

District I  
1625 N French Dr., Hobbs, NM 88240  
District II  
7301 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  
Department  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-144  
June 24, 2008

*W*  
For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.  
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action:  Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  
 Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

Operator: CIMAREX ENERGY CO. OF COLORADO OGRID #: \_\_\_\_\_  
Address: PO BOX 1237 EDDY, NM 88231  
Facility or well name: FADEAWAY RIDGE 29 ST. COM #1  
API Number: 30-015-35030-00-00 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr K Section 29 Township 195 Range 28E County: Eddy  
Center of Proposed Design: Latitude 32°-37'-44.3"-N Longitude 104°-12'-01.2"-W NAD:  1927  1983  
Surface Owner:  Federal  State  Private  Tribal Trust or Indian Allotment

<input type="checkbox"/> <b>Pit:</b> Subsection F or G of 19.15.17.11 NMAC Temporary: <input checked="" type="checkbox"/> Drilling <input type="checkbox"/> Workover <input type="checkbox"/> Permanent <input type="checkbox"/> Emergency <input type="checkbox"/> Cavitation <input type="checkbox"/> Steel Pit <input checked="" type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: Thickness <u>20</u> mil <input type="checkbox"/> LLDPE <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> String-Reinforced Seams: <input type="checkbox"/> Welded <input checked="" type="checkbox"/> Factory <input type="checkbox"/> Other _____ <u>X2</u> Volume: <u>2500</u> bbl Dimensions: L <u>70</u> x W <u>20</u> x D <u>8</u>	<input type="checkbox"/> <b>Closed-loop System:</b> Subsection H of 19.15.17.11 NMAC <input type="checkbox"/> Drying Pad <input type="checkbox"/> Tanks <input type="checkbox"/> Haul-off Bins <input checked="" type="checkbox"/> Other <u>pit x 2</u> <input checked="" type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: Thickness <u>20</u> mil <input type="checkbox"/> LLDPE <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> PVC. <input type="checkbox"/> Other _____ Seams: <input type="checkbox"/> Welded <input checked="" type="checkbox"/> Factory <input type="checkbox"/> Other _____ Volume: _____ bbl <u>2000</u> yd <sup>3</sup> Dimensions: Length <u>70</u> x Width <u>20</u>
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<input type="checkbox"/> <b>Below-grade tank:</b> Subsection I of 19.15.17.11 NMAC Volume: _____ bbl <u>N/A</u> Type of fluid: _____ Tank Construction material: _____ <input type="checkbox"/> Secondary containment with leak detection <input type="checkbox"/> Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off <input type="checkbox"/> Visible sidewalls and liner <input type="checkbox"/> Visible sidewalls only <input type="checkbox"/> Other _____ Liner type: Thickness _____ mil <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____	<input type="checkbox"/> <b>Fencing:</b> Subsection D of 19.15.17.11 NMAC <input type="checkbox"/> Chain link, six feet in height, two strands of barbed wire at top <input checked="" type="checkbox"/> Four foot height, four strands of barbed wire evenly spaced between one and four feet <b>Netting:</b> Subsection E of 19.15.17.11 NMAC <input type="checkbox"/> Screen <input type="checkbox"/> Netting <input type="checkbox"/> Other _____ <input type="checkbox"/> Monthly inspections <b>Signs:</b> Subsection C of 19.15.17.11 NMAC <input checked="" type="checkbox"/> 12"x24", 2' lettering, providing Operator's name, site location, and emergency telephone numbers <input checked="" type="checkbox"/> Signed in compliance with 19.15.3.103 NMAC
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<input type="checkbox"/> <b>Alternative Method:</b> Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	<b>Administrative Approvals and Exceptions:</b> Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. <b>Please check a box if one or more of the following is requested, if not leave blank:</b> <input type="checkbox"/> Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval. <input type="checkbox"/> Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.
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Accepted for record  
NMOCD

ENTERED  
*Shane* Page 1 of 4  
0208229

Final Closure Date 5/22/08

**Siting Criteria (regarding permitting):** 19.15.17.10 NMAC

*Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.*

- Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.
  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Yes  No
- Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).
  - Topographic map; Visual inspection (certification) of the proposed site Yes  No
- Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.
 

*(Applies to temporary, emergency, or cavitation pits and below-grade tanks)*

  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Yes  No  
 NA
- Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.
 

