.

²Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.

[illegible]

Bratcher, Mike, EMNRD

From: Bratcher, Mike, EMNRD
Sent: Tuesday, November 28, 2006 2:45 PM
To: 'dorseyrogers@aol.com'
Cc: Price, Wayne, EMNRD; Gum, Tim, EMNRD; VonGonten, Glenn, EMNRD
Subject: Cimarex Crawford 26 #2 Drilling Pit

Cimarex Energy Co.
207 S. Mesa
Carlsbad NM 88220
ATTN: Dorsey Rogers

Reference: Crawford 26 - 002 API: 30-015-33228 B-26-24s-26e

Dear Mr. Rogers,

The drilling pit at the above referenced well site is currently excavated to approximately 16' below ground surface (bgs). Sample analyses have identified chloride contaminant levels of 4,370 mg/kg to be present at 30' bgs. At this time the New Mexico Oil Conservation Division is requesting a complete delineation of this pit area. Target chloride delineation levels are 250 mg/kg.

Please commence delineation operations no later than December 12, 2006.
Notify the NMOCD District 2 office 24 hours prior to commence of operations.
Notify the NMOCD District 2 office immediately in the event ground water is encountered.

If I can be of assistance in this matter, please contact me.

Sincerely,

Mike Bratcher
NMOCD District 2
1301 W. Grand Ave.
Artesia, NM 88210
(505) 748-1283 Ext. 108
(505) 626-0857
mike.bratcher@state.nm.us

Bratcher, Mike, EMNRD

From: Bratcher, Mike, EMNRD
Sent: Tuesday, November 28, 2006 11:13 AM
To: Price, Wayne, EMNRD
Cc: VonGonten, Glenn, EMNRD; Gum, Tim, EMNRD
Subject: Cimarex Drilling Pit

Wayne,

The pit you, Tim and I discussed this morning is:

Cimarex Energy Co. of Colorado (OGRID 162683)
Crawford 26 # 002 API: 30-015-33228 B-26-24s-26e Eddy County

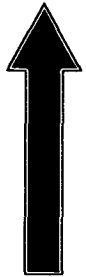
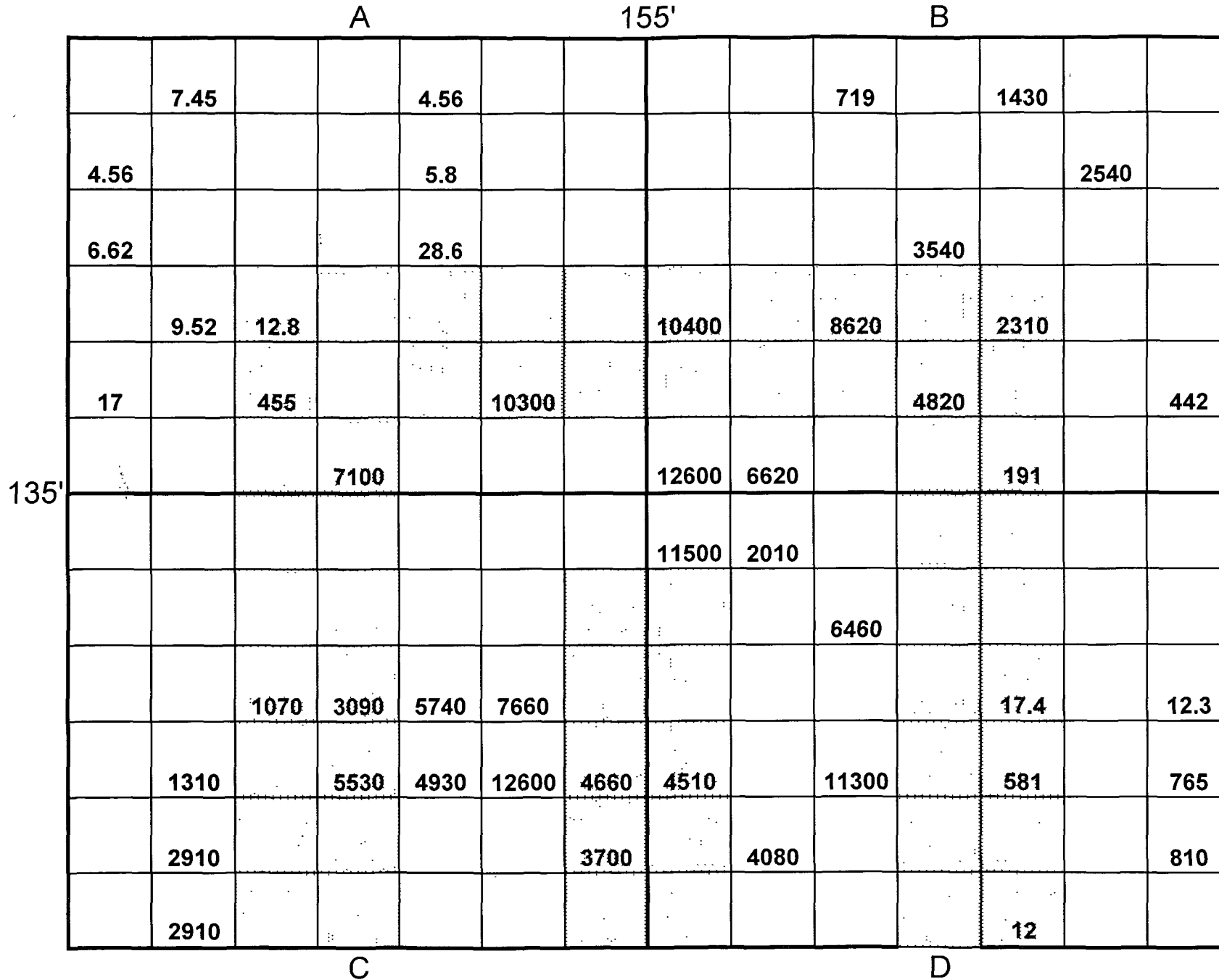
Just a quick overview, the drilling pit has been completely excavated to 16' bgs. Samples showed several hot spots at the 16' bgs bottom of the pit excavation (around 11,000 - 12,000 mg/kg chlorides). Test holes were advanced in these areas to 30' and samples obtained at 1' intervals. Test hole A at 17' bgs (1' below pit bottom) was 11,000. All samples from 19' to 25' were in the 11,000 - 12,000 range. Sample at 26' was 9,320 and the 30' sample was 4,370. Test hole B was not quite as hot, but ranged from 9,280 at 17' to 2,760 at 30'. Test hole C was only advanced to 20' with all samples testing less than 100 mg/kg.

I will have them delineate to 250 mg/kg or until ground water is encountered.

