1025 N. French Dr., Hobba, 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

0

 State of New Mexico Energy Minerals and Natural Resources

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

5 l sy

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

والمتحدية والمراجعة والمحدة والمحدة والمتعد بمالتك والمتركب والمتحا والوجيد والتوجيد والتوجيد والمحدة الموسك والمحدول	Pit or Below-Grade Tank Registration or Closure				
Is pit or below-grade tan	nk covered by a "general plan"? Yes 🗌 No or below-grade task 🔲 Closure of a pit or below-gra				
Operator: <u>Conserve Energy</u> Telephone Address: <u>2101 Dornes Bol. Cortsbool 1. M.</u> Facility or well name Construct 26+2 API #:3	n: <u>505-698-3447</u> 0-mail address: <u>d</u> <u>10-015-33 zz 8</u> W/L or Qúr/Qir_ <u>B</u> 33 ⁰ -11'-35.1'' IV Longitude 154-1	seeder 7 245 R26E			
Pit Type: Drilling Production [] Disposal [] Workover Emergency [] Lined [] Unlined [] Liner type: Synthetic [] Thickness /2 mil Clay [] Pit Volume () Dibl	Below-grade tank Volume:bbl Type of flaid: Construction material: Double-walled, with leak detection? Yes [] If not 	, esplaia why not.			
Depth to ground water (vertical distance from bottom of pit to scanonal high water elevation of ground water.) 20' bg S	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)			
Weilhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water source.)	Yes No	(20 points) (0 points)			
Distance to surface water: (horizontal distance to all wetlands, playas, imigation canals, ditches, and perennial and ephemetral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points)			
	Ranking Score (Total Points)	60)			
your are burying in place) onsite i offisite i If offisite, name of facility remediation start date and end date. (4) Groundwater encountered: No i (5) Attach soil sample results and a disgram of sample locations and excaval Additional Comments:	Yes I If yes, show depth below ground surface				
See Attercheo	final separt				
Thereby certify that the information above is true and complete to the best has been/will be constructed or closed according to NMOCD guideline Date: Printed Name/Title DAMA POKAN DWAY Your certification and NMOCD approval of this application/closure core is otherwise cadanger public health or the environment. Nor does it relayed regulations.	Signature	tive OCD-approved plan [].			
Approval: Printed Name/Title	Signatore	Date:			
Accepted for record NMOCD	FINAL Report	A DRP-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

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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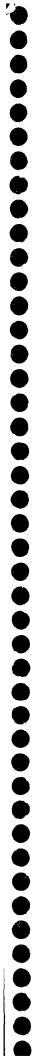
Section - III

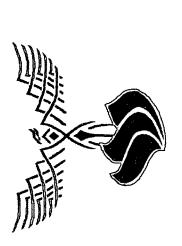
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NMOCD Form C-144 Initial Closure Form	
NMOCD Form C-144 Final Closure Form	

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

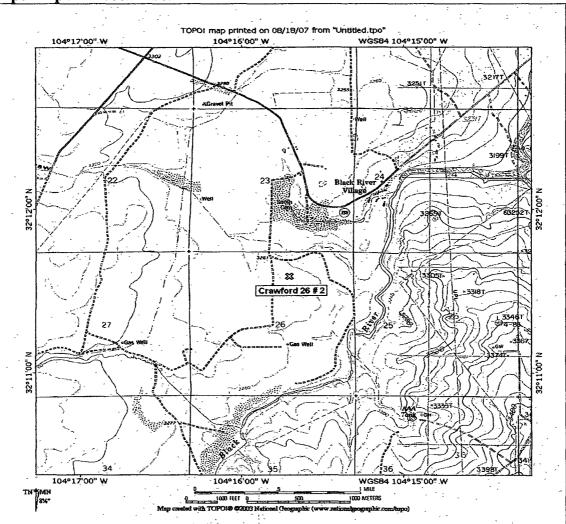
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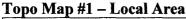
Company: Cimarex Energy Company of Colorado Location: Crawford #26-2 (OCD Case #2R0059)

Project History

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

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





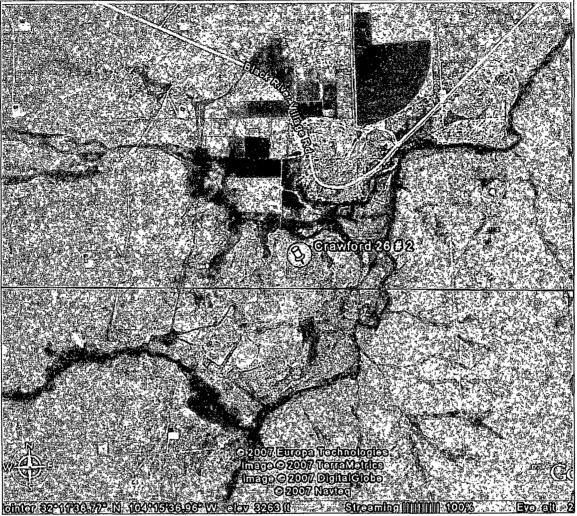




Final Closure Report

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

Google Area Photo #1



Project Overview

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

Chronology of Initial Closure

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





Final Closure Report

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

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

09/28/06 - Continued stabilization and hauling.

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

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

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.





Page 4 of 24

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





			<u> </u>			▶ 15	5' 🗲						
1	A 45	3	4	5 4.56	6	7	η	\mathcal{T}	3 719	4	5 1430	6	7
8	<u> </u>	10	11	12 5.8	13	14	8	9	10	11	12	13 2540	14
15 6.62	16	17	18	19 28.6	20	21	15	16	17	18 3540	19	20	21
22	23 9.52	24 12.8	25	26	27	28	22 10400	23	24 8620	25	26 2310	27	28
29 17	30	31 455	32	33	34 10300	35	29	30	31	32 4820	33	34	35 442
36	37	38	9 100	40	41	42	36 12600	37 6620	38	39	40 191	41	42
1	Z	3	4	5	6	7	1100	201	4	4	Testi	1019A	7
8	9	10	11	12	13	14	8	9	10 6460	11	12	13	14
15	16	17 1070	18 3090	19 5740	20 7660	21	15	16	17	18	19 17.4	20	21 12.3
22	23 1310	24	25 5530	26 4930	27 12600	28 4660	22 4510	23	24 11300	25	26 581	27	28 765
29	30 2910	21 Tres	22 At Bole B	3	34	35 3700	29	30 4080	31	32 •	33	34	35 810
36	37 2910	38	39	40	41	42	36 Rest Hot	27 9C.	38	39	40 12	41	42

Table #3 - Trace Analysis – S	oil 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.





Table #4 – Bore Hole Soil Lithology

Bore Hole Depth	Lithology Description
$\frac{0-5^{2}}{0-5^{2}}$	SOIL LTRD TN CRM VFXLN – CALCARIOUS MARL – NO
	VIS CARB OR ORGANIC MATERIL SM SILTY SUBRNDD
	OTZ 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)

			······		
16'					
17'	9,280	11,000		71.1	
18'	7,490	8,980		-50	
19'	7,440	11,900		66.4	
20'	7,560	11,500		52.1	
21'	6,850	12,700		Test/HoleC	
22'	6,690	11,000	-301P		
23'	9,540	12,000			
24'	8,080	12,000			
25'	8,330	10,400			
26'	8,200	9,320			
27'	7,140	9,660			
28'	6,860	5,380			
29'	4,960	5,910			
30'	2,760	4,370			
	Rest Hole B	Rest)Hole A			

Table #5 - Trace Analysis Bore Hole Results (Please r	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 Analy	sis 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.

CIMAREX



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.

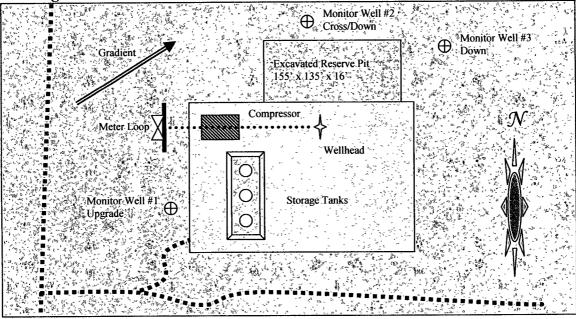
In early April 2007, a meeting was convened in at the NMOCD in Santa Fe with Technical Staff and Mr. Wayne Price. Members from Cimarex and Phoenix Environmental were in attendance where supporting data was supplied on the progress to date and to determine any further actions needed implement the Crawford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







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.

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

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

Summary and Conclusions

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





The pit was excavated to a depth of $16 \pm -$ 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:

Signature:

Title: VP Operations Phoenix Environmental LLC

Allen Hodok.

REM #7096

Name:

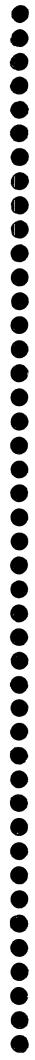
Signature:

Title: Drilling Superintendent Cimarex Energy Company of Colorado











SECTION II

XEN MAREN

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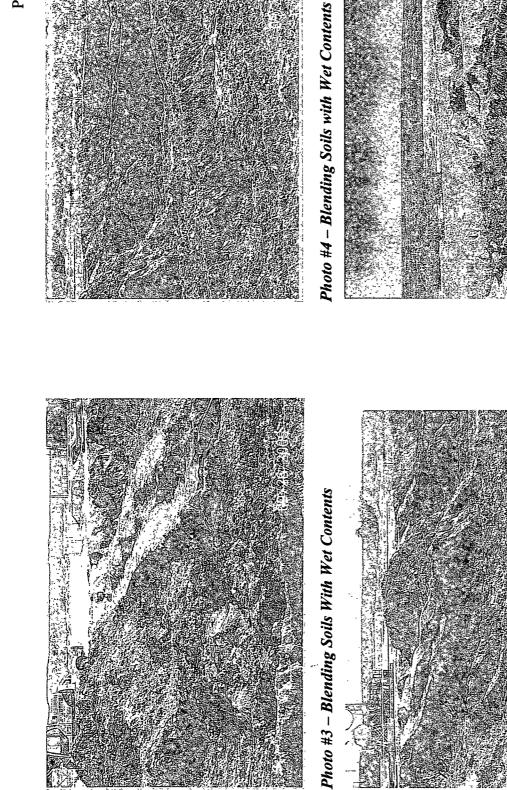
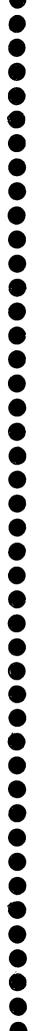


Photo #1 – Reserve Drilling Pit (Contents)



Photo #2 – Reserve Drilling Pit (Contents)





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Photo #7 – Blending Contents and Excavating



Photo #5 – Blending Contents

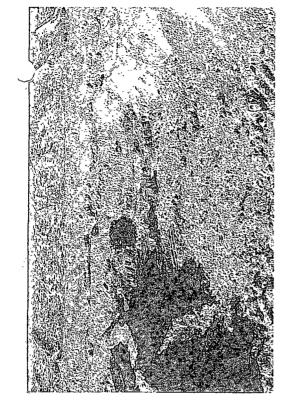


Photo #8 – Blending Contents and Excavating

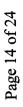


Photo #6 – Blending Contents





2 -•



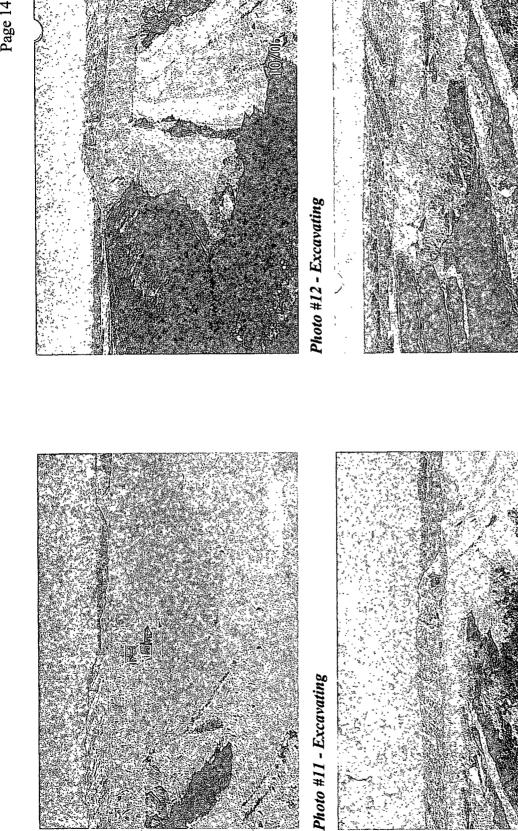


Photo #9 Blending Contents With Soils



Photo #10 View of Horseshoe



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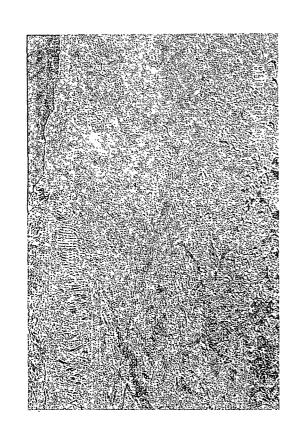


Photo #15 - Excavating





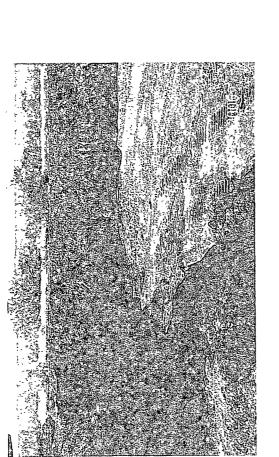


Photo #16 - Excavating

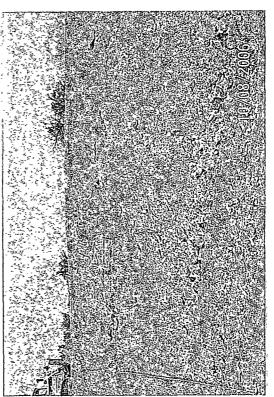


Photo #14 - Excavating





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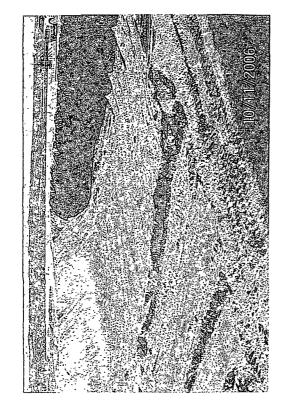


Photo #19 - Excavating



Photo #17 - Excavating

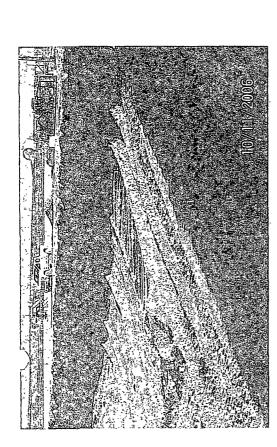


Photo #20 - Excavating



Photo #18 - Excavating





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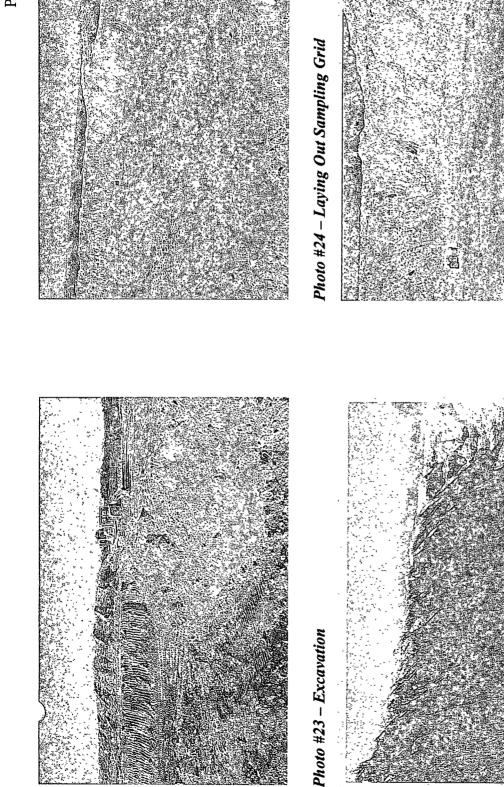


Photo #21 – Laying Out Sampling Grid



Photo #22 – Laying Out Sampling Grid



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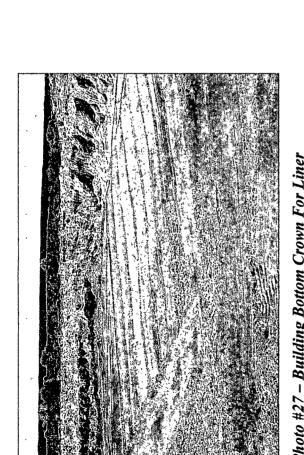


Photo #27 – Building Bottom Crown For Liner

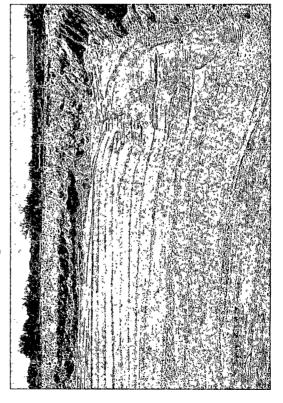


Photo #25 - Building Bottom Crown For Liner

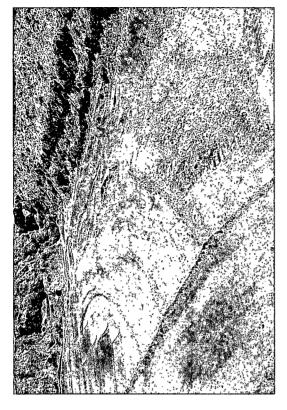


Photo #28 – Building Bottom Crown For Liner



Photo #26 - Building Bottom Crown For Liner







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Photo #31 – Installing Liner Over Crown



Photo #29 – Installing Liner Over Crown



Photo #32 – Installing Liner Over Crown

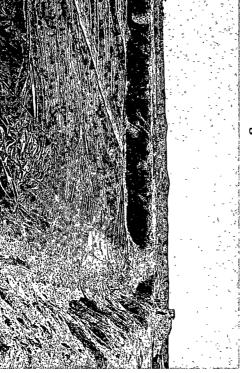


Photo #30 – Installing Liner Over Crown



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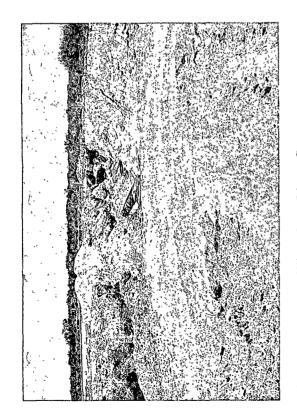


Photo #35 - Backfilling Over Liner Crown



Photo #33 - Backfilling Over Liner Crown

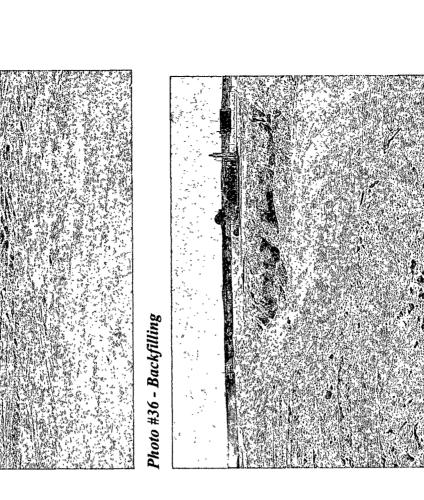


Photo #34 – Backfilling Over Liner Crown





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Page 21 of 24

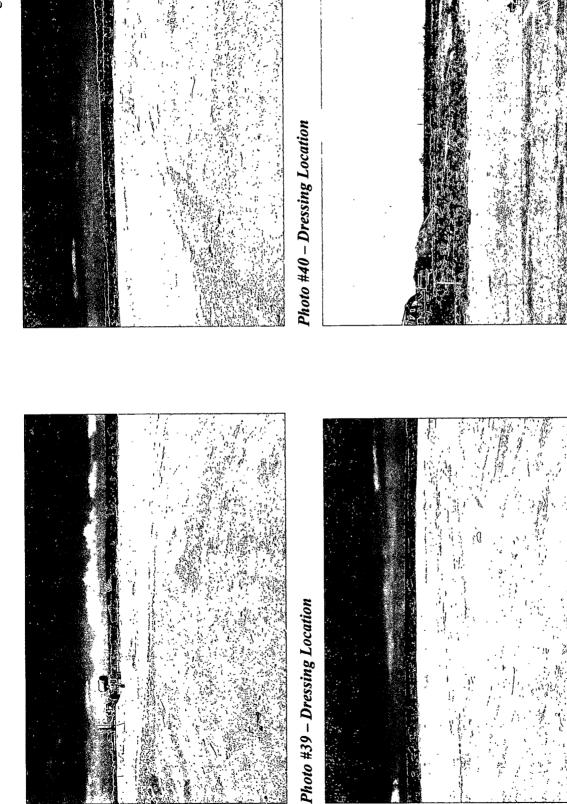


Photo #37 – Dressing Location

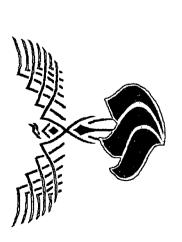
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CIMMARS



Photo #38 – Dressing Location





SECTION III



Allen Hodge

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

Dear Mr. Rogers:

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

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

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

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

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV	State of New Mexico y Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 For de	rilling and production faci priate NMOCD Distrife Offic ownstream facilities submi	ce
1220 S. St. Francis Dr., Santa Fe, NM 87505	·	0	RVB
	w-Grade Tank Registration or Closure	12	ESI
is pri or below-grade Type of action: Registration of a pit	tank covered by a "general plan"? Yes I No I or below-grade tank I Closure of a pit or below-g	grade tank X	A V
			192021222354
Operator: Cimarex Energy Co. Telephone: 432-	682-4429 e-mail address: kemm@nagu	iss.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' FE	L
County: EddyLatitude	NLongitude WNAD: 1927	1983 🗖	
Surface Owner: Federal State X Private 🗌 Indian 🗍			
Pit	Below-grade tank N/A		
Type: Drilling X Production Disposal	Volume: _N/A bbi Type of fluid: _N/A		_
Workover 🗌 Emergency 🗍	Construction material: N/A		
Lined X Unlined	Double-walled, with leak detection? If not, e		
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	Less than 50 feet	(20 points) 20 pts.	
high water elevation of groundwater.) High water elevation of	50 feet or more, but less than 100 feet	(10 points) 20 pts.	
groundwater range to approximately 20'.	100 feet or more	(0 points)	
	<u> </u>		
Wellhead protection area: (Less than 200 feet from a private domestic	Yes X	(20 points) 20 pts.	
water source, or less than 1000 feet from all other water sources.)	No	(0 points)	
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points) 20 pts.	
irrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but less than 1000 feet	(10 points)	
intigation canais, uncres, and percinitian and epitemeral watercourses.)	1000 feet or more	(0 points)	
	Ranking Score (Total Points)	60 pts.	2. 2 2. 2
this is a plt closure: (1) Attach a diagram of the facility showing the pit's abmitted for before and after remediation activity. (2) Indicate disposa eneral description of remedial action taken including remediation start date arface _ ft. and attach sample results.) Attach soil sample results and a diagram of sample locations and excavat	and end date. (4) Groundwater encountered: No X	ame of facility: Lea Land, l	inc. (3) Attach a
Additional Comments: Please refer to the attached letter for detailed "		ital abotos and sample loc	stion disgram shall
be submitted in final closure documents.	Constant a same and the same to a 20023. Dig	in having and sample inc	ungi am 508/1
o- suvinities in man troyal C upcomptiess			
· · · · ·		<u></u>	
	·	<u>_</u>	
I hereby certify that the information above is true and complete to the best of has been/will be constructed or closed according to NMOCD guidelines	of my knowledge and belief. I further certify that is X, a general permit [], or an (attached) alterna	the above-described pit or tive OCD-approved plan	below-grade tank
Date: 14 August 2006	$\land \land$	i A Al.	, .
rinted Name/Title Dorsey Rogers, Drilling Superintendent	Signature for Vorsey Konors	hus Mint	
our certification and NMOCD approval of this application/closure does not out endanger public health or the environment. Nor does it relieve the eg. As.	ot relieve the operator of liability should the contents	s of the pit or tank contamin my other federal, state, or lo	ate ground water or cel laws and/or
Approval: rinted Name/Title Kike Krakker Atsytt	SignatureKenneres	Date: 3//	

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.



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 yd/3 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 feet/2. After removing the source materials we still had chloride residuals that exceeded the 250 mg/l limit as requested by NMOCD. Cimarex ran standard lechate 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 H20	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

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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

^{2 :} Attached lab analysis from Trace Analysis, Lubbock, Texas.

