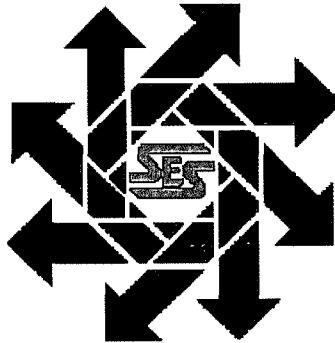
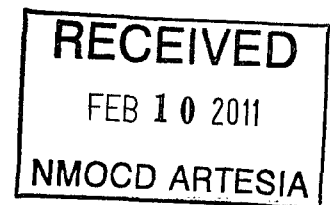


**Cimarex Energy Company
Cottonwood Draw "22" Federal Com #5
Unit Letter A, Section 22, Township 25S, Range 26E
Eddy County, New Mexico**

Delineation Report/Work Plan

September 1, 2010



Prepared for:

***Cimarex Energy Company
600 N Marienfeld Suite 600
Midland, Texas 79701***

By:

***Safety & Environmental Solutions, Inc.
703 East Clinton Street
Hobbs, New Mexico 88240
(575) 397-0510***

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I. Company Contacts

Company Representative	Company	Telephone	E-mail
Terry Ainsworth	Cimarex Energy Co.	575-390-1388	tainsworth@cimarex.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by Cimarex Energy Company to perform a site assessment at the Cottonwood Draw "22" Federal Com #5.

III. Surface and Ground Water

According the database provided by the New Mexico Office of State Engineer's online database, the average depth of water in this area is 80'.

IV. Soils

The surface soils in the area are predominantly sand and sandy loam.

VI. Work Performed

On May 18, 2010, Roadrunner Environmental was onsite to delineate the area. Surface and subsurface soil samples were obtained at depths ranging from 0-2 ft below ground surface. The samples were transported under chain of custody to Cardinal Laboratories of Hobbs, New Mexico for Chloride (EPA Method 4500-B).

The analytical results are as follows:

Lab ID	Sample ID	Cl ⁻ (mg/kg)
Analysis Date:	-	05/19/10
H-19919-1	"A" N.W. Corner Surface	256
H-19919-2	"A" N.W. Corner 1 ft.	192
H-19919-3	"A" N.W. Corner 2 ft.	192
H-19919-4	"B" N.E. Corner Surface	96
H-19919-5	"B" N.E. Corner 1 ft.	208
H-19919-6	"C" S.W. Corner Surface	9,500
H-19919-7	"C" S.W. Corner 1 ft.	3,400
H-19919-8	"D" S.E. Corner Surface	288
H-19919-9	"D" S.E. Corner 1 ft.	64
H-19919-10	"E" Center Surface	4,320
H-19919-11	"E" Center 1 ft.	736
H-19919-12	Runoff east of center	6,880
H-19919-13	"F" N.E. Corner Surface	960
H-19919-14	"F" N.E. Corner 2 ft.	128
H-19919-15	"G" E. Pit Center1 Surface	10,800
H-19919-16	"G" E. Pit Center1 2 ft.	208
H-19919-17	"H" E. Pit Center2 Surface	19,200
H-19919-18	"H" E. Pit Center2 2 ft.	368
H-19919-19	"I" E. Pit Center #4 Surface	832

H-19919-20	"I" E. Pit Center 2 ft.	48
H-19919-21	"J" E. Pit S.E. Corner Surface	5,440
H-19919-22	"K" Pad S.E. Well Surface	18,400
H-19919-23	"L" Pad S. Well Surface	28,400
H-19919-24	"M" S Site Cottonwood 32 Well #8 "Steak"	64
EPA Method 4500 Cl-B		

On August 17, 2010, Mr. Sergio Contreras and Mr. Bob Allen of SESI was onsite along with Mr. Terry Ainsworth of Cimarex and Mr. Mike Bratcher of New Mexico Oil Conservation Division (NMOCD). The meeting was to talk about the delineation process that was going to be done by SESI to find vertical extent of chloride contamination. Two (2) samples were retrieved, one of large rocks found in the excavation and one of small white rocks that were on the surface. The samples were transported under chain of custody to Cardinal Laboratories of Hobbs, New Mexico for Chloride (EPA Method 4500-B) and Calcium, Magnesium, Potassium, Sodium (EPA Method 200.7) and Sulfate (EPA Method 375.4).