Thanks,

Mike Bratcher

Crawford 26 #2 Drilling Pit
Floor -- 10/20/06



N

Legend:

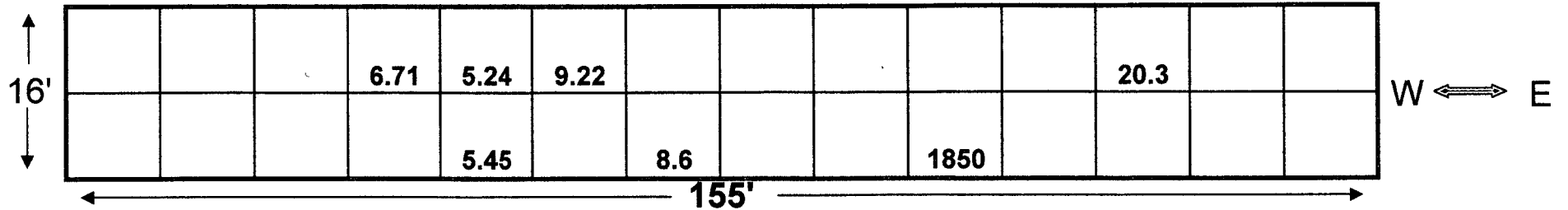
Each square is
11' x 11'
approx

Drilling pit floor
is approx 155'
x 135' x 16'

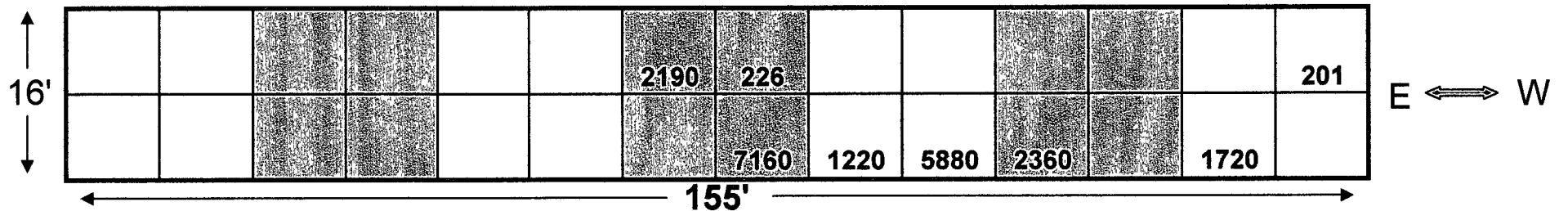
Shaded area =
original
horse shoe

Samples were
taken 1' below
floor surface

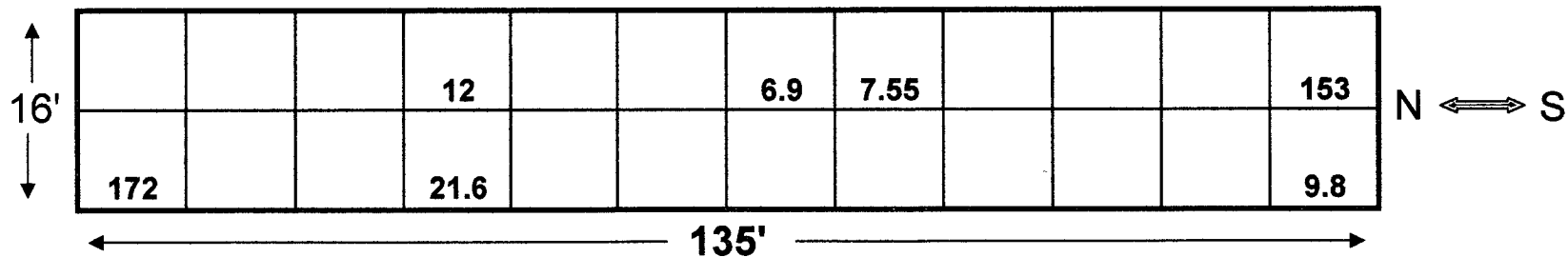
Crawford 26 #2 Drilling Pit
Walls -- 10/20/06
North Wall



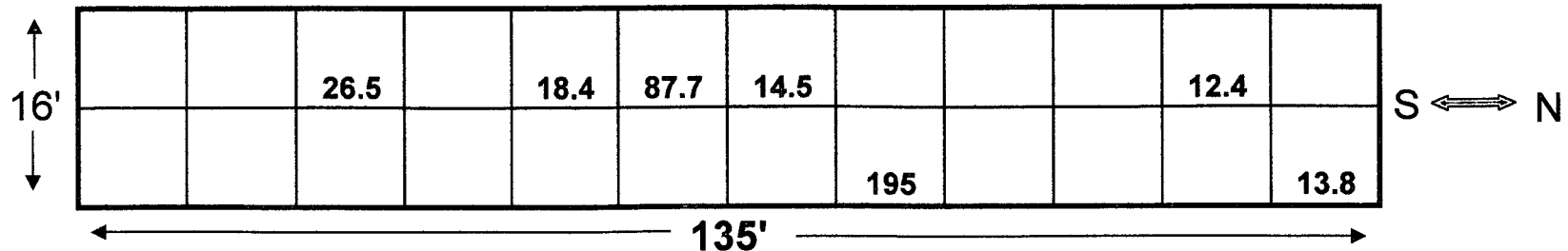
South Wall



East Wall



West Wall



Wall Legend:

Each square is
approx 8' x 11'

South wall
shaded area =
original horse
shoe

Samples were
taken 6" into wall



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

Copy

24-Jul-06

CIMAREX ENERGY CO OF COLORADO

P O BOX 1237

EUNICE NM 88231

LETTER OF VIOLATION - Inspection

LOV NO. 20623

Dear Operator:

The following inspection(s) indicate that the well, equipment, location or operational status of the well(s) failed to meet standards of the New Mexico Oil Conservation Division as described in the detail section below. To comply with standards imposed by Rules and Regulations of the Division, corrective action must be taken immediately and the situation brought into compliance. The detail section indicates preliminary findings and/or probable nature of the violation. This determination is based on an inspection of your well or facility by an inspector employed by the Oil Conservation Division on the date(s) indicated.

Please notify the proper district office of the Division, in writing, of the date corrective actions are scheduled to be made so that arrangements can be made to reinspect the well and/or facility.

INSPECTION DETAIL SECTION

CRAWFORD 26 No.002

B-26-24S-26E

30-015-33228-00-00

Inspection Date	Type Inspection	Inspector	Violation?	*Significant Non-Compliance?	Corrective Action Due By:	Inspection No.
07/19/2006	Routine/Periodic	Richard Inge	Yes	No	8/24/2006	iREI0620045643
Violations						
Evaporation Pits						
Comments on Inspection: Pit still on location. Violation of Rule 50. Lining down to fluid level at west end. Possible rule 116 violation. Fence up around pit, but dirt piled up at north-east corner over fence. Rule 50 violation.						

(I)

In the event that a satisfactory response is not received to this letter of direction by the "Corrective Action Due By:" date shown above, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of CIVIL PENALTIES for your violation of OCD rules.