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

	test hole A		test hole B	test hole C		
16'				 		
17'	1 <u>1,000</u>		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		ι.	
30'	4,370		2,760			

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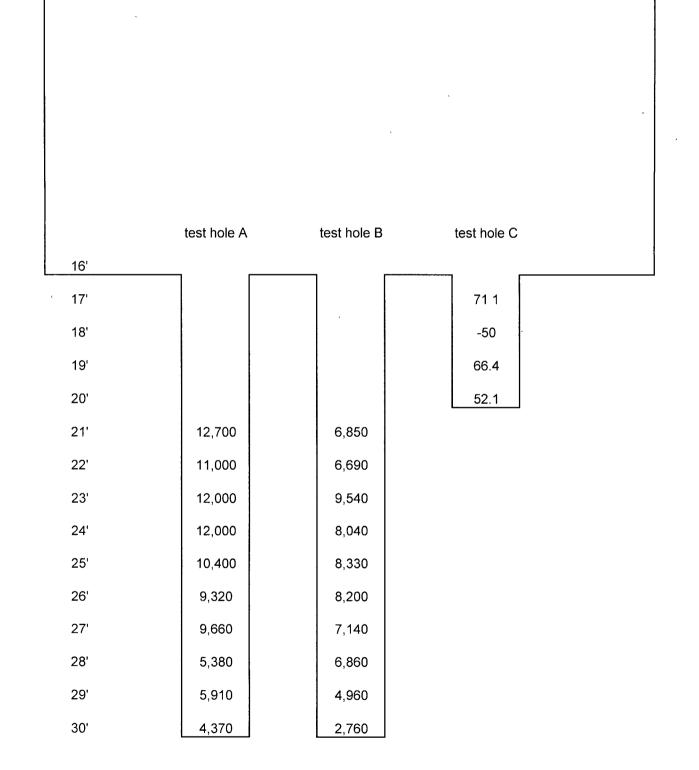
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Crawford 26 Fed #2 Drilling Pit Trace Analysis Lab Results 11/9/2006

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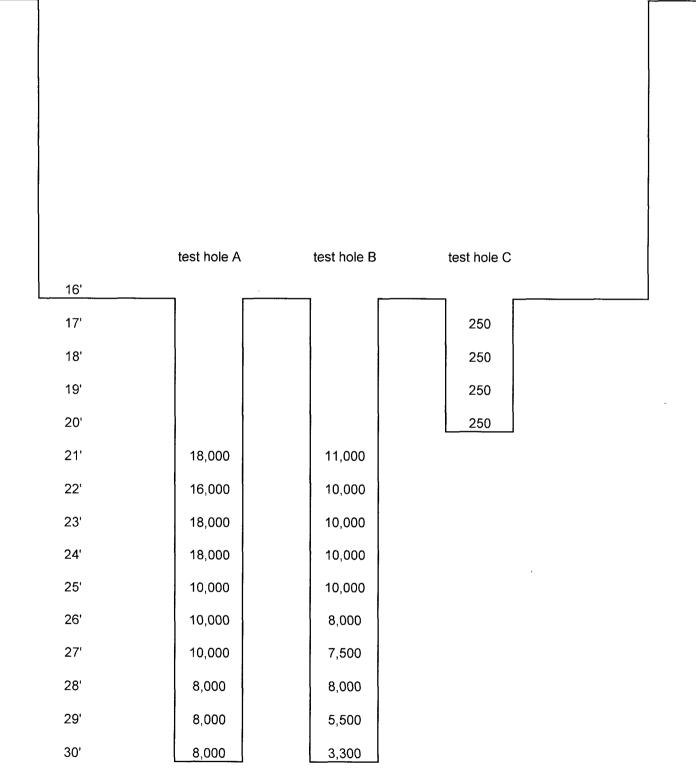
Crawford 26 Fed #2 Drilling Pit BBC International Field Sample Numbers 11/9/2006

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Report Date: November 6, 2006 Eddy County,Nm

Work Order: 6110608Crawford 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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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	$1\mathrm{B}$	soil	2006-11-01	13:50	2006-11-06
107887	$2\mathrm{B}$	soil	2006-11-01	13:55	2006-11-06
107888	3B	soil	2006-11-01	14:00	2006-11-06
107889	$4\mathrm{B}$	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	\mathbf{Units}	RL
Chloride		8980	mg/Kg	2.00

Sample: 107884 - 3A

Param	Flag	Result	Units	\mathbf{RL}
Chloride		11900	m 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	

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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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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	\mathbf{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	\mathbf{RL}	
Chloride		12000	mg/Kg	2.00	
Sample: 108549 -					
Param	Flag	Result	Units	RL 2.00	
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	\mathbf{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	\mathbf{RL}	
Chloride	- · · · · · · · · · · · · · · · · · · ·	4370	mg/Kg	2.00	

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Report Date: November 14, 2006 Eddy County,Nm		Work Order: 61110 Crawford 26 Fed #		age Number: 3 of Jnit B-S26-24S-26
Sample: 108555 -	1 B-2 1'			
Param	Flag	Result	Units	F
Chloride		6850	mg/Kg	2.
Sample: 108556 -	2B-22'			
Param	Flag	Result	Units	F
Chloride		6690	mg/Kg	2.0
Sample: 108557 -	3B-23'			
Param	Flag	Result	Units	F
Chloride	<u>8</u>	9540	mg/Kg	2.
Sample: 108558 - Param Chloride	Flag	Result 8040	Units mg/Kg	I 2.
Sample: 108559 - Param	5 B-25' Flag	Result	Units	F
Chloride		8330	mg/Kg	2.0
Sample: 108560 -	6B-26'			
Param	Flag	Result	Units	F
Chloride		8200	mg/Kg	2.
Sample: 108561 -	7 B-2 7			
Param	Flag	Result	Units	
-		Result 7140	Units mg/Kg	
Param	Flag			
Param Chloride Sample: 108562 - Param	Flag	7140 Result		2.
Param Chloride Sample: 108562 -	Flag . 8B-28'	7140	mg/Kg Units mg/Kg	2.
Param Chloride Sample: 108562 - Param	Flag · · · · · · · · · · · · · · · · · · ·	7140 Result 6860	mg/Kg Units mg/Kg	2.
Param Chloride Sample: 108562 - Param Chloride	Flag · · · · · · · · · · · · · · · · · · ·	7140 Result 6860	mg/Kg Units mg/Kg	F 2.0 F 2.0 R

TraceAnalysis, Inc. • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296

Eddy County,Nm	ember 14, 2006	Work Order: 6111012 Crawford 26 Fed #2		Page Number: 4 of 4 Unit B-S26-24S-26F
Sample: 108564	- 10B-30'			
Param	Flag	Result	Units	RI
Chloride		2760	mg/Kg	2.00
Sample: 108565	- 1C-21'			
Param	Flag	Result	Units	RI
Chloride	<u>_</u>	71.1	mg/Kg	2.00
Sample: 108566 Param Chloride	- 2C-22' Flag	Result <50.0	Units mg/Kg	RI 2.00
Sample: 108567	- 3C-23'			
Sample: 100007		Result	Units	RI
Param Chloride	\mathbf{Flag}	nesuit	mg/Kg	2.00

Param	Flag	Result	Units	RL
Chloride		52.1	mg/Kg	2.00

.

Report Date: May 3, 2007

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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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

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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	\mathbf{RL}
Chloride		45.5	mg/L	0.500

6701 Aberdeen Avenuel Suite 9 200 East Sunset Road, Suite E 5002 Basin Street, Suite A1 6015 Hams Parkway Suite 119 - F: World Texas 76131

Lubbock, Taxas 79424 El Pose, Jexar 79922 Midland Texas 79733 F-Mail, rabi@traccanalysis.con

803+376+1296 888+599+3443

976+794+1296 (AX 805•794•1298 915+585+3443 TAX 913+585+4944 432+682+3301 -AX 432 • 684 • 63* 3 817+201+5260

Analytical and Quality Control Report

Dorsey Rogers Cimarex 207 S Mesa Carlsbad, NM, 88220

ζ.

Eddy Co.,NM Project Location: **Project Name:** Crawford 26-2 Project Number: Crawford 26-2-Eddy County,NM Report Date: May 3, 2007

Work Order: 7043017

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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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:	\mathbf{ER}
Prep Batch:	31983	Sample Preparation:	2007-04-30	Prepared By:	\mathbf{ER}
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		13.3	mg/L	5	0.500

Sample: 122965 - Up & Cross Gradient

Analysis: QC Batch: Prep Batch:	Chloride (IC) 36868 31983	Analytical Method: Date Analyzed: Sample Preparation:	E 300.0 2007-04-30 2007-04-30	Prep Method: Analyzed By: Prepared By:	$\dot{\mathbf{ER}}$
		\mathbf{RL}			
Parameter	\mathbf{Flag}	\mathbf{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:	\mathbf{ER}
Prep Batch:	31983	Sample Preparation:	2007-04-30	Prepared By:	\mathbf{ER}
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		45.5	mg/L	5	0.500

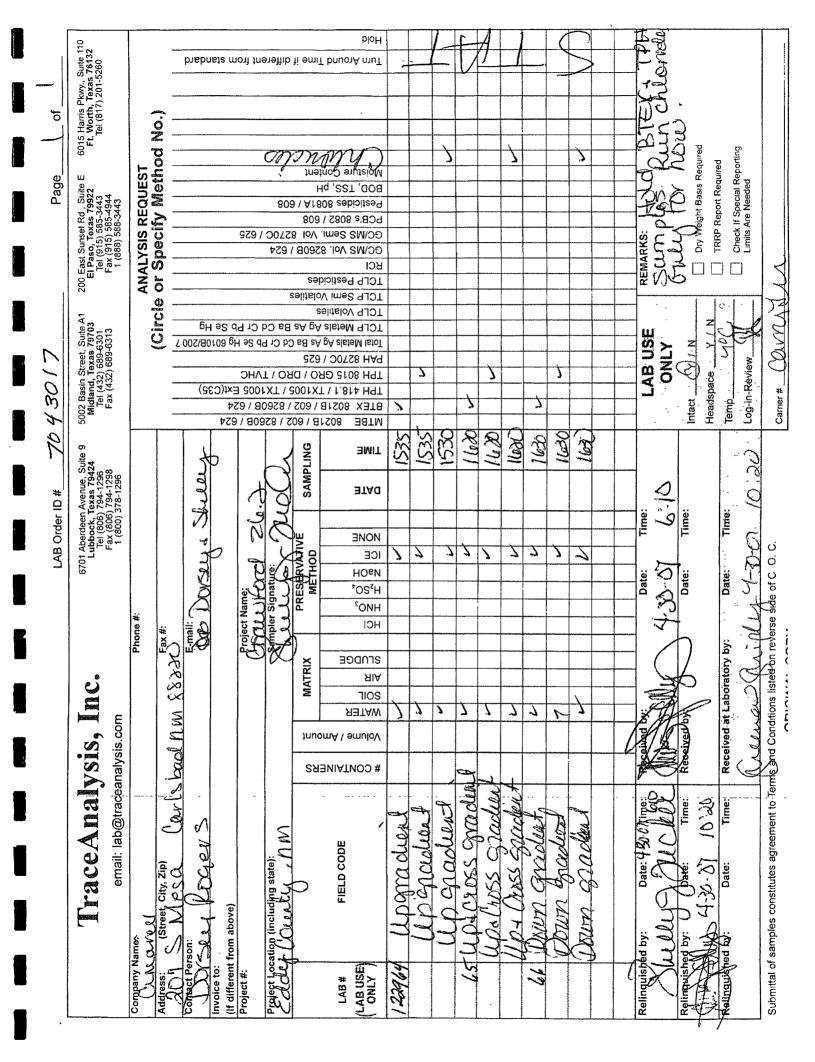
Method Blank (1) QC Batch: 36868

QC Batch: 36868 Prep Batch: 31983		Date Analyzed: 2007-04-30 QC Preparation: 2007-04-30		Analyzed By: Prepared By:	
		MDL			
Parameter	Flag	Result	Units		\mathbf{RL}
Chloride		<0.172	mg/L		0.5

Laboratory Control Spike (LCS-1)

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

Report Date: May 3, 2007 Crawford 26-2-Eddy County,NM			Work Order: 7043017 Crawford 26-2				Page Number: 3 of 3 Eddy Co.,NM			
Param			ČS sult	Units	Dil.	Spike Amount	Ma Res	trix sult F	Rec.	Rec. Limit
Chloride		1	1.3	mg/L	1	12.5	<0.	172	90	90 - 110
Percent recov	very is based on th	e spike result	. RPD is	based on	the spike a	nd spike du	plicate r	esult.		
		LCSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		11.4	mg/L	1	12.5	<0.172	91	90 - 110	1	20
	very is based on th	e spike result		based on						
		· · ·			···· · · · ·		F			
Matrix Spil	ke (MS-1) Spi	ked Sample: 1	22966							
					000504	•				
QC Batch:	36868			nalyzed:	2007-04-3				nalyzed E	
Prep Batch:	31983		QUIR	eparation:	2007-04-3	30		L I	repared B	y: ER
		λ	1S			Spike	Ma	triv		Rec.
Param			sult	Units	Dil.	Amount	Res		Rec.	Limit
Chloride	· · · · ·		270	mg/L	100	1250	45.5		<u>98</u>	10 - 18
Percent recov	very is based on th	e snike result	RPD is		the spike a	nd spike du	nlicato r	oeult		
r ercent recov	very is based on th			based on	one spine a	na spike au	pheater	court.		
		MSD			Spike	Matrix		Rec.		RPE
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limi
Chloride		1220	mg/L	100	1250	45.5389	94	10 - 188	4	20
Percent recov	very is based on th	e spike result	. RPD is	based on	the spike a	nd spike du	plicate r	esult.		
Standard (I	(CV-1)									
QC Batch:	36868		Date Analyzed: 2007-04-30				Aı	nalyzed B	y: ER	
			ICVs	TO	Vs	ICVs		Deveent		
			True		vs ind	Percent		Percent Recovery		Date
			True	FU	ma	rercent	1	Limits	Δ	nalyzed
Param	Flag	Units	Conc	Co	ne	Recovery			-	naryzeu
	0	Units	Conc.		$\frac{\text{nc.}}{4}$	Recovery				07-04-30
		Units mg/L	Conc. 12.5		nc. 4	Recovery 91		90 - 110		07-04-3
Param Chloride Standard (C]				244 B					07-04-30
Chloride Standard (C	CCV-1)		12.5	11	244 B	91		90 - 110		
Chloride	CCV-1)		12.5	11 nalyzed:	4	91		90 - 110	20	
Chloride Standard (C	CCV-1)		12.5 Date A	11 nalyzed: CC	2007-04-30	91		90 - 110 Aı	20	07-04-30 y: ER Date
Chloride Standard (C	2 CV-1) 36868		12.5 Date A CCVs	11 nalyzed: CC Fou	2007-04-30 2Vs	91 O CCVs		90 - 110 Aı Percent	20 nalyzed B	y: ER



NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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a a manufa ya kata a

Name: Cimarex Energy	Work Phone: 972-443-6489
Contact: Dorsey Kogers	Home Phone:
Address: PO Box 140907	_
City: Irving	
2. LOCATION OF WELL(A, B, C, or D required, E or F if kno	N D)
A1/41/41/4 Section: 26 Town	
B. X = 433 881.3 N feet, Y = 522 313.3 E Zone in the	feet, N.M. Coordinate System Grant.
U.S.G.S. Quad Map	
C. Latitude: <u>32</u> d <u>11</u> m <u>38.0</u> s Longitud	de: 104 d 15 m 40.8 s
D. East (m), North (m), UTM	
E. Tract No, Map No of the	
	,
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: 61/8 in.; Total depth of well: 40.0	ft.;
Size of hole: <u>61/8</u> in.; Total depth of well: <u>40.0</u> Completed well is: shallow (shallow, artes	ft.;
Size of hole: 61/8 in.; Total depth of well: 40.0 Completed well is: shallow (shallow, artes Depth to water upon completion of well: 32.22	ft.;
Size of hole: <u>61/8</u> in.; Total depth of well: <u>40.0</u> Completed well is: shallow (shallow, artes	ft.; sian);
Size of hole: <u>61/8</u> in.; Total depth of well: <u>40.0</u> Completed well is: shallow (shallow, artes	ft.; sian);
Size of hole: <u>61/8</u> in.; Total depth of well: <u>40.0</u> Completed well is: <u>shallow</u> (shallow, artes	ft.; sian);
Size of hole: <u>61/8</u> in.; Total depth of well: <u>40.0</u> Completed well is: <u>shallow</u> (shallow, artes	ft.; sian);
Size of hole: <u>61/8</u> in.; Total depth of well: <u>40.0</u> Completed well is: shallow (shallow, artes	ft.; sian);
Size of hole: <u>61/8</u> in.; Total depth of well: <u>40.0</u> Completed well is: <u>shallow</u> (shallow, artes	ft.; sian);
Size of hole: <u>61/8</u> in.; Total depth of well: <u>40.0</u> Completed well is: <u>shallow</u> (shallow, artes	ft.; sian);

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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

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Depth : From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
	<u> </u>		•••••••	
	<u> </u>			

6. RECORD OF CASING

Diameter	Pounds	Threads	Depth	in Feet	Length	Type of Shoe	Perfor	ations
(inches)	per ft.	per in.	Top	Bottom	(feet)		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	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
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			<u></u>			
3						
4						
5						

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File Number:

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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

Depth in From	feet To	Thickness in feet	Color and Type of Material Encountered
0.0	5.0	5.0	Brown clayey sand.
5.0	25.0	20.0	Tannish brown sandy clay.
25.0	30.0	5.0	Rust & brown clayey sand.
30.0	35.0	5.0	Light brown clayey sand. Moist @ 22.0'
35.0	40.0	5.0	Light brown sandy clay. Wet @ 30.0'
			Light brown bandy bidy. Wet to 50.0
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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. $\frac{51107}{(mm/dd/year)}$ FOR STATE ENGINEER USE ONLY Quad ____; FWL ____; FSL ____; Use ____; Location No. _____ Trn Number: File Number: Form: wr-20 page 4 of 4

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	DER OF WELL					070 442 6400
	Contact:	Cimarex Energy Dorsey Rogers				972-443-6489
	Address:	PO Box 140907	••		Home Phone:	
	City: [irving			State: TX	Zip: 75014-0907
. LOC	ATION OF W	BLL (A, B, C, or D	required, 2 c	r F if know	n)	
						ange: 26E N.M.P.M
	in Eddy					County
B	x = 433 /				FAAR N.M.	. Coordinate System
2.	Zo1	ne in the		010.0 E	<i>Leel, N.M.</i>	Grant.
	U.S.G.S. Qu	ad Map				
c	Totitude.	27 4 44	39.0			40.0
						m 40.8 s
D.	East	(m), North		(m), UTM Z	ione 13, NAD	(27 or 83)
Ε.	Tract No.	, Map No.	of t	he	Нус	irographic Survey
				-		of th
		, 2200// 110 Sul	bdivision rec	orded in		County.
G.	Other:	±				
п.	Give state	Engineer File N	umber 11 exis	sting well:		
Ι.	On land own	ed by (required): Cecil Bou	nds		
	LLING CONT					
LIC	ense Number:					408 664 968A
	Name:	White Drilling C John W. White	ompany, inc.			
M- + 1	-	P.O. Box 906	,,,,,,		Home Phone:	323-093-2930
Mart	ing Address:	P.U. BOX 900				
	City	Cłyde			State: TX Z:	in. 79510
	•*•]		· · · · ·		<u> </u>	
		RD: Crawford				
		04/26/07 ;				Air Rotary
		1/8 in.; Tota				
Com		is: shallow			an);	
	م	upon completion	of well: 29.	40	ft.	

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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

_ ___

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

- ----6. RECORD OF CASING

Diameter	Pounds	Threads	Depth	in Feet	Length	Type of Shoe	Perfor	ations
(inches)	per ft.	per in.	Top	Bottom	(feet)		From	То
2.0	<u>Sch. 40</u>	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	Sacks	Cubic Feet	Method of Placement
From	То	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 Cemer	
Top Bottom	
1	
2	
3	
4	
5	• • • • • •

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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

Depth in		Thickness	Color and Type of Material Encountered
From 0.0	то 5.0	in feet	
5.0	13.0	<u>5.0</u> 8.0	Light brown sandy clay.
13.0	18.0		Rust & tannish brown sand.
19.0		5.0	Tannish brown sandy clay.
18.0	29.0	11.0	Moist tan clay.
29.0	34.0	5.0	Wet clayey sand.
34.0	38.0	4.0	Wet clayey sand w/large gravel.
38.0	39.0	1.0	Wet sandy clay.
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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

).	ADDITIONAL	STATEMENTS	ÔR	EXPLANATIONS:	Crawford	26-2/MN-2
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T b h	the undersigned belief, the formation of	ed hereby ce	ertii a ti	fies that, to t rue and correct	he best of record of	his knowledge and the above described
	-fee	Driller			5 (10 (mm/dd/yc	<u>]</u>
=				. 곳 곳 는 도 프 또 는 분 만 드 드 드		
		FC	DR S	TATE ENGINEER	USE ONLY	
c	uad; FWL	; FSL		;USA;L	ocation No	·
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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

1. OWNER OF WELL	
Name: Cimerex Energy	Work Phone: 972-443-6489
Contact: Dorsey Rogers Address: PO Box 140907	nome Phone:
City: Irving	State: TX Zip: 75014-0907
2. LOCATION OF WELL (A, B, C, or D r	Section: 26 Township: 248 Range: 26E N.M.P.M.
in Eddy	County.
	t, Y - 522 313.3 E feet, N.M. Coordinate System
Zone in the	Grant.
U.S.G.S. Quad Map	<u></u>
C. Latitude: <u>32</u> d <u>11</u> m <u>3</u>	38.0 s Longitude: <u>104</u> d <u>15</u> m <u>40.8</u> s
D. East (m), North	(m), UTM Zone 13, NAD (27 or 93)
F. Lot No, Block No.	of Unit/Tract of the
	division recorded in County.
G. Other:	
H. Give State Engineer File Nur	mber if existing well:
	0
I. On land owned by (required):	Cech Bounds
3. DRILLING CONTRACTOR	
License Number: WD-1456	
	mpany, inc. Work Phone: 325-893-2950
	Home Phone: 325-893-2950
Mailing Address: P.O. Box 906	
City: Clyde	State: TX Zip: 79510
4. DRILLING RECORD: Crawford 2	26-2/ MW 3
	Completed: 04/28/07 ; Type tools: Air Rotary ;
Size of hole: 6 1/8 in.; Total	
Completed well is: shallow	
Depth to water upon completion of	
File Number:	Trn Number:page l of 4
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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

5, PRINCIPAL WATER-BEARING STRATA: Crawford 26-2/MM-3

Depth in Feet From To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
	<u> </u>		

6. RECORD OF CASING

Diameter	Pounds	Threads	Depth	in Feet	Length	Type of Shoe	Perfor	ations
(inches)	per ft.	per in.	Top	Bottom	(feet)		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
						<u> </u>		
	<u></u>	·····				,		

7. RECORD OF MUDDING AND CEMENTING

Depth	in Feet	Hole	Sacks	Cubic Feet	Method of Placement
From	То	Diameter	of mud	of Cement	
39.0	17.0	6 1/8	11.0		8/16 sand
<u>39.0</u> 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. Dept1	h in Feet	Cubic	Feet	of	Cement
	Тор	Bottom				
1						
2						
3						
4	······					
5						

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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

Depth in		Thickness	Color and Type of Material Encountered
From	То	in feet	color and type of Material Encountered
0.0	5.0	5.0	Brown sandy clay.
5.0	14.0	9.0	Tannish white clay.
14.0	19.0	5.0	Light brown clay.
19.0	22.0	3.0	Moist light brown clay.
22.0	30.0	8.0	Moist light brown sandy clay.
30.0	39.0	9.0	Light brown sandy clay.
		<u> </u>	Light brown sandy cidy.
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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

ADDITIONAL STATEMENTS OR EXPLANATIONS: Crawford 26-2/MW-3 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.  $\frac{5[1]07}{(mm/dd/year)}$ Driller FOR STATE ENGINEER USE ONLY Quad ____; FWL ____; FSL ____; Use ____; Location No. _____ Trn Number: File Number: Form: wr-20 page 4 of 4

10.

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## 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

			$\operatorname{Date}$	$\operatorname{Time}$	Date
Sample	Description	Matrix	Taken	Taken	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	$\mathbf{Units}$	RL
Chloride		13.3	mg/L	0.500

#### Sample: 122965 - Up & Cross Gradient

Param	$\mathbf{Flag}$	$\operatorname{Result}$	Units	RL
Chloride		14.2	mg/L	0.500

## Sample: 122966 - Down Gradient

Param	$\mathbf{Flag}$	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		45.5	mg/L	0.500

C/ULAN UCC//C Exclamation and a construction of the Avenue Suite scalably in Cross 79424
C/ULAN Scrupt Head, Suite Scalably Ecology, exces 79922
Head Dasin Struet Easte Al Minimum excess 79703
EU 5 Hearts Parkway Suite 110 - Et Worth Texas 76132

Bubbonu Toyak 79424 - Kili • 978• 1291
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 Minichi Eccs 79703
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 El Mail Lab@Aracemia yels con

R(\$\$*378*1796 #06*794*1796 R(\$*378*1796 9.5*585*3113 432*659*030 817*31*576

296 - ±4X 206+794+1295 1413 - £4X 215+583+3924 1801 - FAX 402+689+6313 1261

## Analytical and Quality Control Report

Dorsey Rogers Cimarex 207 S Mesa Carlsbad, NM, 88220

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

Report Date: April 30, 2007

Ad JAK

Work Order: 7043017

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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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

1

 $\,B\,$  - 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.