The results of the analysis are as follows:

Lab ID	Sample ID	Cl ⁻ (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Potassium (mg/kg)	Sodium (mg/kg)	Sulfate (mg/kg)
Analysis Date:	-	08/26/10	08/23/10	08/23/10	08/23/10	08/23/10	08/23/10
H020663-01	#1SMALL ROCKS	5600	471	34500	619	8940	150000
H020663-02	#2LARGE ROCKS	103	597	126	<5.00	95.7	1950
EPA Methods 4500 Cl-B; 200.7; 375.4							

On August 24, 2010, SESI was onsite to delineate the area by installing a total of nine (9) test trenches, utilizing a backhoe. Paul Evans representative of the Bureau of Land Management (BLM) was notified to witness sampling. Mr. Evans declined stating he had prior arrangements.

Due to the solid rock layer the test trenches were installed at depths ranging from 1-2 feet. Samples were taken from the surface up to 2'. The samples were transported under chain of custody to Cardinal Laboratories of Hobbs, New Mexico for Chloride (EPA Method 4500-B).

The results of the analysis are as follows:

Lab ID	Sample ID	Cl ⁻ (mg/kg)
Analysis Date:	-	08/26/10
H020713-01	TT. A SURFACE	1200
H020713-02	TT. A-1' BGL	192
H020713-03	TT. B-SURFACE	256
H020713-04	TT. C-SURFACE	304
H020713-05	TT. C-1' BGL	160
H020713-06	TT. D-SURFACE	656
H020713-07	TT. D-1' BGL	128
H020713-08	TT. E-SURFACE	1920
H020713-09	TT. E-1' BGL	512

H02071310	TT. E-2' BGL	224
H020713-11	TT. F-SURFACE	656
H020713-12	TT. F-1' BGL	64.0
H020713-13	TT.G-SURFACE	1650
H020713-14	TT. G-1' BGL	304
H020713-15	TT. G-2' BGL	128
H020713-16	TT. H-SURFACE	944
H020713-17	TT. H-1' BGL	304
H020713-18	TT. I-SURFACE	6300
H020713-19	TT. I-1'BGL	128
EPA Method 4500 Cl-B		

VII. Action Plan

The most recent delineation of the site indicates that the levels of chloride contamination in the area of concern have changed significantly since the first delineation. This fact can be explained by the amount of rainwater the excavation had encountered within the past six (6) weeks. The rainwater was able to solubilize the chlorides and deposit this solution over the entire excavation in lower concentrations than were present before. However, the most dramatic decrease was most likely caused by the removal of the rainwater while the chlorides were in solution. The chloride concentrations in each test trench were below the target concentration of 250 ppm at 1 foot with the exception of three trenches where the target was attained at 2 feet.

Based on the most recent delineation, SESI proposes the following:

1. The most highly contaminated material will be excavated and transported to Controlled Recovery Inc. (CRI), a New Mexico Oil Conservation Division (NMOCD) approved facility, for disposal and the entire excavation will then be backfilled with caliche obtained from the downsizing of the existing well location pad in the northwest corner. This material will be covered with an appropriate amount of topsoil and reseeded per Bureau of Land Management (BLM) guidelines.
2. The area on the well pad that was identified as having high chlorides in the first delineation will also be excavated at transported to CRI for disposal. The caliche from the downsizing of the pad will be used to replace the excavated material.