*(Applies to permanent pits)*

  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Yes  No  
 NA
- Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.
  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site Yes  No
- Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.
  - Written confirmation or verification from the municipality; Written approval obtained from the municipality Yes  No
- Within 500 feet of a wetland.
  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Yes  No
- Within the area overlying a subsurface mine.
  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division Yes  No
- Within an unstable area.
  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map Yes  No
- Within a 100-year floodplain.
  - FEMA map Yes  No

**Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC

*Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

- Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
  - Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
  - Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
  - Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
  - Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
  - Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
- Previously Approved Design (attach copy of design) API Number: 30-015-35030 or Permit Number: \_\_\_\_\_

**Closed-loop Systems Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC

*Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

- Geologic and Hydrogeologic Data (required for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
  - Siting Criteria Compliance Demonstrations (required for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
  - Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
  - Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
  - Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
- NMAC
- Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_

**Permanent Pits Permit Application Checklist:** Subsection B of 19.15.17.9 NMAC

**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Climatological Factors Assessment
- Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- Quality Control/Quality Assurance Construction and Installation Plan
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan
- Emergency Response Plan
- Oil Field Waste Stream Characterization
- Monitoring and Inspection Plan
- Erosion Control Plan
- Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

**Proposed Closure:** 19.15.17.13 NMAC

Type:  Drilling  Workover  Emergency  Cavitation  Permanent Pit  Below-grade Tank  Closed-loop System  Alternative

Proposed Closure Method:  Waste Excavation and Removal **TO CRI**  
 Waste Removal (Closed-loop systems only)  
 On-site Closure Method (Only for temporary pits and closed-loop systems)  
 In-place Burial  On-site Trench Burial  
 Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

**Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC

**Instructions:** Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

- |   |   |
|---|---|
| Ground water is less than 50 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is between 50 and 100 feet below the bottom of the buried waste<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).<br>- Topographic map; Visual inspection (certification) of the proposed site  | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.<br>- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.<br>- Written confirmation or verification from the municipality; Written approval obtained from the municipality   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 500 feet of a wetland.<br>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within the area overlying a subsurface mine.<br>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within an unstable area.<br>- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within a 100-year floodplain.<br>- FEMA map   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |

**Waste Excavation and Removal Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

**Waste Removal Closure For Closed-loop Systems That Utilize Haul-off Bins Only:** (19.15.17.13.D NMAC) *Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings.*

Disposal Facility Name: CRI

Disposal Facility Permit Number: \_\_\_\_\_

**On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- Construction and Design of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

**Operator Application Certification:**

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): DORSEY ROGERS Title: Drilling Supt.

Signature: [Signature] Date: 6/30/2008

e-mail address: dorsey.rogers@Coal.com Telephone: 575 200 6105

**OCD Approval:**  Permit Application (including closure plan)  Closure Plan (only)

OCD Representative Signature: [Signature] Approval Date: 7/29/08

Title: District II Supervisor OCD Permit Number: 0208229

**Closure Report (required within 60 days of closure completion):** Subsection K of 19.15.17.13 NMAC

Closure Completion Date: 8/22/08

**Closure Method:**

- Waste Excavation and Removal  On-Site Closure Method  Alternative Closure Method
- If different from approved plan, please explain.

**Closure Report Attachment Checklist:** *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- Proof of Closure Notice
- Proof of Deed Notice (if applicable)
- Plot Plan
- Confirmation Sampling Analytical Results
- Waste Material Sampling Analytical Results
- Disposal Facility Name and Permit Number
- Soil Backfilling and Cover Installation
- Re-vegetation Application Rates and Seeding Technique
- Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD:  1927  1983

**Operator Closure Certification:**

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Dorsey Rogers Title: Drilling Supt.

Signature: [Signature] Date: 8/26/2008

e-mail address: dorsey.rogers@Coal.com Telephone: 200 6105

Accepted for record

NMOCD



AUG 27 2008  
OCD-ARTESIA

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

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

# *Final Closure Report*

*Fade Away Ridge 29 St. Com #1 Reserve Drilling Pit, API: 30-015-35030  
Sec. 29 19S 28E – Eddy County, New Mexico  
(OCD Permit #0208229)*