Sincerely,

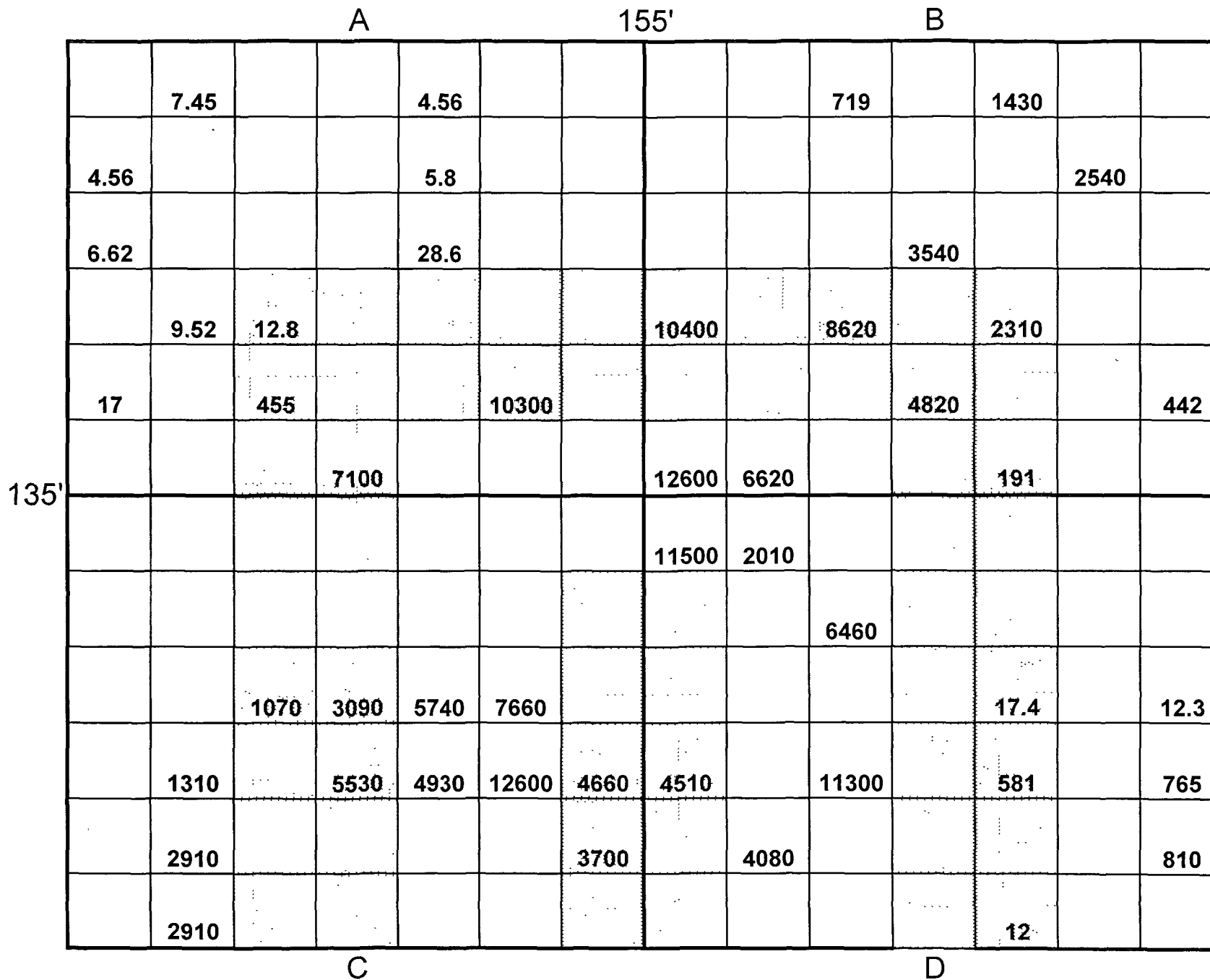
RICHARD INGE

Artesia OCD District Office

Note: Information in Detail Section comes directly from field inspector data entries - not all blanks will contain data.

*Significant Non-Compliance events are reported directly to the EPA, Region VI, Dallas, Texas.

Crawford 26 #2 Drilling Pit
Floor -- 10/20/06



N

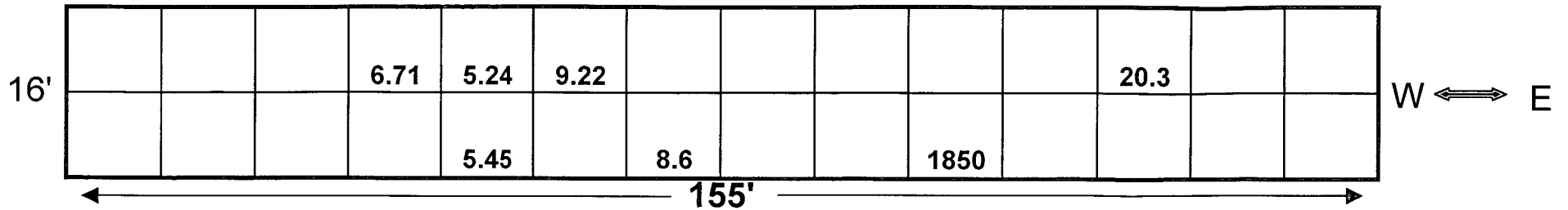
Legend:

Each square is
11' x 11'
approx

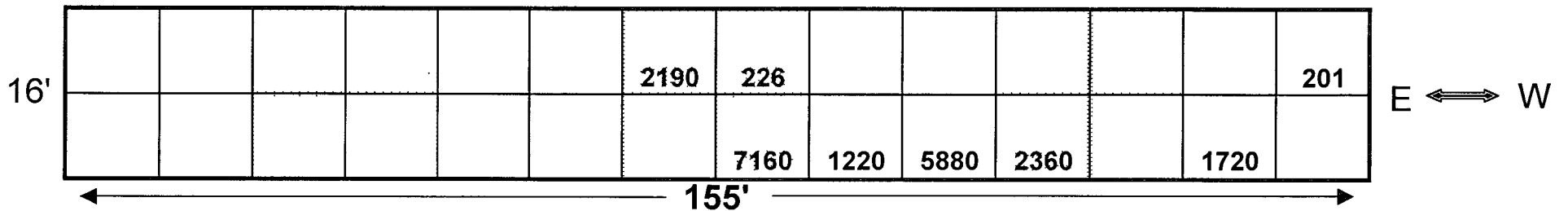
Drilling pit floor
is approx 155'
x 135'

Shaded area =
original
horse shoe

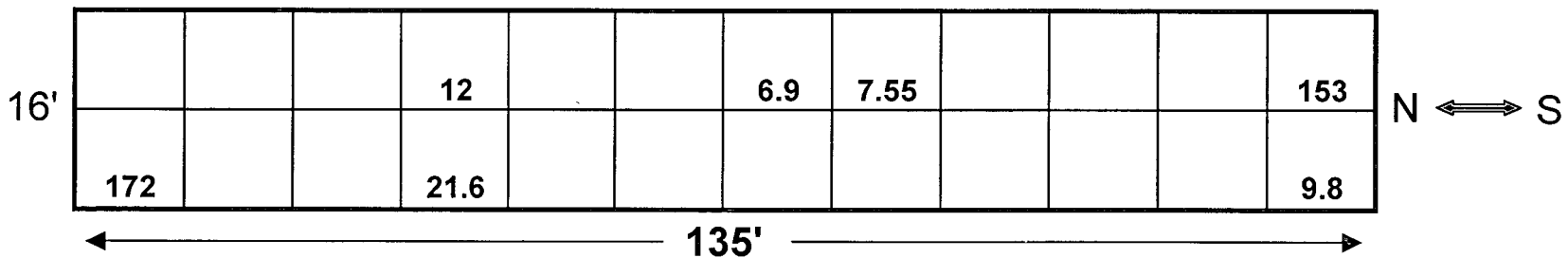
Crawford 26 #2 Drilling Pit
Walls -- 10/20/06
North Wall



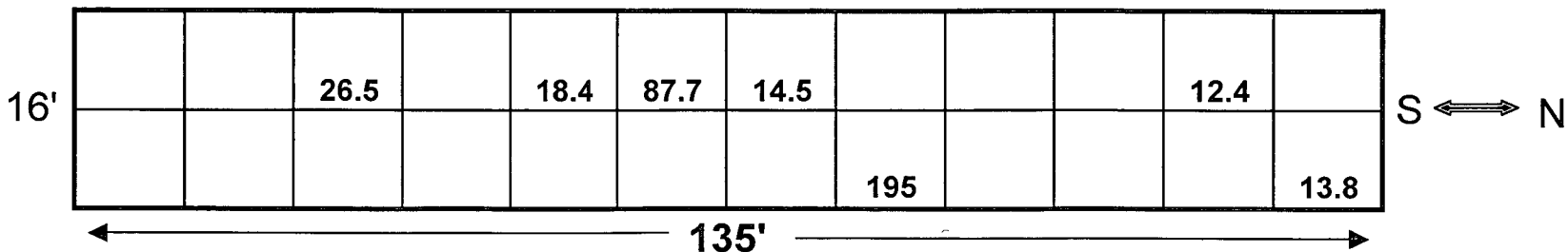
South Wall



East Wall



West Wall



Wall Legend:

Each square is
approx 8' x 11'

South wall
shaded area =
original horse
shoe

Samples taken 6" into wall

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., 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-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.