Based on the most recent delineation, Terry Gregston with BLM proposed the following:

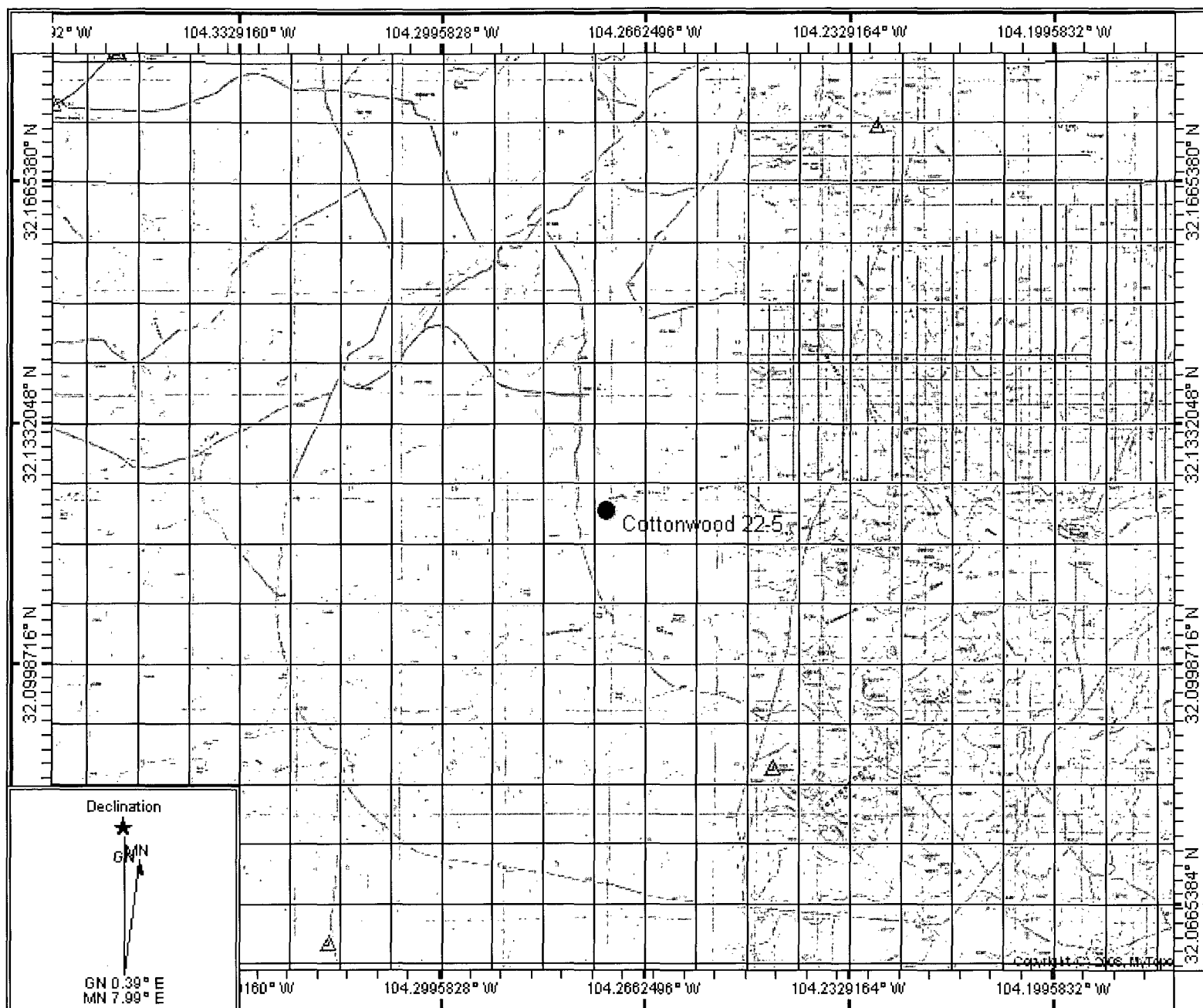
1. The location will be downsized to below the approved APD pad size stipulations to comply with interim reclamation requirements. The BLM would like to see the pad reduced to not only what was approved in the original APD conditions of approval, but downsized from those dimension to comply with interim reclamation requirements. The approved APDs authorized disturbance of 2.06 acres for both wells combined; the final pad size should be considerably less than this to achieve interim reclamation requirements.
2. Final sampling of the excavated areas and bottom sampling will be witnessed by a BLM authorized officer. If no one is available at the proposed sampling time, a mutually agreeable sampling time and date will be set to accommodate all parties. All backfill caliche from the pad will be tested to ensure that it is clean prior to