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## **Analytical Report**

## Sample: 122964 - Upgradient

Analysis: QC Batch: Prep Batch:	Chloride (IC) 36868 31983	Analytical Method: Date Analyzed: Sample Preparation:	E 300.0 2007-04-30 2007-04-30	Prep Method: Analyzed By: Prepared By:	$\dot{\mathbf{ER}}$
D (		RL	TT 1.		DI
Parameter	Flag	$\operatorname{Result}$	Units	Dilution	$\operatorname{RL}$
Chloride		13.3	$\mathrm{mg/L}$	5	0.500

## Sample: 122965 - Up & Cross Gradient

Analysis: QC Batch: Prep Batch:	Chloride (IC) 36868 31983	Analytical Method: Date Analyzed: Sample Preparation:	E 300.0 2007-04-30 2007-04-30	Prep Method: Analyzed By: Prepared By:	$\dot{\mathbf{ER}}$
		RL			
Parameter	Flag	$\mathbf{Result}$	Units	Dilution	$\operatorname{RL}$
Chloride		14.2	$\mathrm{mg/L}$	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:	$\mathbf{ER}$
Prep Batch:	31983	Sample Preparation:	2007-04-30	Prepared By:	$\mathbf{ER}$
		RL			
Parameter	Flag	Result	Units	Dilution	$\operatorname{RL}$
Chloride		45.5	_mg/L	5	0.500

## Method Blank (1) QC Batch: 36868

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QC Batch: Prep Batch:	Date Analyzed: QC Preparation:	Analyzed By: Prepared By:	

		MDL		
Parameter	Flag	Result	$\mathbf{Units}$	RL
Chloride		< 0.172	mg/L	0.5

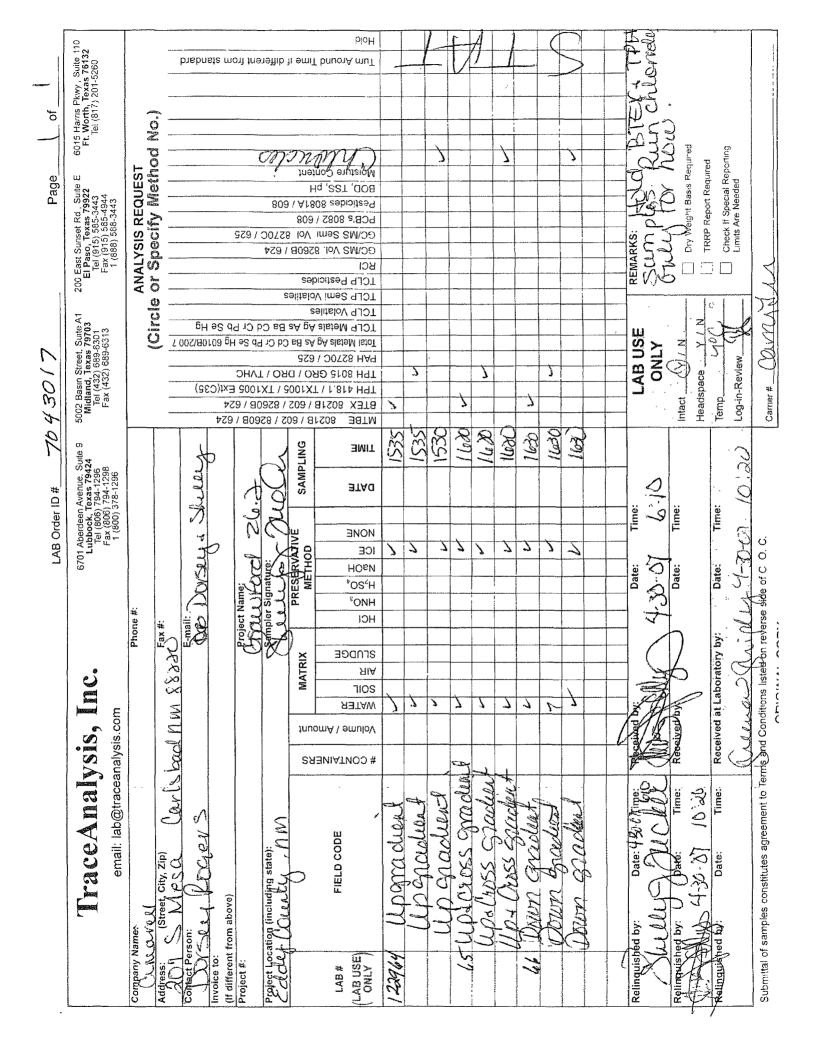
## Laboratory Control Spike (LCS-1)

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QC Batch:	36868	Date Analyzed:	2007-04-30	Analyzed By:	$\mathbf{ER}$
Prep Batch:	31983	QC Preparation:	2007-04-30	Prepared By:	$\mathbf{ER}$

Report Date: April 30, 2007 Crawford 26-2-Eddy County,NM			Work Order: 7043017 Crawford 26-2				Page Number: 4 of 4 Eddy Co.,NM			
			CS			Spike		trix		Rec.
Param			sult	Units	Dil.	Amount		sult Re		Limit
Chloride				$\mathrm{mg/L}$	1	12.5			0	90 - 11
Percent recovery is b	ased on the sp	ike result.	RPD is 1	based on	the spike a	nd spike du	plicate 1	result.		
		LCSD			Spike	Matrix		Rec.		RP
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	$\operatorname{Lim}$
Chloride		11.4	$\mathrm{mg/L}$	1	12.5	< 0.172	91	90 - 110	1	20
Percent recovery is b	ased on the sp	ike result.	RPD is	based on	the spike a	nd spike du	plicate 1	result.		
Matrix Spike (MS	-1) Spiked	Sample: 1	22966							
QC Batch: 36868			Date Ar		2007-04-				alyzed E	
Prep Batch: 31983			QC Pre	paration:	2007-04-3	30		$\Pr$	epared E	By: El
	,	Ν	IS			Spike	Ma	trix		Rec.
Param		Rea	sult	Units	Dil.	Amount			ec.	Limi
Chloride		12	70	mg/L	100	1250	45.5	5389 9	8	10 - 18
Param Chloride		MSD Result 1220	Units mg/L	Dil.	Spike Amount 1250	Matrix Result 45.5389	Rec.	Rec. Limit 10 - 188	RPD 4	RP Lim 20
Percent recovery is b	ased on the sp									
Standard (ICV-1)				•						
Standard (ICV-1) QC Batch: 36868			Date Ar	nalyzed:	2007-04-30	)		An	alyzed E	3y: El
. ,			ICVs	IC	Vs	ICVs		Percent	alyzed I	
QC Batch: 36868	<b>.</b>		ICVs True	IC Fo	Vs und	ICVs Percent		Percent Recovery		Date
QC Batch: 36868 Param Fla			ICVs True Conc.	IC Fo Co	Vs und onc.	ICVs Percent Recovery		Percent Recovery Limits	A	Date Analyze
QC Batch: 36868 Param Fla Chloride Standard (CCV-1	mg/		ICVs True Conc. 12.5	IC Fo Cc 1	EVs und onc. 1.4	ICVs Percent Recovery 91		Percent Recovery Limits 90 - 110	A 2(	Date Analyze 007-04-3
QC Batch: 36868 Param Fla Chloride	mg/		ICVs True Conc. 12.5 Date Ar	IC Fo Cc 1: nalyzed:	2Vs und onc. 1.4 2007-04-30	ICVs Percent Recovery 91		Percent Recovery Limits 90 - 110	A	Date Analyze 007-04-
QC Batch: 36868 Param Fla Chloride Standard (CCV-1	mg/		ICVs True Conc. 12.5 Date An CCVs	IC Fo Cc 1: nalyzed: CC	2Vs und onc. 1.4 2007-04-30 2Vs	ICVs Percent Recovery 91		Percent Recovery Limits 90 - 110 An Percent	A 2(	Date Analyze 007-04-3 By: EI
QC Batch: 36868 Param Fla Chloride Standard (CCV-1 QC Batch: 36868	mg/	Ĺ	ICVs True Conc. 12.5 Date An CCVs True	IC Fo Cc 1: nalyzed: Fo	EVs und onc. 1.4 2007-04-30 EVs und	ICVs Percent Recovery 91		Percent Recovery Limits 90 - 110 An Percent Recovery	A 20 alyzed F	Date Analyze 007-04-: By: EI Date
QC Batch: 36868 Param Fla Chloride Standard (CCV-1	mg/	Lts	ICVs True Conc. 12.5 Date An CCVs	IC Fo Cc 1: nalyzed: CC Fo Cc	2Vs und onc. 1.4 2007-04-30 2Vs	ICVs Percent Recovery 91		Percent Recovery Limits 90 - 110 An Percent	A 2( alyzed F	Date Analyze 007-04 By: El

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## **Summary Report**

Dorsey Rogers Cimarex 207 S Mesa Carlsbad, NM, 88220

Report Date: October 24, 2006

Work Order: 6102302

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

			Date	$\operatorname{Time}$	Date
Sample	Description	Matrix	Taken	Taken	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	$0.500 \cdot$

### Sample: 106546 - River 2

Param Flag		Result	Units	RL
Chloride		18.0	nıg/L	0.500

Report Date: October 27, 2006 Eddy County,Nm

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Work Order: 6102301Crawford 26 Fed #2

## **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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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
				······································	704 1906

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Eddy County,Nm		Crav	vford 26 Fed #2	Unit B-S26-24S-26E		
Sample	Description	Matrix	Date Taken	Time Taken	Date Received	
5000000000000000000000000000000000000	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	

Work Order: 6102301

	BTEX				MTBE	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(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

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Report Date: October 27, 2006

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Report Date: October 27, 2006	
Eddy County,Nm	

Work Order: 6102301 Crawford 26 Fed #2

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			BTEX		MTBE	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
106478 - A-34	<0.0100	<0.0100	<0.0100	<0.0100	(mg/Kg)	<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 <50.0	<1.00
106491 - C-37	<0.0100	< 0.0100	< 0.0100	< 0.0100		<50.0 <50.0	<1.00
106492 - D-1	< 0.0100	< 0.0100	< 0.0100	< 0.0100		<50.0	< 1.00 < 1.00
106492 - D-1 106493 - D-2	<0.0100	< 0.0100	< 0.0100 < 0.0100	< 0.0100		<50.0	<1.00
106493 - D-2 106494 - D-10	<0.0100	< 0.0100	< 0.0100	< 0.0100 < 0.0100		< 50.0	<1.00
106494 - D-10 106495 - D-19	<0.0100	< 0.0100	< 0.0100	< 0.0100		< 50.0 < 50.0	< 1.00 < 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 <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 106525 - S-14	<0.0100	< 0.0100	< 0.0100	<0.0100		<50.0	<1.00
106525 - S-14 106526 - S-22	$< 0.0100 \\ < 0.0100$	$< 0.0100 \\ < 0.0100$	< 0.0100	<0.0100		<50.0	<1.00
106526 - S-22 106527 - S-23	< 0.0100	< 0.0100 < 0.0100	< 0.0100	<0.0100		<50.0	<1.00
106528 - S-24	< 0.0100	< 0.0100	$< 0.0100 \\ < 0.0100$	$< 0.0100 \\ < 0.0100$		<50.0	<1.00
106528 - 5-24 106529 - 5-25	<0.0100	< 0.0100 < 0.0100				<50.0	<1.00
106530 - S-25	<0.0100	< 0.0100 < 0.0100	$< 0.0100 \\ < 0.0100$	$< 0.0100 \\ < 0.0100$		<50.0 <50.0	<1.00
106531 - W-3	< 0.0100	< 0.0100	< 0.0100	< 0.0100 < 0.0100			<1.00
106532 - W-5	<0.0100	< 0.0100 < 0.0100	< 0.0100	< 0.0100 < 0.0100		< 50.0 < 50.0	<1.00 <1.00
106533 - W-6	<0.0100	< 0.0100	< 0.0100	<0.0100			
10000 - 11-0		<u></u>	<0.0100	<0.0100	L	<50.0	<1.00

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Report Date: October 27, 2006	Work Order: 6102301	Page Number: 4 of 12
Eddy County,Nm	Crawford 26 Fed #2	Unit B-S26-24S-26E

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	BTEX			MTBE	TPH DRO	TPH GRO	
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(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	$\operatorname{Flag}$	$\operatorname{Result}$	$\mathbf{Units}$	$\operatorname{RL}$
Chloride		4.56	mg/Kg	2.00
Sample: 106470	- A-8			
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		4.56	mg/Kg	2.00

## Sample: 106471 - A-12

Param	Flag	Result	Units	$\mathbf{RL}$
Chloride		5.80	mg/Kg	2.00

## Sample: 106472 - A-15

Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		6.62	mg/Kg	2.00

## Sample: 106473 - A-19

Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		28.6	mg/Kg	2.00

## Sample: 106474 - A-23

Report Date: October 27, 2006 Eddy County,Nm				Number: 5 of 12 B-S26-24S-26E
Param	Flag	Result	Units	RL
Chloride		9.52	m 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	$\operatorname{RL}$
Chloride		17.0	mg/Kg	2.00
Sample: 106477 -	A-31			
Param	Flag	Result	Units	RL
Chloride		455	m 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	$^{\cdot}$ Flag	Result	Units	RL
Chloride		1070	mg/Kg	2.00
Sample: 106481 -	C-18	· ·		
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride	0	3090	mg/Kg	2.00
Sample: 106482 -	C-19			
Param	Flag	Result	Units	RL
Chloride	······································	5740	mg/Kg	2.00

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Report Date: October 27, 20 Eddy County,Nm	06	Work Order: 6102301 Crawford 26 Fed #2		umber: 6 of 12 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 ·	$\operatorname{Result}$	Units	$\mathbf{RL}$
Chloride		1310	mg/Kg	2.00
Sample: 106485 - C-25				
Param	Flag	Result	Units	RL
Chloride		5530	mg/Kg	2.00
Sample: 106486 - Ċ-26				
Param	Flag	Result	Units	RL
Chloride		4930	mg/Kg	2.00
Sample: 106487 - C-27				
Param	Flag	$\operatorname{Result}$	Units	RL
Chloride		12600	mg/Kg	2.00
Sample: 106488 - C-28				
Param	Flag	Result	Units	$\operatorname{RL}$
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	$\operatorname{RL}$
Chloride		3700	ing/Kg	2.00
Sample: 106491 - C-37				
Param	Flag	Result	Units	RL
Chloride		2910	mg/Kg	2.00

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Report Date: October 27, 2006 - Eddy County,Nm		Work Order: 6102301 Crawford 26 Fed #2		umber: 7 of 12 B-S26-24S-26E
Sample: 106492 - D	-1			
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
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	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		12.3	mg/Kg	2.00
Sample: 106497 - D	<b>)-2</b> 2			
Param	Flag	Result	Units	RL
Chloride	¥	4510	mg/Kg	2.00
Sample: 106498 - D	0-24			
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		11300	mg/Kg	2.00
Sample: 106499 - D	0-26			
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		581	mg/Kg	2.00
Sample: 106500 - D	0-28			
Param	Flag	Result	Units	$\mathbf{RL}$
Chloride		765	mg/Kg	2.00

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Report Date: October 27, 2006 Eddy County,Nm		Work Order: 6102301 Crawford 26 Fed #2		umber: 8 of 12 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	$\operatorname{Result}$	Units	$\mathbf{RL}$
Chloride		810	ıng/Kg	2.00
Sample: 106503 -	D-40			
Param	Flag	$\operatorname{Result}$	Units	RL
Chloride		12.0	m mg/Kg	2.00
Sample: 106504 -	B-3			
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		719	mg/Kg	2.00
Sample: 106505 -	· B-5			
Param	Flag	Result	Units	RL
Chloride	1 100	1430	mg/Kg	2.00
Sample: 106506 -	B-13			
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		2540	mg/Kg	2.00
Sample: 106507 -	· B-18			
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		3450	mg/Kg	2.00
Sample: 106508 -	· B-22			
Param	Flag	$\operatorname{Result}$	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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Report Date: October 27, 2006 Eddy County,Nm		Work Order: 6102301 Crawford 26 Fed #2		umber: 9 of 12 B-S26-24S-26E
Sample: 106510 -	B-26			
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		2310	mg/Kg	2.00
Sample: 106511 -	B-32			
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		4820	mg/Kg	2.00
Sample: 106512 -	B-35			
Param	Flag	Result	Units	RL
Chloride		442	ıng/Kg	2.00
Sample: 106513 -	B-36			
Param	Flag	Result	Units	RL
Chloride		12600	mg/Kg	2.00
Sample: 106514 -	B-37			
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		6620	mg/Kg	2.00
Sample: 106515 -	B-40			
Param	$\operatorname{Flag}$	Result	Units	$\operatorname{RL}$
Chloride		191	mg/Kg	2.00
Sample: 106516 -	E-13			
Param	Flag	$\operatorname{Result}$	Units	$\mathbf{RL}$
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	$\operatorname{Flag}$	Result	Units	$\operatorname{RL}$
Chloride	<u>_</u>	7.55	mg/Kg	2.00

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Report Date: October 27, 2 Eddy County,Nm	006	Work Order: 6102301 Crawford 26 Fed #2		Page Number: 10 of 12 Unit B-S26-24S-26E
Sample: 106519 - E-12				
Param	Flag	$\operatorname{Result}$	Units	RL
Chloride		153	m mg/Kg	2.00
Sample: 106520 - E-4				
Param	Flag	$\operatorname{Result}$	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	$\operatorname{Result}$	Units	RL
Chloride		9.80	mg/Kg	2.00
Sample: 106523 - S-7				
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		2190	mg/Kg	2.00
Sample: 106524 - S-8				
Param	$\mathbf{Flag}$	Result	Units	RL
Chloride		226	mg/Kg	2.00
Sample: 106525 - S-14				
Param	Flag	$\operatorname{Result}$	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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Report Date: October 27, 2006 Eddy County,Nm				Page Number: 11 of 12 Unit B-S26-24S-26E	
Sample: 106528 - S-24					
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride		5800	mg/Kg	2.00	
Sample: 106529 - S-25					
Param	Flor	$\operatorname{Result}$	Units	$\operatorname{RL}$	
Chloride	Flag	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	$\operatorname{RL}$	
Chloride		26.5	mg/Kg	2.00	
Sample: 106532 - W-5					
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride	······································	18.4	mg/Kg	2.00	
Sample: 106533 - W-6					
Param	Flag	$\operatorname{Result}$	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	$\operatorname{RL}$	
Chloride		12.4	mg/Kg	2.00	
Sample: 106536 - W-20					
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride		195	mg/Kg	2.00	

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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	$\operatorname{Result}$	Units	RL		
Chloride	······································	13.8	mg/Kg	2.00		
Sample: 106538 -	N-4	```				
Param	Flag	$\operatorname{Result}$	Units	$\mathbf{RL}$		
Chloride		6.71	mg/Kg	2.00		
Sample: 106539 -	· N-5		c			
Param	Flag	Result	Units	RL		
Chloride		5.24	mg/Kg	2.00		
Sample: 106540 -	· N-6					
Param	Flag	Result	Units	$\operatorname{RL}$		
Chloride		9.22	mg/Kg	2.00		
Sample: 106541 -	· N-12					
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$		
Chloride		20.3	mg/Kg	2.00		
Sample: 106542 -	· N-19					
Param	Flag	Result	Units	$\operatorname{RL}$		
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	$\operatorname{Flag}$	Result	Units	RL		
Chloride		1850	mg/Kg	2.00		

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## **Summary Report**

Dorsey Rogers Cimarex  $207~\mathrm{S}$  Mesa Carlsbad, NM, 88220

Report Date: November 14, 2006 a

Work Order: 6111012 

Project Name:	Unit B-S26-24S-26E Crawford 26 Fed #2 Eddy County,Nm
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			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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	<u>10B-30'</u>	soil	2006-11-09	12:15	2006-11-10

#### Sample: 108545 - 1A-21'

Param	$\operatorname{Flag}$	Result	Units	$\operatorname{RL}$
SPLP Chloride		1330	mg/Kg	0.500

#### Sample: 108550 - 6A-26'

Param	$\operatorname{Flag}$	Result	Units		$\operatorname{RL}$
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'

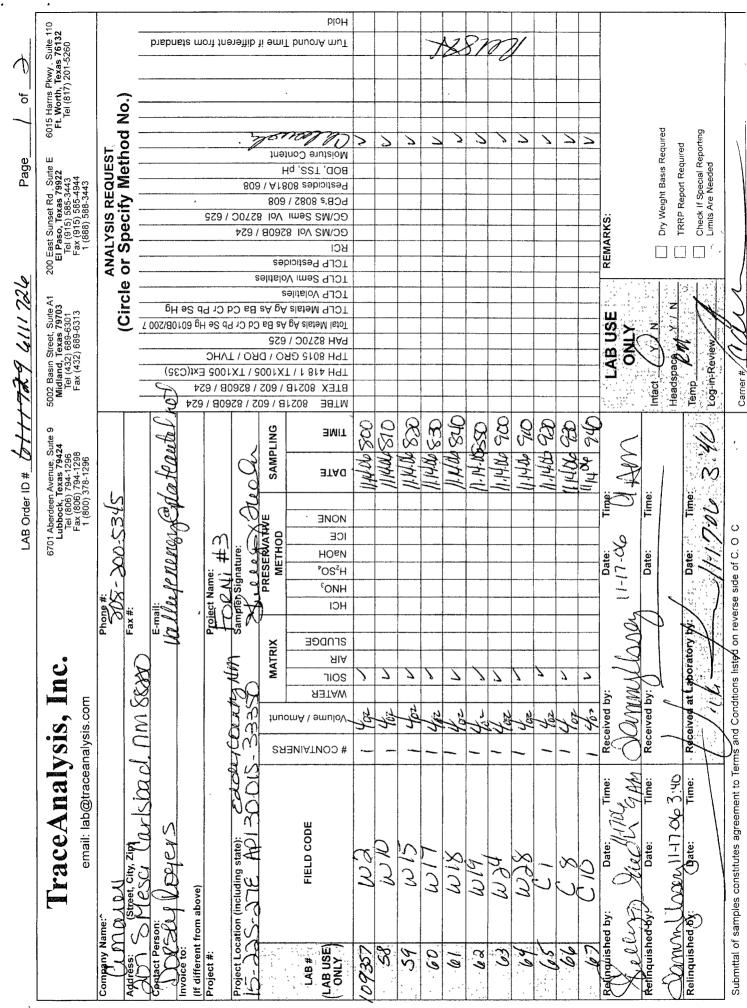
Param	Flag	Result	Units	$\operatorname{RL}$
SPLP Chloride		695	mg/Kg	0.500

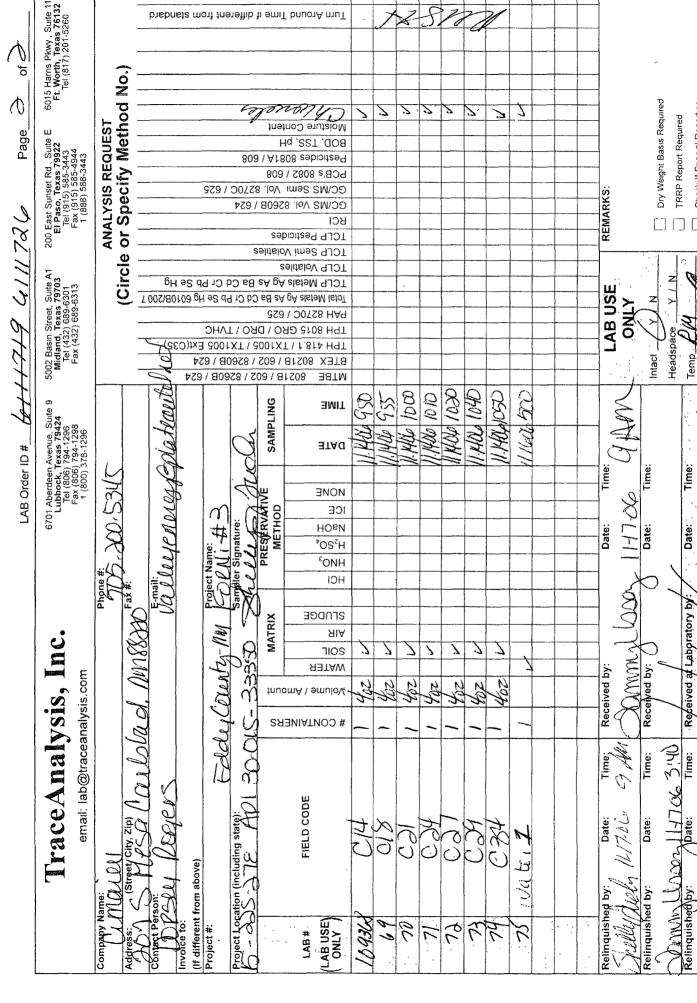
14, 2006	Work Order: 6111012 Crawford 26 Fed #2		e Number: 2 of 2 it B-S26-24S-26E
26'			
Flag	Result	Units	RL
· · · · · · · · · · · · · · · · · · ·	783	mg/Kg	0.500
-30'			
Flag	Result	Units	$\operatorname{RL}$
	342	mg/Kg	0.500
	26' Flag -30'	Crawford 26 Fed #2 26' Flag Result 783 -30' Flag Result	Crawford 26 Fed #2 Un

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Turn Around Time If different from standard

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Limits Are Needed Log-in-Review Carrier # 3:40 N 0. X-Ο Submittal of samples constitutes agreement to Terms and conditions listed on reverse side of C. O

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Date:

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# **Analytical Report**

## Sample: 108545 - 1A-21'

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Analysis: QC Batch:	SPLP Cl 32052		Analytical Method: Date Analyzed:	E 300.0 2006-11-19	Prep Method: Analyzed By:	
Prep Batch:	27922		Sample Preparation:	2006-11-19	Prepared By:	JS
			SPLP Extraction:	2006-11-19	Prepared By:	JS
			RL			
Parameter		Flag	Result	Units	Dilution	RL
SPLP Chlori	de	······································	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
			RL			
Parameter		Flag	Result	Units	Dilution	RL
SPLP Chlori	de		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
			RL			
Parameter		Flag	Result	Units	Dilution	RL
SPLP Chlori	de		488	mg/Kg	10	0.500

## Sample: 108555 - 1B-21'

Analysis: QC Batch: Prep Batch:	SPLP Cl 32052 27922		Analytical Method: Date Analyzed: Sample Preparation: SPLP Extraction:	E 300.0 2006-11-19 2006-11-19 2006-11-19	Prep Method: Analyzed By: Prepared By: Prepared By:	WB JS
Parameter		Flag	RL Result	Units	Dilution	RL
SPLP Chlori	de		695	mg/Kg	50	0.500