30-015-33228

5. Indicate Type of Lease

STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

Crawford 26

8. Well Number

002

9. OGRID Number

162683

10. Pool name or Wildcat

White City; Penn (Gas) 87280

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

RECEIVED

2. Name of Operator
Gruy Petroleum Management Co.

JUN 10 2005

3. Address of Operator
PO Box 140904; Irving, TX 75014

4. Well Location

Unit Letter B : 990' feet from the North line and 1980' feet from the East line
Section 26 Township 24S Range 26E NMPM County Eddy

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3271' GR

Pit or Below-grade Tank Application ☐ or Closure ☐ N/A

Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____

Pit Liner Thickness: _____ Below-Grade Tank: Volume _____ bbls; Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☒

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

06-25-04 In 12-1/4" hole, ran 88 jts 9-5/8" 36# J-55 STC casing to 3825'. Cemented with lead 950 sx Class C + 3% Metasilicate + 0.25 pps Celloflake and tail 200 sx Class C + 2% CaCl. Did not circulate cement to pit. Waited on temperature survey - estimated at 1195', but wanted to run another.
06-26-04 Ran second temperature survey and estimated top of cement at 44'. Tested casing to 2500psi. WOC 19.75 hours.
07-22-05 In 8-3/4" hole, ran 205 jts 5-1/2" 17# P-110 LTC casing.
07-23-05 Finished running casing to 11840'. Cemented first stage with lead 360 sx Class H + 1.0% FL-52 + 3.0% SMS + 1.6% R-3 + 3 PPS Gilsonite and tail 415 sx Class C + 1.0% FL-52 + 3.0% SMS + 1.6% R-3. Cemented second stage with 650 sx Class C + 0.7% FL-52 + 0.7% FL-25 + 0.2% CD-32 + 0.1% SMS. Full returns throughout job. Calculated TOC 2526'. Tested casing to 2350psi. Released rig at 23:00 07-23-04.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines X, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Natalie Krueger TITLE Regulatory Analyst DATE June 9, 2005

Type or print name Natalie Krueger email address: nkrueger@magnumhunter.com Telephone No. 972-401-3111

For State Use Only

APPROVED BY: FOR RECORDS ONLY TITLE _____ DATE JUN 15 2005
Conditions of Approval (if any): _____

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

COPY FROM WELL FILE

Form C-144
March 12, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOC 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. of Colorado Telephone: 972-443-6489 e-mail address: zfarris@cimarex.com
Address: P.O. Box 140907, Irving, Tx 75014-0907 30-015-33228-0000
Facility or well name: Crawford 26 No. 2 API #: 30-015-33448 U/L or Qtr/QtrB Sec 26 T24S R26E
County: Eddy Latitude 321134.01 N Longitude 1041540.33 W NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☐ State ☐ Private ☒ Indian ☐

Pit	Below-grade tank
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 <u>12</u> mil Clay <input type="checkbox"/> Volume _____ bbl to be hauled _____	Volume: _____ bbl Type of fluid: _____ 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>25'</u>	<u>Less than 50 feet</u> (20 points) 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 (20 points) <u>No</u> (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) 200 feet or more, but less than 1000 feet (10 points) <u>1000 feet or more</u> (0 points)
<u>?</u>	Ranking Score (Total Points) 20

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: onsite ☐ offsite ☒ If offsite, name of facility CRC Disposal CRC? (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.

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 NMOC guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.
Date: 07-31-06

Printed Name/Title Zeno Farris Manager Operations Administration Signature Zeno Farris

Your certification and NMOC 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:

Date: 8/1/06

Printed Name/Title RICHARD INGE FIELD INSPECTOR Signature RICHARD INGE

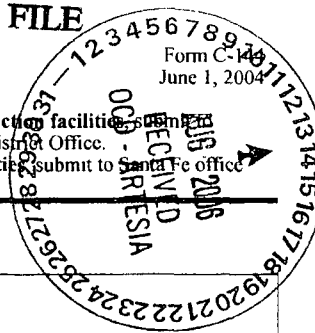
APPROVED WITH THE STIPULATION THAT SOIL SAMPLES BE TAKEN (AND RESULTS SENT TO US) WHERE THE LINER WAS BLOWN DOWN TO THE FLUID LEVEL. I BELIEVE THIS WAS THE SOUTH SIDE OF THE PIT. PLEASE NOTIFY THIS OFFICE WHEN THE ACTION IS COMPLETED. THANK YOU.

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 APL# 30-015-33228 U/E 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 ☐

Pit

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness: 12ml HDPE liner Clay ☐

Pit Volume: 2400 bbl. Approximately

Below-grade tank N/A

Volume: N/A bbl Type of fluid: N/A

Construction material: N/A

Double-walled, with leak detection? ☐ 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 ☒

(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)

Ranking Score (Total Points)

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 ☒ 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:

Printed Name/Title

Mike Bratcher

ASST

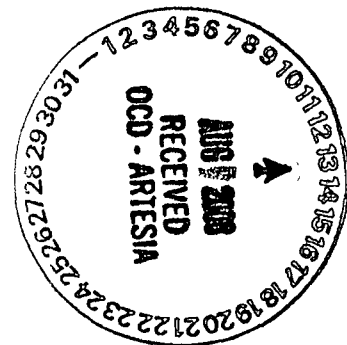
Signature

Mike Bratcher

Date

8/14/06

Mr. Dorsey Rogers
Drilling Superintendent
CIMAREX ENERGY CO.
7101 Norris Road
Carlsbad, NM 88220



August 14, 2006

Mr. Richard Inge
OIL CONSERVATION DIVISION
1301 West Grand Avenue
Artesia, NM 88210

Re: Crawford 26, No. 2 Letter of Violation No. 20623, Inspection No. iREI0620045643

Dear Mr. Inge:

Pleased be advised we are in receipt of your 24 July 2006 Letter of Violation No. 20623 and herewith respond pursuant to the assessed violation of the New Mexico, Oil Conservation Division Rule 50 regarding Cimarex Energy Co.'s Crawford 26 No. 2 drilling pit (API No. 30-015-33228) located in U/L B S26 T24S, R26E, 990' FNL and 1980' FEL of Eddy County, New Mexico.

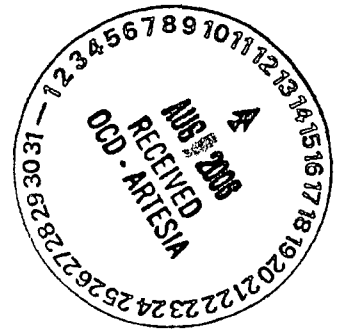
Cimarex Energy Co., hereinafter "Cimarex", intends to begin immediate closure of the Crawford 26, No. 2 drilling pit pursuant to New Mexico, OCD Rule 50 requirements. Attached to this transmittal is a copy of the Form C-144 and the "Closure Plan" submitted to Mr. Mike Bratcher of your office. As soon as the New Mexico, OCD authorizes closure of the above-described drilling pit, Cimarex will begin closure operations.