- backfilling by pulling grab samples from the proposed fill material in grid pattern. The spill area can be backfilled with caliche, but must also have at least 1 foot of topsoil similar to the surrounding terrain. The same is true of any interim reclamation areas.
3. Once the pad is downsized and all contaminated areas are addressed and backfilled, erosion control measures will be installed on the reclaimed areas to prevent erosion and to help establish vegetation.
 4. Terry Gregston, (575) 361-2635, will be contacted for a reclamation onsite 3 days prior to pulling the equipment off the location.
 5. The reclaimed areas will be ripped and seeded with a combination of BLM seed mixes #3 and #4. The BLM is open to the addition of additional seeds that may encourage vegetation establishment, such as utilizing *Oenothera* (primrose), *Verbena bracteata*, *Glandularia bipinnatifida* (Dakota mock vervain), and *Ratibida columnifera* (upright prairie coneflower) as possible additions to reclamation seed mixes in gypsum soils. *Ratibida* seed has been successfully used in mining reclamations in soils with a higher than normal chloride content. Dakota mock vervain is already often found in the Hay Hollow area coming in on disturbed soil sites through native seeding (a number of Cimarex sites have this coming in on disturbed areas).
 6. Three days prior to seeding the reclaimed areas, contact Terry Gregston, (575) 361-2635.
 7. Cimarex will monitor the reclamation after completion to ensure no erosion develops and that vegetation is successfully established on a sustainable basis.
 8. Upon completion of this proposal SESI will file the appropriate reports with the NMOCD and the BLM.

VIII. Figures and Appendices

Figure 1 – Vicinity Map
Figure 2 – Site Plan
Appendix A– Analytical Results
Appendix B – Site Photographs
Appendix C – C-141