*Presented to:*

## *New Mexico Oil Conservation Division*

*1220 South St. Francis Drive  
Santa Fe, New Mexico 87505*

*Prepared by:*

## *Phoenix Environmental, LLC.*

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



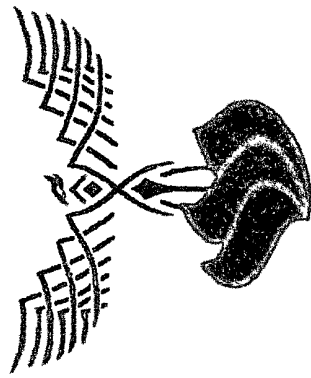
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**IMPORTANT NOTICE:**

Phoenix Environmental, LLC., with offices at 2113 French Drive, Hobbs, New Mexico 88241 (the Company), has prepared this project report for remediation of Fade Away Ridge 29 St. Com #1, 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 88022, and (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*





# PHOENIX ENVIRONMENTAL LLC

P.O. Box 1856

2113 French Dr.

Hobbs, NM 88241-1856

Office 505-391-9685

Fax 505-391-9687

June 26, 2008

Cimarex Energy Co.  
207 S. Mesa  
Carlsbad, New Mexico 88220

Attn: Mr. Dorsey Rogers  
Drilling Superintendent

**RE: Work Plan for the LOV # 2-8-117 on the Fadeaway Ridge 29 St. Com #1  
Located in UL-K, Sec 29, T19S and R28E of Eddy County, New Mexico API #  
30-015-35030**

Dear Mr. Rogers:

Phoenix Environmental, LLC (Phoenix) would like to take this time to thank you and Cimarex Energy Co., for the opportunity to provide our professional services. Please find attached our work plan for the above listed site.

If you have any questions and/or need more data in regards to projects please call at any time. My cell phone is 575-631-8314.

Sincerely,

Allen Hodge, REM  
VP Operations  
Phoenix Environmental LLC





## Summary/Overview

The Fadeaway Ridge St. Com #1 drilling pit should be completed and remediated in accordance with the standards of the NMOCD. It is our understanding that any potential contamination from the site was a result of activities associated with the drilling and production of oil and gas.

The potential contaminants of concern are mid to high-level concentrations of drilling mud and cuttings that were left in the pits once drilling operations were completed.

The lands primary use is domestic pasture for ranching and the production of oil and gas.

The ground water depth data available for this area showed the depth to ground water to be in the 125' range BGS.

Pursuant to the standards of the NMOCD, the clean up level for this site will be at <2,500ppm of TPH, <50ppm for BTEX and Chlorides less than <1,000ppm.

The following scope of work was based on data from our site visit and the requirements of the NMOCD for site clean up following the new pit rule 19.15.17 NMAC that started on 6-16-08.

## Scope of Work for Off-Site Disposal

**NOTE:** Phoenix, for the purpose of this work plan, will estimate that there is approximately 2,000cyds of impacted soils at the site that needs to be addressed for site closure.

1. Phoenix will mobilize to the site located north of Carlsbad, NM equipment and personnel necessary to start and complete the site remediation as required, getting the site back into compliance with the requirements of subsection G of 19.15.17.13 NMAC.
2. At the site a staging area will be set up for site control and safety.



3. The impacted soils will be excavated, stabilized and loaded into trucks for off-site disposal.
4. Impacted soils at the site will then be transported to a NMOCD approved disposal facility for disposal (CRI).
5. Phoenix will field screen the site during the excavation, and, once the TPH BTEX and CL has dropped below clean-up requirements, final samples will be taken and sent to a third party lab for analysis to meet the requirements of subsection D of 19.15.17.13 NMAC.
6. Once all of the remediation criteria have been met for site closure and compliance, the site will be backfilled with clean material from the site and contoured with a crown to prevent the ponding of water to meet the requirements of subsection H of 19.15.17.13 NMAC.
7. The site will be reseeded once backfilling operations have been completed to meet the requirements of subsection I of 19.15.17.13 NMAC
8. Once all of the closure criteria have been met, a final closure report will be prepared by Phoenix. This report will include a summary of remediation operations, findings on-site and lab analysis, site maps and project photos to meet the requirements of subsection K of 19.15.17.13 NMAC.

If you have any questions and/or need more data in regards to this project please call 505-631-8314 at any time.

