DATE IN 10.27.10	SUSPENSE	ENGINEER WJ	LOGGED IN 10.27.10	TYPE SWD	APP NO. pTGW 1030056255

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

Cimarex
Pipeline Peep Unit #1

ADMINISTRATIVE APPLICATION CHECKLIST 30-025-24470

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

RECEIVED OCD
2010 OCT 27 A 11:12

7200 PSI
6010 - 6900', O.H.

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☒ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☒ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Zeno Farris	Zeno Farris	Mgr Operations Admin	10/22/10
Print or Type Name	Signature	Title	Date

zfarris@cimarex.com
e-mail Address

Cimarex Energy Co. of Colorado
600 N. Marienfeld St. ♦ Suite 600 ♦ Midland, TX 79701 ♦ (432) 620-1938 ♦ Fax (432) 620-1940
A subsidiary of Cimarex Energy Co. • A NYSE Listed Company • "XEC"

Date: October 26, 2010

New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Attn: Mr. Will Jones

Re: Pipeline Deep Unit No. 1
API No. 30-025-24470
SWD Administrative Application

Dear Mr. Jones:

Enclosed is an original C-108 (Application for Authorization to Inject) for the above mentioned well.

The well is currently a shut-in Morrow well. Cimarex proposes to abandon the lower zones, cut casing and convert to a Delaware open hole SWD well from 6010'-6900'.

Proof of notice to affected parties and Affidavit of Publication are attached.

If you have any questions of need additional information please call me at 432-620-1938.

Sincerely,

Zeno Farris

Zeno Farris
Manager, Operations Administration
Permian Basin Region
Phone: 432-620-1938
Fax: 432-620-1940

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance ____X____Disposal _____Storage
Application qualifies for administrative approval? _____Yes _____No

II. OPERATOR: Cimarex Energy Co. of Colorado

ADDRESS: 600 N. Marienfeld St Suite 600; Midland, TX 79702

CONTACT PARTY: Zeno Farris PHONE: 432-620-1938

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? _____Yes ____X____No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Zeno Farris TITLE: Manager Operations Administration

SIGNATURE: Zeno Farris DATE: 10-21-10

E-MAIL ADDRESS: zfarris@cimarex.com

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Cimarex Energy Co. of Colorado

WELL NAME & NUMBER: Pipeline Deep Unit Federal No. 1

WELL LOCATION:	1980 FSL & 1650 FEL	J	17	19S	34E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 15" Casing Size: 11 ¾" 42# H-40 @ 447'

Cemented with: 400 sx. ***or*** _____ ft^3

Top of Cement: Surface Method Determined: Circ 50 sx

Intermediate Casing

Hole Size: 11" Casing Size: 8⅝" 32# S80/J55 @ 5352'

Cemented with: 500 sx. ***or*** _____ ft^3

Top of Cement: Surface Method Determined: Circ

Production Casing - **PROPOSED**

Hole Size: 7 7/8" Casing Size: 5 ½"" 17#/20# N80/S95 @ 6010'

Cemented with: 600 sx. ***or*** _____ ft^3

Top of Cement: Surface Method Determined: Circulate

Total Depth: 6900' TVD

Injection Interval

6010' feet To 6900'

(Perforated or Open Hole; indicate which) Open Hole

INJECTION WELL DATA SHEET

Tubing Size: 2 7/8", 9.3#, L-80 Lining Material: Nylon (IPC 101)

Type of Packer: 5 1/2" AS-1X Pkr

Packer Setting Depth: +/- 5900'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? _____Yes ___X___No

   If no, for what purpose was the well originally drilled? Oil & Gas Production

2. Name of the Injection Formation: Delaware (Upper Cherry Canyon/Upper Brushy Canyon)

3. Name of Field or Pool (if applicable): N/A

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.
   See attached current & proposed WBD. Well was originally drilled to 13551' and produced from Morrow perfs from 13292'-13319' w perfs at 13456'-13460' behind CIBP at 13335' w/20' cement cap.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
   Morrow (12920'), Atoka (12449'), Strawn (12180') Wolfcamp (10730'), Bone Spring (7952') – underlying

C-108 Attachment

Section VI – There are four wells within the area of review, all of which penetrated the injection interval. See attached WBD.

1. Mescalero Unit Federal No. 2, 1980' FSL & 1980' FEL Sec 17-19S-34S drilled to a depth of 10235'. PA 6-13-64.
2. Mescalero Unit No. 4, 330' FSL & 330' FEL Sec. 17-19S-34E drilled to a depth of 10200'. PA 5-19-65.
3. Lea ED State NCT A No. 3, 1980' FSL & 660' FWL Sec 16-19S-34E drilled to a depth of 10200'. PA 12-11-78.
4. The Amtex Energy Inc. Lea ED State NCT A No. 1, 760' FSL & 660' FEL Sec 16-19S-34E drilled to a depth of 13521' and currently producing from Quail Ridge Bone Spring. TOC for 7" production casing at 5720' by 1962 temperature survey.

Section VII – Data on Proposed Operation

1. Proposed Average and Maximum Daily Rate and Volume of Fluids to be Injected
   a. Average Daily Rate: 2000 BWPD
   b. Maximum Daily Rate: 3000 BWPD

2. Open or Closed System:
   a. Injection System is a closed System

3. Proposed Average & Maximum* Injection Pressure
   a. Average Injection Pressure: 900 psi
   b. Maximum Injection Pressure: 1200 psi
      i. Until a fracture gradient is determined, maximum injection pressure will be based on a 0.2 psi/ft gradient

4. Sources or Appropriate Analysis of Injection Fluid
   a. The source of the injection water will be produced water from Cimarex operated Morrow, and Bone Spring wells in the area (see attached representative water analysis).