The estimated of time for closure of said drilling pit is described in the closure documents, however Cimarex might incur unknown conditions which may influence the specific time necessary to satisfactorily complete closure operations. Should such events or conditions arise, Cimarex will contact New Mexico, OCD immediately to discuss timelines or corrective actions denoted by the specific conditions at the time.

Thank you for your consideration. Should you have questions, please call 505-628-3447 (office) or 505-200-6105 (cell).

Sincerely,
for Dorsey Rogers by C. Finkler
Dorsey Rogers
Drilling Superintendent

cc: State of New Mexico, OCD, Form C-144



Mr. Dorsey Rogers
Drilling Superintendent
CIMAREX ENERGY CO.
7101 Norris Road
Carlsbad, NM 88220

August 14, 2006

Mr. Mike Bratcher
OIL CONSERVATION DIVISION
1301 West Grand Avenue
Artesia, NM 88210

Re: Crawford 26, No. 2 Pit Closure Documents

Dear Mr. Bratcher:

Pursuant to the State of New Mexico regulatory requirements for permanent closure of drilling pits, enclosed herewith is the completed Form C-144, in addition to the "Closure Plan" for closure of the Cimarex Energy Co. hereinafter "Cimarex", Crawford 26, No. 2 drilling pit (API No. 30-015-33228) located in U/L B S26 T24S, R26E, 990' FNL and 1980' FEL of Eddy County, New Mexico.

INTRODUCTION

Remediation of the Cimarex Crawford 26, No. 2, hereinafter "Crawford 26", drilling pit is targeted to begin 15 August 2006 with completion expected by 28 August 2006, permitting weather and the occurrence of unexpected conditions not within the Operator's control do not create delays or exacerbate the proposed schedule in any way. Cimarex intends to maintain its commitment to environmental health and safety and fully comply with the Regulatory Performance of the State of New Mexico, OCD regarding this disposal action and permanent closure of the Crawford 26 drilling pit (see LOV No. 20623).

Potential, temporary contamination from the Crawford 26 drilling pit site, should any exist, resulted solely from oil and gas production activities. Potential contaminants of concern are typical mid to high-level concentrations of brines, typical polymers (such as xanthium gum and starch) and in general, drilling mud and fluids remaining upon completion of said drilling operations.

Area land use is primarily ranching with domestic pasturage and oil and gas production activities. The Cimarex, Crawford 26 drilling pit is located in an area wherein groundwater depth to surface demonstrates an average depth of approximately 20 feet predicated upon the State Engineer's Web Site data and its proximity to the Black River. Consequently, *insitu* disposal is not being considered for the Crawford 26 drilling pit closure to ensure compliant environmental performance and reduction of liability in this water sensitive, designated area pursuant to New Mexico, OCD regulations.

Cimarex intends to haul the above cited pit contents to Lea Land, Inc. a State approved land disposal facility located south of Carlsbad, New Mexico (see Form C-144). This compliance action shall strictly engage the State of New Mexico, OCD standards, i.e. clean-up level for the Crawford 26 drilling pit shall meet the less

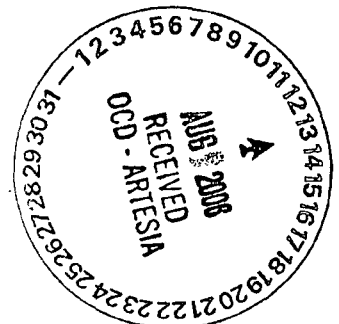
than 100ppm of TPH, ND for BTEX and the less than 250ppm of chlorides unless otherwise approved and substantiated by background information documented to be higher than the above cited indices.

CLOSURE PLAN

Prior to commencement of closure activities, Cimarex contractor will contact One-Call for line spot clearance confirming the State of New Mexico, OCD is in agreement with the proposed "Closure Plan" for removal of approximately 2,500 bbl. of liquid followed by the removal of all fines (drill cuttings) assuming these fines have sufficiently dried allowing for maneuverability of heavy equipment in the pit area, enabling transport to Lea Land, Inc. and final closure.

Environmental health and safety regulations mandate control of pit volumes at all times. Thus, the liquid material was pumped off as needed and properly disposed of during active drilling operations. Water accumulated since this time is either due to liquid material not completely hauled from actual drilling operations or rain. This water has subsequently been hauled from the location and properly disposed of pursuant to OCD Regulatory Performa.

- ❖ Contractor shall mobilize to the Crawford 26 drilling pit site located approximately 10 miles South and East of Carlsbad, New Mexico (see Form C-144). Personnel necessary to provide for the initiation and completion of said remediation activities presented above shall be engaged as is appropriate to the mandated exercise.
- ❖ No remediation activity shall occur off the existing pad or already disturbed areas as authorized by the APD and approved Best Management Practices (BMP's). Cimarex shall consider weather conditions and necessary equipment positioning to provide a clear area for adequate staging for site control and safety compliance, ensuring operations shall be compliant with New Mexico, OCD Regulatory Performa.
- ❖ The Crawford 26 drilling pit is currently lined with a 12ml HDPE liner, which shall be removed by heavy equipment and disposed of with the drilling fines transported to Lea Land, Inc. compliant with New Mexico, OCD requirements.
- ❖ Prior to initiation of backfilling, the Operator shall take appropriate samples of the pit area to ensure compliance with OCD Standards for remediation of possible TPH, ND for BTEX and levels of less than 250ppm of chlorides. However if levels at the bottom of the drilling pit test too high, a background set of samples shall be obtained for testing from the immediate vicinity and compared to those of the pit bottom. Simultaneously, more soil shall be removed from the "hot spots". Once completed, new data acquisition shall occur and sample results determine whether or not compliance has been reached in order to begin backfilling. No backfilling shall begin without authorization by the State of New Mexico, OCD.
- ❖ Backfilling of the Crawford 26 drilling pit shall be commensurate with existing topography and terrain relief features (contouring) so as to return it to its "near-as" previous condition, including a contour for prevention of water impoundment.



COPY FROM WELL FILE

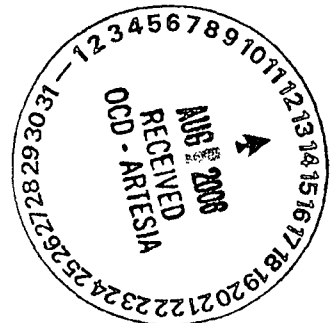
- ❖ The "Closure Plan" shall include a final report providing lab analysis of the backfill material, digital project photos and evidentiary narrative to support the completed disposition of the reclaimed Crawford 26 drilling pit site.

Should you have questions, please call 505-628-3447(office) or 505-200-6105 (cell).