Sincerely,



Allen Hodge, REM  
VP Operations  
Phoenix Environmental LLC



7007 2680 0001 6451 2810



NEW MEXICO ENERGY, MINERALS and  
NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor  
Joanna Prukop  
Cabinet Secretary

Mark E. Fesmire, P.E.  
Director  
Oil Conservation Division

**\*Response Required – Deadline Enclosed\***

*Letter to the Operator*  
*Oil Conservation Division*

17-Jun-08

CIMAREX ENERGY CO. OF COLORADO  
P O BOX 1237  
EUNICE NM 88231

LOV NO. 2-8-117

LETTER OF VIOLATION - Inspection

Dear Operator:

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

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

**INSPECTION DETAIL SECTION**

FADEAWAY RIDGE 29 STATE COM No.001		K-29-19S-28E	30-015-35030-00-00			
Inspection Date	Type Inspection	Inspector	Violation?	*Significant Non-Compliance?	Corrective Action Due By:	Inspection No.
06/16/2008	Routine/Periodic	Richard Inge	Yes	No	7/7/2008	iREI0816849672
Comments on Inspection: Drilling pits still open. Liner is down in both pits. Solids still in both pits. Pictures taken.						

Violation of OCD rule 19.15.17.13. Please submit OCD form C-144 by Completion Action Due by date with the pit to be closed within 1 month of the closure approval.

GPS - 32°-37'-44.3-N - 104°-12'-01.2-W ELEV. 3382  
GWD 125' BGS

COPY FROM WELL FILE

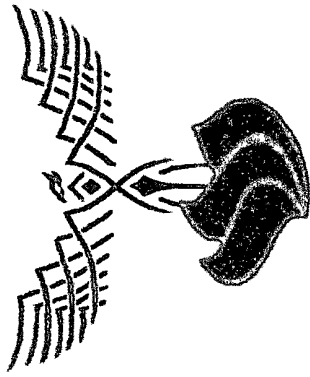
In the event that a satisfactory response is not received to this letter of direction by the "Corrective Action Due By:" date shown above, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner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

Sincerely,

*RICHARD INGS*

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.



# *SECTION II*



## **Project Overview**

*Phoenix Environmental, LLC. (Phoenix) was contracted for the closure of a reserve-drilling pit on the Fade Away Ridge 29 St #1, belonging to Cimarex Energy Co... The Fade Away Ridge 29 St #1 is located in Section 29 T19S R28E. The GPS Reading is 32°37'44.3"N & 104°12'01.2"W, with an elevation of 3392 feet above sea level. The land, in and around the site, is primarily used as domestic pasture for ranching and the production of oil and gas. The pit site is located on the south side of the location.*

*The potential contaminates of concern were mid- to high-level concentrations of produced water that was left after well work over was completed.*

*The ground water depth data available from the State of New Mexico Engineers' office showed the vertical depth to the top of water to be about 50 feet below surface.*

*Pursuant to the NMOCD guidelines for clean up of unlined surface impoundments, the clean up level for this site will be at <100 ppm for TPH (Total Petroleum Hydrocarbons) and <50 ppm for BTEX (Benzene, Toluene, Ethylbenzene, and Xylene). The NMOCD has also asked for CL (Chlorides) be returned back as close to background levels as possible or <250 ppm.*

## **Findings and Conclusion**

*It appeared that in excess of 2,020 cubic yards of impacted soil were impacted in the pit area with the dimensions of 60x25x12. Impacted soils at the site were transported to a NMOCD approved disposal facility for disposal. (CRI Permit #R9166)*

*The bottom of the excavation (approximately 15 feet) was tested for TPH, BTEX & Chlorides to make certain that the target limits had been met prior to backfilling and compaction for closure. The site cleaned up well with vertical depth of impact, listed above at 15 feet and not impacting groundwater. All of the final lab analyses were below the NMOCD guidelines for unlined surface impoundments (refer to attached laboratory reports for actual levels.)*

*The site was backfilled and compacted with clean backfill and contoured with a crown back to grade to prevent ponding on the area. The site was reseeded and should vegetate very well with upcoming rains.*