5. Analysis of disposal zone formation water
   a. The nearest Delaware production is to the south in the Lea Delaware; Northeast above 5900' and to the north in the Dios Mano Delaware; South below the injection interval below 7500'. The Pipeline well had no shows in the Cherry Canyon or Brushy canyon intervals. See attached water analysis of a Delaware well to the south which should be analogous to the formation water in the Pipeline Deep Unit 1 SWD and is compatible with the Bone Spring and Morrow formation water to be injected.

Section VIII – Geologic Data on Injection Zone

1. The injection interval 6010' – 6900' is in the Delaware formation of the Devonian System with dolomite geology. The estimated top of the Delaware formation is at 5580' while the bottom of the formation is at 7952'. Gross thickness is 2372'.

2. The Office of the State Engineer indicates the average depth to usable quality ground water in the area is 200' in the Ogallala aquifer.

Section IX – Proposed stimulation program:

1. Pipeline Deep Unit # 1 SWD
   a. Acidize with 1500 gals 7 1/2% type acid

Section X – Logs have previously been filed on the Pipeline Deep Unit Federal # 1

Section XI – Fresh water wells within one mile of proposed disposal well

1. The Office State Engineer records indicate there no fresh water wells within 1 mile of the proposed disposal well.

Section XII – Statement of Hydrologic connection between disposal zone and underground sources of drinking water.

1. Based on available geologic and engineering data Cimarex finds no evidence of open faults or any other hydrologic connection between the disposal zone and underground sources of drinking water.

Section XIII and XIV – Proof of Notice

1. Surface owners – Application mailed by Certified Mail to the following:

   Bureau of Land Management
   620 E Greene St
   Carlsbad, NM 88220

2. Leasehold Operators within ½ mile of proposed injection well – application mailed by Certified Mail to the following:

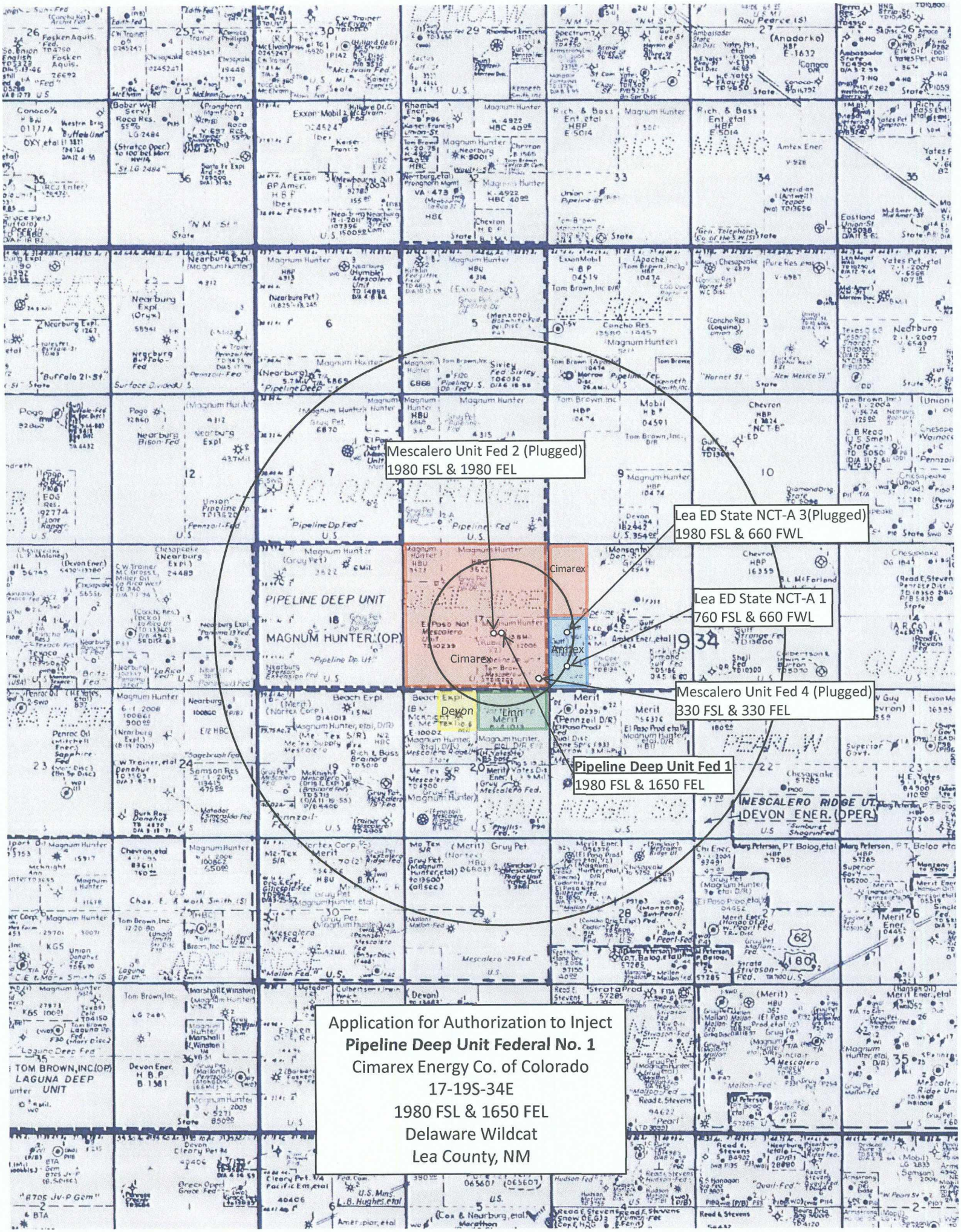
   Cimarex Energy Co. of Colorado
   600 N Marienfeld St Suite 600
   Midland TX 79701