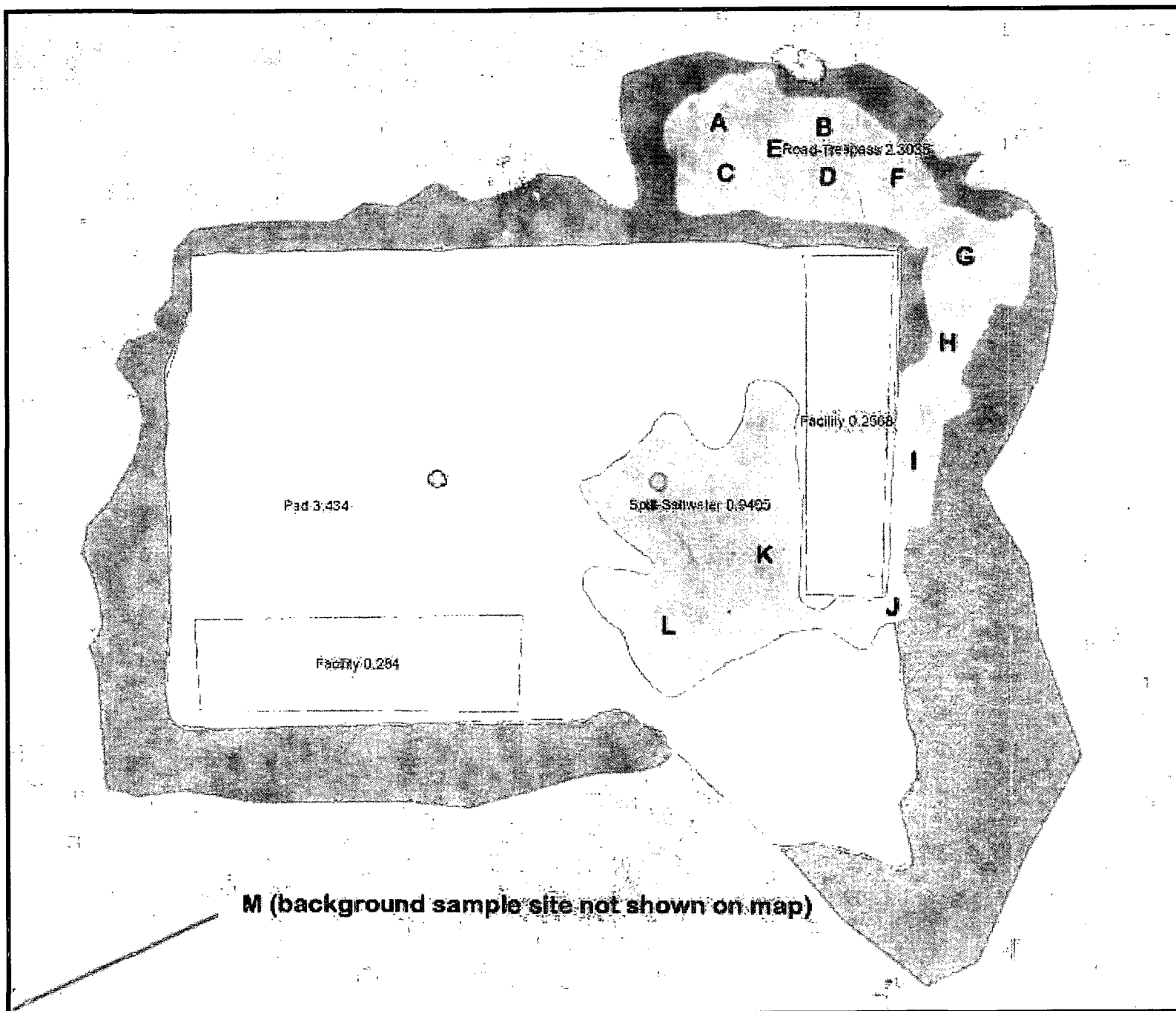
Figure 1 Vicinity Map

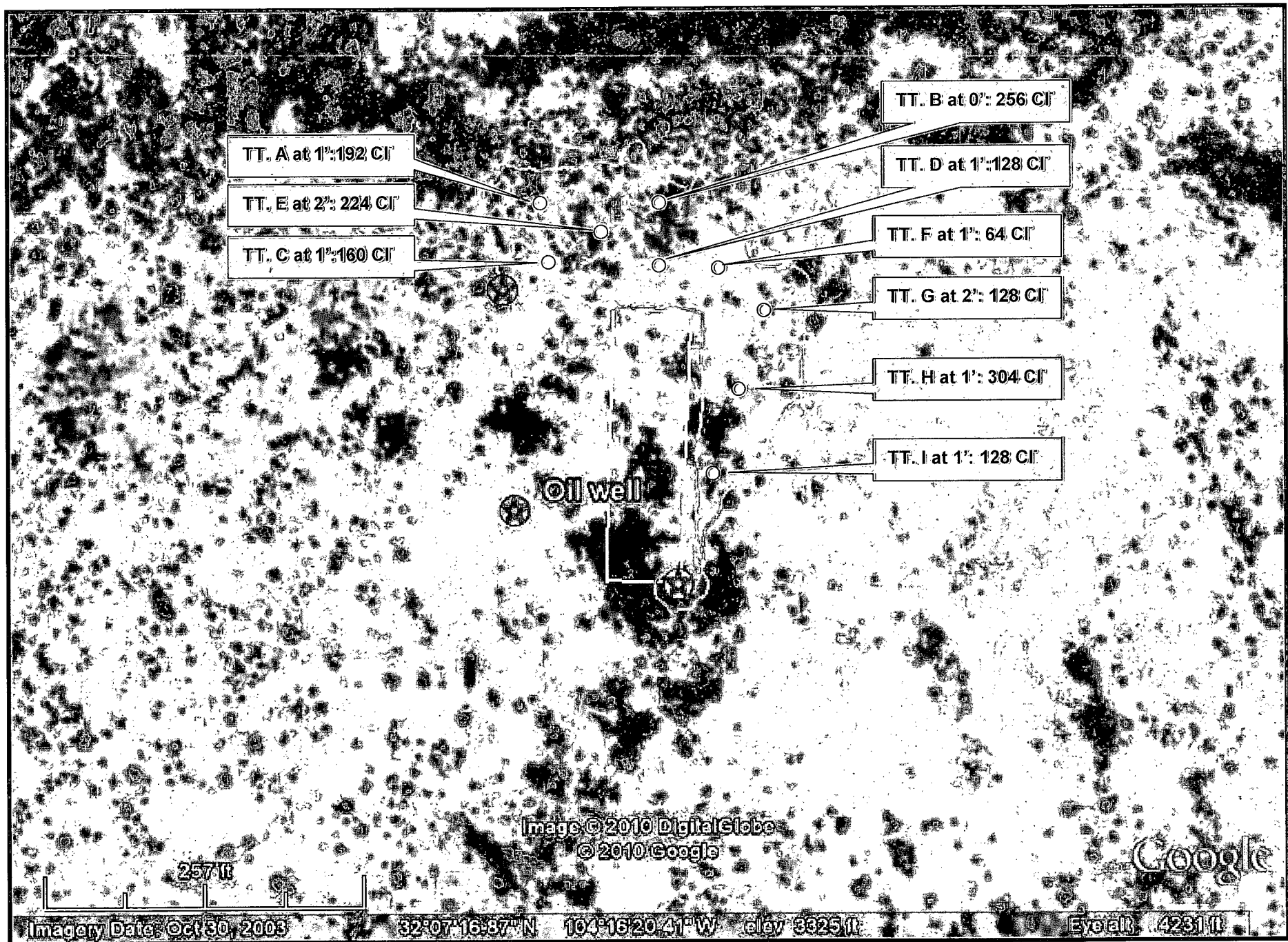


Map Name: COTTONWOOD HILLS,
Scale: 1 inch = 8,000 ft.

Map Center: 032.1211596° N 104.2721286° W
Horizontal Datum: WGS84

Figure 2 Site Plan





Appendix A Analytical Results



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

August 25, 2010

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: CIM-10-007

Enclosed are the results of analyses for samples received by the laboratory on 08/18/10 9:30.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received: 08/18/2010
Reported: 08/25/2010
Project Name: CIM-10-007
Project Number: COTTONWOOD 22-5
Project Location: CARLSBAD, NEW MEXICO

Sampling Date: 08/17/2010
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Jodi Henson

Sample ID: #1 SMALL ROCKS (H020663-01)

Calcium, 200.7		mg/kg		Analyzed By: JM					GAL	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Calcium	471	5.00	08/23/2010	ND	4.51	113	4.00	10.5		
Magnesium, 200.7		mg/kg		Analyzed By: JM					GAL	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Magnesium	34500	5.00	08/23/2010	ND	3.99	99.8	4.00	3.45		
Potassium, 200.7		mg/kg		Analyzed By: JM					GAL	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Potassium	619	5.00	08/23/2010	ND	10.4	104	10.0	12.4		