## **Chronology of Operations**

1. *July 1, 2008 – Phoenix mobilized on-site. The first order on the agenda was a tailgate safety meeting to review any potential safety concerns of the site and to cover the clean-up operations. (Please note that a daily safety meeting is the first order of the day before any work begins on site). New Mexico One Call was notified of the intent to finish the pit closure. A dozier was mobilized on-site. The crew began to mix and blend reserve drilling pit contents to dry out the mud for future hauling to a NMOCD approved disposal facility. Location was dressed and prep for trucks to start hauling off contents of reserve drilling mud.*
2. *July 2, 2008 – Crew started to dig out impacted soil from reserve drilling pit and loaded into trucks. A total of 240 cubic yards was taken to disposal on this day.*
3. *July 3, 2008 – Impacted soil was dug out of reserve drilling pit and loaded into trucks. Trucks hauled 220 cubic yards of impacted soil to disposal.*
4. *July 7, 2008 – Impacted soil was dug out of reserve drilling pit and loaded into trucks. A total of 300 cubic yards of impacted soil was taken to disposal.*
5. *July 8, 2008 - Impacted soil was dug out of reserve drilling pit and loaded into trucks. A total of 220 cubic yards of impacted soil was taken to disposal.*
6. *July 9, 2008 - Impacted soil was dug out of reserve drilling pit and loaded into trucks. A total of 240 cubic yards of impacted soil was taken to disposal.*
7. *July 10, 2008 – Crew was rained out on this day. A vacuum truck was called out to pull of excess rain water from the reserve drilling pit.*
8. *July 14, 2008 - Impacted soil was dug out of reserve drilling pit and loaded into trucks. A total of 240 cubic yards of impacted soil was taken to disposal.*
9. *July 15, 2008 - Impacted soil was dug out of reserve drilling pit and loaded into trucks. A total of 240 cubic yards of impacted soil was taken to disposal.*
10. *July 16, 2008 - Impacted soil was dug out of reserve drilling pit and loaded into trucks. A total of 200 cubic yards of impacted soil was taken to disposal.*
11. *July 7, 2008 – Crew finished digging out impacted soil, which was loaded into trucks... A total of 120 cubic yards was taken to disposal on this date. The bottom of the reserve drilling pit was cleaned. Final samples were taken and sent to a*



## Final Closure Report

Company: Cimarex Energy Company of Colorado  
Location: Fade Away Ridge 29 St #1

*third party laboratory for analysis of Chlorides for final verification of the limits met. (Please refer to attached reports, pages 8 through 12 of this report).*

- 12. July 18, 2008 - Crew began to backfill the reserve drilling pit.*
- 13. July 21, 2008 – Crew continued to backfill the reserve drilling pit.*
- 14. July 22, 2008 – Crew push in material from location to backfill to complete the backfilling of the reserve drilling pit. Final contouring and compactions was implemented to return the site back to grade. Contouring was completed with a crown to prevent rainwater ponding.*
- 15. July 29, 2008 – The site was reseeded with native grasses and with the available moisture should vegetate very quickly.*





**Final Closure Report**

Company: Cimarex Energy Company of Colorado  
Location: Fade Away Ridge 29 St #1

Limitations

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

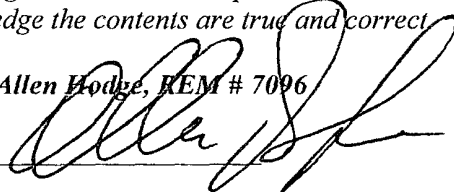
*This report has been prepared for Cimarex Energy Company of Colorado our client. The information contained in this report including all exhibits and attachments, may not be used by any other party without the express consent from Phoenix Environmental LLC and/or the client.*

Certification

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

Name: *Allen Hodge, REM # 7096*

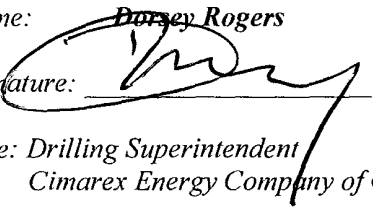
Signature: \_\_\_\_\_



Title: *VP Operations  
Phoenix Environmental LLC*

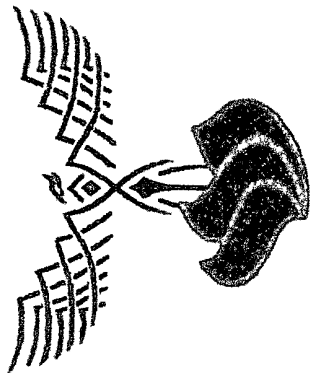
Name: *Darsey Rogers*

Signature: \_\_\_\_\_



Title: *Drilling Superintendent  
Cimarex Energy Company of Colorado*





# SECTION III



## SUMMARY SOIL ANALYSIS REPORT

**Client:** Cimarex Energy Co.  
**Supervisor:** Allen Hodge  
**Sample Matrix:** Soil

**Facility:** # Fade Away Ridge 29 St Com. 1  
**Order No.:** Dorsey Rogers  
**Samples Received:** Intact on site

### **Initial Project Screening**

Sample	Date	Depth	Chlorides	TPH	BTEX	Location	Test Method
#1							
#2							
#3							
#4							
#5							
#6							