   Amtex Energy Inc.
   P.O. Box 3418
   Midland, TX 79702

   Linn Operating Inc.
   600 Travis Suite 5100
   Houston TX 77002

   Devon Energy Production Company, LP
   20 N Broadway
   Oklahoma City, OK 73102

3. Publication and proof of notice - Attached

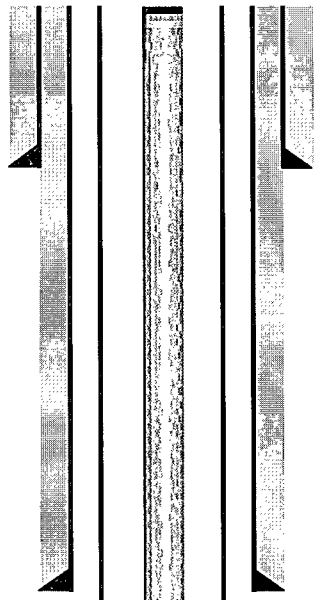

Mescalero Unit Fed 2 (Plugged)
1980 FSL & 1980 FEL
Lea ED State NCT-A 3(Plugged)
1980 FSL & 660 FWL
Lea ED State NCT-A 1
760 FSL & 660 FWL
Mescalero Unit Fed 4 (Plugged)
330 FSL & 330 FEL
Pipeline Deep Unit Fed 1
1980 FSL & 1650 FEL
Application for Authorization to Inject
Pipeline Deep Unit Federal No. 1
Cimarex Energy Co. of Colorado
17-19S-34E
1980 FSL & 1650 FEL
Delaware Wildcat
Lea County, NM

Cimarex Energy Co. of Colorado
Pipeline Deep Unit Federal #1
1980' FSL & 1650' FEL
Sec 17, T19S R34E
Lea County, NM
API 30-025-24470

CURRENT WELLBORE

KB: 3776' (19')
GL: 3757'

11 3/4" 42# H40 @ 447' (15" hole)
Cmt'd w/400 sx, circ 50 sx



From 8/13/07 Report
Tubing hung off in WH w/2 7/8" BO2 adapter, screwed on WH, seal assembly 2.35" ID

8 5/8" 32# S80/J55 @ 5352' (11" hole)
Cmt'd w/500 sx, TOC @ surface

Tubing Detail (from 8/13/07 report)
KB Correction 19

Quantity	Description	Length	Setting Depth
	2 7/8" sub (8', 10')	18.00	37.00
279	2 7/8" L80 8rd EUE	5041.00	5078.00
	X-over, 8rd to DSS HT	1.00	5079.00
248	2 7/8" DSS HT 6.5#	8026.00	13105.00
	X-over & 2.31" 'F' nipple	0.00	13105.00
1	2 7/8" L80 8rd EUE	32.19	13137.19
	5 1/2" MD E 22 anchor seal assembly	0.85	13138.04
	FB1 Retainer production pkr	3.10	13141.14
	4" millout ext	5.91	13147.05
	4" X-over to 2 7/8" EUE	0.68	13147.73
	2 7/8" tbg, jet cut on btm	20.00	13167.73
	Total Tubing String Length	13148.73	

TOC 10080' (TS)

Junk in hole: 8/3/07
10' tail 2 7/8" cut off w/swab bar &
~ 50' swab line

Morrow Perfs:
13292'-13298' (24 holes)
13302'-13319' (68 holes)

CIBP 13355' w/20' cmt cap
Lwr Morrow
13456'-13460' (10 holes) shot in acid

PBTD: 13335'
TD: 13551'

5 1/2" 17#/20# N80/S95 @ 13542' (7 7/8" hole)
Cmt'd w/875 sx, TOC 10080' (TS)

L. Luig 11/5/09

CIMAREX

Cimarex Energy Co. of Colorado
Pipeline Deep Unit Federal #1
1980' FSL & 1650' FEL
Sec 17, T19S R34E
Lea County, NM
API 30-025-24470

PROPOSED WELLBORE

KB: 3776' (19')
GL: 3757'

11 3/4" 42# H40 @ 447' (15" hole)
Cmt'd w/400 sx, circ 50 sx

All cement plugs below 7500' are Class "H"
All cement plugs will be tagged

2-7/8" J55 IPC injection tubing
EOT @ 5900'

8 5/8" 32# S80/J55 @ 5352' (11" hole)
Cmt'd w/500 sx, TOC @ surface

5-1/2" Injection packer @ 5900'

5 1/2" 17#/20# N80/S95 @ 6010' (7 7/8" hole)
Cmt'd to surface

Formation packer shoe - 6010'

Delaware open-hole disposal zone 6010'-6900'

Cmt plug 6900' - 7100' (200')
over Base of Injection Zone

Top of Bone Spring @ 7952'

Cmt plug 7800' - 8000' (200')

5-1/2" CSG cut at 10,000'
TOC 10080' (TS)

Cmt stub plug from 9950' - 10780' (830')

Top of Wolfcamp @ 10730'

Top of Morrow @ 12920'

CIBP 13,200' w/ cmt to 12870' (330')
Morrow Perfs:
13292' - 98' (24 holes)
13302' - 19' (68 holes)

Junk in hole: 8/3/07
10' tail 2 7/8" cut off w/ swab bar &
~ 50' swab line

CIBP 13355' w/ 20' cmt cap

Lwr Morrow Perfs:
13456' - 60' (10 holes) shot in acid

PBTD: 13335'
TD: 13551'

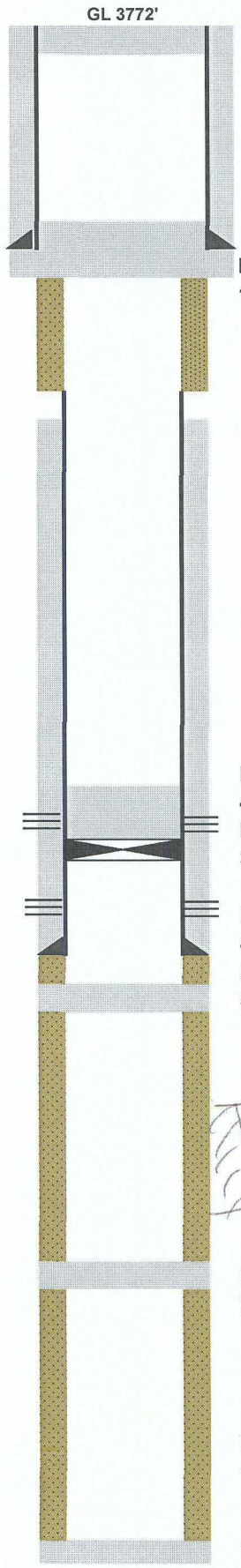
5 1/2" 17#/20# N80/S95 @ 13542' (7 7/8" hole)
Cmt'd w/875 sx, TOC 10080' (TS)