Sodium, 200.7		mg/kg		Analyzed By: JM					GAL	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sodium	8940	5.00	08/23/2010	ND	16.7	103	16.2	2.37		
Sulfate 375.4		mg/kg		Analyzed By: JM					GAL	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate	150000	10.0	08/23/2010	ND						

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received: 08/18/2010
Reported: 08/25/2010
Project Name: CIM-10-007
Project Number: COTTONWOOD 22-5
Project Location: CARLSBAD, NEW MEXICO

Sampling Date: 08/17/2010
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Jodi Henson

Sample ID: #2 LARGE ROCKS (H020663-02)

Calcium, 200.7		mg/kg		Analyzed By: JM					GAL	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Calcium	597	5.00	08/23/2010	ND	4.51	113	4.00	10.5		
Magnesium, 200.7		mg/kg		Analyzed By: JM					GAL	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Magnesium	126	5.00	08/23/2010	ND	3.99	99.8	4.00	3.45		
Potassium, 200.7		mg/kg		Analyzed By: JM					GAL	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Potassium	<5.00	5.00	08/23/2010	ND	10.4	104	10.0	12.4		
Sodium, 200.7		mg/kg		Analyzed By: JM					GAL	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sodium	95.7	5.00	08/23/2010	ND	16.7	103	16.2	2.37		
Sulfate 375.4		mg/kg		Analyzed By: JM					GAL	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate	1950	10.0	08/23/2010	ND						