Sincerely,

for Dorsey Rogers by C. Finkler
Dorsey Rogers
Drilling Superintendent

cc: State of New Mexico, OCD, Form C-144, LOV 20623 Response Letter



Report Date: October 27, 2006
Eddy County,Nm

Work Order: 6102301
Crawford 26 Fed #2

Page Number: 1 of 12
Unit B-S26-24S-26E

Summary Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: October 27, 2006

Work Order: 6102301



Project Location: Unit B-S26-24S-26E
Project Name: Crawford 26 Fed #2
Project Number: Eddy County,Nm

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
106468	A-2	soil	2006-10-20	12:00	2006-10-21
106469	A-5	soil	2006-10-20	12:05	2006-10-21
106470	A-8	soil	2006-10-20	12:10	2006-10-21
106471	A-12	soil	2006-10-20	12:15	2006-10-21
106472	A-15	soil	2006-10-20	12:20	2006-10-21
106473	A-19	soil	2006-10-20	12:25	2006-10-21
106474	A-23	soil	2006-10-20	12:35	2006-10-21
106475	A-24	soil	2006-10-20	12:40	2006-10-21
106476	A-29	soil	2006-10-20	12:45	2006-10-21
106477	A-31	soil	2006-10-20	12:50	2006-10-21
106478	A-34	soil	2006-10-20	12:55	2006-10-21
106479	A-39	soil	2006-10-20	13:00	2006-10-21
106480	C-17	soil	2006-10-20	13:25	2006-10-21
106481	C-18	soil	2006-10-20	13:30	2006-10-21
106482	C-19	soil	2006-10-20	13:35	2006-10-21
106483	C-20	soil	2006-10-20	13:37	2006-10-21
106484	C-23	soil	2006-10-20	13:40	2006-10-21
106485	C-25	soil	2006-10-20	13:45	2006-10-21
106486	C-26	soil	2006-10-20	13:50	2006-10-21
106487	C-27	soil	2006-10-20	13:55	2006-10-21
106488	C-28	soil	2006-10-20	14:00	2006-10-21
106489	C-30	soil	2006-10-20	14:05	2006-10-21
106490	C-35	soil	2006-10-20	14:15	2006-10-21
106491	C-37	soil	2006-10-20	14:20	2006-10-21
106492	D-1	soil	2006-10-20	14:25	2006-10-21
106493	D-2	soil	2006-10-20	14:30	2006-10-21
106494	D-10	soil	2006-10-20	14:33	2006-10-21
106495	D-19	soil	2006-10-20	14:35	2006-10-21
106496	D-21	soil	2006-10-20	14:50	2006-10-21
106497	D-22	soil	2006-10-20	14:55	2006-10-21
106498	D-24	soil	2006-10-20	15:00	2006-10-21
106499	D-26	soil	2006-10-20	15:05	2006-10-21
106500	D-28	soil	2006-10-20	15:10	2006-10-21
106501	D-30	soil	2006-10-20	15:15	2006-10-21
106502	D-35	soil	2006-10-20	15:20	2006-10-21
106503	D-40	soil	2006-10-20	15:25	2006-10-21

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
106504	B-3	soil	2006-10-20	16:00	2006-10-21
106505	B-5	soil	2006-10-20	16:05	2006-10-21
106506	B-13	soil	2006-10-20	16:10	2006-10-21
106507	B-18	soil	2006-10-20	16:15	2006-10-21
106508	B-22	soil	2006-10-20	16:20	2006-10-21
106509	B-24	soil	2006-10-20	16:25	2006-10-21
106510	B-26	soil	2006-10-20	16:30	2006-10-21
106511	B-32	soil	2006-10-20	16:35	2006-10-21
106512	B-35	soil	2006-10-20	16:45	2006-10-21
106513	B-36	soil	2006-10-20	16:47	2006-10-21
106514	B-37	soil	2006-10-20	16:50	2006-10-21
106515	B-40	soil	2006-10-20	16:55	2006-10-21
106516	E-13	soil	2006-10-20	17:10	2006-10-21
106517	E-7	soil	2006-10-20	17:19	2006-10-21
106518	E-8	soil	2006-10-20	17:22	2006-10-21
106519	E-12	soil	2006-10-20	17:24	2006-10-21
106520	E-4	soil	2006-10-20	17:17	2006-10-21
106521	E-16	soil	2006-10-20	17:15	2006-10-21
106522	E-24	soil	2006-10-20	17:26	2006-10-21
106523	S-7	soil	2006-10-20	17:28	2006-10-21
106524	S-8	soil	2006-10-20	17:29	2006-10-21
106525	S-14	soil	2006-10-20	17:35	2006-10-21
106526	S-22	soil	2006-10-20	17:30	2006-10-21
106527	S-23	soil	2006-10-20	17:31	2006-10-21
106528	S-24	soil	2006-10-20	17:32	2006-10-21
106529	S-25	soil	2006-10-20	17:33	2006-10-21
106530	S-27	soil	2006-10-20	17:34	2006-10-21
106531	W-3	soil	2006-10-20	17:36	2006-10-21
106532	W-5	soil	2006-10-20	17:37	2006-10-21
106533	W-6	soil	2006-10-20	17:38	2006-10-21
106534	W-7	soil	2006-10-20	17:39	2006-10-21
106535	W-11	soil	2006-10-20	17:41	2006-10-21
106536	W-20	soil	2006-10-20	17:40	2006-10-21
106537	W-24	soil	2006-10-20	17:42	2006-10-21
106538	N-4	soil	2006-10-20	17:45	2006-10-21
106539	N-5	soil	2006-10-20	17:46	2006-10-21
106540	N-6	soil	2006-10-20	17:48	2006-10-21
106541	N-12	soil	2006-10-20	17:51	2006-10-21
106542	N-19	soil	2006-10-20	17:47	2006-10-21
106543	N-21	soil	2006-10-20	17:49	2006-10-21
106544	N-24	soil	2006-10-20	17:50	2006-10-21

Sample - Field Code	BTX				MTBE	TPH DRO	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	MTBE (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
106468 - A-2	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106469 - A-5	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106470 - A-8	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106471 - A-12	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106472 - A-15	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106473 - A-19	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106474 - A-23	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106475 - A-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106476 - A-29	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106477 - A-31	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00

continued ...

. continued

Sample - Field Code	BTX				MTBE MTBE (mg/Kg)	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)			
106478 - A-34	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106479 - A-39	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106480 - C-17	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106481 - C-18	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106482 - C-19	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106483 - C-20	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106484 - C-23	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106485 - C-25	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106486 - C-26	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106487 - C-27	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106488 - C-28	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106489 - C-30	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106490 - C-35	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106491 - C-37	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106492 - D-1	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106493 - D-2	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106494 - D-10	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106495 - D-19	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106496 - D-21	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106497 - D-22	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106498 - D-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106499 - D-26	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106500 - D-28	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106501 - D-30	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106502 - D-35	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106503 - D-40	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106504 - B-3	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106505 - B-5	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106506 - B-13	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106507 - B-18	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106508 - B-22	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106509 - B-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106510 - B-26	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106511 - B-32	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106512 - B-35	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106513 - B-36	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106514 - B-37	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106515 - B-40	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106516 - E-13	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106517 - E-7	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106518 - E-8	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106519 - E-12	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106520 - E-4	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106521 - E-16	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106522 - E-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106523 - S-7	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106524 - S-8	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106525 - S-14	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106526 - S-22	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106527 - S-23	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106528 - S-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106529 - S-25	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106530 - S-27	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106531 - W-3	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106532 - W-5	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106533 - W-6	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00

continued ...