Printed 10/5/2010

Morrison 10/2010

Carper Drilling Company, Inc.
Mescalero Unit Federal
No. 2
30-025-02388
1980' FSL & 1980' FEL, Sec 17, T19S R34E
Lea County, NM

Orig drill by El Paso Natural Gas Co 1962
Plugged



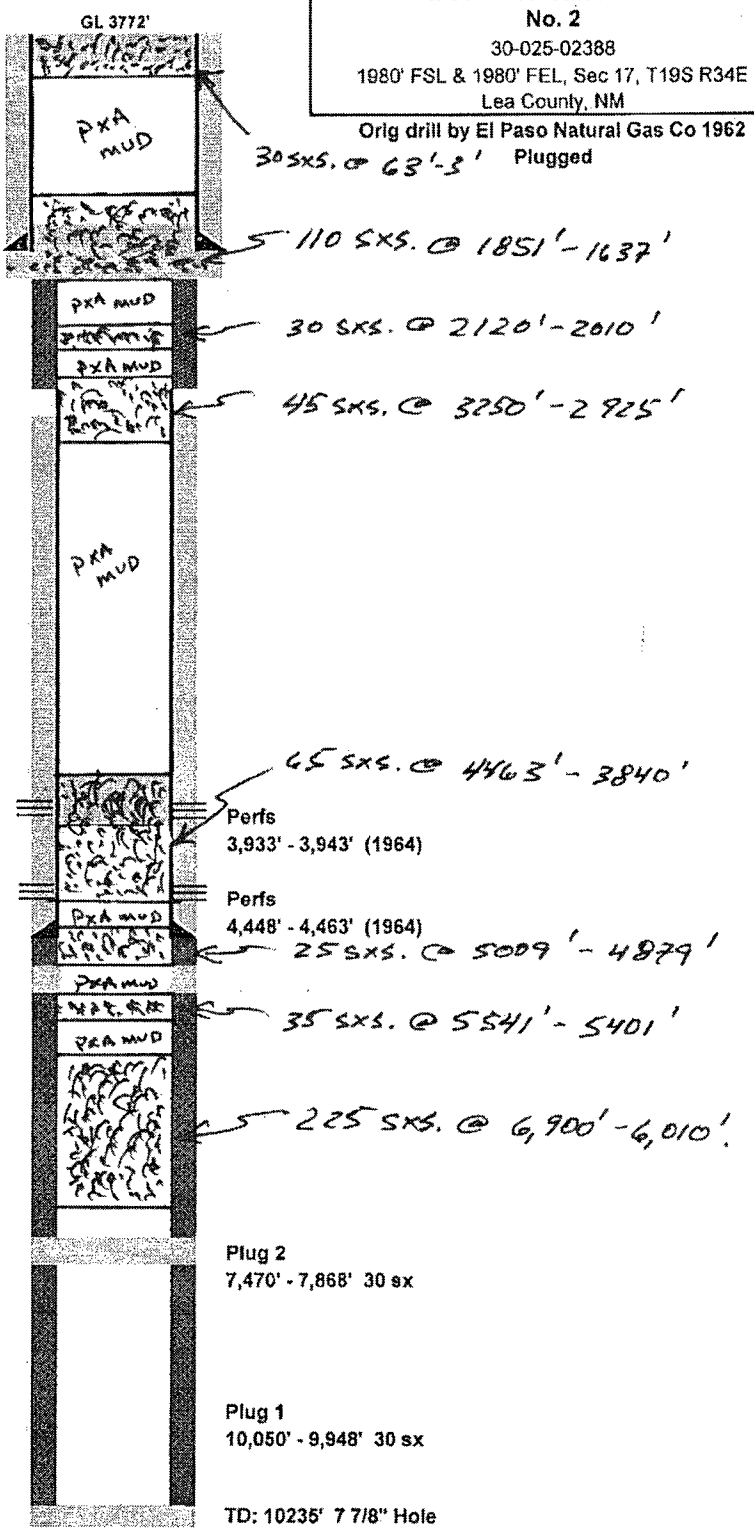
See Note EXHIBIT

For Cimarex Energy Co
R. Morrison 8/2010

Printed 10/4/2010

Carper Drilling Company, Inc.
Mescalero Unit Federal
No. 2
30-025-02388
1980' FSL & 1980' FEL, Sec 17, T19S R34E
Lea County, NM

Orig drill by El Paso Natural Gas Co 1962



For Cimarex Energy Co
R. Morrison 8/2010

Printed 11/29/2010

DHE 12/02/10.