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

GAL Analysis subcontracted to Green Analytical Laboratories, a subsidiary of Cardinal Laboratories.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



(575) 393-2326 FAX (575) 393-2476

Page 5 of 5

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#26



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received: 08/18/2010
Reported: 08/27/2010
Project Name: CIM-10-007
Project Number: COTTONWOOD 22-5
Project Location: CARLSBAD, NEW MEXICO

Sampling Date: 08/17/2010
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Jodi Henson

Sample ID: #1 SMALL ROCKS (H020663-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: JM				GAL		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5600	10.0	08/26/2010	ND	66.0	93.0	71.0			

Sample ID: #2 LARGE ROCKS (H020663-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: JM				GAL		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	103	10.0	08/26/2010	ND	66.0	93.0	71.0			

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*=Accredited Analyte

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

GAL	Analysis subcontracted to Green Analytical Laboratories, a subsidiary of Cardinal Laboratories.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

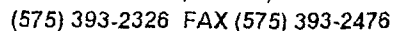
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Celey D. Keene, Lab Director/Quality Manager



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#26



August 27, 2010

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: CIM-10-007

Enclosed are the results of analyses for samples received by the laboratory on 08/24/10 15:35.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received: 08/24/2010
Reported: 08/27/2010
Project Name: CIM-10-007
Project Number: COTTONWOOD 22 #5
Project Location: CARLSBAD, NEW MEXICO

Sampling Date: 08/24/2010
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Caley D. Keene

Sample ID: TT. A - SURFACE (H020713-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12000	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. A - 1' BGL (H020713-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	08/26/2010	ND	432	108	400	0.00		

Sample ID: TT. B - SURFACE (H020713-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. C - SURFACE (H020713-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. C - 1' BGL (H020713-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	08/26/2010	ND	432	108	400	0.00		

Cardinal Laboratories

* = Accredited Analyte

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Caley D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received: 08/24/2010
Reported: 08/27/2010
Project Name: CIM-10-007
Project Number: COTTONWOOD 22 #5
Project Location: CARLSBAD, NEW MEXICO

Sampling Date: 08/24/2010
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: TT. D - SURFACE (H020713-06)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT D. - 1' BGL (H020713-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. E - SURFACE (H020713-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1920	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. E - 1' BGL (H020713-09)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. E - 2' BGL (H020713-10)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	08/26/2010	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
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Fax To: (575) 393-4388

Received: 08/24/2010
Reported: 08/27/2010
Project Name: CIM-10-007
Project Number: COTTONWOOD 22 #5
Project Location: CARLSBAD, NEW MEXICO

Sampling Date: 08/24/2010
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: TT. F - SURFACE (H020713-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. F - 1' BGL (H020713-12)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. G - SURFACE (H020713-13)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1650	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. G - 1' BGL (H020713-14)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. G - 2' BGL (H020713-15)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	08/26/2010	ND	432	108	400	0.00		

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received: 08/24/2010
Reported: 08/27/2010
Project Name: CIM-10-007
Project Number: COTTONWOOD 22 #5
Project Location: CARLSBAD, NEW MEXICO

Sampling Date: 08/24/2010
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: TT. H - SURFACE (H020713-16)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. H - 1' BGL (H020713-17)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	08/26/2010	ND	432	108	400	0.00		

Sample ID: TT. I - SURFACE (H020713-18)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6300	16.0	08/26/2010	ND	432	108	400	0.00	

Sample ID: TT. I - 1' BGL (H020713-19)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	08/26/2010	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

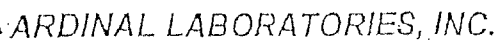
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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

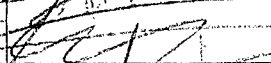

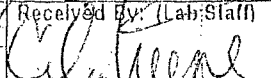
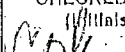
Page 1 of 2