Report Date: November 14, 2006 Eddy County,Nm				COrder: 6111012 wford 26 Fed #2		Page Number: 4 of 8 Unit B-S26-24S-26E					
Sample: 108	8560 - 6B-26'										
Analysis:	SPLP Cl		Analytical Method:	E 300.0			Prep M	ethod:	SPLP 1312		
QC Batch:	32052		Date Analyzed:	2006-11-19			Analyz		WB		
Prep Batch:	27922		Sample Preparation:				Prepare		JS		
1			SPLP Extraction:	2006-11-19			Prepare	•	JS		
			RL								
Parameter		Flag	Result	Unit	ts	D	ilution		RL		
SPLP Chlori	de		783	mg/K	g		50		0.500		
Sample: 108	8564 - 10B-30'										
Analysis:	SPLP CI		Analytical Method:	E 300.0			Prep M	ethod:	SPLP 1312		
QC Batch:	32052		Date Analyzed:	2006-11-19			Analyze	ed By:	WB		
Prep Batch:	27922		Sample Preparation:	2006-11-19			Prepare		JS		
			SPLP Extraction:	2006-11-19			Prepare	ed By:	JS		
			RL								
Parameter		Flag	Result	Unit		D	ilution		RL		
			242				10				
		Batch: 32052	342	mg/K	g		10		0.500		
<b>Matrix Blar</b> QC Batch:		Batch: 32052	Date Analyzed: QC Preparation:	2006-11-19 2006-11-18	<u>g</u>		ŀ	Analyzed Prepared	By: WB		
Matrix Blar QC Batch: Prep Batch:	nk (1) QC E 32052		Date Analyzed:	2006-11-19 2006-11-18 , MDL	<u>g</u>	Linit	<i>A</i> F		By: WB By: WB		
Matrix Blar QC Batch: Prep Batch: Parameter	nk (1) QC E 32052 27922	Batch: 32052 Flag	Date Analyzed:	2006-11-19 2006-11-18 , MDL Result	<u>g</u>	Unit mg/K	A F S		By: WB By: WB RL		
Matrix Blar QC Batch: Prep Batch: Parameter SPLP Chlori	nk (1) QC E 32052 27922 de	Flag	Date Analyzed:	2006-11-19 2006-11-18 , MDL	<u>g</u>	Unit mg/K	A F S		By: WB By: WB		
-	nk (1) QC E 32052 27922 de Control Spike	Flag	Date Analyzed: QC Preparation:	2006-11-19 2006-11-18 , MDL Result 1.39	<u>g</u>		A F s -g	Prepared	By: WB By: WB RL 0.5		
Matrix Blar QC Batch: Prep Batch: Parameter SPLP Chlori Laboratory QC Batch:	nk (1) QC E 32052 27922 ide Control Spike 32052	Flag	Date Analyzed: QC Preparation: Date Analyzed:	2006-11-19 2006-11-18 MDL Result 1.39	<u>g</u>		A F S -g -	Analyzed	By: WB By: WB RL 0.5 By: WB		
Matrix Blar QC Batch: Prep Batch: Parameter SPLP Chlori Laboratory	nk (1) QC E 32052 27922 de Control Spike	Flag	Date Analyzed: QC Preparation:	2006-11-19 2006-11-18 MDL Result 1.39	<u>g</u>		A F S -g -	Prepared	By: WB By: WB RL 0.5 By: WB		
Matrix Blar QC Batch: Prep Batch: Parameter SPLP Chlori Laboratory QC Batch:	nk (1) QC E 32052 27922 ide Control Spike 32052	Flag e (LCS-1)	Date Analyzed: QC Preparation: Date Analyzed:	2006-11-19 2006-11-18 MDL Result 1.39	g Spike		A F S S A F	Analyzed	By: WB By: WB RL 0.5 By: WB		
Matrix Blar QC Batch: Prep Batch: Parameter SPLP Chlori Laboratory QC Batch:	nk (1) QC E 32052 27922 ide Control Spike 32052	Flag e (LCS-1)	Date Analyzed: QC Preparation: Date Analyzed: QC Preparation:	2006-11-19 2006-11-18 MDL Result 1.39 2006-11-19 2006-11-18		mg/K	s -g ix	Analyzed	By: WB By: WB RL 0.5 By: WB By: WB		
Aatrix Blar OC Batch: Prep Batch: Parameter PLP Chlori Aboratory OC Batch: rep Batch: rep Batch:	nk (1) QC E 32052 27922 de Control Spike 32052 27922	Flag e ( <b>LCS-1</b> ) F	Date Analyzed: QC Preparation: Date Analyzed: QC Preparation: LCS	2006-11-19 2006-11-18 MDL Result 1.39 2006-11-19 2006-11-18	Spike	mg/K Matr	A F S S S A F F ix It	Analyzed	By: WB By: WB RL 0.5 By: WB By: WB Rec. Limit		
Matrix Blar QC Batch: Prep Batch: Parameter PLP Chlori Prep Batch: Prep Batch: Prep Batch: Prep Batch: PLP Chlori	nk (1) QC E 32052 27922 de <b>Control Spike</b> 32052 27922 de	Flag e (LCS-1) F	Date Analyzed: QC Preparation: Date Analyzed: QC Preparation: LCS Result Units	2006-11-19 2006-11-18 , MDL Result 1.39 2006-11-19 2006-11-18 D1l.	Spike Amount 12.5	mg/K Matr Resu 1.39	A F S S S A F F ix It	Analyzed Prepared Rec.	By: WB By: WB RL 0.5 By: WB By: WB Rec. Limit		
Matrix Blar QC Batch: Prep Batch: Parameter SPLP Chlori Laboratory QC Batch: Prep Batch: Prep Batch: Prep Batch:	nk (1) QC E 32052 27922 de <b>Control Spike</b> 32052 27922 de	Flag e (LCS-1) F	Date Analyzed: QC Preparation: Date Analyzed: QC Preparation: LCS Result Units 12.6 mg/Kg RPD is based on the s	2006-11-19 2006-11-18 , MDL Result 1.39 2006-11-19 2006-11-18 Dil. 1 pike and spike du	Spike Amount 12.5	mg/K Matr Resu 1.39	A F S S S A F F ix It	Analyzed Prepared Rec.	By: WB By: WB RL 0.5 By: WB By: WB Rec.		
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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	ber 14, 2006				: Order: 61110 wford 26 Fed #				ge Numbe it B-S26-	
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Prep Batch: 27922				Preparation:					pared By	
,		MS				Spike	Matrix			Rec.
Param		Rest		Units	Dil.	Amount	Result			Limit
SPLP Chloride		45:	5	mg/Kg	10	125	342	90	- 49	9.8 - 149
Percent recovery is ba	ased on the sp	vike result. RI	PD is bas	ed on the sp	pike and spike	e duplicate re	esult.			
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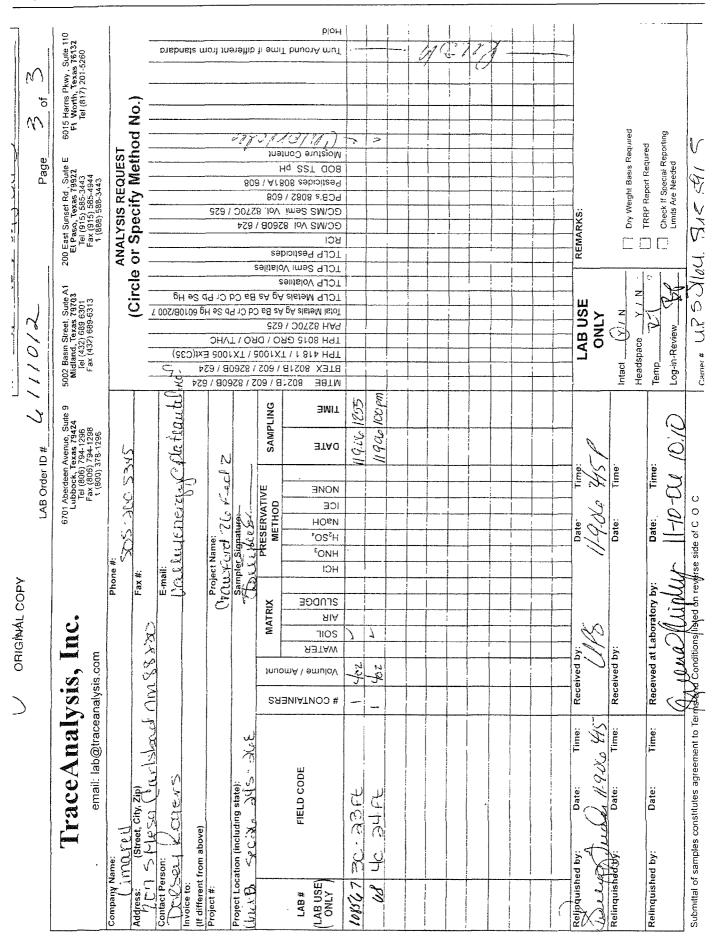
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рюн 6015 Harris Pkwy , Suite 110 F1 Worth, Texas 76132 Tel (817) 201-5260 1,007 (74 7 S brebness most transition in emit bruosA mut M 5 or Specify Method No. N Dry Weight Basis Required Check If Special Reporting Limits Are Needed 7 1 7 7 7 2 7 7 7 V. 1 TRRP Report Required ANALYSIS REQUEST Moisture Content Page ш Hq ,227 ,008 79922 carner # UPS SILLY SU SGI 200 East Sunset Rd , Sunt El Paso, Texas 79922 Tel (915) 585-3443 Fax (915) 585-4944 1 (888) 588-3443 803 \ A1808 sebicites9 PCB's 8082 / 608 GC/MS Semi Vol 8270C / 625 REMARKS CC/W2 API 8560B / 624  $\Box$ RCI TCLP Pesticides TCLP Semi Volatiles 0 ¢ TCLP Volatiles Circl 5002 Basin Street, Suite A' Midland, Texas 79703 Tel (432) 689-6301 Fax (432) 689-6313 Y / N TCLP Metals Ag As Ba Cd Cr Pb Se Hg LAB USE N (X) Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007 ONLY PAH 8270C / 625 N Log-In-Review_ TPH 8015 GRO / DRO / TVHC Headspace TPH 418 1 / TX1005 / TX1005 Ext(C35) 41110. Intact _ Tenip BTEX 80218/602/82608/624 80218 / 602 / 82608 / 624 **MTBE** 114.04 1200 11931313 (<del>1</del>-1) (G-04 1152) (210) (135 II GOV II HS 11.9 24 11:55 538 11945 KI whith SAMPLING TIME 11 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 Tei (806) 794-1296 Fax (806) 794-1298 i (800) 378-1298 Unilerrenergye pateute 1905 11-9-06 1 924 1905-(CD) **JTAG** LAB Order ID # 2345 Time: Time: Time: Y -070 PRESERVATIVE NONE 30% se side of C. O C ICE METHOD 6701 -906 Sampler Signature: HOPN Date. Date: Date: T "OS⁷H NON Project Name: ^cONH Phone #: ICH E-mail Fax #: pulreve Received at Laboratory by R. sendee MATRIX Submittal of samples constitutes agreement to Term's and Conditions listed ЯІА 1105 -2 Ĩ " 7 7 7. SS 3X ABTAW Ъ, LERO Received by Received by email. lab@traceanalysis com TraceAnalysis, J 1-4-1 the Acr 102 四 402 5,0 203 20 201 3 inuomA \ emuloV ĩ U W # CONTAINERS Ecler Ś without Time: Time: ime: SAL-JUS SUE Ľ FIELD CODE 1 acres Project Location (including state): (りルチア Sスピ・スイン・シ 266 Date: Date: -30.65 Date: (Street, City, Zip) 2367 - 2151 40 WB - 201616 - 296 2.2 Ft E K - 186 25 R 01 7B - 27FL 24 5 Mesu (if different from above) ł ţ IMALEN . ۲ IC D <u>.</u> 20 20 B 9 9 9 Xrsey ZB. 33 E B 5.0 Relinquished by Relinquished by Company Name: Contact Person: 108556 LAB USE) 58 62 63 64 66 53 S4 65 (Weller Invoice to *Z07 Project # LAB # Address (

Report Date: November 14, 2006 Eddy County,Nm

#### Work Order: 6111012 Crawford 26 Fed #2

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Report Date: November 14, 2006

Eddy County,Nm

Work Order: 6111012 Crawford 26 Fed #2

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

## Bratcher, Mike, EMNRD

From:Bratcher, Mike, EMNRDSent:Thursday, December 07, 2006 2:41 PMTo:'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

MULTRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 155 McCutcheon, Suite H Lubbock, Texas 79424 800•378•1296 El Paso, Texas 79932 888•588•3443 E-Mail, lab@traceanalysis.com

6 806•794•1296 915•585•3443

FAX 806•794•1298 FAX 915•585•4944

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

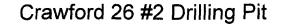
Above are bore hole sample results for chloride and SPLP chloride representing various high concentration levels at Crawford 26 Fed #2. The data shows that only 9-12% of the total chlorides are leachable. If rainfall were such that the site could pond and leach the concentration of leachable chlorides 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.

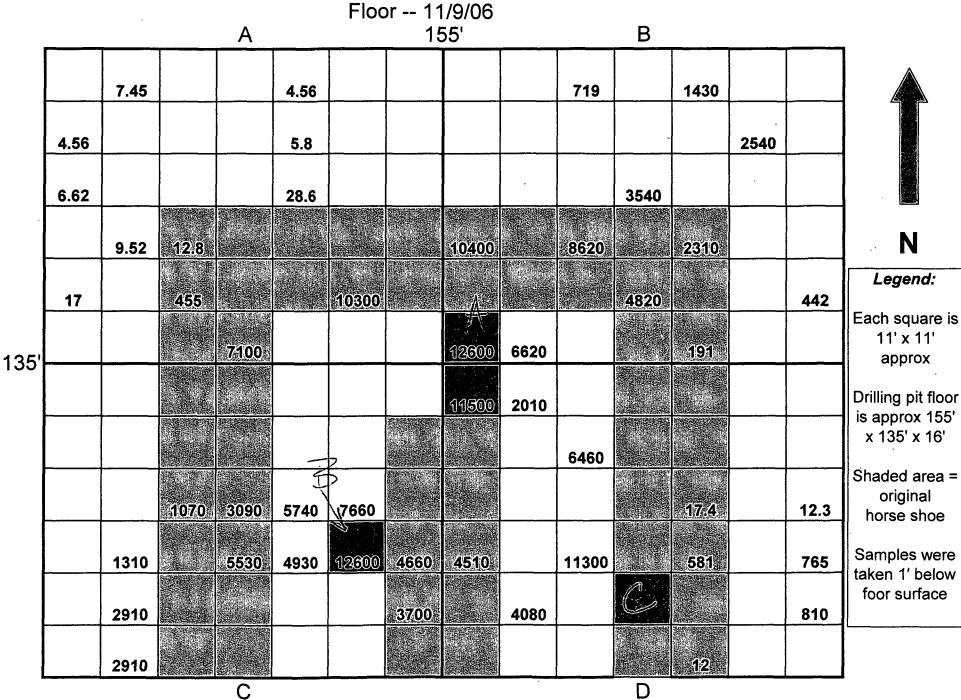
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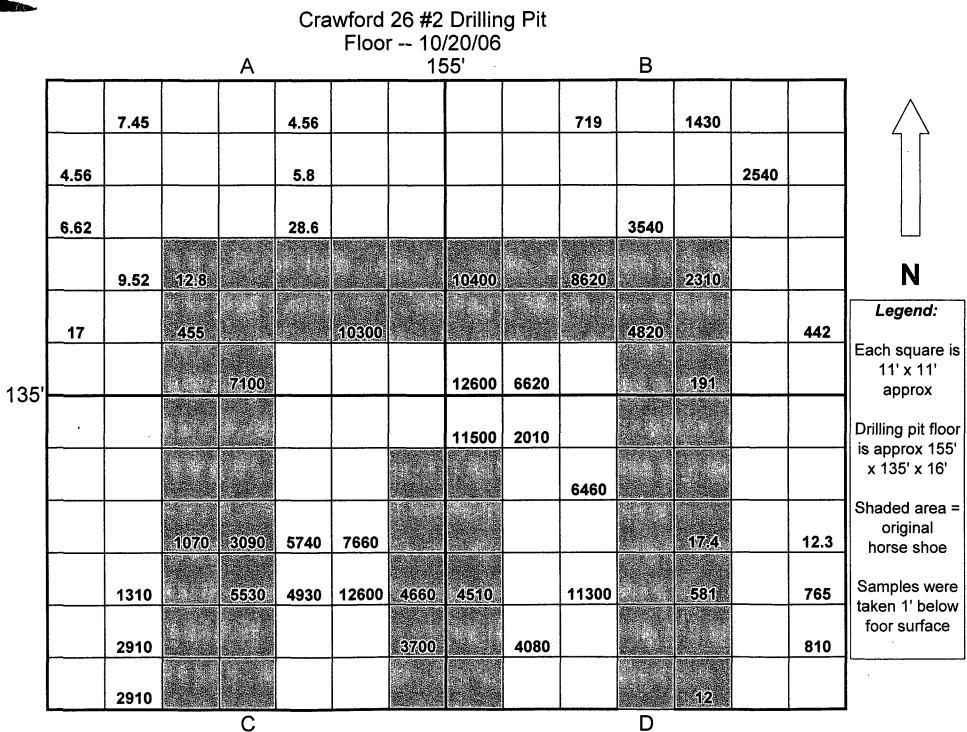
Director, Dr. Blair Leftwich

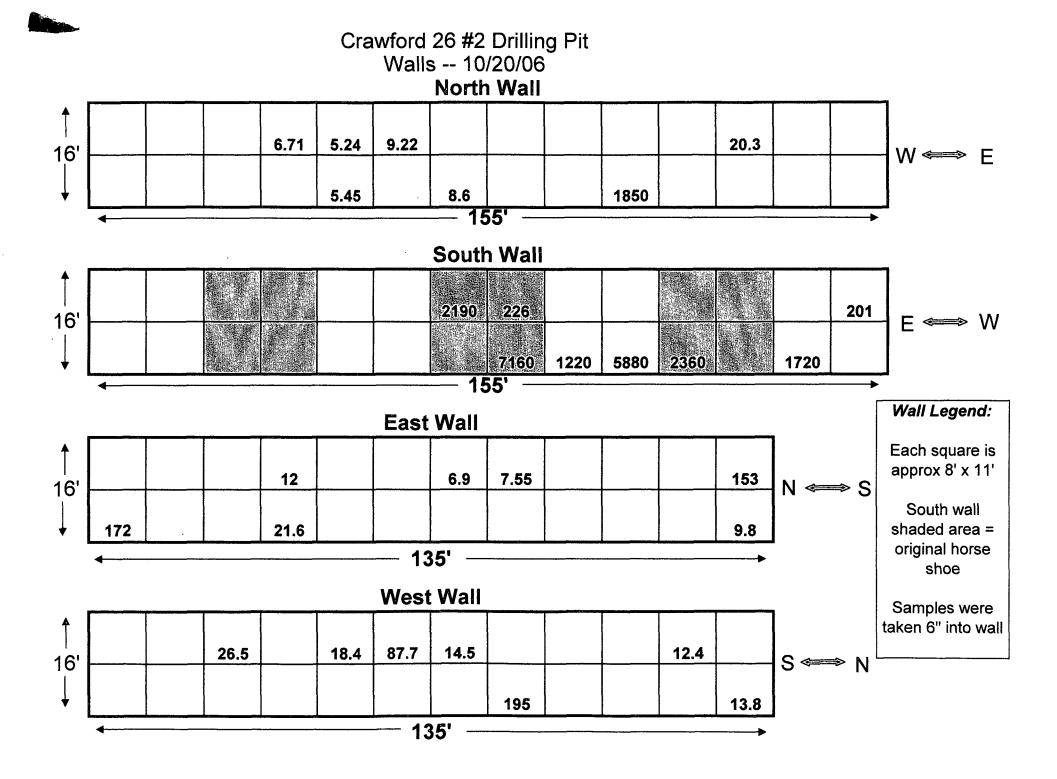
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DATE