Form 3160-5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NM 02392

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
MESCALERO UNIT

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other PLUGGED AND ABANDONED WELL

8. Well Name and No.
MESCALERO UNIT #002 FEDERAL

2. Name of Operator
CIMAREX ENERGY COMPANY CO. OF COLORADO ATTN: ZENO FARRIS

9. API Well No.
30-025-02388

3a. Address
600 N. MARIENFELD, STE. 600, MIDLAND, TEXAS 79701

3b. Phone No. *(include area code)*
(432)571-7800

10. Field and Pool, or Exploratory Area
WILDCAT

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
1980' FSL & 1980' FEL
SEC. 17, T-19-S, R-34-E

11. County or Parish, State
LEA COUNTY NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☒ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

PROPOSED PROCEDURE FOR THE RE-PLUGGING OF THE MESCALERO UNIT FEDERAL #002:

1) DRILL OUT EXISTING CEMENT PLUGS X 4-1/2" CIBP @ 4,200' X TAG EXISTING CMT. PLUG @ +/-7,470'.
2) MIX X PUMP A 225 SX. CMT. PLUG @ 6,900'-6,010'(O/H);WOC X TAG TOP OF CMT. PLUG; CIRC. WELL W/ PXA MUD.
3) MIX X PUMP A 35 SX. CMT. PLUG @ 5,541'-5,401'(T/DLWR.).
4) MIX X PUMP A 25 SX. CMT. PLUG @ 5,009'-4,879'(4-1/2" CSG. SHOE).
5) MIX X PUMP A 65 SX. CMT. PLUG @ 4,463'-3,840'(OLD PERFS.); WOC X TAG TOP OF CMT. PLUG.
6) MIX X PUMP A 45 SX. CMT. PLUG @ 3,250'-2,925'(B/SALT X 4-1/2" CSG. CUT); WOC X TAG TOP OF CMT. PLUG.
7) MIX X PUMP A 30 SX. CMT. PLUG @ 2,120'-2,010'(T/SALT); WOC X TAG TOP OF CMT. PLUG.
8) MIX X PUMP A 110 SX. CMT. PLUG @ 1,851'-1,637'(10-3/4" CSG. SHOE X T/ANHY.); WOC X TAG CMT. PLUG.
9) MIX X CIRC. TO SURF. A 30 SX. CMT. PLUG @ 63'-3'.
10) WELD STEEL PLATE ONTO 10-3/4" CASING X INSTALL DRY HOLE MARKER.

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
DAVID A. EYLER

Title
AGENT

UNAPPROVED DAE

Date 12/06/10

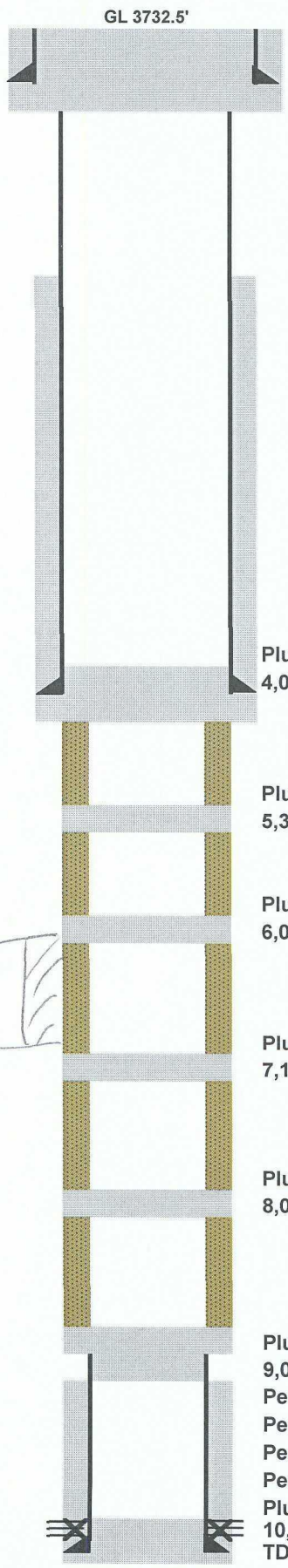
THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Tom Brown Drilling Company, Inc.
Mescalero Unit
No. 4
30-025-21195
330' FSL & 330' FEL, Sec 17, T19S R34E
Lea County, NM

Plugged



Plug 9 - 10 sx
13 3/8" 40# @ 400' cmt w/ 235 sx circ
Plug 8 - 450' - 350' 50 sx

8 5/8" cut @ 362'

TOC @ 2000' est

8 5/8" 24 & 32# @ 4000'
Cmt w/ 400 sx;

Plug 7
4,060 - 3,960' 50 sx

Plug 6
5,305 - 5,205' 35 sx

Plug 5
6,085 - 5,985' 35 sx

Plug 4
7,100 - 7,000' 35 sx

Plug 3
8,010' - 7,890' 35 sx

4 1/2" cut @ 8989'

Plug 2
9,039' - 8,940' 25 sx
Perfs: 10,091 - 104' sqz w/ 100 sx (1965)
Perfs: 10,099 - 102' sqz w/ 125 sx (1965)
Perfs: 10,108 - 109' sqz w/ 125 sx (1965)
Perfs: 10,092.5 - 093.5' frac (1965)

4 1/2" 11.6# @ 10200'
Cmt w/ 200 sx;