Samples reported in parts per million (ppm) and depth is in feet (') and inches (")

### **Interim Project Screening**

Sample	Date	Depth	Chlorides	PID TPH	PID BTEX	Location	Test Method
#1	6/25/08	15'	<50			Southeast	EPA 325.3
#2	6/25/08	15"	<50			Southwest	EPA 325.3
#3	6/25/08	14'	60			Northeast	EPA 325.3
#4	6/25/08	14'	<50			Northwest	EPA 325.3
#5							
#6							
#7							
#8							
#9							
#10							
#11							
#12							
#13							
#14							
#15							
#16							

Samples reported in parts per million (ppm) and depth is in feet (') and inches (")

### **Final (Third Party Laboratory) Project Screening Verification**

Sample	Date	Depth	Chlorides	TPH	BTEX	Location	Test Method
#1	7/28/08	15'	<32.5			Southeast	See Report
#2	7/28/08	15"	<32.5			Southwest	See Report
#3	7/28/08	14'	38.1			Northeast	See Report
#4	7/28/08	14'	<32.5			Northwest	See Report
#5	7/28/08	0-6"	<32.5			Background	
#6							
#7							

Samples reported in parts per million (ppm) and depth is in feet (') and inches (")



**Phoenix Environmental, LLC.**  
**P.O. Box 1856 – 2113 French Drive**  
**Hobbs, New Mexico 88241**  
**505.391.9685 – FAX: 505.391.9687**

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## **SOIL ANALYSIS REPORT**

**Date:** 6/25/08  
**Client:** Cimarex Energy Co.  
**Supervisor:** Allen Hodge  
**Sample Matrix:** Soil

**Facility:** Fadeaway Ridge 29 St. #1  
**Test Method:** EPA 325.3  
**Order No.:** Dorsey Rogers  
**Sample Received:** Intact on site

<b><u>Sample</u></b>	<b><u>Cl (ppm)</u></b>	<b><u>Depth (feet)</u></b>	<b><u>Location</u></b>
#1	<50	15'	Southeast
#2	<50	15'	Southwest
#3	60	14'	Northeast
#4	<50	14'	Northwest

**COMMENTS:** Sample does not meet limits for NMOCD guidelines for unlined pit closure.

## Summary Report

Dorsey Rogers  
 Cimarex  
 207 S Mesa  
 Carlsbad, NM, 88220

Report Date: July 31, 2008

Work Order: 8072833



Project Location: UL-K, Sec. 29-T195-R28E  
 Project Name: Fadeaway Ridge 29 St. Com. #1  
 Project Number: API 30-015-35030

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
168585	Southeast @ 15'	soil	2008-07-22	14:00	2008-07-28
168586	Southwest @ 15'	soil	2008-07-22	14:20	2008-07-28
168587	Northeast @ 14'	soil	2008-07-22	14:45	2008-07-28
168588	Northwest @ 14'	soil	2008-07-22	15:00	2008-07-28
168589	Background @ 0-6"	soil	2008-07-22	15:30	2008-07-28

Sample - Field Code	BTEX				MTBE	TPH DRO	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	MTBE (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
168585 - Southeast @ 15'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
168586 - Southwest @ 15'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
168587 - Northeast @ 14'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
168588 - Northwest @ 14'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
168589 - Background @ 0-6"	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00

**Sample: 168585 - Southeast @ 15'**

Param	Flag	Result	Units	RL
Chloride		<32.5	mg/Kg	3.25

**Sample: 168586 - Southwest @ 15'**

Param	Flag	Result	Units	RL
Chloride		<32.5	mg/Kg	3.25

Sample: 168587 - Northeast @ 14'