... continued

Sample - Field Code	BTEX				MTBE MTBE (mg/Kg)	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)			
106534 - W-7	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106535 - W-11	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106536 - W-20	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106537 - W-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106538 - N-4	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106539 - N-5	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106540 - N-6	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106541 - N-12	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106542 - N-19	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106543 - N-21	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
106544 - N-24	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00

Sample: 106468 - A-2

Param	Flag	Result	Units	RL
Chloride		7.45	mg/Kg	2.00

Sample: 106469 - A-5

Param	Flag	Result	Units	RL
Chloride		4.56	mg/Kg	2.00

Sample: 106470 - A-8

Param	Flag	Result	Units	RL
Chloride		4.56	mg/Kg	2.00

Sample: 106471 - A-12

Param	Flag	Result	Units	RL
Chloride		5.80	mg/Kg	2.00

Sample: 106472 - A-15

Param	Flag	Result	Units	RL
Chloride		6.62	mg/Kg	2.00

Sample: 106473 - A-19

Param	Flag	Result	Units	RL
Chloride		28.6	mg/Kg	2.00

Sample: 106474 - A-23

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Param	Flag	Result	Units	RL
Chloride		9.52	mg/Kg	2.00

Sample: 106475 - A-24

Param	Flag	Result	Units	RL
Chloride		12.8	mg/Kg	2.00

Sample: 106476 - A-29

Param	Flag	Result	Units	RL
Chloride		17.0	mg/Kg	2.00

Sample: 106477 - A-31

Param	Flag	Result	Units	RL
Chloride		455	mg/Kg	2.00

Sample: 106478 - A-34

Param	Flag	Result	Units	RL
Chloride		10300	mg/Kg	2.00

Sample: 106479 - A-39

Param	Flag	Result	Units	RL
Chloride		7100	mg/Kg	2.00

Sample: 106480 - C-17

Param	Flag	Result	Units	RL
Chloride		1070	mg/Kg	2.00

Sample: 106481 - C-18

Param	Flag	Result	Units	RL
Chloride		3090	mg/Kg	2.00

Sample: 106482 - C-19

Param	Flag	Result	Units	RL
Chloride		5740	mg/Kg	2.00

Report Date: October 27, 2006
Eddy County,Nm

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Sample: 106483 - C-20

Param	Flag	Result	Units	RL
Chloride		7660	mg/Kg	2.00

Sample: 106484 - C-23

Param	Flag	Result	Units	RL
Chloride		1310	mg/Kg	2.00

Sample: 106485 - C-25

Param	Flag	Result	Units	RL
Chloride		5530	mg/Kg	2.00

Sample: 106486 - C-26

Param	Flag	Result	Units	RL
Chloride		4930	mg/Kg	2.00

Sample: 106487 - C-27

Param	Flag	Result	Units	RL
Chloride		12600	mg/Kg	2.00

Sample: 106488 - C-28

Param	Flag	Result	Units	RL
Chloride		4660	mg/Kg	2.00

Sample: 106489 - C-30

Param	Flag	Result	Units	RL
Chloride		2910	mg/Kg	2.00

Sample: 106490 - C-35

Param	Flag	Result	Units	RL
Chloride		3700	mg/Kg	2.00

Sample: 106491 - C-37

Param	Flag	Result	Units	RL
Chloride		2910	mg/Kg	2.00

Report Date: October 27, 2006
Eddy County, Nm

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Sample: 106492 - D-1

Param	Flag	Result	Units	RL
Chloride		11500	mg/Kg	2.00

Sample: 106493 - D-2

Param	Flag	Result	Units	RL
Chloride		2010	mg/Kg	2.00

Sample: 106494 - D-10

Param	Flag	Result	Units	RL
Chloride		6460	mg/Kg	2.00

Sample: 106495 - D-19

Param	Flag	Result	Units	RL
Chloride		17.4	mg/Kg	2.00

Sample: 106496 - D-21

Param	Flag	Result	Units	RL
Chloride		12.3	mg/Kg	2.00

Sample: 106497 - D-22

Param	Flag	Result	Units	RL
Chloride		4510	mg/Kg	2.00

Sample: 106498 - D-24

Param	Flag	Result	Units	RL
Chloride		11300	mg/Kg	2.00

Sample: 106499 - D-26

Param	Flag	Result	Units	RL
Chloride		581	mg/Kg	2.00

Sample: 106500 - D-28

Param	Flag	Result	Units	RL
Chloride		765	mg/Kg	2.00

Sample: 106501 - D-30

Param	Flag	Result	Units	RL
Chloride		4080	mg/Kg	2.00

Sample: 106502 - D-35

Param	Flag	Result	Units	RL
Chloride		810	mg/Kg	2.00

Sample: 106503 - D-40

Param	Flag	Result	Units	RL
Chloride		12.0	mg/Kg	2.00

Sample: 106504 - B-3

Param	Flag	Result	Units	RL
Chloride		719	mg/Kg	2.00

Sample: 106505 - B-5

Param	Flag	Result	Units	RL
Chloride		1430	mg/Kg	2.00

Sample: 106506 - B-13

Param	Flag	Result	Units	RL
Chloride		2540	mg/Kg	2.00

Sample: 106507 - B-18

Param	Flag	Result	Units	RL
Chloride		3450	mg/Kg	2.00

Sample: 106508 - B-22

Param	Flag	Result	Units	RL
Chloride		10400	mg/Kg	2.00

Sample: 106509 - B-24

Param	Flag	Result	Units	RL
Chloride		8620	mg/Kg	2.00

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Sample: 106510 - B-26

Param	Flag	Result	Units	RL
Chloride		2310	mg/Kg	2.00

Sample: 106511 - B-32

Param	Flag	Result	Units	RL
Chloride		4820	mg/Kg	2.00

Sample: 106512 - B-35

Param	Flag	Result	Units	RL
Chloride		442	mg/Kg	2.00

Sample: 106513 - B-36

Param	Flag	Result	Units	RL
Chloride		12600	mg/Kg	2.00

Sample: 106514 - B-37

Param	Flag	Result	Units	RL
Chloride		6620	mg/Kg	2.00

Sample: 106515 - B-40

Param	Flag	Result	Units	RL
Chloride		191	mg/Kg	2.00

Sample: 106516 - E-13

Param	Flag	Result	Units	RL
Chloride		172	mg/Kg	2.00

Sample: 106517 - E-7

Param	Flag	Result	Units	RL
Chloride		6.90	mg/Kg	2.00

Sample: 106518 - E-8

Param	Flag	Result	Units	RL
Chloride		7.55	mg/Kg	2.00

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Sample: 106519 - E-12

Param	Flag	Result	Units	RL
Chloride		153	mg/Kg	2.00

Sample: 106520 - E-4

Param	Flag	Result	Units	RL
Chloride		12.2	mg/Kg	2.00

Sample: 106521 - E-16

Param	Flag	Result	Units	RL
Chloride		21.6	mg/Kg	2.00

Sample: 106522 - E-24

Param	Flag	Result	Units	RL
Chloride		9.80	mg/Kg	2.00

Sample: 106523 - S-7

Param	Flag	Result	Units	RL
Chloride		2190	mg/Kg	2.00

Sample: 106524 - S-8

Param	Flag	Result	Units	RL
Chloride		226	mg/Kg	2.00

Sample: 106525 - S-14

Param	Flag	Result	Units	RL
Chloride		201	mg/Kg	2.00

Sample: 106526 - S-22

Param	Flag	Result	Units	RL
Chloride		7160	mg/Kg	2.00

Sample: 106527 - S-23

Param	Flag	Result	Units	RL
Chloride		1220	mg/Kg	2.00

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Sample: 106528 - S-24

Param	Flag	Result	Units	RL
Chloride		5800	mg/Kg	2.00

Sample: 106529 - S-25

Param	Flag	Result	Units	RL
Chloride		2360	mg/Kg	2.00

Sample: 106530 - S-27

Param	Flag	Result	Units	RL
Chloride		1720	mg/Kg	2.00

Sample: 106531 - W-3

Param	Flag	Result	Units	RL
Chloride		26.5	mg/Kg	2.00

Sample: 106532 - W-5

Param	Flag	Result	Units	RL