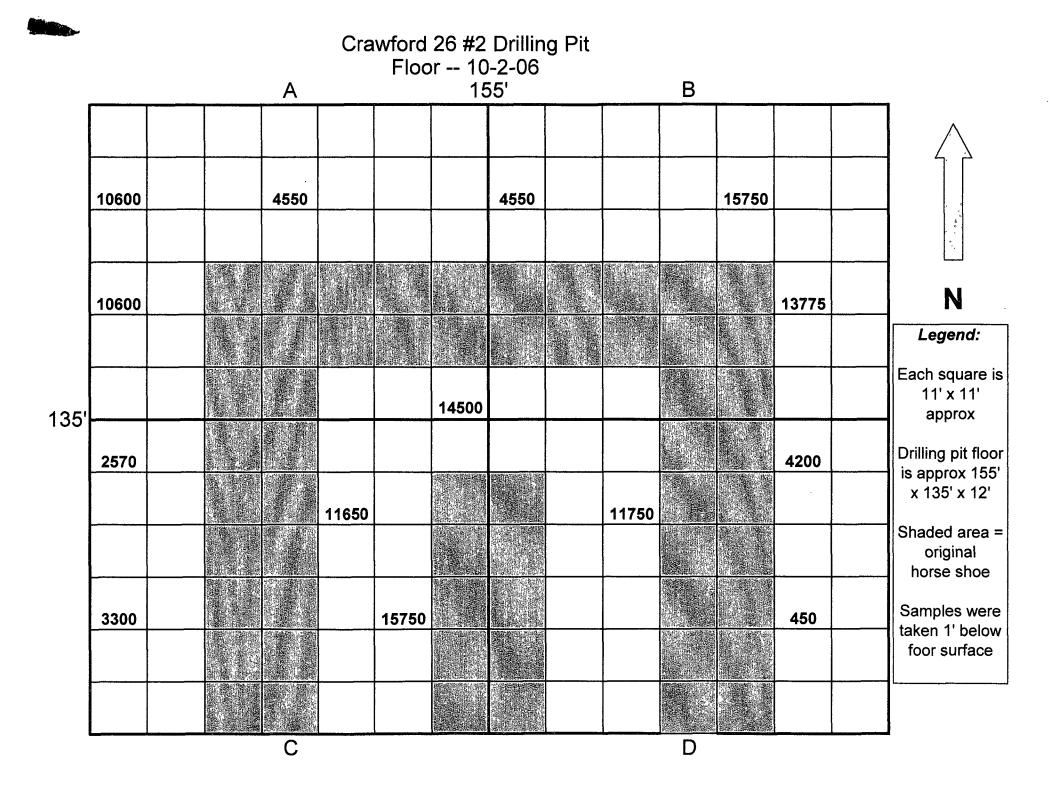


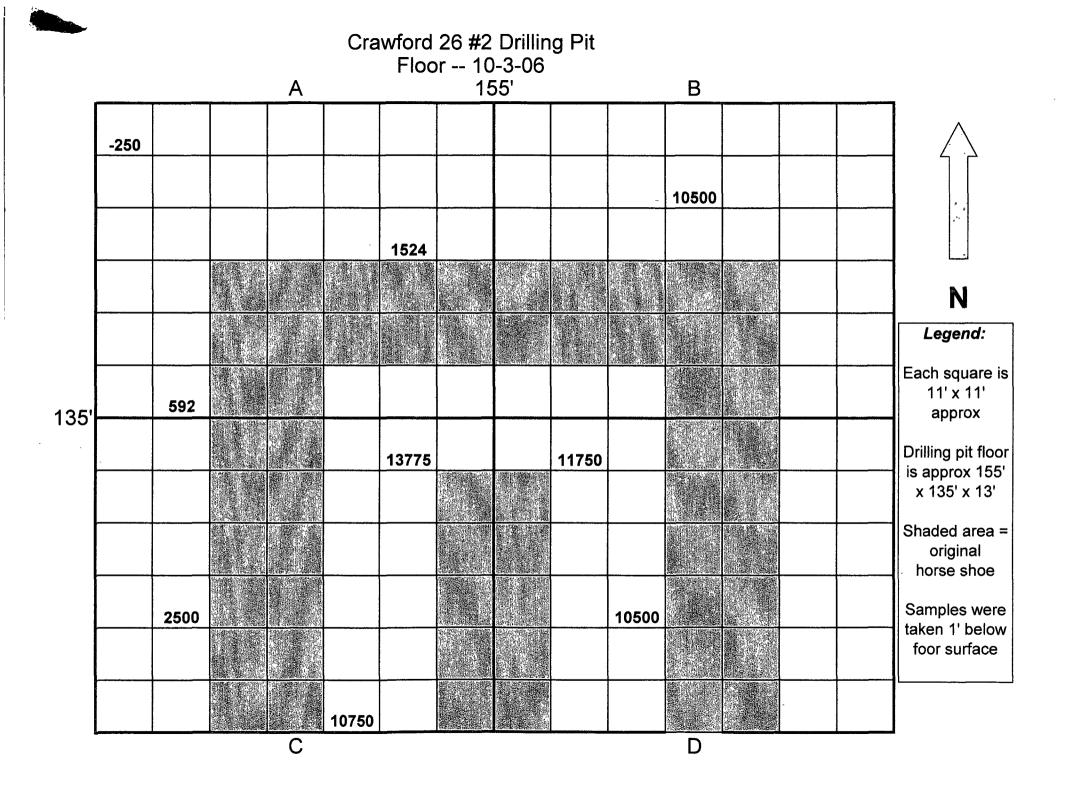


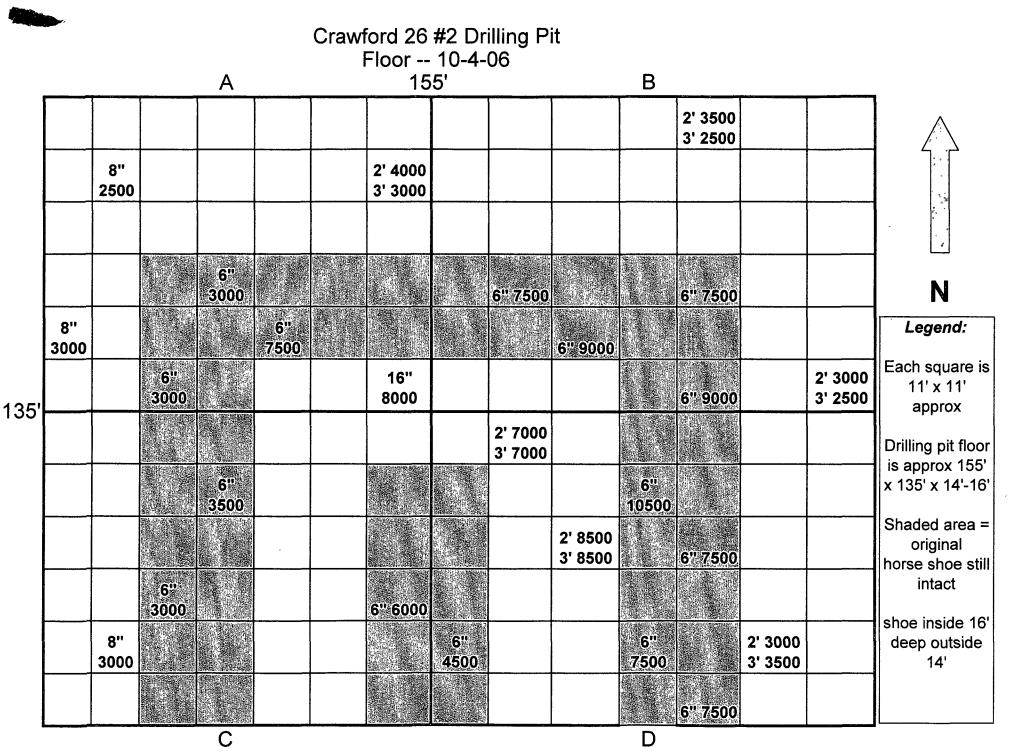


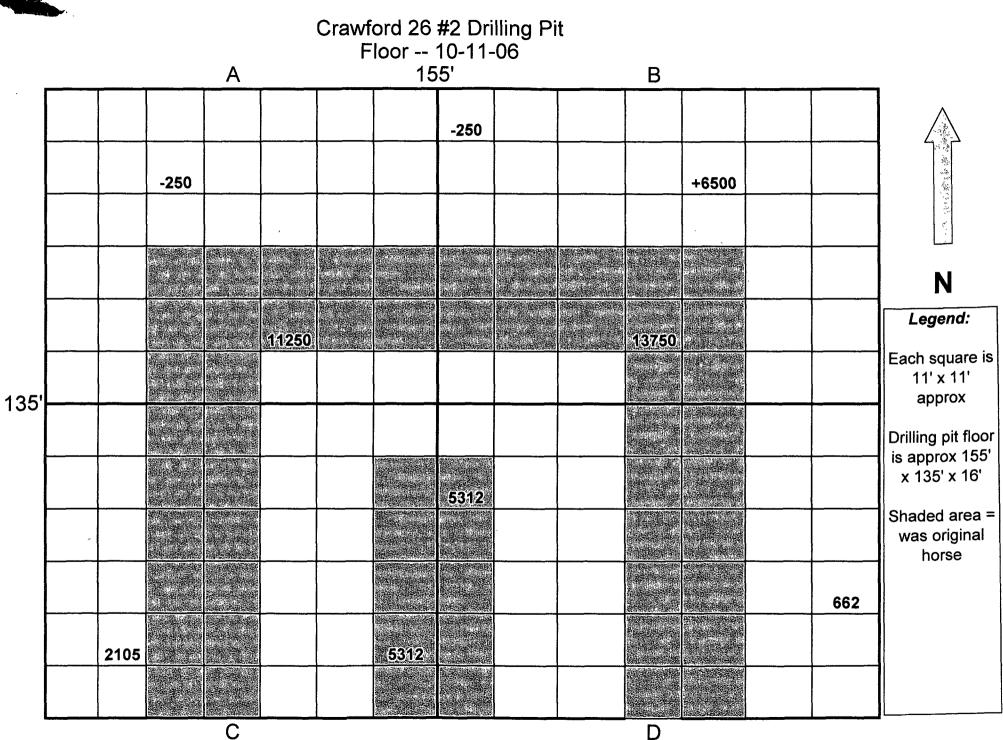


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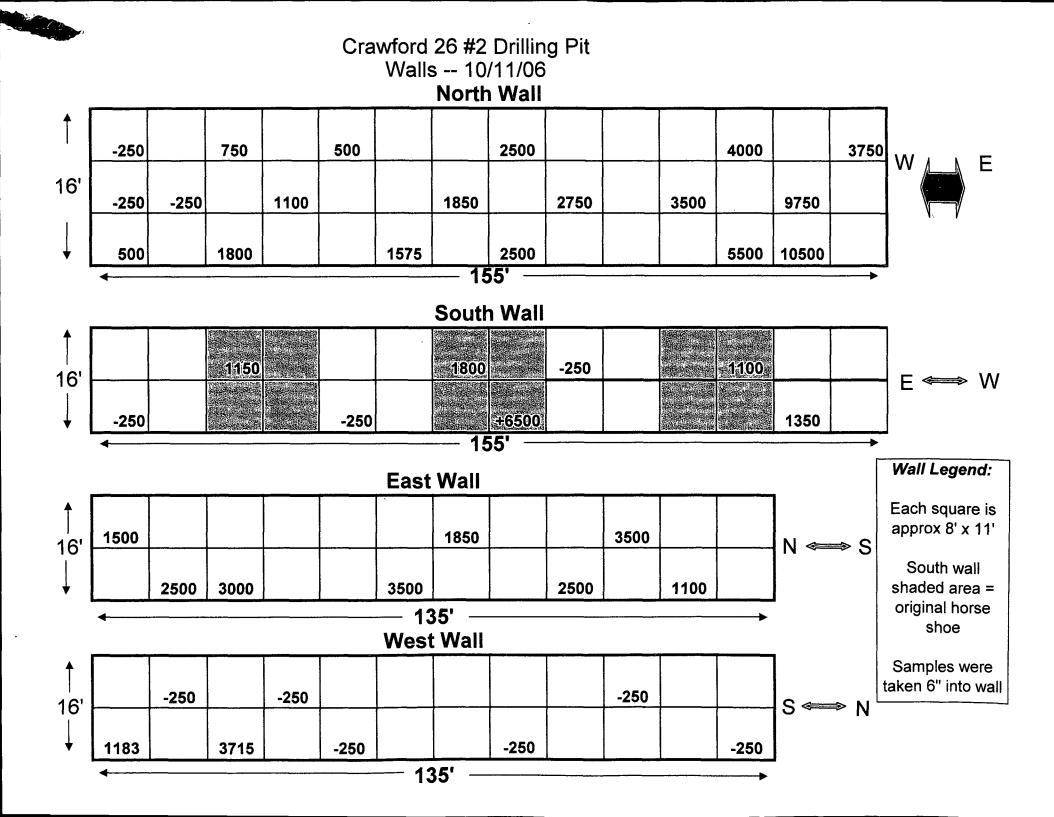


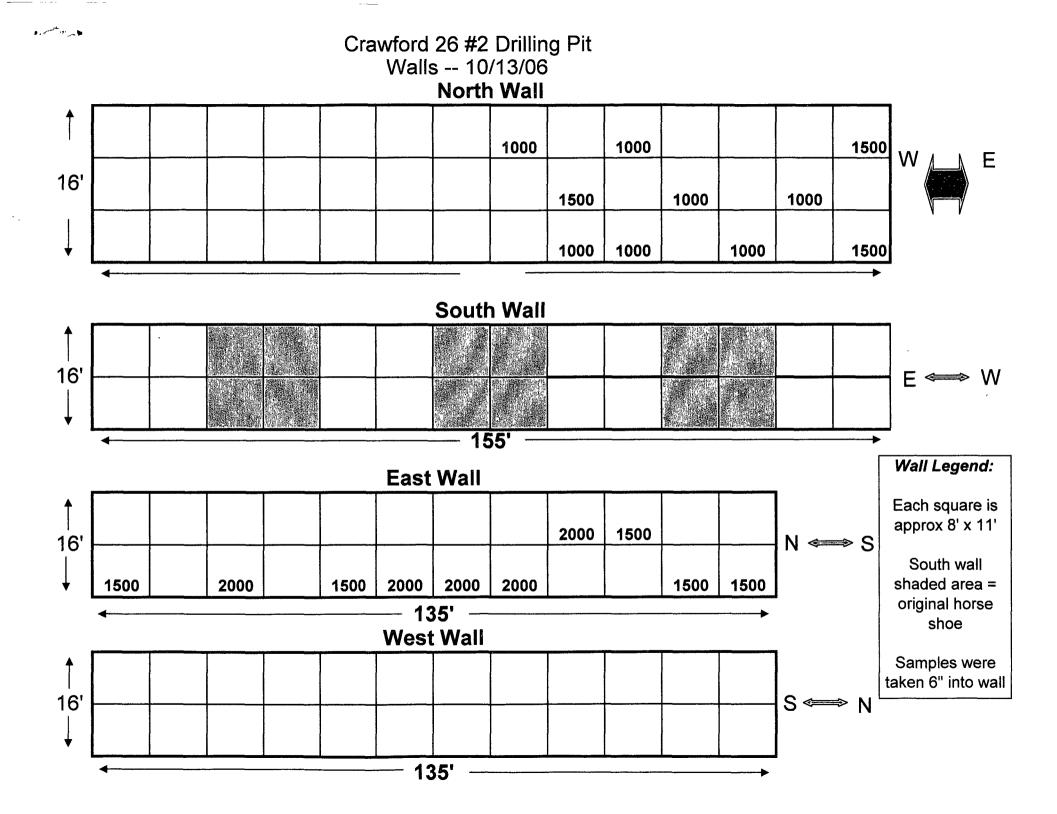


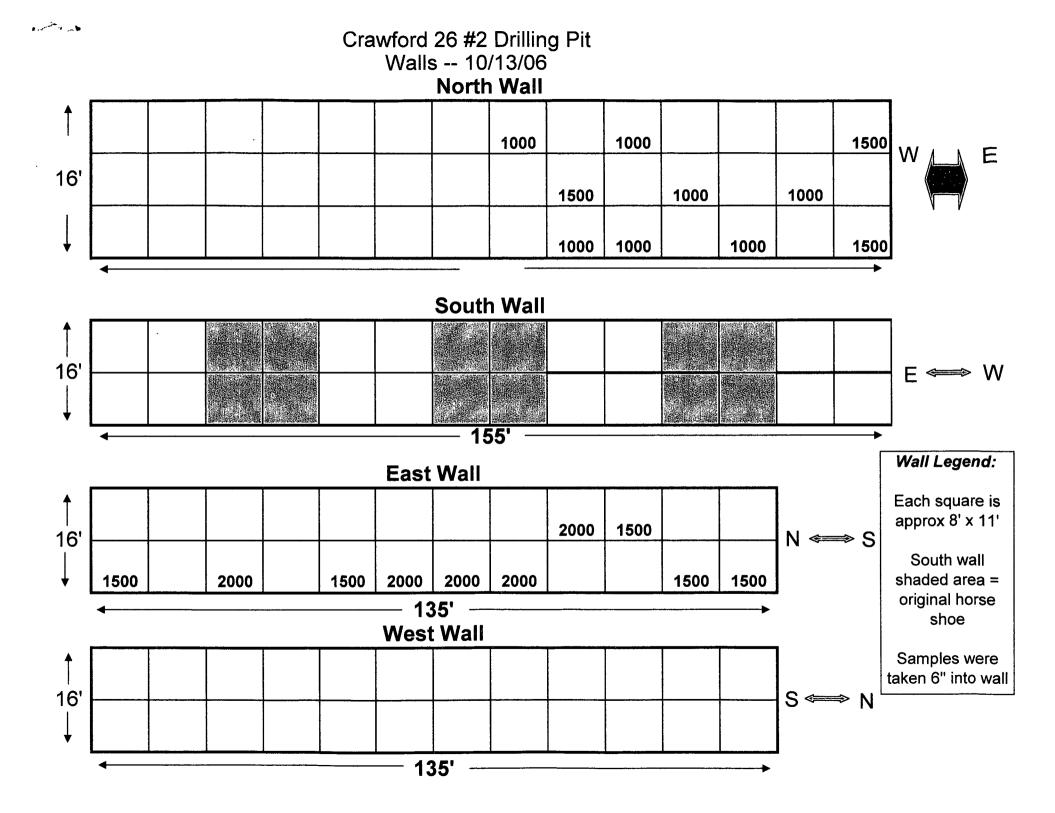




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	COMPANY:	CIMAREX ENERGY	
DISCOVERY	WELL:	CRAWFORD 26-2	
LOGGING INC.	FIELD:	WHITE CITY PENN	
P.O. Box 80531 HYDROCARE MIDLAND, TX 7GEOLOGICAL WELLSITE CONSUL	ON LOGGING		STATE:
(432) 687-1823			
	LOCATION	· 	
	Spud Date	<u>:</u>	
Logging Personnel:	Started:	At	:_0
MIKE FARLEIGH	Ended:	At	: 30
CONSULTING GEOLOGIST	Api No.:		
Unit No.:	G.L.:		
Rig:	K.B:	·	
FilenameCIMAREX-CRAWFORD26-2	SOIGeologist	FOR DORSEY RODGE	RS
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TGTrip Gas LAT Logged After Tri	P		C3
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1			┠ <del>┝┿┿╅╏┿┿┽╠╏╪┥╎┥╋┊╎┊┊╏┊┊╎┊╋┥┥┿┿╏╷┿┿┥╏</del>
	<mark>┃<mark>┆╴┼╌╎╶┼╶╉╶┼╌╎╶┼╴┫╴</mark>┞╍╽<del>╴╎┊┨╍┝╍┝╍╿╸┫╸</del>┨╍┝╍┼╾┽╍┨ ┛</mark>		
	<u>▋┤╶┤┥┢╍╄┪┼┼┤┏╵┦┪┼┼┼╽╌┩┓┼┼┤┢╌╉┧</u> ╎┼┤┏╌┱┓		
1	<u>╏╎╶┊╶╎┺┯╈╼┩╶╎╶╎┺┯╈╼┩╌╎╴╎┺┯╈╼┥╶╎╶╎┺┯╈╼</u> ┙		
1			
1	<u>┃<u></u></u>		
			┠┽┼┿┽┫╍╎┾┽┤┨╌┝┿╍┝┫┤╧╌╢┼┫┿╍┝╆┾┫┥╡┼┼╵┛╓┯┿┿┯╹
			┠╌┼┶┼╂╌┫╍┼╧┤┥┟╏╧╎┼╎┼┅╧╋╍╎┽╍┼╌╣╌┦╌┼┾┼╴┨╸╪╼┿╍┽╌╿╸┨╾┾┿┑┥┿╡┫╸╴╏
1			
			<mark>╾╎╴┾┉┿╼┽┨╸┾╍┽╶┽╶┦╺╋╌┼╌┝╶┽╴┨╋┽┥</mark> ╌┝┝┿╍┨╌┥╴┾╼╎╴┨╴┼╍┾╼┽╼╉╍┼╌┽╵┥┽╸╏
	<u>╊╊┊╶┤╶┥┥┚╼┾╼┤┙┤┥╋╺┿╶┦┙┾┑┥</u> ┫╌╿┥┿┑╵┥┨╶╅╌╢╖┿┥┫		<mark>┍┥╶┊╴┊╴┊┙╏╺┊╼╪┙┥┑╏╶┊╶╞╌</mark> ┥╼┼╶╉╌┼┽╵┊┿┛┲┥╴╎╌╎╴┼┛╹┤╍┝╼┽╍╂╤┥┤╍┊┼┽┨
1	<mark>┠┧┿╪╶╪╌╄╴╉╶┼╶╽╌╞╶┿╌┫╸┥╌┝╶╋╌┽┫╴┥┥┥╡┥╡╴╡╴╪╸╪╸┫</mark> ╸╸╸		╏╶┧╌╽╾┧╴┫┍┝╍┽┽╱╿╌┫╶┼╌┥╌┥╴┥╌┫╌╿╍╎╌┥╾┤╶┥╶┽┥┥┥┥╋┽┼┥╴┽┿┩╸╹
	╏╏┾╼┼╌┟╌╽╾╊╼┽╾┟╶┼ <del>╶┫╶┥╌┥╶╪╌╎╴╋╸╎╌╽╼╎╶┨╸╋╶┥╸╽┈┯╸╡╸</del> ╏ <mark>╴</mark> ╴╴╴		<mark>╴╴╷╷╷╷╷╴╸╴╵╷╷╴┛╷╷╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴</mark>
	<mark>┠<del>╎╷┼╌╎╶╫╼╋╸╎╶┼╶┥╶┧╶┧╍┥╌╎╶┫╍╎╶╎╌╿╌╿╸┩╸┥╵┥╶</del>┼╍╢╌╸╴╏</mark>		
	<b>┫┼┼┽┽╋┼┼┼┼┼╋┽┽┼┼╋┼┽┼┽╋┼┽┼┽╔┼┼┾┽┉┼┥</b>		
			<b>┙┼┼┥┥┨╍┼┼┼╎╂╎┼┼┼┲┼┼┼┼</b> ╹╵┼┼╎╎┟┼┼╵┦╹╵╹
			<del>╸┼┊╡╪┇╋╪╪╎╹┥┫╹┥╹┥╹</del> ┫┝╌╴┥╸╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴╴
			╏╶╎╌┊╶╎┨╸┥╌╎╸┝╶┫╸╎╎╸┝╶┥╋╴╎┼┥╼┥╴┫╸┥╍┿╸┽╶╿╴┨╴┥╸┥╌┥╸┥╸┫╸╴╸
1			
			<mark>╸╎╎╷┼┼┨╎┝┿┿┥┨╎╍┥┥┧╏╋┽╬╎╍┢╋┽╬╎┽╋┼┥╪┿┨┽╪</mark> ╎╌┢ <mark>╸</mark>
			<mark>┟╷┊╎┊┾┨╞┝╍╛╎╏┊╎┊┦┥╋┿┿╎┥╋</mark> ╏╴╎╴┊┊┨╌╵┥┽╂┦┽┽┿╋┫
	<mark>┃<mark>╎╴┤┈┼┈┼╾┫╾┤</mark>╼┼╌┨╌┤╌┥╴┨╌┥╌┥╴╅╸╅╼┽╸┥╌┽╌┫╸┤╜┿╍╇╍┿╼┨</mark>		<u></u>
	<u>┣</u> ┫╎╌╎ <del>╶╎╺╎╸┥╺╎╶┥╶┥╶┥╶┥╶╿╶╿╹┥╹┫╵┥┥╘</del> ╶┽┥		┝┽┽┼┼╉┼╽┼┼╉╎┧┾┽┨┾┾┼┼╊┤┼┽╂╋┽┼┿╉╏┞┼┿┨
1	<u>┫╢╶╫╼┾╼╪╌┨╾┽╌┊╌╎</u> ╌┠┱╄╌┼╌┦┨╶┽╶╃┅┽╌┨╸ <mark>╎╴┿╍</mark> ┽╶┧╍┫		
		I I++1	•••••

Report Date: November 14, 2006 Eddy County,Nm

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Work Order. 6111012 Crawford 26 Fed #2

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## **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

30-0/5-33228

			Date	Time	. Date
Sample	Description	Matrix	Taken	Taken	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		e Number: 2 of 4 it B-S26-24S-26E
_				
Param Chloride	Flag	Result	Units mg/Kg	RL 2.00
Chionde		11000	liig/ Kg	2.00
Sample: 108547 -	3A-23'			
Param	Flag	Result	Units	RL
Chloride		12000	mg/Kg	2.00
Sample: 108548 -	4A-24'			
Param	Flag	$\operatorname{Result}$	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 -	9 <b>A-2</b> 9'			
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		6910	mg/Kg	2.00
Sample: 108554 -	10A-30'			
Param	Flag	Result	Units	RL
Chloride		4370	mg/Kg	2.00

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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	$\operatorname{RL}$	
Chloride	6850	mg/Kg	2.00	
Sample: 108556 - 2B-22'				
Param Flag	Result	Units	$\operatorname{RL}$	
Chloride	6690	mg/Kg	2.00	
Sample: 108557 - 3B-23'				
Param Flag	Result	Units	$\operatorname{RL}$	
Chloride	9540	mg/Kg	2.00	
Sample: 108558 - 4B-24'				
Param Flag	Result	Units	$\operatorname{RL}$	
Chloride	8040	mg/Kg	2.00	
Sample: 108559 - 5B-25'				
Param Flag	Result	Units	$\operatorname{RL}$	
Chloride	8330	mg/Kg	2.00	
Sample: 108560 - 6B-26'	1			
Param Flag	Result	Units	$\operatorname{RL}$	
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	$\operatorname{RL}$	
Chloride	6860	mg/Kg	2.00	
Sample: 108563 - 9B-29'				
Param Flag	Result	Units	RL	
Chloride	4960	mg/Kg	2.00	

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TraceAnalysis, Inc.  $\bullet~~6701$  Aberdeen Ave., Suite 9  $\bullet~~$  Lubbock, TX 79424-1515  $\bullet~~(806)$  794-1296

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Report Date: Nove Eddy County,Nm	mber 14, 2006	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		<b>2760</b> mg/Kg		2.00
Sample: 108565	- 1C-21'			
Param	$\operatorname{Flag}$	Result	Units	RL
Chloride		71.1	mg/Kg	2.00
Sample: 108566	- 2C-22'			
Param	$\operatorname{Flag}$	Result	Units	$\operatorname{RL}$
Chloride		<50.0	mg/Kg	2.00
Sample: 108567	- 3C-23'			
Param	$\operatorname{Flag}$	Result	Units	$\operatorname{RL}$
Chloride		66.4	mg/Kg	2.00
Sample: 108568	- 4C-24'			
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride	<u>_</u>	52.1	nıg/Kg	2.00

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6701 Aberdeen Avenue, Suite 9 155 McCutcheon, Suite H Lubbock, Texas 79424 800 • 378 • 1296 El Paso, Texas 79932 888 • 588 • 3443 E-Mail lab@traceanalysis com

806•794•1296 FAX 806•794•1298 915•585•3443 FAX 915•585•4944

# **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-26EProject Name:Crawford 26 Fed #2Project Number:Eddy County,Nm

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

		5 1	Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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	4 <b>B-2</b> 4'	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'	soıl	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.

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

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Dr. Blair Leftwich, Director

#### **Standard Flags**

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

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# **Analytical Report**

### Sample: 108545 - 1A-21'

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

#### Sample: 108546 - 2A-22'

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 31861 27745	Analytical Method: Date Analyzed: Sample Preparation:	SM 4500-Cl B 2006-11-13 2006-11-13		Prep Method: Analyzed By: Prepared By:	SM
Parameter	Flag	RL Result	Units	Dilution		RL
Chloride		11000	mg/Kg	25		2.00

#### Sample: 108547 - 3A-23'

Analysıs: QC Batch: Prep Batch:	Chloride (Titration) 31861 27745	Analytical Method: Date Analyzed: Sample Preparation:	SM 4500-Cl B 2006-11-13 2006-11-13		Prep Method: Analyzed By: Prepared By:	SM
		RL				
Parameter	Flag	Result	Units	Dilution		RL
Chloride		12000	mg/Kg	25		2.00

#### Sample: 108548 - 4A-24'

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 31861 27745	Analytical Method: Date Analyzed: Sample Preparation:	SM 4500-Cl B 2006-11-13 2006-11-13		Prep Method: Analyzed By: Prepared By:	SM
		RL				
Parameter	Flag	Result	Units	Dilution		RL
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

Report Date: Eddy County	: November 14, 2006 y,Nm	Work Order: 6 Crawford 26			Page Number: 4 Unit B-S26-24	
		RL				
Parameter	Flag	Result	Units	Dilution		RL
Chloride		10400	mg/Kg	25		2.00
Sample: 108	3550 - 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
		RL				
Parameter	Flag	Result	Units	Dilution		RL
Chloride		9320	mg/Kg	25		2.00
Sample: 108	3551 - 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
		RL				
Parameter	Flag	Result	Units	Dilution		RL
Chloride		9660	mg/Kg	25		2.00
Sample: 108	3552 - 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
		RL				
Parameter	Flag	Result	Units	Dilution		RL
Chloride		5380	mg/Kg	25		2.00
Sample: 108	8553 - 9A-29'					
Sample: 108 Analysis:	<b>3553 - 9A-29'</b> Chloride (Titration)	Analytical Method:	SM 4500-Cl B		Prep Method:	N/A
-		Analytical Method: Date Analyzed:	SM 4500-Cl B 2006-11-13		Prep Method: Analyzed By:	N/A SM
Analysis:	Chloride (Titration)				<b>A</b>	
Analysis: QC Batch:	Chloride (Titration) 31861	Date Analyzed:	2006-11-13		Analyzed By:	SM
Analysis: QC Batch:	Chloride (Titration) 31861	Date Analyzed: Sample Preparation:	2006-11-13	Dilution	Analyzed By:	SM

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Report Date Eddy Count	November 14, 2006 y,Nm	Work Order [•] 6111012 Crawford 26 Fed #2			Page Number: 5 Unit B-S26-24	
Sample: 108	3554 - 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
		DI				
Parameter	Flag	RL Result	Units	Dilution		RL
Chloride	Tiag	4370	mg/Kg	25		2.00
emoriae		7570		25		2.00
Sample: 108	2555 - 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
		RL				
Parameter	Flag	Result	Units	Dilution		RL
Chloride		6850	mg/Kg	25		2.00
Analysis: QC Batch: Prep Batch:	Chloride (Titration) 31862 27746	Analytical Method: Date Analyzed: Sample Preparation: RL	2006-11-13 2006-11-13	Dilatar	Prep Method: Analyzed By: Prepared By:	SM SM
Parameter Chloride	Flag	Result 6690	Units mg/Kg	Dilution 25		RL 2.00
	2557 - 3B-23'					
-						27/1
Analysis: QC Batch:	Chloride (Titration) 31862	Analytical Method: Date Analyzed:	SM 4500-CI B 2006-11-13		Prep Method:	
Prep Batch:	27746	Sample Preparation:	2006-11-13		Analyzed By: Prepared By:	SM SM
- p Duton.		RL	2000 11 15		, iopaica Dy.	5141
Parameter	Flag	Result	Units	Dilution		RL
Chloride	Ŭ	9540	mg/Kg	25		2.00
-	<b>558 - 4B-24'</b> Chloride (Titration)	م معادمات المراجع الم				
Analysis: QC Batch:	31862	Analytical Method: Date Analyzed:	SM 4500-Cl B 2006-11-13		Prep Method: Analyzed By:	N/A SM
Prep Batch:	27746	Sample Preparation:	2006-11-13		Prepared By:	SM
Top Duton.			2000-11-13		перанов Бу.	141
D	1-1	RL	<b>T</b> T *	···· · ·	ð	
Parameter	Flag	Result	Units	Dilution		RL
Chloride		8040	mg/Kg	25		2.00

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Report Date: November 14, 2006	Work Order: 6111012	Page Number: 6 of 14
Eddy County,Nm	Crawford 26 Fed #2	Unit B-S26-24S-26E

#### Sample: 108559 - 5B-25'

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 31862 27746	Analytical Method: Date Analyzed: Sample Preparation:	2006-11-13		Prep Method: Analyzed By: Prepared By:	SM
		RL				
Parameter	Flag	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
		RL				
Parameter	Flag	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
		RL				
Parameter	Flag	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
		RL				
Parameter	Flag	Result	Units	Dilution		RL
Chloride		6860	mg/Kg	25		2.00

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#### Sample: 108563 - 9B-29'

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 31862 27746	Analytical Method: Date Analyzed: Sample Preparation:	2006-11-13		Prep Method: Analyzed By: Prepared By:	SM
		RL				
Parameter	Flag	Result	Units	Dilution		RL
Chloride		4960	mg/Kg	25		2.00

Report Date Eddy Count	: November 14, 2006 y,Nm	Work Order: 6 Crawford 26			Page Number: 7 Unit B-S26-24	
Sample: 108	3564 - 10B-30'					
Analysis: QC Batch: Prep Batch:	Chloride (Titration) 31862 27746	Analytical Method: Date Analyzed: Sample Preparation:	SM 4500-Cl B 2006-11-13 2006-11-13		Prep Method: Analyzed By: Prepared By:	N/A SM SM
<b>D</b>		RL	<b>T</b> T '.	D'1 - '		DI
Parameter Chloride	Flag	Result 2760	Units mg/Kg	Dilution 25		RL 2.00
				23		2.00
Sample: 108	3565 - 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
-		RL				<b></b>
Parameter Chloride	Flag	Result 71.1	Units mg/Kg	Dilution 25		RL 2.00
Sample: 108	3566 - 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
-		RL				D.
Parameter Chloride	Flag	Result <50.0	Units	Dilution 25		RL 2.00
Chionde		<50.0	mg/Kg	25		-2.00
Sample: 108	3567 - 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
Danamatan	Flag	RL Bogult	Thite	Dilution		DI
Parameter Chloride	Flag	Result 66.4	Units mg/Kg	Dilution 25		RL 2.00
		00.4		25		2.00
Sample: 108	3568 - 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
		RL	<b>T</b> T <b>1</b> .			<b></b>
Parameter	Flag	Result	Units	Dilution		RL
Chloride		52.1	mg/Kg	25		2.00

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Report Date: Eddy County,		per 14, 2006				Order. 611101 Ford 26 Fed #2				Page Number Unit B-S26-	
Method Blan	k (1)	QC Batch: 31859									
QC Batch:	31859			Date A	analyzed:	2006-11-13				Analyzed B	y: SM
-	27743				eparation:	2006-11-13				Prepared By	·
					Ν	ÍDL					
Parameter		Flag				esult		Unit	s		RL
Chloride		1148				.500	·····	mg/K			2
		· · · · · · · · · · · ·							-0		
Method Blan	k (1)	QC Batch: 31861									
QC Batch:	31861			Date A	analyzed:	2006-11-13				Analyzed B	y: SM
	27745				eparation:	2006-11-13				Prepared By	
1					1					1 5	
					٦.	<b>Í</b> DL					
Parameter		Flag				esult		Unit	s		RI
Chloride		. 145				.500		mg/K			2
·								6	0		
Method Blan	ık (1)	QC Batch: 31862									
QC Batch:	31862			Date A	Analyzed:	2006-11-13				Analyzed B	y: SM
	27746				eparation:					Prepared By	
I					1					1 5	
D		51				1DL		<b>T T T T</b>			DI
Parameter Chloride		Flag				esult .500		Unit			RI 2
Chioride						.500		mg/K	<u>g</u>		2
Laboratory (	Control	Spike (LCS-1)									
QC Batch:	31859			Date A	nalvzed:	2006-11-13				Analyzed B	v SM
Prep Batch:						2006-11-13				Prepared By	
· r · · · · · · · · · · · · · · · · · ·					• · · · · • • • •					······································	
			LCS				Spike	Mat	rıx		Rec.
Param			Result		Units	Dil.	Amount	Resi		Rec.	Limit
Chloride			96.5		mg/Kg	1	100	< 0.5	500	96	85 - 115
Percent recov	ery is ba	used on the spike res	sult. RPD	is base	d on the sp	ike and spike	duplicate re	esult.			
		L	CSD			Spike	Matrıx		Rec.		RPD
			esult	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limi
Param		IN IN	coun	Onno	D 11.						