Param	Flag	Result	Units	RL
Chloride		38.1	mg/Kg	3.25

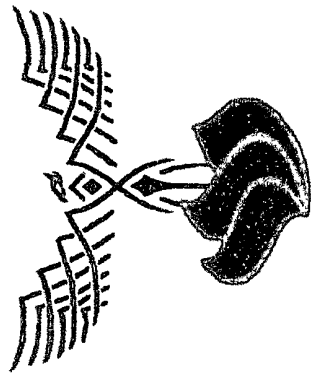
Sample: 168588 - Northwest @ 14'

Param	Flag	Result	Units	RL
Chloride		<32.5	mg/Kg	3.25

Sample: 168589 - Background @ 0-6"

Param	Flag	Result	Units	RL
Chloride		<32.5	mg/Kg	3.25



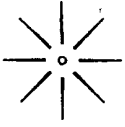


# SECTION IV



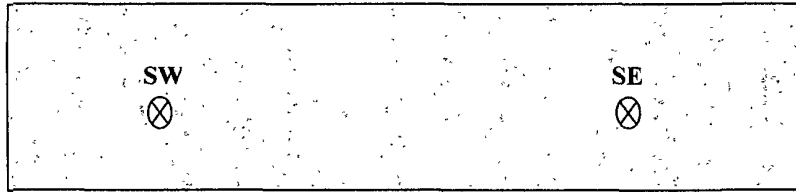
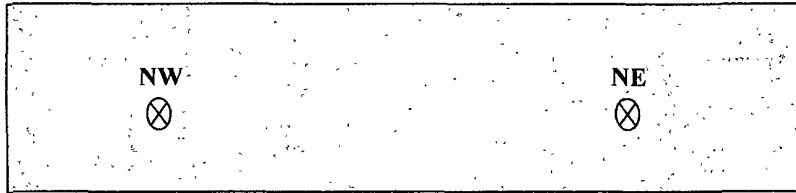


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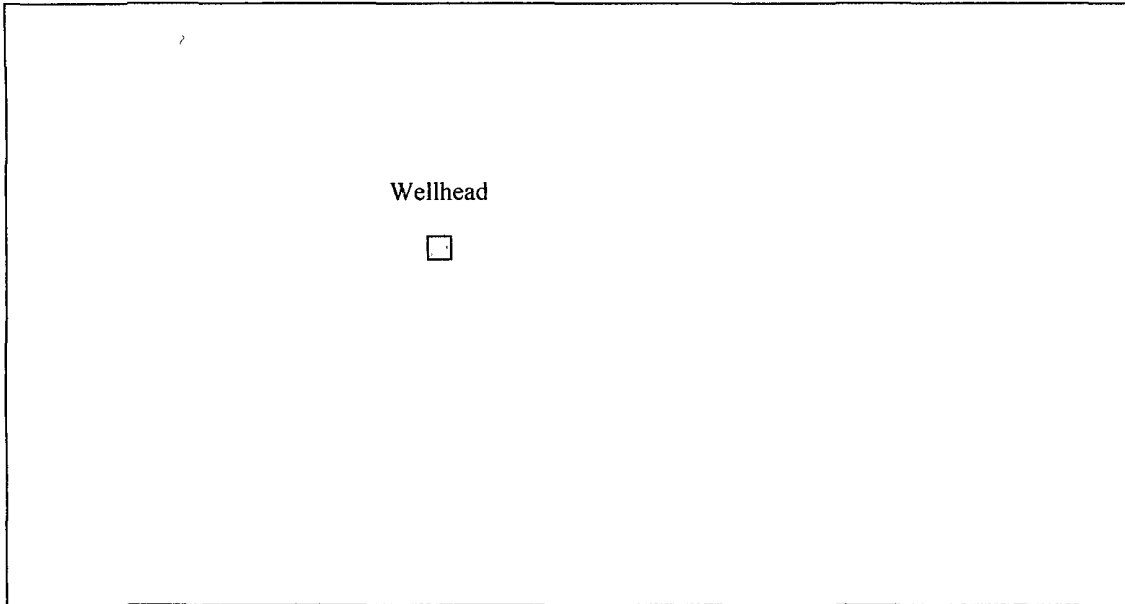
Cimarex Energy  
Fadeaway Ridge 29 St. Com #1  
UL-K-SEC 29-T19S- R28E  
Eddy Co. NM  
API# 30-015-35030