Chloride		18.4	mg/Kg	2.00

Sample: 106533 - W-6

Param	Flag	Result	Units	RL
Chloride		87.7	mg/Kg	2.00

Sample: 106534 - W-7

Param	Flag	Result	Units	RL
Chloride		14.5	mg/Kg	2.00

Sample: 106535 - W-11

Param	Flag	Result	Units	RL
Chloride		12.4	mg/Kg	2.00

Sample: 106536 - W-20

Param	Flag	Result	Units	RL
Chloride		195	mg/Kg	2.00

Sample: 106537 - W-24

Param	Flag	Result	Units	RL
Chloride		13.8	mg/Kg	2.00

Sample: 106538 - N-4

Param	Flag	Result	Units	RL
Chloride		6.71	mg/Kg	2.00

Sample: 106539 - N-5

Param	Flag	Result	Units	RL
Chloride		5.24	mg/Kg	2.00

Sample: 106540 - N-6

Param	Flag	Result	Units	RL
Chloride		9.22	mg/Kg	2.00

Sample: 106541 - N-12

Param	Flag	Result	Units	RL
Chloride		20.3	mg/Kg	2.00

Sample: 106542 - N-19

Param	Flag	Result	Units	RL
Chloride		5.45	mg/Kg	2.00

Sample: 106543 - N-21

Param	Flag	Result	Units	RL
Chloride		8.60	mg/Kg	2.00

Sample: 106544 - N-24

Param	Flag	Result	Units	RL
Chloride		1850	mg/Kg	2.00

Report Date: October 24, 2006
Unit B-S26-25S-26E

Work Order: 6102302
Crawford 26-2

Page Number: 1 of 1
Blackriver-New Mexico

Summary Report

Dorsey Rogers
Cinmarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: October 24, 2006

Work Order: 6102302



Project Location: Blackriver-New Mexico
Project Name: Crawford 26-2
Project Number: Unit B-S26-25S-26E

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
106545	River 1	Water	2006-10-20	18:20	2006-10-21
106546	River 2	Water	2006-10-20	18:25	2006-10-21

Sample: 106545 - River 1

Param	Flag	Result	Units	RL
Chloride		18.2	mg/L	0.500

Sample: 106546 - River 2

Param	Flag	Result	Units	RL
Chloride		18.0	mg/L	0.500



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155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail lab@traceanalysis.com

Analytical and Quality Control Report

Dorsey Rogers
Cimarex
207 S Mesa
Carlsbad, NM, 88220

Report Date: October 24, 2006

Work Order: 6102302



Project Location: Blackriver-New Mexico
Project Name: Crawford 26-2
Project Number: Unit B-S26-25S-26E

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
106545	River 1	Water	2006-10-20	18:20	2006-10-21
106546	River 2	Water	2006-10-20	18:25	2006-10-21

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 106545 - River 1

Analysis: Chloride (IC) Analytical Method: E 300 0 Prep Method: N/A
QC Batch: 31209 Date Analyzed: 2006-10-23 Analyzed By: WB
Prep Batch: 27178 Sample Preparation: 2006-10-23 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		18.2	mg/L	5	0.500

Sample: 106546 - River 2

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 31209 Date Analyzed: 2006-10-23 Analyzed By: WB
Prep Batch: 27178 Sample Preparation: 2006-10-23 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		18.0	mg/L	5	0.500

Method Blank (1) QC Batch: 31209

QC Batch: 31209 Date Analyzed: 2006-10-23 Analyzed By: WB
Prep Batch: 27178 QC Preparation: 2006-10-23 Prepared By: WB

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.0181	mg/L	0.5

Laboratory Control Spike (LCS-1)

QC Batch: 31209 Date Analyzed: 2006-10-23 Analyzed By: WB
Prep Batch: 27178 QC Preparation: 2006-10-23 Prepared By: WB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.4	mg/L	1	12.5	<0.0181	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12.3	mg/L	1	12.5	<0.0181	99	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 106565

QC Batch: 31209
Prep Batch: 27178

Date Analyzed: 2006-10-23
QC Preparation: 2006-10-23

Analyzed By: WB
Prepared By: WB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	2200	mg/L	100	1250	880	106	25.4 - 171

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	2180	mg/L	100	1250	880	104	25.4 - 171	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 31209

Date Analyzed: 2006-10-23

Analyzed By: WB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.4	99	90 - 110	2006-10-23

Standard (CCV-1)

QC Batch: 31209

Date Analyzed: 2006-10-23

Analyzed By: WB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.7	102	90 - 110	2006-10-23

TraceAnalysis, Inc. 6701 Aberdeen Avenue, Ste 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1296 email lab@traceanalysis.com		155 McCutcheon, Suite H El Paso, Texas 79932 Tel (915) 585-3443 Fax (915) 585-4944 1 (888) 588-3443	
Company Name: <u>Turner</u> Address: <u>2015 Mesa Carlsbad, NM 88800</u> Contact Person: <u>Don Royers</u> Invoice to: <u>Don Royers</u> (If different from above)		Phone #: <u>505-300-5345</u> Fax #: <u>505-300-6105</u> E-mail: <u>clorseyrogers@aol.com</u> <u>valleyenergy@plateau.net</u>	
Project #: <u>Crawford 26-2</u> Project Location (including state): <u>Unit B S26-25S-26E</u> <u>Blackriver - New Mexico</u>		Project Name: <u>Crawford 26-2</u> Sampler Signature: <u>[Signature]</u>	

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX			PRESERVATIVE METHOD				SAMPLING		
				WATER	AIR	SLUDGE	HCl	HNO ₃	H ₂ O ₂	NaOH	ICE	DATE	TIME
106545	RIVER 1	1	4oz									10/20/06	1200P
46	RIVER 2	1	4oz									10/20/06	1105P

Refiniquished by: <u>Sherry Rudy</u>	Date: <u>10/20/06</u>	Time: <u>9:00am</u>	Received by: <u>[Signature]</u>	Date: <u>10/20/06</u>	Time: <u>8:00 PM</u>
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by: <u>[Signature]</u>	Date: <u>10/20/06</u>	Time: <u>12/11</u>	Received at Laboratory by: <u>[Signature]</u>	Date: <u>10/21/06</u>	Time: <u>12:21</u>

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C O C

ORIGINAL COPY

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 4102302

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	
BTEX 8021B / 602 / 8260B / 624	
TPH 418 1 / TX1005 / TX1005 EXT(C35)	
TPH 8015 GRO / DRO / TVHC	
PAH 8270C / 625	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
TCLP Pesticides	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi Vol 8270C / 625	
PCBs 8082 / 608	
Pesticides 8081A / 608	
BOD, TSS, pH	
Moisture Content	
Chloride	
Turn Around Time if different from standard	

LAB USE ONLY		REMARKS: <u>Please email: Shell & Dorsey results</u>
Intact <u>Y</u> / <u>N</u>		
Headspace <u>Y</u> / <u>N</u>		
Temp <u>4</u>		
Log-in-Review <u>45</u>		
<input type="checkbox"/> Dry Weight Basis Required <input type="checkbox"/> TRRP Report Required <input type="checkbox"/> Check if Special Reporting Limits Are Needed		Carrier # <u>walk in</u>