# Laboratory Control Spike (LCS-1)

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QC Batch:	31861	Date Analyzed:	2006-11-13	Analyzed By:	SM
Prep Batch:	27745	QC Preparation:	2006-11-13	Prepared By:	SM

Report Date [.] November 14, 2006 Eddy County,Nm				Order: 611101 Ford 26 Fed #2					ber: 9 of 14 6-24S-26E
Param	LCS Resul		Units	Dil.	Spike Amount	Mat Res	ult	Rec.	Rec. Limit
Chloride	95.2		mg/Kg	1	100	<0.:	500	95	85 - 115
Percent recovery is based on the sp	oike result. RPD	is base	d on the spi	ike and spike	duplicate re	esult.			
	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPI	
Chloride	96.7	mg/Kg	1	100	< 0.500	97	85 - 11	5 2	20
Percent recovery is based on the sp	oike result. RPD	is base	d on the sp	ike and spike	duplicate re	esult.			
Laboratory Control Spike (LCS-	-1)								
QC Batch: 31862		Date A	Analyzed:	2006-11-13				Analyzed	By: SM
Prep Batch: 27746			eparation:	2006-11-13				Prepared	
	LCS				Spike	Mat	rix		Rec.
Param	Resul		Units	Dil.	Amount	Res		Rec.	Limit
Chloride	99.0		mg/Kg	1	100	<0.	500	99	85 - 115
Percent recovery is based on the sp	oike result. RPD	is base	d on the sp	ike and spike	duplicate re	esult.			
	LCSD			Spike	Matrix		Rec.		RPD
	LCSD			-		<b>D</b>		DDF	
Param	Result	Units	Dil.	Amount	Result	кес.	Limit	- R P I	i Limi
Chloride	Result 105 vike result. RPD	Units mg/Kg is base		Amount 100 ike and spike	Result <0.500 duplicate re	Rec. 105 esult.	Limit 85 - 11	RPI 5 6	Limit
Chloride Percent recovery is based on the sp Matrix Spike (MS-1) Spiked Sa QC Batch: 31859	105	mg/Kg ) is base Date A	l d on the sp Analyzed:	100 ike and spike 2006-11-13	< 0.500	105		5 6 Analyzed	20 By: SM
Chloride Percent recovery is based on the sp Matrix Spike (MS-1) Spiked Sa QC Batch: 31859	105 bike result. RPD	mg/Kg ) is base Date A	l d on the sp	100 ike and spike	< 0.500	105		5 6	20 By: SM
Chloride Percent recovery is based on the sp <b>Matrix Spike (MS-1)</b> Spiked Sa QC Batch: 31859 Prep Batch: 27743	105 vike result. RPD ample: 108568 MS	mg/Kg ) is base Date A QC Pr	l d on the sp Analyzed: eparation:	100 ike and spike 2006-11-13 2006-11-13	<0.500 duplicate re Spike	105 esult. Mat	85 - 11.	5 6 Analyzed Prepared	20 By: SM By: SM Rec.
Chloride Percent recovery is based on the sp <b>Matrix Spike (MS-1)</b> Spiked Sa QC Batch: 31859 Prep Batch: 27743 Param	105 vike result. RPD ample: 108568 MS Resul	mg/Kg 9 is base Date A QC Pr t	l d on the sp Analyzed: reparation: Units	100 ike and spike 2006-11-13 2006-11-13 Dil.	<0.500 duplicate re Spike Amount	105 esult. Mau Res	85 - 11. 	5 6 Analyzed Prepared Rec.	20 By: SM By: SM Rec. Limit
Chloride Percent recovery is based on the sp <b>Matrix Spike (MS-1)</b> Spiked Sa QC Batch: 31859 Prep Batch: 27743 Param Chloride	105 bike result. RPD ample: 108568 MS Resul 2390	mg/Kg ) is base Date A QC Pr t	1 d on the sp Analyzed: reparation: Units mg/Kg	100 ike and spike 2006-11-13 2006-11-13 Dil. 25	<0.500 duplicate re Spike Amount 2500	105 esult. Mai Res 52.	85 - 11. 	5 6 Analyzed Prepared	20 By: SM By: SM Rec. Limit
Chloride Percent recovery is based on the sp <b>Matrix Spike (MS-1)</b> Spiked Sa QC Batch: 31859 Prep Batch: 27743 Param Chloride	105 bike result. RPD ample: 108568 MS Resul 2390	mg/Kg ) is base Date A QC Pr t	1 d on the sp Analyzed: reparation: Units mg/Kg	100 ike and spike 2006-11-13 2006-11-13 Dil. 25	<0.500 duplicate re Spike Amount 2500	105 esult. Mai Res 52.	85 - 11. 	5 6 Analyzed Prepared Rec.	20 By: SM By: SM Rec. Limit
Chloride Percent recovery is based on the sp <b>Matrix Spike (MS-1)</b> Spiked Sa QC Batch: 31859 Prep Batch: 27743 Param Chloride Percent recovery 1s based on the sp	105 bike result. RPD ample: 108568 MS Resul 2390 bike result. RPD MSD	mg/Kg ) is base Date A QC Pr t	l d on the sp Analyzed: reparation: Units mg/Kg d on the sp	100 ike and spike 2006-11-13 2006-11-13 Dil. 25 ike and spike Spike	<0.500 duplicate re Spike Amount 2500 duplicate re Matrix	105 esult. Mai Res 52. esult.	85 - 11 ault 133 Rec.	5 6 Analyzed Prepared Rec. 94	20 By: SM By: SM Rec. Limit 70 - 13( RPD
Chloride Percent recovery is based on the sp <b>Matrix Spike (MS-1)</b> Spiked Sa QC Batch: 31859 Prep Batch: 27743 Param Chloride Percent recovery 1s based on the sp Param	105 bike result. RPD ample: 108568 MS Resul 2390 bike result. RPD MSD Result	mg/Kg ) is base Date A QC Pr t t Units	1 d on the sp Analyzed: eparation: <u>Units</u> mg/Kg d on the sp Dil.	100 ike and spike 2006-11-13 2006-11-13 Dil. 25 ike and spike Spike Amount	<0.500 duplicate re Spike Amount 2500 duplicate re Matrix Result	105 esult. Mat Res 52. esult. Rec.	85 - 11 strix sult 133 Rec. Limit	5 6 Analyzed Prepared Rec. 94 RPI	20 By: SM By: SM Rec. Limit 70 - 130 RPD Limit
Chloride Percent recovery is based on the sp <b>Matrix Spike (MS-1)</b> Spiked Sa QC Batch: 31859 Prep Batch: 27743 Param Chloride Percent recovery is based on the sp Param Chloride	105 pike result. RPD ample: 108568 MS Resul 2390 pike result. RPD MSD Result 2230	mg/Kg Date A QC Pr t Units mg/Kg	1 d on the sp Analyzed: reparation: Units mg/Kg d on the sp Dil. 25	100           ike and spike           2006-11-13           2006-11-13           Dil.           25           ike and spike           Spike           Amount           2500	<0.500 duplicate re Spike Amount 2500 duplicate re Matrix Result 52.133	105 esult. Mau Res 52. esult. Rec. 87	85 - 11 ault 133 Rec.	5 6 Analyzed Prepared Rec. 94 RPI	20 By: SM By: SM Rec. Limit 70 - 13( RPD
Chloride Percent recovery is based on the sp <b>Matrix Spike (MS-1)</b> Spiked Sa QC Batch: 31859 Prep Batch: 27743 Param Chloride Percent recovery is based on the sp Param Chloride	105 pike result. RPD ample: 108568 MS Resul 2390 pike result. RPD MSD Result 2230	mg/Kg Date A QC Pr t Units mg/Kg	1 d on the sp Analyzed: reparation: Units mg/Kg d on the sp Dil. 25	100           ike and spike           2006-11-13           2006-11-13           Dil.           25           ike and spike           Spike           Amount           2500	<0.500 duplicate re Spike Amount 2500 duplicate re Matrix Result 52.133	105 esult. Mau Res 52. esult. Rec. 87	85 - 11 strix sult 133 Rec. Limit	5 6 Analyzed Prepared Rec. 94 RPI	20 By: SM By: SM Rec. Limit 70 - 130 RPD Limi
Chloride Percent recovery is based on the sp Matrix Spike (MS-1) Spiked Sa QC Batch: 31859 Prep Batch: 27743 Param Chloride Percent recovery is based on the sp Param Chloride Percent recovery is based on the sp	105 pike result. RPD ample: 108568 MS Resul 2390 pike result. RPD MSD Result 2230	mg/Kg Date A QC Pr t Units mg/Kg	1 d on the sp Analyzed: reparation: Units mg/Kg d on the sp Dil. 25	100           ike and spike           2006-11-13           2006-11-13           Dil.           25           ike and spike           Spike           Amount           2500	<0.500 duplicate re Spike Amount 2500 duplicate re Matrix Result 52.133	105 esult. Mau Res 52. esult. Rec. 87	85 - 11 strix sult 133 Rec. Limit	5 6 Analyzed Prepared Rec. 94 RPI	20 By: SM By: SM Rec. Limit 70 - 130 RPE Limi
Chloride Percent recovery is based on the sp Matrix Spike (MS-1) Spiked Sa QC Batch: 31859 Prep Batch: 27743 Param Chloride Percent recovery is based on the sp Param Chloride Percent recovery is based on the sp Matrix Spike (MS-1) Spiked Sa	105 bike result. RPD ample: 108568 MS Resul 2390 bike result. RPD MSD Result 2230 bike result. RPD	mg/Kg ) is base Date A QC Pr t Units mg/Kg ) is base	1 d on the sp Analyzed: eparation: Units mg/Kg d on the sp Dil. 25 d on the sp	100 ike and spike 2006-11-13 2006-11-13 Dil. 25 ike and spike Spike Amount 2500 ike and spike	<0.500 duplicate re Spike Amount 2500 duplicate re Matrix Result 52.133	105 esult. Mau Res 52. esult. Rec. 87	85 - 11 strix sult 133 Rec. Limit	Analyzed Prepared Rec. 94 RPI 0 7	20 By: SM By: SM Rec. Limit 70 - 130 RPE Limi 20
Percent recovery is based on the sp <b>Matrix Spike (MS-1)</b> Spiked Sa QC Batch: 31859 Prep Batch: 27743 Param Chloride Percent recovery is based on the sp Param Chloride Percent recovery is based on the sp <b>Matrix Spike (MS-1)</b> Spiked Sa QC Batch: 31861	105 bike result. RPD ample: 108568 MS Resul 2390 bike result. RPD MSD Result 2230 bike result. RPD	mg/Kg ) is base Date A QC Pr t Units mg/Kg ) is base Date A	1 d on the sp Analyzed: reparation: Units mg/Kg d on the sp Dil. 25	100           ike and spike           2006-11-13           2006-11-13           Dil.           25           ike and spike           Spike           Amount           2500	<0.500 duplicate re Spike Amount 2500 duplicate re Matrix Result 52.133	105 esult. Mau Res 52. esult. Rec. 87	85 - 11 strix sult 133 Rec. Limit	5 6 Analyzed Prepared Rec. 94 RPI	20 By: SM By: SM Rec. Limit 70 - 130 RPE Limi 20 By: SM
Chloride         Percent recovery is based on the sp         Matrix Spike (MS-1)         Spiked Sa         QC Batch:       31859         Prep Batch:       27743         Param         Chloride         Percent recovery is based on the sp         Param         Chloride         Percent recovery is based on the sp         Matrix Spike (MS-1)       Spiked Sa         QC Batch:       31861	105 bike result. RPD ample: 108568 MS Resul 2390 bike result. RPD MSD Result 2230 bike result. RPD	mg/Kg ) is base Date A QC Pr t Units mg/Kg ) is base Date A	1 d on the sp Analyzed: eparation: Units mg/Kg d on the sp Dil. 25 d on the sp Analyzed:	100           ike and spike           2006-11-13           2006-11-13           Dil.           25           ike and spike           Spike           Amount           2500           ike and spike	<0.500 duplicate re Spike Amount 2500 duplicate re Matrix Result 52.133	105 esult. Mau Res 52. esult. Rec. 87	85 - 11 strix sult 133 Rec. Limit	Analyzed Prepared Rec. 94 RPI 0 7 Analyzed	20 By: SM By: SM Rec. Limit 70 - 130 RPE Limi 20 By: SM
Chloride         Percent recovery is based on the sp         Matrix Spike (MS-1)         Spiked Sa         QC Batch:       31859         Prep Batch:       27743         Param         Chloride         Percent recovery is based on the sp         Param         Chloride         Percent recovery is based on the sp         Matrix Spike (MS-1)       Spiked Sa         QC Batch:       31861	105 bike result. RPD ample: 108568 MS Resul 2390 bike result. RPD MSD Result 2230 bike result. RPD ample: 108554	mg/Kg ) is base Date A QC Pr t Units mg/Kg ) is base Date A	1 d on the sp Analyzed: eparation: Units mg/Kg d on the sp Dil. 25 d on the sp Analyzed:	100           ike and spike           2006-11-13           2006-11-13           Dil.           25           ike and spike           Spike           Amount           2500           ike and spike	<0.500 duplicate re Amount 2500 duplicate re Matrix Result 52.133 duplicate re	105 esult. Mar Res 52. esult. 87 esult.	85 - 11 strix sult 133 Rec. Limit 70 - 130	Analyzed Prepared Rec. 94 RPI 0 7 Analyzed	20 By: SM By: SM Rec. Limit 70 - 130 Limi 20 By: SM By: SM
Chloride         Percent recovery is based on the sp         Matrix Spike (MS-1)         Spiked Sa         QC Batch:       31859         Prep Batch:       27743         Param         Chloride         Percent recovery is based on the sp         Param         Chloride         Percent recovery is based on the sp         Matrix Spike (MS-1)       Spiked Sa         QC Batch:       31861	105 bike result. RPD ample: 108568 MS Resul 2390 bike result. RPD MSD Result 2230 bike result. RPD	mg/Kg ) is base Date A QC Pr t Units mg/Kg ) is base Date A QC Pr	1 d on the sp Analyzed: eparation: Units mg/Kg d on the sp Dil. 25 d on the sp Analyzed:	100           ike and spike           2006-11-13           2006-11-13           Dil.           25           ike and spike           Spike           Amount           2500           ike and spike	<0.500 duplicate re Spike Amount 2500 duplicate re Matrix Result 52.133	105 esult. Mau Res 52. esult. Rec. 87	85 - 11 strix sult 133 Rec. Limit 70 - 130	Analyzed Prepared Rec. 94 RPI 0 7 Analyzed	20 By: SM By: SM Rec. Limit 70 - 130 RPD Limit 20 By: SM

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

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Report Date Eddy Coun	e: November 14, ty,Nm	, 2006			Order: 61110 ford 26 Fed #			-	e Number nit B-S26	
Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limıt	RPD	RPD Limit
Chloride		6770	mg/Kg	25	2500	4372.69	96	70 - 130	4	20
Percent reco	overy is based or	1 the spike result. I	RPD is base	d on the sp	oike and spike	e duplicate re	esult.			
Matrix Spil	ke (MS-1) Sp	iked Sample: 1085	64							
QC Batch:	31862		Date /	Analyzed:	2006-11-12	3		А	nalyzed B	y: SM
Prep Batch:	27746			reparation:	2006-11-12	3			repared B	
1				•					1 .	, ,
			⁄IS			Smiles	Ма			Dee
Param			sult	Units	Dil.	Spike Amount	Mat Res		lec.	Rec. Limit
Chloride				mg/Kg	25	2500	2757		.02	70 - 130
	war is based or	the spike result. I		<u> </u>					02	70 - 150
reicem ieu	overy is based of	i ule spike lesult. r	CPD is base	a on the sp	once and spike	e dupricate re	sun.			
		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit.	RPD	Limit
		5090	mg/Kg	25	2500	2757.32	93	70 - 130	4	20
Percent reco Standard (1	ICV-1)	the spike result. I		d on the sp Analyzed:	-	-	esult.	А	nalyzed B	y: SM
Percent recc <b>Standard (</b> 1 QC Batch: Param	ICV-1)	Units	Date A ICVs True Conc.	Analyzed: IG FG C	2006-11-13 CVs ound fonc.	ICVs Percent Recovery		A Percent Recovery Limits		y: SM Date nalyzed
Percent recc <b>Standard (1</b> QC Batch: Param	<b>ICV-1)</b> 31859	-	Date A ICVs True	Analyzed: IG FG C	2006-11-13 CVs ound	ICVs Percent		Percent Recovery	A	Date
Percent recc Standard (1 QC Batch: Param Chloride Standard (4	ICV-1) 31859 Flag CCV-1)	Units	Date A ICVs True Conc. 100	Analyzed: Fe C 9	2006-11-13 CVs ound fonc.	ICVs Percent Recovery 98		Percent Recovery Limits 85 - 115	A	Date nalyzed 06-11-13
Percent recc Standard (1 QC Batch: Param Chloride Standard (4	ICV-1) 31859 Flag CCV-1)	Units	Date A ICVs True Conc. 100	Analyzed: Fe C 9 Analyzed:	2006-11-13 CVs ound onc. 98.2	ICVs Percent Recovery 98		Percent Recovery Limits 85 - 115	A	Date nalyzed 06-11-13
Percent recc Standard (1 QC Batch: Param Chloride Standard (4	ICV-1) 31859 Flag CCV-1) 31859	Units mg/Kg	Date A ICVs True Conc. 100 Date A CCVs True	Analyzed: FG C S Analyzed: FG	2006-11-13 CVs ound onc. 28.2 2006-11-13 CVs ound	ICVs Percent Recovery 98		Percent Recovery Limits 85 - 115 A	A	Date nalyzed 06-11-13
Percent recc Standard (1 QC Batch: Param Chloride Standard (0 QC Batch: Param	ICV-1) 31859 Flag CCV-1)	Units mg/Kg Units	Date A ICVs True Conc. 100 Date A CCVs True Conc.	Analyzed: Fe C S Analyzed: Fe C	2006-11-13 CVs ound onc. 2006-11-13 CVs ound conc.	ICVs Percent Recovery 98 CCVs Percent Recovery		Percent Recovery Limits 85 - 115 A Percent Recovery Limits	A 200 nalyzed B A	Date nalyzed 06-11-13 y: SM Date nalyzed
Percent reco Standard (I QC Batch: Param Chloride Standard (I QC Batch: Param	ICV-1) 31859 Flag CCV-1) 31859	Units mg/Kg	Date A ICVs True Conc. 100 Date A CCVs True	Analyzed: Fe C S Analyzed: Fe C	2006-11-13 CVs ound onc. 28.2 2006-11-13 CVs ound	ICVs Percent Recovery 98 CCVs Percent		Percent Recovery Limits 85 - 115 A Percent Recovery	A 200 nalyzed B A	Date nalyzed 06-11-13 y: SM Date nalyzed
Percent reco Standard (I QC Batch: Param Chloride Standard (I QC Batch: Param Chloride Standard (I	ICV-1) 31859 Flag CCV-1) 31859 Flag ICV-1)	Units mg/Kg Units	Date A ICVs True Conc. 100 Date A CCVs True Conc. 100	Analyzed: FG C 9 Analyzed: FG C	2006-11-13 CVs ound onc. 08.2 2006-11-13 CVs ound onc. 102	ICVs Percent Recovery 98 CCVs Percent Recovery 102		Percent Recovery Limits 85 - 115 A Percent Recovery Limits 85 - 115	A 200 nalyzed B A 20	Date nalyzed 06-11-13 y: SM Date nalyzed 06-11-13
Percent reco Standard (I QC Batch: Param Chloride Standard (I QC Batch: Param Chloride Standard (I	ICV-1) 31859 Flag CCV-1) 31859 Flag ICV-1)	Units mg/Kg Units	Date A ICVs True Conc. 100 Date A CCVs True Conc. 100	Analyzed: Fe C S Analyzed: Fe C	2006-11-13 CVs ound onc. 08.2 2006-11-13 CVs ound onc. 102	ICVs Percent Recovery 98 CCVs Percent Recovery 102		Percent Recovery Limits 85 - 115 A Percent Recovery Limits 85 - 115	A 200 nalyzed B A	Date nalyzed 06-11-13 y: SM Date nalyzed 06-11-13
Chloride Percent reco Standard (I QC Batch: Param Chloride Standard (I QC Batch: Param Chloride Standard (I QC Batch:	ICV-1) 31859 Flag CCV-1) 31859 Flag ICV-1)	Units mg/Kg Units	Date A ICVs True Conc. 100 Date A CCVs True Conc. 100 Date A ICVs	Analyzed: FC C Analyzed: C FC C Analyzed:	2006-11-13 CVs bund bonc. 2006-11-13 CVs bund bonc. 102 2006-11-13 CVs	ICVs Percent Recovery 98 CCVs Percent Recovery 102 ICVs		Percent Recovery Limits 85 - 115 A Percent Recovery Limits 85 - 115 A Percent	A 200 nalyzed B A 20	Date nalyzed 06-11-13 y: SM Date nalyzed 06-11-13 y: SM
Percent reco Standard (I QC Batch: Param Chloride Standard (I QC Batch: Param Chloride Standard (I	ICV-1) 31859 Flag CCV-1) 31859 Flag ICV-1)	Units mg/Kg Units	Date A ICVs True Conc. 100 Date A CCVs True Conc. 100 Date A	Analyzed: IG FG C S Analyzed: C FG C C FG C C FG C C FG C C FG C C FG C C FG C S S S S S S S S S S S S S	2006-11-13 CVs ound onc. 2006-11-13 CVs ound conc. 102 2006-11-13	ICVs Percent Recovery 98 CCVs Percent Recovery 102		Percent Recovery Limits 85 - 115 A Percent Recovery Limits 85 - 115 A	A 200 nalyzed B A 20 nalyzed B	Date nalyzed 06-11-13 y: SM Date nalyzed 06-11-13