1. SE - N32°37'44.5"-W104°12'01.4"
2. SW - N32°37'44.4"-W104°12'01.9"
3. NE - N32°37'45.0"-W104°12'01.5"
4. NW - N32°37'45.0"-W104°12'01.9"
5. BG - N32°37'43.9"-W104°12'03.6"

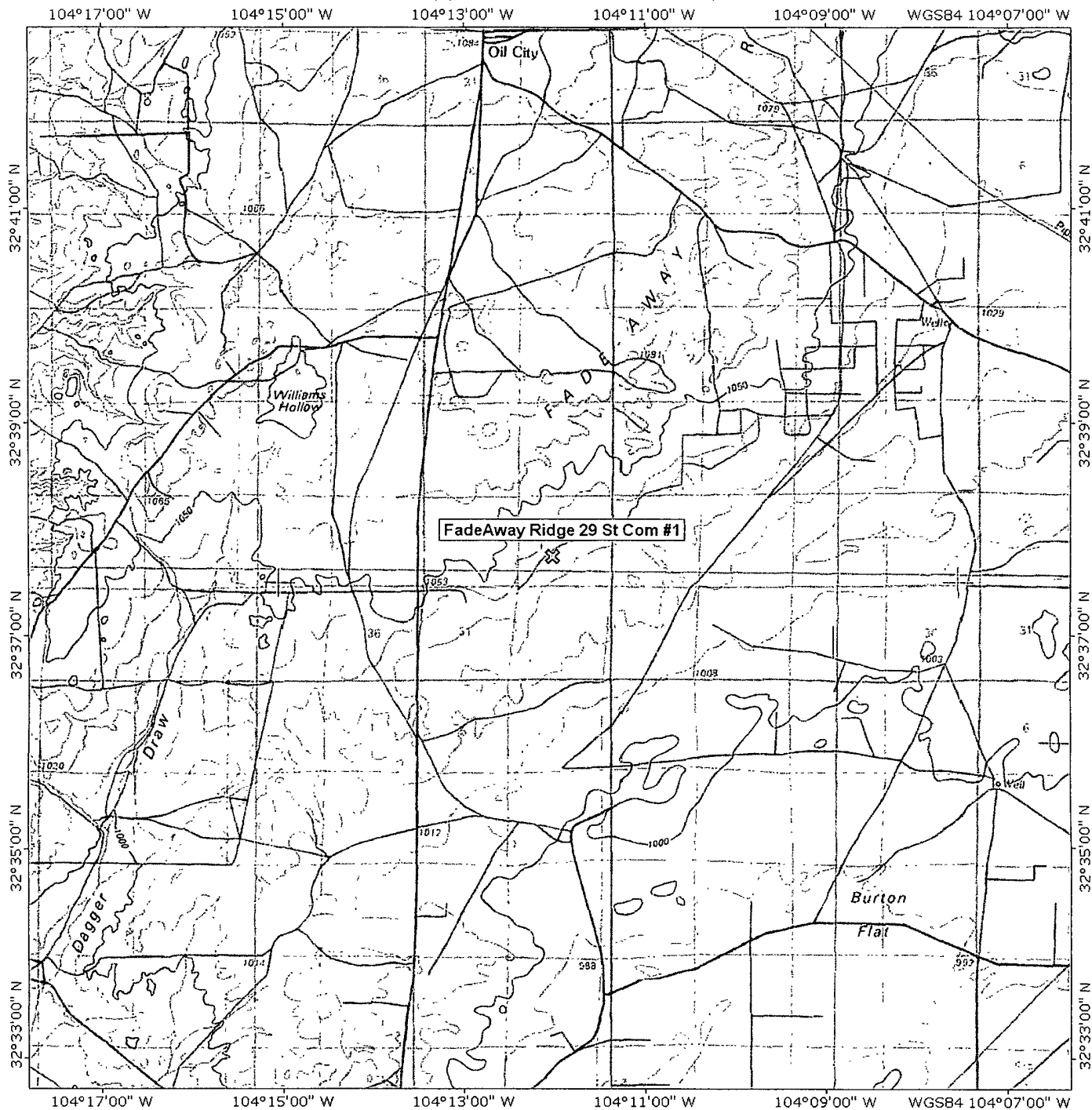


BG

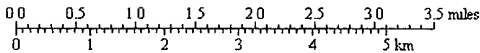
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TN MN  
8 1/2°



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