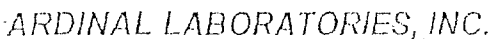
Company Name: SEST			Project Manager: Bob Allen			Address: 703 E. CLINTON, #103			City: HOBBES State: NM Zip: 88240			Phone #: (505) 397-0510			Fax #: (505) 393-4388			Project #: Cm-10-007 Project Owner: Cimarex			Project Name: Cottamwood 22#5			Project Location: Eddy County		
BILL TO			PO #:			Company: SAME			Attn:			Address:			City:			State:			Zip:					
Phone #:			Fax #:			Phone #:			Fax #:			Phone #:			Fax #:			Phone #:			Fax #:					

FOR LAB USE ONLY		LAB I.D.		Sample I.D.		(G)PAB OR (C)OAMP		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID:		ICE/COOL		OTHER:		DATE		TIME	
420713-		1		TT.A-Surface		✓		1						✓										✓		8/24/10		0832			
		2		TT.A-1' bgl		✓		1						✓										✓				0843			
		3		TT.B-Surface		✓		1						✓										✓				0901			
		4		TT.C-Surface		✓		1						✓										✓				0922			
		5		TT.C-1' bgl		✓		1						✓										✓				0936			
		6		TT.D-Surface		✓		1						✓										✓				0954			
		7		TT.D-1' bgl		✓		1						✓										✓				1004			
		8		TT.E-Surface		✓		1						✓										✓				1024			
		9		TT.E-1' bgl		✓		1						✓										✓				1034			
		10		TT.E-2' bgl		✓		1						✓										✓		8/24/10		1052			

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and at costs of collections, including attorney's fees.

Sampler Relinquished:		Date: 8/24/10		Received By: 		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Additional Fax #:	
Relinquished By: 		Time: 1:35		Received By: (Lab Staff) 		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Delivered By: (Circle One)		Date: 8/24/10		Time: 3:35		REMARKS:	
Sampler - UPS - Bus - Other: -1.5C		Sample Condition		CHECKED BY: 			
		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>		(Initials)			
		Yes <input type="checkbox"/> No <input type="checkbox"/>					



(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

Page 2 of 2

† Cardinal cannot accept verbal changes. Please fax written changes to 915-873-7020.

Appendix B Site Photographs



Test Trench A



Test Trench B



Test Trench C



Test Trench D



Test Trench E



Test Trench F



Test Trench G



Test Trench H



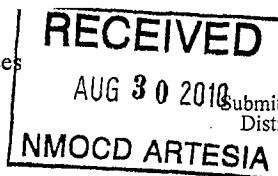
Test Trench I

Appendix C C-141

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

State of New Mexico
Energy Minerals and Natural Resources

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



Form C-141
Revised October 10, 2003
Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Cimarex Energy	Contact: Terry Ainsworth
Address: 600 N Marienfeld Suite 600, Midland TX 79701	Telephone No. (575) 390-1388
Facility Name: Cottonwood Draw 22 Federal Com # 5	Facility Type: Battery

Surface Owner	Mineral Owner	Lease No.
---------------	---------------	-----------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	22	25S	26E					Eddy

Latitude: 32.11892350 Longitude: -104.27579450

NATURE OF RELEASE

Type of Release: Unknown	Volume of Release Unknown	Volume Recovered Unknown
Source of Release Unknown	Date and Hour of Occurrence Unknown	Date and Hour of Discovery
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher, NMOC D	
By Whom? <u>Terry Ainsworth</u>	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The cause is unknown, SESI was contacted for assessment. The affected area was delineated and results are pending.

Describe Area Affected and Cleanup Action Taken.*

SESI was contacted for assessment. Area will be delineated and an appropriate work plan submitted upon results.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC D rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOC D marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOC D acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <u>Terry Ainsworth</u> <u>8/30/10</u>	OIL CONSERVATION DIVISION	
Printed Name: Terry Ainsworth	Approved by District Supervisor:	
Title:	Approval Date:	Expiration Date:
E-mail Address: tainsworth@cimarex.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date:	Phone: (575) 390-1388	

Attach Additional Sheets If Necessary