# Standard (CCV-1)

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QC Batch: 31861

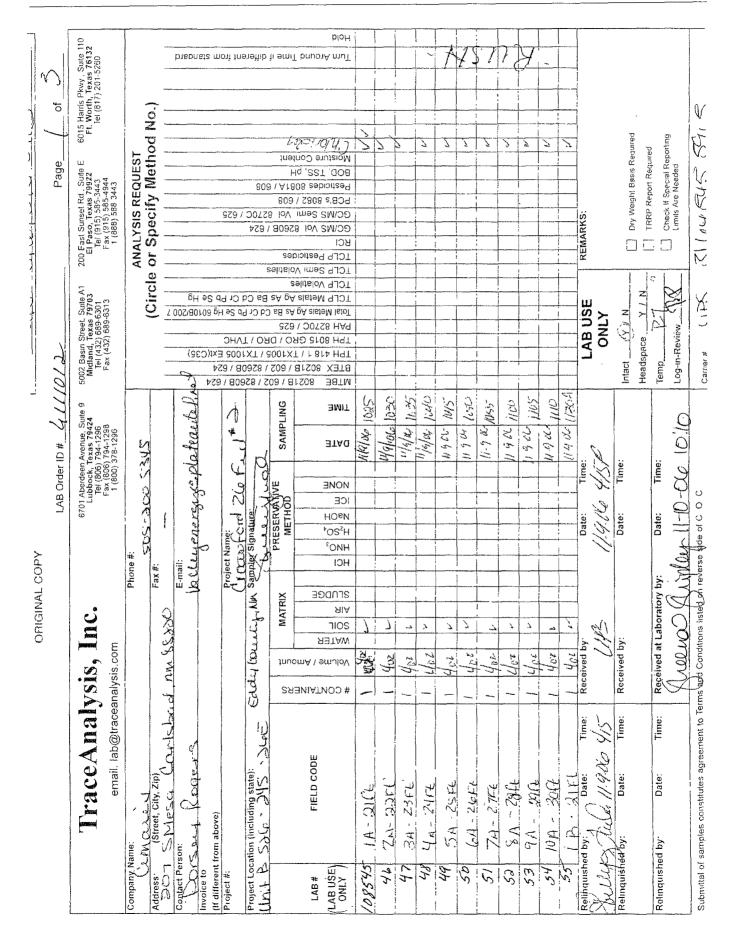
Date Analyzed: 2006-11-13

Analyzed By: SM

Report Date Eddy Coun	e: November 14 ty,Nm	, 2006		Work Order: 61 Crawford 26 Fe			Number: 11 of 14 it B-S26-24S-26E
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 (I	(CV-1)						
QC Batch:	31862		Date Ana	yzed: 2006-11	-13	Ana	alyzed By: SM
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2006-11-13
Standard (	CCV-1)						
QC Batch:	31862		Date Ana	lyzed: 2006-11	-13	Ana	alyzed By: SM
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	99.2	99	85 - 115	2006-11-13

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Relinquished by: Nove of Ucer Relinquished by:	Date. TI 11-9.26 5 Date: TI	Time: Time: Time	Received by: Received by:	by:	5		0-11-9-11	Date: - イ しし Date:	Time: Time:	ds.		LAE 0			¥	KEWAKKS	S: Weight	KKS: Dry Waight Basis Required	quired			
Relinquished by: Date: Time: Received at Laboratory by: Date: Submittal of samples constitutes any conditions histed indicaverte side of G	Date: Ti	Lime:	Received at Laboratory by	at Lab	oratory	by: DULLA		Date: [-[[]-[	Time: VI [[	0,0		Temp Log-in-Review_	eview 2	50		1 (1) 1 (1)(	RP Report R ack If Specia hts Are Need	1 RRP Report Required Check If Special Reporting Limits Are Needed	ed orting			

Report Date: November 14, 2006 Eddy County,Nm

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Report Date: November 14, 2006 Eddy County,Nm

LAB Order ID # 4/11/0/2 Page 3 of 3	6701 Aberdeen Avenue, Suite 9         5002 Basin Street Suite A1         200 East Surset Rd, Suite E         6015 Harris Prwy, Suite 110           Lubbock, Texas 73424         Midland, Texas 7913         E1 Paso, Texas 79922         F1 Worth, Texas 76132           Tel (605) 794-1298         Fat (432) 669 6301         Tel (615) 565-443         Tel (617) 201-5260           Fax (805) 794-1298         Fax (915) 565-9443         Tel (617) 201-5260           1 (800) 3378-1298         Fax (915) 565-9443         Tel (617) 201-5260	Circle or Specify Method No.)	б ₁	256 F	\ 922 \ 025 \ 025 \ 254 \ 125 \ 125 \\125 \ 125 \\ 125 \\125 \ 125 \ 12	2270C / 624 1220C / 1220C / 1200C / 12	D TIVE SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING SAMPL	H	тен. 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12- 10-12-	16th 1555	11900 100 pm					Date: Timp: LAB USE REMARKS: -Q. U.S. ONLY ONLY	Date: Time: Intact (Y/ N Headenses Y / N	T P aned	THINE. TEMP
)	TraceAnalysis, Inc. email. lab@traceanalysis.com	ame. MOLLE (] (Street, City, Zp)	7. C. I. S. M. P. S. J. W. L. S. S. L. A. L. A. S. E-mail: Contact Person: () E-mail: Dr. P. S. S. L. L. C. N. E. S.	 Ut from above)	Project #:	Project Location (including state): Sampler Suprature 1111, 1 Ph. S. P. S. M. S. M. S.	SS MATRIX	Field Code Here / Amo	тијоУ 1102 102 2102 1012 1012 1012 1017	10867 3C-33Ft 1 42 4	W LC 24 R					Reinduished by: Date: Time: Received by:	quished by: Date: Time: Received by:	Relinquished by: Date: Time: Received at Laboratory by:	

Work Order: 6111012 Crawford 26 Fed #2

## Page Number: 14 of 14 Unit B-S26-24S-26E

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# 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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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	$4\mathrm{A}$	soil	2006-11-01	13:45	2006-11-06
107886	1B	soil	2006-11-01	13:50	2006-11-06
107887	$2\mathrm{B}$	soil	2006-11-01	13:55	2006-11-06
107888	$3\mathrm{B}$	soil	2006-11-01	14:00	2006-11-06
107889	$4\mathrm{B}$	soil	2006-11-01	14:05	2006-11-06

30-015-33228

#### Sample: 107882 - 1A

Param	Flag	Result	$\mathbf{Units}$	RL
Chloride		11000	mg/Kg	2.00

#### Sample: 107883 - 2A

Param	$\operatorname{Flag}$	Result	Units	$\operatorname{RL}$
Chloride		8980	mg/Kg	2.00

#### Sample: 107884 - 3A

Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		11900	mg/Kg	2.00

#### Sample: 107885 - 4A

Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		11500	mg/Kg	2.00

TraceAnalysis, Inc • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296

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	$\mathbf{Units}$	RL
Chloride		9280	mg/Kg	2.00
Sample: 107887 -	2B			
Param	$\operatorname{Flag}$	Result	Units	RL
Chloride		7490	nıg/Kg	2.00
Sample: 107888 -	3B			
Param	$\operatorname{Flag}$	Result	Units	RL
Chloride		7440	mg/Kg	2.00
Sample: 107889 -	4B			
Param	$\operatorname{Flag}$	Result	Units	$\operatorname{RL}$
Chloride	<u>v</u>	7560	mg/Kg	2.00

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6701 Aberdeen Avenue, Suite 9 155 McCutcheon, Suite H Lubbock, Texas 79424 800•378•1296 El Paso, Texas 79932 888•588•3443 E-Mail lab@traceanalysis.com

806•794•1296 FAX 8 915•585•3443 FAX 9

6 FAX 806•794•1298 3 FAX 915•585•4944

# **Analytical and Quality Control Report**

Dorsey Rogers Cimarex 207 S Mesa Carlsbad, NM, 88220

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

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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
107882	1Å	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.

lan

Dr. Blair Leftwich, Director

Report Date: November 6, 2006

Work Order: 6110608

# **Analytical Report**

## Sample: 107882 - 1A

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

#### Sample: 107883 - 2A

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 31552 27478	Analytical Method: Date Analyzed: Sample Preparation:	SM 4500-Cl B 2006-11-06 2006-11-06		Prep Method: Analyzed By: Prepared By:	SM
Parameter	Flag	RL Result	Units	Dilution		RL
Chloride	1 146	8980	mg/Kg	25		2.00

#### Sample: 107884 - 3A

Analysis: QC Batch:	Chloride (Titration) 31552	Analytical Method: Date Analyzed:	SM 4500-Cl B 2006-11-06		Prep Method: Analyzed By:	
Prep Batch:	27478	Sample Preparation:	2006-11-06		Prepared By:	SM
		RL				
Parameter	Flag	Result	Units	Dilution		RL
Chloride		11900	mg/Kg	25		2.00

#### Sample: 107885 - 4A

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

Eddy Count	: November 6, 2006 y,Nm	Work Order: Crawford 26			Page Number: Unit B-S26-24	
		RL				
Parameter	Flag	Result	Units	Dilution		RL
Chloride		9280	mg/Kg	25		2.00
Sample: 107	/887 - 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
		RL				
Parameter	Flag	Result	Units	Dilution		RL
Chloride		7490	mg/Kg	25		2.00
<u></u>						
Sample: 107	7888 - 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
		RL				
	Flag	Result	Units	Dilution		RL
	Flag	Result 7440	Units mg/Kg	Dilution 25		RL 2.00
Parameter Chloride Sample: 107 Analysis: QC Batch: Prep Batch:		7440 Analytical Method: Date Analyzed: Sample Preparation:			Prep Method: Analyzed By: Prepared By:	
Chloride Sample: 107 Analysis: QC Batch: Prep Batch:	7 <b>889 - 4B</b> Chloride (Titration) 31552 27478	7440 Analytical Method: Date Analyzed: Sample Preparation: RL	mg/Kg SM 4500-Cl B 2006-11-06 2006-11-06	25	Analyzed By:	2.00 N/A SM SM
Chloride Sample: 107 Analysis: QC Batch: Prep Batch: Parameter	<b>7889 - 4B</b> Chloride (Titration) 31552	7440 Analytical Method: Date Analyzed: Sample Preparation: RL Result	mg/Kg SM 4500-C1 B 2006-11-06 2006-11-06 Units	25 Dilution	Analyzed By:	2.00 N/A SM SM RL
Chloride Sample: 10' Analysis: QC Batch:	7 <b>889 - 4B</b> Chloride (Titration) 31552 27478 Flag	7440 Analytical Method: Date Analyzed: Sample Preparation: RL	mg/Kg SM 4500-Cl B 2006-11-06 2006-11-06	25	Analyzed By:	2.00 N/A SM SM
Chloride Sample: 107 Analysis: QC Batch: Prep Batch: Parameter Chloride	7 <b>889 - 4B</b> Chloride (Titration) 31552 27478 Flag	7440 Analytical Method: Date Analyzed: Sample Preparation: RL Result 7560	mg/Kg SM 4500-C1 B 2006-11-06 2006-11-06 Units	25 Dilution	Analyzed By: Prepared By:	2.00 N/A SM SM RL 2.00
Chloride Sample: 10 ⁷ Analysis: QC Batch: Prep Batch: Prep Batch: Parameter Chloride Method Bla QC Batch:	<b>7889 - 4B</b> Chloride (Titration) 31552 27478 Flag <b>nk (1)</b> QC Batch: 31552	7440 Analytical Method: Date Analyzed: Sample Preparation: RL Result 7560 Date Analyzed: 2006	mg/Kg SM 4500-C1 B 2006-11-06 2006-11-06 Units mg/Kg	25 Dilution	Analyzed By:	2.00 N/A SM SM RL
Chloride Sample: 107 Analysis: QC Batch: Prep Batch: Parameter Chloride Method Bla QC Batch:	<b>7889 - 4B</b> Chloride (Titration) 31552 27478 Flag <b>nk (1)</b> QC Batch: 31552 31552	7440 Analytical Method: Date Analyzed: Sample Preparation: RL Result 7560 Date Analyzed: 2006	mg/Kg SM 4500-C1 B 2006-11-06 2006-11-06 Units mg/Kg	25 Dilution	Analyzed By: Prepared By: Analyzed By:	2.00 N/A SM SM RL 2.00
Chloride Sample: 107 Analysis: QC Batch: Prep Batch: Parameter Chloride Method Bla	<b>7889 - 4B</b> Chloride (Titration) 31552 27478 Flag <b>nk (1)</b> QC Batch: 31552 31552	7440 Analytical Method: Date Analyzed: Sample Preparation: RL Result 7560 Date Analyzed: 2006	mg/Kg SM 4500-C1 B 2006-11-06 2006-11-06 Units mg/Kg	25 Dilution	Analyzed By: Prepared By: Analyzed By:	2.00 N/A SM SM RL 2.00

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

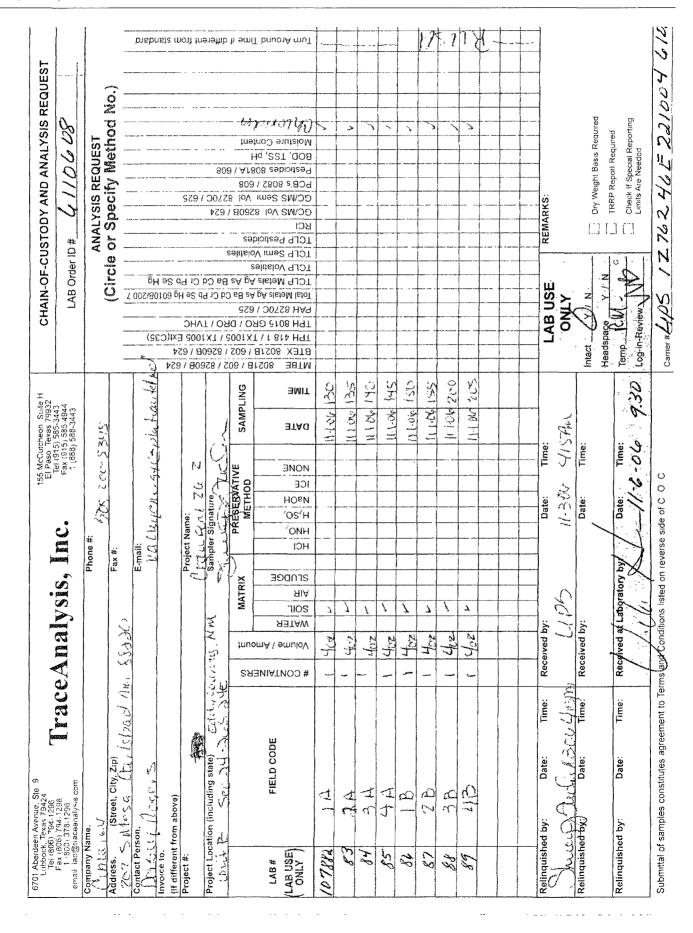
Report Date: November 6, 2006 Eddy County,Nm		<u></u>		Order: 61106 ford 26 Fed #				age Numl Jnit B-S26	
	LCS	5			Spike	Mat	rix		Rec.
Param	Resu	lt	Units	Dil.	Amount	Res	ult I	Rec.	Lımit
Chloride	96.4	n	ng/Kg	1	100	<0.:	500	96	85 - 115
Percent recovery is based on the	spike result. RPI	) is based	on the sp	ike and spike	e duplicate re	sult.			
	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Lımit	RPD	Lımıt
Chloride	97.7	mg/Kg	1	100	< 0.500	98	85 - 115	1	20
Percent recovery is based on the	-	) is based	on the sp	oike and spike	e duplicate re	sult.			
	Sample: 107888								
QC Batch: 31552			nalyzed:	2006-11-0				nalyzed H	-
Prep Batch: 27478		QC Pre	paration:	2006-11-0	6		P	repared B	y: SM
	МС				0.1				D
Devee	MS	1	[ [].	D:1	Spike	Mat		<b>)</b>	Rec.
Param	Resu 1 8970		Units	Dil.	Amount	Res		Rec.	Limit
Chloride Percent recovery is based on the			ng/Kg on the sr	25 vike and spik	2500 e duplicate re	7441	.51	61	70 - 130
	MSD	> 15 04.504	on the sp	Spike	Matrix	Jourt.	Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	² 9070	mg/Kg	25	2500	7441.51	65	70 - 130	1	20
Percent recovery is based on the							70 150		
Standard (ICV-1)									
								Analyzed F	
QC Batch: 31552		Date A	nalyzed:	2006-11-06	1		Г	maryzeu i	By: SM
QC Batch: 31552		Date Ai ICVs	-	2006-11-06 CVs	ICVs		Percent	uaryzeu r	By: SM
QC Batch: 31552			I			]		unaryzeu r	By: SM Date
<b>`</b>	Units	ICVs	I F	CVs	ICVs	]	Percent	-	-
Param Flag	Units mg/Kg	ICVs True	I F C	CVs ound	ICVs Percent		Percent Recovery	A	Date
Param Flag Chloride		ICVs True Conc.	I F C	CVs ound onc.	ICVs Percent Recovery		Percent Recovery Limits	A	Date nalyzed
Param Flag Chloride Standard (CCV-1)		ICVs True Conc. 100	I F C	CVs ound onc. 09.1	ICVs Percent Recovery 99		Percent Recovery Limits 85 - 115	A	Date nalyzed 06-11-06
Param Flag Chloride Standard (CCV-1)		ICVs True Conc. 100	I F C	CVs ound onc. 09.1	ICVs Percent Recovery 99		Percent Recovery Limits 85 - 115	A	Date nalyzed 06-11-06
Param Flag Chloride Standard (CCV-1)		ICVs True Conc. 100 Date An	I F C	CVs ound onc. 99.1 2006-11-06	ICVs Percent Recovery 99		Percent Recovery Limits 85 - 115	A	Date nalyzed 06-11-06
~		ICVs True Conc. 100 Date An CCVs	I F C malyzed:	CVs ound onc. 99.1 2006-11-06 CVs	ICVs Percent Recovery 99		Percent Recovery Limits 85 - 115 A Percent	A 20 Analyzed F	Date nalyzed 06-11-06 By: SM

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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.

Page Number:	5	of	5
Unit B-S26-24	S-	-26	Е



## Bratcher, Mike, EMNRD

From:Bratcher, Mike, EMNRDSent:Tuesday, November 28, 2006 2:45 PMTo:'dorseyrogers@aol.com'Cc:Price, Wayne, EMNRD; Gum, Tim, EMNRD; VonGonten, Glenn, EMNRDSubject: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 <u>mike.bratcher@state.nm.us</u>

# Bratcher, Mike, EMNRD

From:
Sent:
To:
Cc:
Subject:

Bratcher, Mike, EMNRD Tuesday, November 28, 2006 11:13 AM Price, Wayne, EMNRD VonGonten, Glenn, EMNRD; Gum, Tim, EMNRD 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

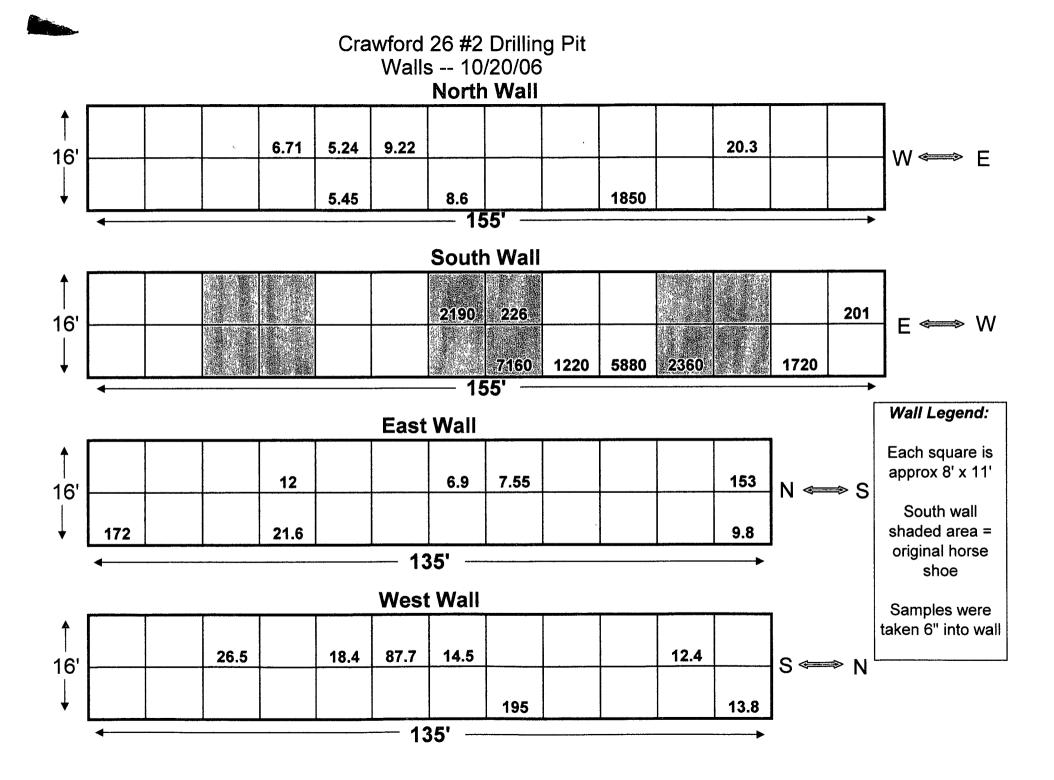
Just a quick overview, the drilling pit has been completely excavated to 16' bgs. Samples showed several hot spots at the 16' bgs bottom of the pit excavation (around 11,000 - 12,000 mg/kg chlorides). Test holes were advanced in these areas to 30' and samples obtained at 1' intervals. Test hole A at 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

			٨	Cra		r 10	Drillin /20/06							
r			<u> </u>	r	<u> </u>	1:	55'			В			<u>`</u>	1
	7.45			4.56					719		1430		,	
4.56				5.8								2540		-
6.62			· · · · · · · · · · · · · · · · · · ·	28.6				· · ·		3540		 		
	9.52	12.8		· · ·			10400		8620		2310			N
17		455		···: :	10300					4820	· ·		442	Legend:
5			7100				12600	6620		-	191			Each square is 11' x 11' approx
							11500	2010						Drilling pit floor is approx 155'
						· · · · ·	· · · · · ·		6460	• :				x 135' x 16'
		1070	3090	5740	7660		:			· .:	17.4		12.3	Shaded area = original horse shoe
	1310		5530	4930	12600	4660	4510		11300		581		765	Samples were
	2910					3700	· . · :	4080					810	taken 1' below foor surface
	2910	· ·									12			





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor Joanna Prukop Cabinet Secretary

つくら カウ eres pres

24-Jul-06

## CIMAREX ENERGY CO OF COLORADO

P O BOX 1237 EUNICE NM 88231

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.

			INSPECTIC	ON DETAIL	SECTION						
CRAWFOF Inspection Date	RD 26 No.002 Type Inspectio	n	Inspector	Violation?	B-26-24S-26E *Significant Non-Compliance?	30-015-33228-00- Corrective Action Due By:	00 Inspection No.				
07/19/2006	Routine/Periodic Violations Evaporation Pits		Routine/Periodic Richard Inge Yes Violations				No	8/24/2006	6 iREI0620045643		
Comments	on Inspection:			-	•	at west end. Possible er over fence. Rule 5					





Mark E. Fesmire, P.E.

Director

**Oil Conservation Division** 

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 Divison 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,

a. . . . 🐐

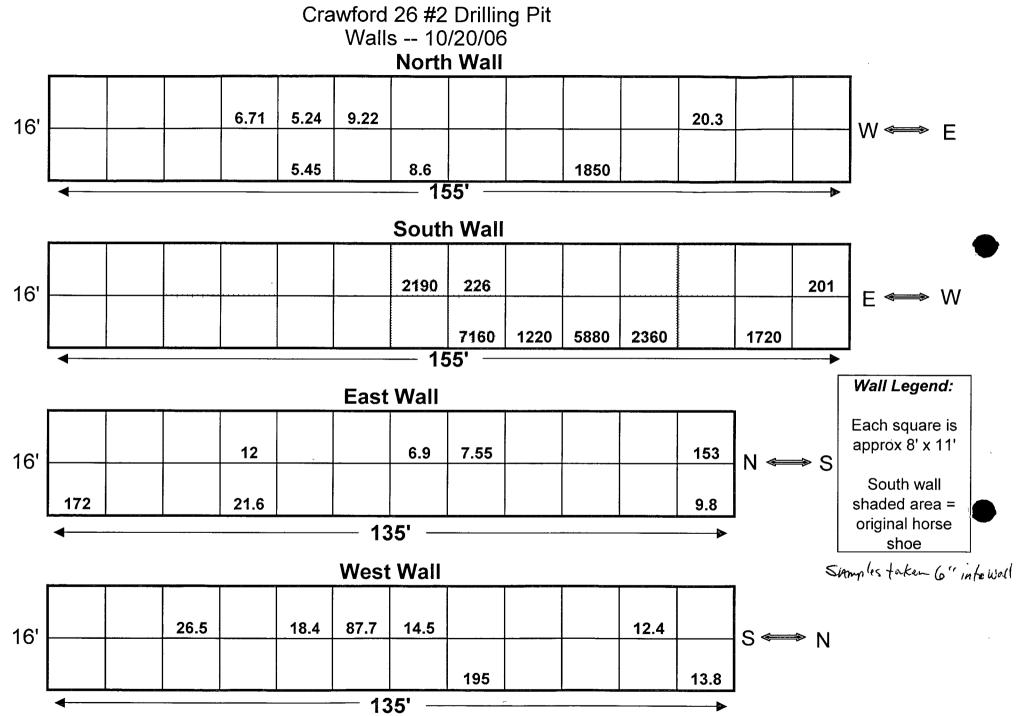
RILLARD INGE

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.