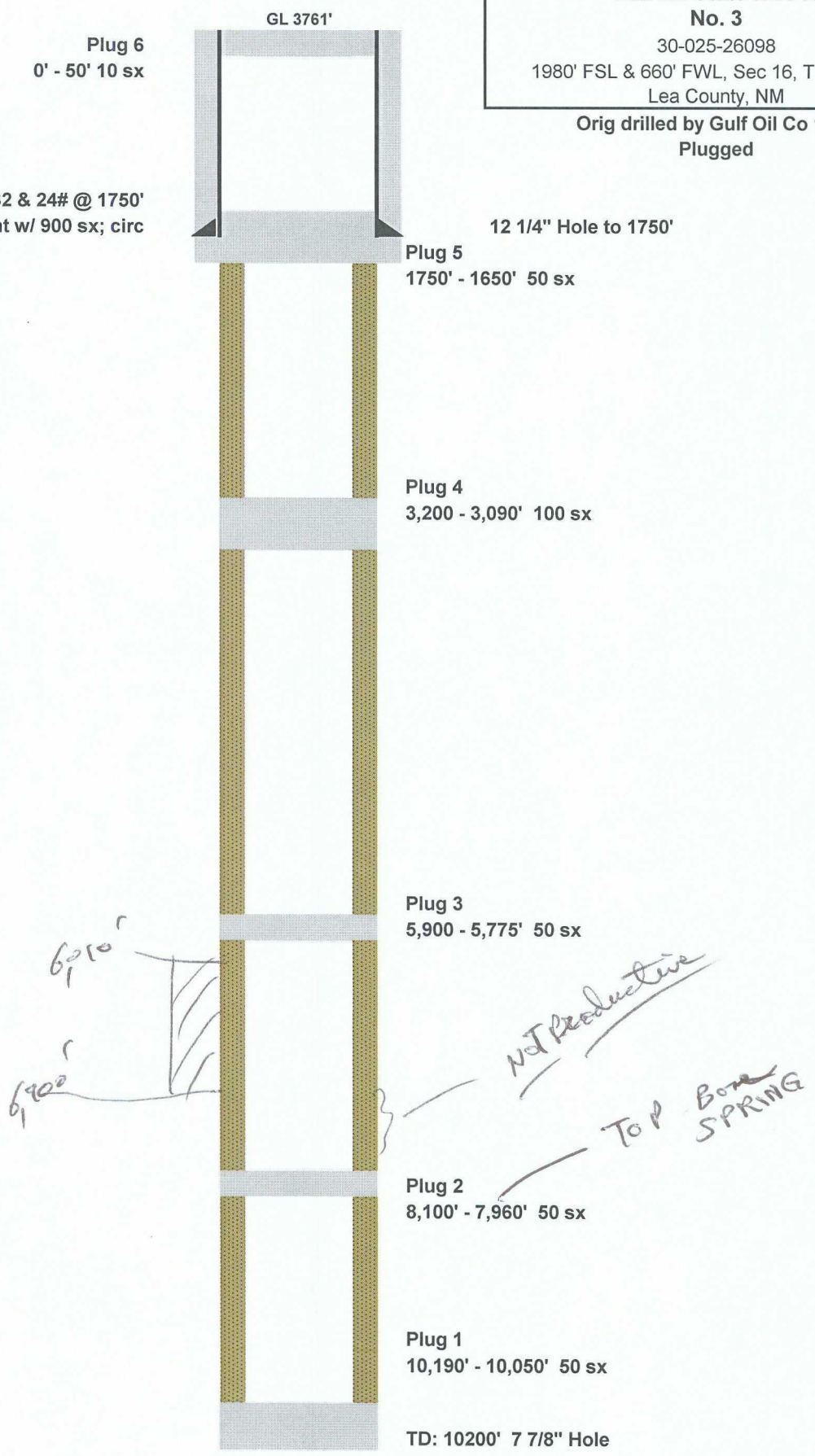
Plug 1
10,100' - 9,950' 25 sx
TD: 10200' 7 7/8" Hole

For Cimarex Energy Co
R. Morrison 8/2010

Printed 10/4/2010

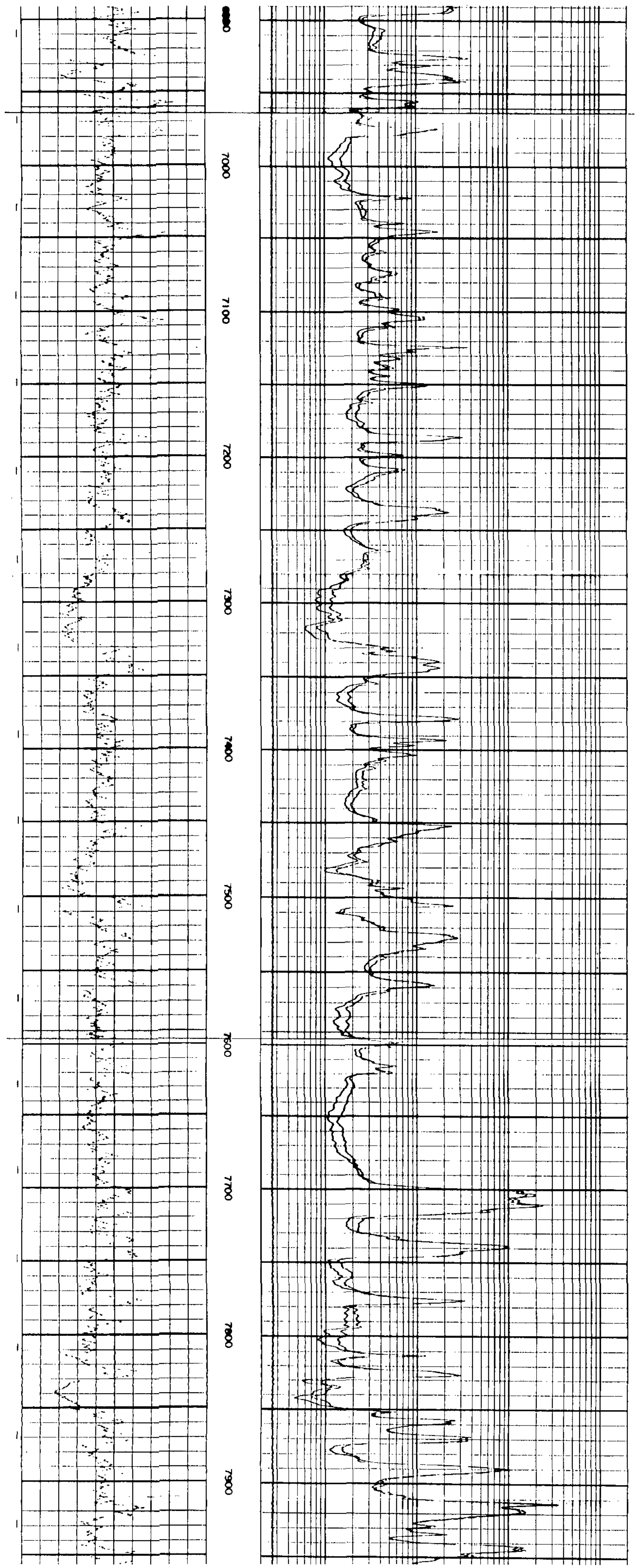
Amtex Energy, Inc.
Lea ED State NCT A
No. 3
30-025-26098
1980' FSL & 660' FWL, Sec 16, T19S R34E
Lea County, NM