			А	Cra		r 10	2 Drillin /20/06 55'			В				
	7.45			4.56					719		1430			
4.56				5.8		 						2540		
6.62				28.6				· ;		3540				
	9.52	12.8	· . ·	-1	· ·		10400	· · · · · · · · · · · · · · · · · · ·	8620		2310			N
17		455		-	10300					4820			442	Legend:
35'			7100				12600	6620		·····	191			Each square is 11' x 11' àpprox
							11500	2010						Drilling pit floor is approx 155'
							•		6460					x 135'
		1070	3090	5740	7660						17.4		12.3	Shaded area = original horse shoe
	1310	:	5530	4930	12600	4660	4510		11300	: .	581		765	
	2910					3700		4080		-			810	
	2910					· · · · · · · · · · · ·				·	12			





	To Appropriate District	State of New	Mexico	Form C-103
Office District I		Energy, Minerals and N	Natural Resources	May 27, 2004
	)r., Hobbs, NM 88240		CUDA HR	WELL API NO.
District II		OIL CONSERVATI	ION DIVISION	30-015-33228
District III	ve., Artesia, NM 88210	1220 South St.		5. Indicate Type of Lease
	Rd., Aztec, NM 87410			STATE FEE
District IV	D. Contract ND4	Santa Fe, NM	/18/303	6. State Oil & Gas Lease No.
87505 St. Franc	is Dr , Santa Fe, NM			
	SUNDRY NOT	ICES AND REPORTS ON WE	ELLS	7. Lease Name or Unit Agreement Name
	HIS FORM FOR PROPO	SALS TO DRILL OR TO DEEPEN O	R PLUG BACK TO A	
	SERVOIR. USE "APPLI	CATION FOR PERMIT" (FORM C-10	1) FOR SUCH	Crawford 26
PROPOSALS.)		Gas Well 🔀 Other		8. Well Number
1. Type of w			RECEIVED	002
2. Name of O	perator			9. OGRID Number
Gruy Petroleu	m Management Co.		JUN 1 0 2005	162683
3. Address of			OOD-MITEOM	10. Pool name or Wildcat
PO Box 1409	04; Irving, TX 75014			White City; Penn (Gas) 87280
4. Well Locat	ion			
Unit	Letter B · 99(	feet from the <u>North</u>	line and 1980'	feet from the East line
Section		ownship 24S Range		CountyEddy
Seen		11. Elevation (Show whether		
	The states	3271' GR	DR, $RRD$ , $RI$ , $GR$ , $eic.)$	
With relation of the State of t	e Tank Application 🗌 o			
Pit type			ach water wall	Distance from nearest surface water
Pit Liner Thickne	<u>ss:</u>	Below-Grade Tank: Volume	bbls; Constru	iction Material
	12. Check	Appropriate Box to Indicat	te Nature of Notice,	Report or Other Data
	NOTICE OF IN		SUR	SEQUENT REPORT OF:
PERFORM RE		PLUG AND ABANDON	REMEDIAL WOR	
TEMPORARIL		CHANGE PLANS		
PULL OR ALT			CASING/CEMEN	
TULL ON ALT				
OTHER:			OTHER:	
13. Descri	be proposed or comp	leted operations. (Clearly state		d give pertinent dates, including estimated date
				tach wellbore diagram of proposed completion
	mpletion.	•	1	
		،		
06-25-04	In 12-1/4" hole, ra	n 88 jts 9-5/8" 36# J-55 STC c	asing to 3825'. Cement	ed with lead 950 sx Class C + 3% Metasilicate
	+ 0.25 pps Cellofl	ake and tail 200 sx Class C + 2	% CaCl. Did not circula	ate cement to pit. Waited on temperature
		l at 1195', but wanted to run an		
06-26-04				ed casing to 2500psi. WOC 19.75 hours.
07-22-05		205 jts 5-1/2" 17# P-110 LTC		
07-23-05				Class H + 1.0% FL-52 + 3.0% SMS + 1.6%
				S + 1.6% R-3. Cemented second stage with
				. Full returns throughout job. Calculated TOC
	2520°. Tested cas	ing to 2350psi. Released rig at	23:00 07-23-04.	

l hereby certify that the grade tank has been/will be	information above is true and constructed or closed according to	complete to the best of my knowledge and belief. If NMOCD guidelines X, a general permit $\Box$ or an (attached) al	further certify that any pit or below- ternative OCD-approved plan .
	stali-thing		DATE June 9, 2005
Type or print name For State Use Only	Natalie Krueger	email address: nkrueger@magnumhunter.com	Telephone No. <u>972-401-3111</u>
APPROVED BY:	FOR RECORDS	ONLYTITLE	JUN 1 5 2005

Conditions of Approval (if any):

District 1 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 **COPY FROM WELL FILE** 

Form C-144 March 12, 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 X Type of action: Registration of a pit or below-grade tank Closure of a pit or below-grade tank X Telephone: 972-443-6489 e-mail address: zfarris@cimarex.com Operator: Cimarex Energy Co. of Colorado 30-015-33228-0000 Address: P.O. Box 140907, Irving, Tx 75014-0907 API #: 30-015-38418 Facility or well name: Crawford 26 No. 2 U/L or Otr/Otr^B Sec26 T24S R26E County: Eddy Latitude 321134.01 N Longitude1041540.33 W NAD: 1927 🕅 1983 🗌 Surface Owner Federal 🗋 State 🗋 Private 🕅 Indian 🗌 Pit Below-grade tank <u>Evpe:</u> Drilling 🖾 Production 🗌 Disposal 🗍 Volume: _____bbl Type of fluid: _____ Workover Emergency Construction material: Lined X Unlined Double-walled, with leak detection? Yes I If not, explain why not, Liner type: Synthetic X Thickness 12 mil Clay Volume bbl to be hauled Less than 50 feet (20 points) Depth to ground water (vertical distance from bottom of pit to seasonal high 50 feet or more, but less than 100 feet (10 points) water elevation of ground water.) 251 100 feet or more ( 0 points) Yes (20 points) Wellhead protection area: (Less than 200 feet from a private domestic No) ( 0 points) water source, or less than 1000 feet from all other water sources.) Less than 200 feet (20 points) Distance to surface water: (horizontal distance to all wetlands, playas, (10 points) 200 feet or more, but less than 1000 feet irrigation canals, ditches, and perennial and ephemeral watercourses.) 1000 feet or more 0 points **Ranking Score (Total Points)** Ż 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 CRT ?... (3) Attach a general description of remedial action taken including remediation start date and en 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 NMOCD guidelines , a general permit , or an (attached) alternative OCD-approved plan . a an-O Printed Name/Title Zeno Farris Manager Operations Administration Signature Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations. Approval: 106 Date: 8 Printed Name/Title RICHARD INGE FEED IN SPISETOR Signature Richard Wess APPLONED WITH THE STIPULATION THAT SOIL SAMPLES BE TAKET (AND LESULTS SENT TO US) WHERE THE LINER WAS BLOWN DOWN TO THE FLUIP LEVEL. I BELIEVE THIS WAS THE South SIDE OF THE PIT. PLEASE NOTIFY THIS OFFICE WHEN THE ACTION IS COMPLETED. THANK YOU.

	COPY	OM WELL FILE 2456780					
District I 1625 N. French Dr., Hobbs, NM 88240 Energy	State of New Mexico y Minerals and Natural Resources	VOIVI WELL FILE					
District II		June 1, 2004					
1301 W. Grand Avenue, Artesia, NM 88210 District III	Oil Conservation Division 1220 South St Francis Dr	For drilling and production facilities and production					
1000 Rio Brazos Road, Aztec, NM 87410 District IV		appropriate NMOCD District Office. For downstream facilitie submit to Santa Fe office					
1220 S. St. Francis Dr., Santa Fe, NM 87505		8 RVB					
	w-Grade Tank Registration or Closure	ES ES					
	tank covered by a "general plan"? Yes $\square$ No or below-grade tank $\square$ Closure of a pit or b						
	<u> </u>	25-5					
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 X Private 🔲 Indian 🗌							
Pit	Below-grade tank N/A						
Type: Drilling X Production Disposal	Volume _N/A bbl Type of fluid: _N/A						
Workover 🔲 Emergency 🗔	Construction materialN/A						
Lined X Unlined	Double-walled, with leak detection?	If not, explain why not.					
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	Less than 50 feet	(20 points) 20 pts.					
high water elevation of groundwater.) High water elevation of	50 feet or more, but less than 100 feet	(10 points)					
groundwater range to approximately 20'.	100 feet or more	(0 points)					
Wellhead protection area: (Less than 200 feet from a private domestic	Yes X	(20 points) 20 pts.					
water source, or less than 1000 feet from all other water sources.)	No	(0 points)					
	Less than 200 feet	(20 points) 20 pts.					
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points) 20 pts.					
irrigation canals, ditches, and perennial and ephemeral watercourses.)		(0 points)					
	1000 feet or more						
	Ranking Score (Total Points)	60 pts.					

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 I 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 for Dorsey Kogens lug C. Stindler

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: Approval: Printed Name/Title Wille Krakher Alsrtt Signature Alle Spaning Date 8/14/06

Z



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 Dursey Rogers by CFindles **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 Performa 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 contaminates 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.

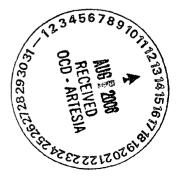


The "Closure Plan" shall include a final report providing lab analysis of the backfill material, digital project photos and evidentiary narrative to support the completed disposition of the reclaimed Crawford 26 drilling pit site.

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

Sincerely, Junkley low OA NO J 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

# 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

			Date	$\operatorname{Time}$	Date
Sample	Description	Matrix	Taken	Taken	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

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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-22 S-23	soil	2006-10-20	17:31	2006-10-21	
106528	S-23 S-24	soil	2006-10-20	17:32	2006-10-21	
106529	S-24 S-25	soil	2006-10-20	17:32	2006-10-21	
106530	S-27	soil	2006-10-20	17:34	2006-10-21	
106531	W-3	soil	2006-10-20	17:34	2006-10-21	
106532	W-5	soil	2006-10-20	17.30 17:37	2006-10-21	
106533	W-5 W-6			17:38		
		soil	2006-10-20		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	

		1	BTEX		MTBE	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(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
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······			BTEX		MTBE	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	DRO	GRO
Sample - Field Code			(mg/Kg)	(mg/Kg)	1		
106478 - A-34	(mg/Kg) <0.0100	(mg/Kg) <0.0100	<0.0100	<0 0100	(mg/Kg)	(mg/Kg) <50.0	(mg/Kg) <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
106480 - C-17 106481 - C-18	< 0.0100	< 0.0100 < 0.0100	< 0.0100	< 0.0100		<50.0	<1.00
	< 0.0100 < 0.0100					<50.0	< 1.00 < 1.00
106482 - C-19		< 0.0100	< 0.0100	< 0.0100		1	1
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
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Eddy County,Nm	Crawford 26 Fed $\#2$	Unit B-S26-24S-26E

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		BTEX			MTBE	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(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	$\operatorname{Flag}$	Result	Units	$\operatorname{RL}$
Chloride		7.45	mg/Kg	2.00

# Sample: 106469 - A-5

Param	Flag	$\operatorname{Result}$	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	$\mathbf{Flag}$	Result	Units	$\operatorname{RL}$
Chloride		5.80	m 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	$\operatorname{RL}$	
Chloride		9.52	mg/Kg	2.00	
Sample: 106475 - A-24					
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride		12.8	mg/Kg	2.00	
Sample: 106476 - A-29					
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride		17.0	mg/Kg	2.00	
Sample: 106477 - A-31					
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride	····	455	mg/Kg	2.00	
Sample: 106478 - A-34					
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$	
Chloride		10300	mg/Kg	2.00	
Sample: 106479 - A-39					
Param	Flag	$\mathbf{Result}$	Units	$\operatorname{RL}$	
Chloride		7100	mg/Kg	2.00	
Sample: 106480 - C-17					
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride		1070	mg/Kg	2.00	
Sample: 106481 - C-18					
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride		3090	mg/Kg	2.00	
Sample: 106482 - C-19					
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride		5740	mg/Kg	2.00	

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Report Date: October 27, Eddy County,Nm	2006	Work Order: 6102301Page NumbCrawford 26 Fed #2Unit B-St		umber: 6 of 12 B-S26-24S-26E
Sample: 106483 - C-20				
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
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	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		5530	mg/Kg	2.00
Sample: 106486 - C-26				
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		4930	m mg/Kg	2.00
Sample: 106487 - C-27				
Param	Flag	Result	Units	RL
Chloride		12600	mg/Kg	2.00
Sample: 106488 - C-28				
Param	$\operatorname{Flag}$	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		4660	m 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	$\operatorname{RL}$
Chloride		3700	mg/Kg	2.00
Sample: 106491 - C-37				
Param	Flag	Result	Units	RL
Chloride		2910	mg/Kg	2.00

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Report Date: October 27, 2006 Eddy County,Nm	Work Order: 6102301 Crawford 26 Fed #2		Page Number: 7 of 12 Unit B-S26-24S-26E	
Sample: 106492 - D-1				
Param Flag	Result	Units	$\operatorname{RL}$	
Chloride	11500	mg/Kg	2.00	
Sample: 106493 - D-2				
Param Flag	Result	Units	$\operatorname{RL}$	
Chloride	2010	mg/Kg	2.00	
Sample: 106494 - D-10				
Param Flag	Result	Units	$\operatorname{RL}$	
Chloride	6460	mg/Kg	2.00	
Sample: 106495 - D-19				
Param Flag	g Result	Units	$\operatorname{RL}$	
Chloride	17.4	mg/Kg	2.00	
Sample: 106496 - D-21				
Param Flag	g Result	Units	$\operatorname{RL}$	
Chloride	12.3	mg/Kg	2.00	
Sample: 106497 - D-22				
Param Flag	g Result	Units	$\operatorname{RL}$	
Chloride	4510	mg/Kg	2.00	
Sample: 106498 - D-24				
Param Flag		Units	$\operatorname{RL}$	
Chloride	11300	mg/Kg	2.00	
Sample: 106499 - D-26				
Param Flag	g Result	Units	$\operatorname{RL}$	
Chloride	581	mg/Kg	2.00	
Sample: 106500 - D-28				
Param Flag	g Result	Units	$\operatorname{RL}$	
Chloride	765	mg/Kg	2.00	

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Sample: 106501 - D-	30				
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride		4080	mg/Kg	2.00	
Sample: 106502 - D-	35				
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$	
Chloride		810	mg/Kg	2.00	
Sample: 106503 - D-	40				
Param	Flag	$\operatorname{Result}$	Units	$\mathbf{RL}$	
Chloride		12.0	mg/Kg	2.00	
Sample: 106504 - B-	3				
Param	Flag	$\operatorname{Result}$	Units	RL	
Chloride		719	m mg/Kg	2.00	
Sample: 106505 - B-	5				
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$	
Chloride		1430	mg/Kg	2.00	
Sample: 106506 - B-	13				
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride		2540	mg/Kg	2.00	
Sample: 106507 - B-	18				
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$	
Chloride		3450	mg/Kg	2.00	
Sample: 106508 - B-:	22				
Param	Flag	Result	Units	$\operatorname{RL}$	
Chloride	····· ··· ··· ··· ··· ··· ··· ··· ···	10400	mg/Kg	2.00	
Sample: 106509 - B-	24				
Param	Flag	Result	$\mathbf{Units}$	$\operatorname{RL}$	
Chloride		8620	mg/Kg	2.00	

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Report Date: October Eddy County,Nm	27, 2006	Work Order: $6102301$ Crawford 26 Fed $#2$	Page Number: 9 o Unit B-S26-24S-	
Sample: 106510 - E	3-26			
Param	$\operatorname{Flag}$	Result	Units	$\operatorname{RL}$
Chloride		2310	mg/Kg	2.00
Sample: 106511 - H	3-32			
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		4820	mg/Kg	2.00
Sample: 106512 - H	3-35			
Param	Flag	Result	Units	RL
Chloride		442	mg/Kg	2.00
Sample: 106513 - I	3-36			
Param	Flag	$\operatorname{Result}$	Units	RL
Chloride		12600	mg/Kg	2.00
Sample: 106514 - I	3-37			
Param	$\mathbf{Flag}$	$\operatorname{Result}$	Units	RL
Chloride		6620	mg/Kg	2.00
Sample: 106515 - I	3-40			
Param	$\operatorname{Flag}$	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		191	mg/Kg	2.00
Sample: 106516 - I	E-13			
Param	$\operatorname{Flag}$	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		172	mg/Kg	2.00
Sample: 106517 - I	E-7			
Param	$\operatorname{Flag}$	$\operatorname{Result}$	Units	RL
Chloride		6.90	mg/Kg	2.00
Sample: 106518 - I	E-8			
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		7.55	mg/Kg	2.00

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Report Date: October 27, Eddy County,Nm	2006	Work Order: 6102301 Crawford 26 Fed #2		
Sample: 106519 - E-12				
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		153	mg/Kg	2.00
Sample: 106520 - E-4				
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		12.2	mg/Kg	2.00
Sample: 106521 - E-16				
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		21.6	mg/Kg	2.00
Sample: 106522 - E-24		,		
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		9.80	m mg/Kg	2.00
Sample: 106523 - S-7				
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		2190	mg/Kg	2.00
Sample: 106524 - S-8				
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		226	m mg/Kg	2.00
Sample: 106525 - S-14				
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		201	m mg/Kg	2.00
Sample: 106526 - S-22				
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		7160	mg/Kg	2.00
Sample: 106527 - S-23				
Param	Flag	$\operatorname{Result}$	Units	RL
Chloride	0	1220	mg/Kg	2.00

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Report Date: October 27, 26 Eddy County,Nm	006	Work Order: 6102301 Crawford 26 Fed #2	Page Number: 11 of 12 Unit B-S26-24S-26E	
Sample: 106528 - S-24				
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		5800	mg/Kg	2.00
Sample: 106529 - S-25				
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		2360	mg/Kg	2.00
Sample: 106530 - S-27				
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		1720	mg/Kg	2.00
Sample: 106531 - W-3				
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		26.5	mg/Kg	2.00
Sample: 106532 - W-5				
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		18.4	m mg/Kg	2.00
Sample: 106533 - W-6				
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		87.7	mg/Kg	2.00
Sample: 106534 - W-7		•		
Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Chloride		14.5	mg/Kg	2.00
Sample: 106535 - W-11				
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		12.4	mg/Kg	2.00
Sample: 106536 - W-20				
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride ,		195	mg/Kg	2.00

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Report Date: October 27, 2006 Eddy County,Nm		Work Order: 6102301 Crawford 26 Fed #2		mber: 12 of 12 B-S26-24S-26E
Sample: 106537 - W-24				
	Flag	Result	Units	RL
Chloride		13.8	m mg/Kg	2.00
Sample: 106538 - N-4				
	Flag	Result	Units	RL
Chloride		6.71	mg/Kg	2.00
Sample: 106539 - N-5				
	Flag	Result	Units	RL
Chloride		5.24	m mg/Kg	2.00
Sample: 106540 - N-6				
	Flag	Result	Units	RL
Chloride		9.22	mg/Kg	2.00
Sample: 106541 - N-12				
	Flag	Result	Units	RL
Chloride		20.3	mg/Kg	2.00
Sample: 106542 - N-19				
	Flag	Result	Units	RL
Chloride		5.45	mg/Kg	2.00
Sample: 106543 - N-21				
	Flag	Result	Units	$\operatorname{RL}$
Chloride		8.60	mg/Kg	2.00
Sample: 106544 - N-24				
Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		1850	mg/Kg	2.00

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

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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 MexicoProject Name:Crawford 26-2Project Number:Unit B-S26-25S-26E

			Date	$\operatorname{Time}$	$\operatorname{Date}$
Sample	Description	Matrix	Taken	Taken	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	$\mathbf{Units}$	$\operatorname{RL}$
Chloride		18.0	mg/L	0.500



6701 Aberdeen Avenue, Suite 9 155 McCutcheon, Suite H Lubbock, Texas 79424 800•378•1296 El Paso, Texas 79932 888•588•3443 E-Mail lab@traceanalysis.com

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# **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 MexicoProject Name:Crawford 26-2Project Number:Unit B-S26-25S-26E

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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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.

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Dr. Blair Leftwich, Director

## Page Number: 2 of 4 Blackriver-New Mexico

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

## Sample: 106546 - River 2

Analysis: OC Batch:	Chloride (IC) 31209	Analytical Method: Date Analyzed:	E 300.0 2006-10-23	1	Method: N/A yzed By: WB
Prep Batch:	27178	Sample Preparation:	2006-10-23		ared By: WB
		RL			
Parameter	Flag	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

		MDL		
Parameter	Flag	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 base	ed on the spike result. RPD is b	based on the s	spike and sp	oike duplicate re	esult.		
	LCSD		Spike	Matrix	Re	ec.	RPD

Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	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.

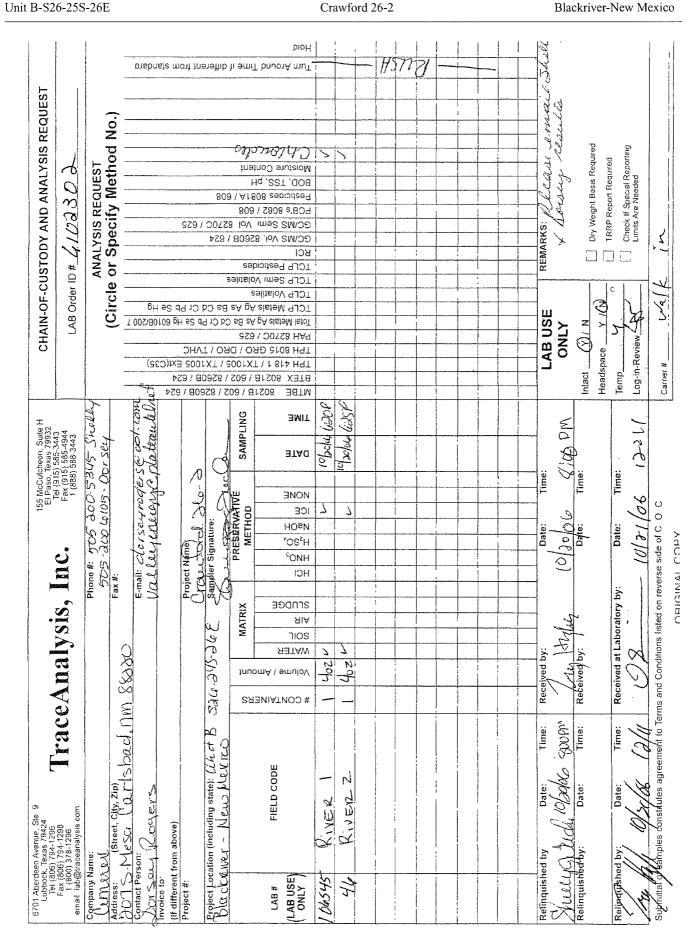
Unit B-S26	e: October 24, 2 5-25S-26E	2006			vrder: 610230 wford 26-2	02			Page Numb ckriver-Nev	
Matrix Spi	ke (MS-1) Sp	oiked Sample: 106	565							
QC Batch:	31209		Date	Analyzed:	2006-10-2	23		A	Analyzed By	: WB
Prep Batch:	27178		QC F	reparation	2006-10-2	23		F	Prepared By	: WB
			MS			Spike	Ma	trix		Rec.
Param			esult	Units	Dil.	Amount	Res		ec	Limit
Chloride		2	200	mg/L	100	1250	88	30 10	06 2:	5.4 - 171
Percent rec	overy is based of	n the spike result.	RPD is bas	ed on the s	pike and spi	ke duplicate i	esult.			
		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Lımit	RPD	Limi
Percent rec	-	2180 n the spike result.	mg/L RPD is bas	100 ed on the s	1250 pike and spi	880 ke duplicate i	104 result.	25.4 - 171	1	20
Percent rec Standard (	ICV-1)		RPD is bas	ed on the s		ke duplicate i			1 Analyzed B	
Percent rec Standard (	ICV-1)		RPD is bas	ed on the s Analyzed:	pike and spi	ke duplicate i				
Percent rec Standard (	ICV-1)		RPD is bas Date	ed on the s Analyzed: I	pike and spi 2006-10-2	ke duplicate i		Į		
Percent rec <b>Standard (</b> QC Batch:	ICV-1)	n the spike result. Units	RPD is bas Date ICVs True Conc.	ed on the s Analyzed: I F C	pike and spi 2006-10-2 CVs ound Conc.	ke duplicate 3 ICVs Percent Recovery		Percent Recovery Limits	Analyzed By	7: WB Date nalyzed
Chloride Percent rec Standard ( QC Batch: Param Chloride	ICV-1) 31209	n the spike result.	RPD is bas Date ICVs True	ed on the s Analyzed: I F C	pike and spi 2006-10-2 CVs ound	ke duplicate r 3 ICVs Percent		A Percent Recovery	Analyzed By	7: WB Date
Percent rec Standard ( QC Batch: Param Chloride	ICV-1) 31209 Flag	n the spike result. Units	RPD is bas Date ICVs True Conc.	ed on the s Analyzed: I F C	pike and spi 2006-10-2 CVs ound Conc.	ke duplicate 3 ICVs Percent Recovery		Percent Recovery Limits	Analyzed By	7: WB Date nalyzed
Percent rec Standard ( QC Batch: Param Chloride Standard (	ICV-1) 31209 Flag CCV-1)	n the spike result. Units	RPD is bas Date ICVs True Conc. 12.5	ed on the s Analyzed: I F C	pike and spi 2006-10-2 CVs ound Conc.	ke duplicate 3 ICVs Percent Recovery 99		Percent Recovery Limits 90 - 110	Analyzed By	7: WB Date nalyzed 06-10-2:
Percent rec Standard ( QC Batch: Param Chloride Standard (	ICV-1) 31209 Flag CCV-1)	n the spike result. Units	RPD is bas Date ICVs True Conc. 12.5 Date CCVs	ed on the s Analyzed: I F C Analyzed: C	pike and spi 2006-10-2 CVs ound Conc. 12.4 2006-10-2 CCVs	ke duplicate n 3 ICVs Percent Recovery 99 3 CCVs		Percent Recovery Limits 90 - 110 Percent	Analyzed By A 200	7: WB Date nalyzed 06-10-22 /: WB
Percent rec Standard ( QC Batch: Param Chloride Standard ( QC Batch:	ICV-1) 31209 Flag CCV-1) 31209	n the spike result. Units mg/L	RPD is bas Date ICVs True Conc. 12.5 Date CCVs True	ed on the s Analyzed: F C Analyzed: F	pike and spi 2006-10-2 CVs ound Conc. 12.4 2006-10-2 CCVs ound	ke duplicate 3 ICVs Percent Recovery 99 3 CCVs Percent		Percent Recovery Limits 90 - 110 A Percent Recovery	Analyzed B Analyzed B	/: WB Date nalyzed )6-10-22 /: WB Date
Percent rec Standard ( QC Batch: Param Chloride Standard (	ICV-1) 31209 Flag CCV-1)	n the spike result. Units	RPD is bas Date ICVs True Conc. 12.5 Date CCVs	ed on the s Analyzed: F C Analyzed: C F C	pike and spi 2006-10-2 CVs ound Conc. 12.4 2006-10-2 CCVs	ke duplicate n 3 ICVs Percent Recovery 99 3 CCVs		Percent Recovery Limits 90 - 110 Percent	Analyzed By Analyzed By Analyzed By	7: WB Date nalyzed 06-10-2. /: WB

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Work Order: 6102302 Crawford 26-2

#### Page Number: 4 of 4 Blackriver-New Mexico



Report Date: October 24, 2006