Orig drilled by Gulf Oil Co 1978
Plugged



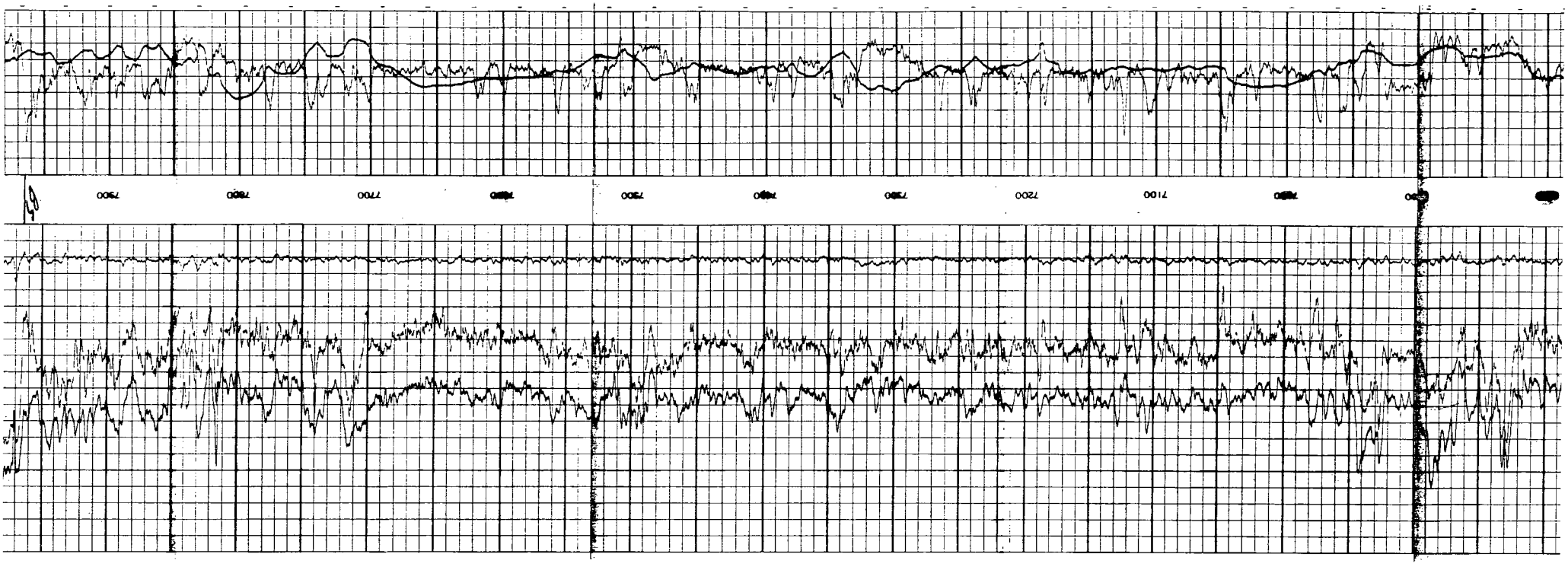
For Cimarex Energy Co
R. Morrison 8/2010

Printed 10/4/2010



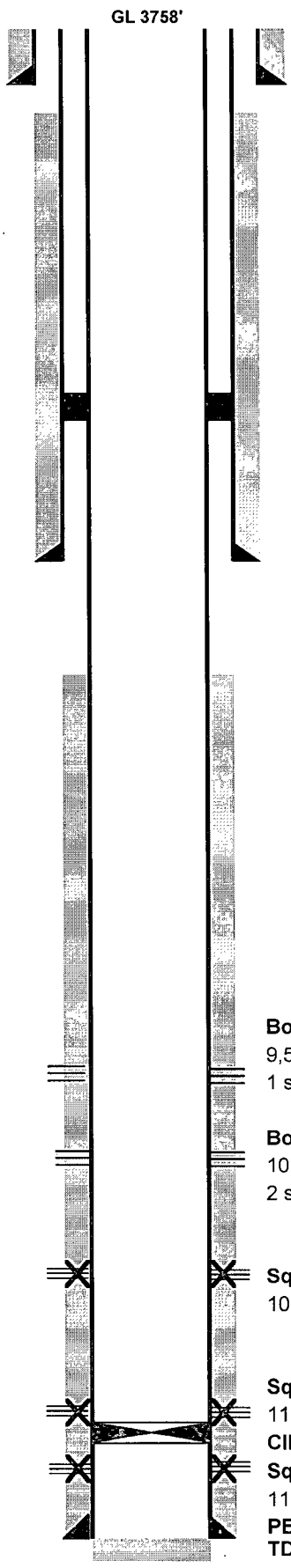
NOR Well

30-025-26098



Amtex Energy Inc
Lea ED State NCT A
No. 1
30-025-02387
760' FSL & 660' FWL, Sec 16, T19S R34E
Lea County, NM

Orig drilled by Gulf Oil Co 1962
Active



For Cimarex Energy Co
R. Morrison 8/2010

Printed 10/4/2010

HALLIBURTON

CENTRAL OPERATIONS LABORATORY
WATER ANALYSIS REPORT
HOBBS, NEW MEXICO

COMPANY Gruy Petroleum

REPORT W05-119
DATE April 1, 2005
DISTRICT Hobbs

SUBMITTED BY Morrow

WELL Pipeline Deep #18 Fed #4 DEPTH _____ FORMATION _____
COUNTY _____ FIELD _____ SOURCE _____
TANK #
SAMPLE

Sample Temp.	70 °F	°F	°F	°F
RESISTIVITY	0.24			
SPECIFIC GR.	1.040			
pH	6.69			
CALCIUM	1,150 mpl	mpl	mpl	mpl
MAGNESIUM	750 mpl	mpl	mpl	mpl
CHLORIDE	22,016 mpl	mpl	mpl	mpl
SULFATES	Light mpl	mpl	mpl	mpl
BICARBONATES	793 mpl	mpl	mpl	mpl
SOLUBLE IRON	25 mpl	mpl	mpl	mpl
KCL	N			
Sodium	mpl	mpl	mpl	mpl
TDS	mpl	mpl	mpl	mpl
OIL GRAVITY	@ °F	@ °F	@ °F	@ °F

REMARKS

Resitivity measured in: Ohm/m2/m

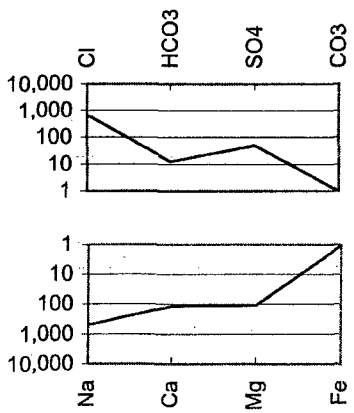
ANALYST: _____

CAPITAN CHEMICAL
WATER ANALYSIS REPORT

	Cimarex	Date Sampled	: 06/21/06
Lease Name	: Laguna	Capitan Rep.	: S Seed
Well Number	: Fed #8 MORROW	Company Rep.	: C Johnson
Location	: Lea County, N.M.		

	ANALYSIS					
1.	pH	6.8				
2.	Specific Gravity @ 60/60 F.	1.026				
3.	CaCO3 Saturation Index @ 80 F.	+0.272	'Calcium Carbonate Scale Possible'			
	@ 140 F.	+1.212	'Calcium Carbonate Scale Possible'			
	Dissolved Gasses					
4.	Hydrogen Sulfide	0	PPM			
5.	Carbon Dioxide	191	PPM			
6.	Dissolved Oxygen	Not Determined				
	Cations	mg/L	/ Eq. Wt.	=	MEQ/L	
7.	Calcium (Ca++)	2,400	/ 20.1	=	119.40	
8.	Magnesium (Mg++)	1,337	/ 12.2	=	109.55	
9.	Sodium (Na+) Calculated	11,727	/ 23.0	=	509.89	
10.	Barium (Ba++)	Not Determined	/ 68.7	=	0.00	
	Anions					
11.	Hydroxyl (OH-)	0	/ 17.0	=	0.00	
12.	Carbonate (CO3=)	0	/ 30.0	=	0.00	
13.	Bicarbonate (HCO3-)	756	/ 61.1	=	12.38	
14.	Sulfate (SO4=)	2,460	/ 48.8	=	50.40	
15.	Chloride (Cl-)	24,000	/ 35.5	=	676.06	
	Other					
16.	Soluble Iron (Fe)	20	/ 18.2	=	1.10	
17.	Total Dissolved Solids	42,680				
18.	Total Hardness As CaCO3	11,500				
	Calcium Sulfate Solubility @ 90 F.	3,598				
20.	Resistivity (Measured)	0.160	Ohm/Meters	@ 92	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	12.38	=	1,003
CaSO4	68.07	X	50.40	=	3,431
CaCl2	55.50	X	56.62	=	3,143
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	109.55	=	5,217
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	509.89	=	29,808

Analytical Laboratory Report for:

Cimarex

BJ Chemical Services

Account Representative:
Lavell Hanson

Production Water Analysis

Listed below please find water analysis report from: Mallon 34, #9 (BONE SPRING)

Lab Test No:	2008115458	Sample Date:	04/14/2008
Specific Gravity:	1.159		
TDS:	243395		
pH:	5.10		
Resistivity:	.10 @ 70F	ohms/M	

Cations:	mg/L	as:
Calcium	25380	(Ca^{++})
Magnesium	4708	(Mg^{++})
Sodium	45494	(Na^{+})
Iron	27.33	(Fe^{++})
Potassium	1406.2	(K^{+})
Barium	1.03	(Ba^{++})
Strontium	665.65	(Sr^{++})
Manganese	2.53	(Mn^{++})
Anions:	**mg/L**	**as:**
Bicarbonate	61	(HCO_3^{-})
Sulfate	550	($SO_4^{=}$)
Chloride	165100	(Cl^{-})
Gases:		
Carbon Dioxide	510	(CO_2)
Hydrogen Sulfide	2	(H_2S)

Lab Comments:
FORMATION BONE SPRINGS

Cimarex

Lab Test No: 2008115458

DownHole SAT™ Scale Prediction @ 170 deg. F

Chemical Services

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO3)	.0198	-.00117
Aragonite (CaCO3)	.0161	-.00144
Witherite (BaCO3)	< 0.001	-31.94
Strontianite (SrCO3)	< 0.001	-.684
Magnesite (MgCO3)	.0111	-.00176
Anhydrite (CaSO4)	.697	-6.14
Gypsum (CaSO4*2H2O)	.478	-17.47
Barite (BaSO4)	.0144	-21.68
Celestite (SrSO4)	.0331	-326
Silica (SiO2)	0	-81.58
Brucite (Mg(OH)2)	< 0.001	-.102
Magnesium silicate	0	-125.21
Siderite (FeCO3)	.00966	-.00279
Halite (NaCl)	.207	-81525
Thenardite (Na2SO4)	< 0.001	-95756
Iron sulfide (FeS)	.0078	-2.91

Interpretation of DHSat Results:

The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The scale is logarithmic, i.e. a Saturation Index of 3 is 10 times more saturated than a value of 2.

The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) to positive (precipitating) values. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

Analytical Laboratory Report for:

Cimarex

BJ Chemical Services

Account Representative:
Lavell Hanson

Production Water Analysis

Listed below please find water analysis report from: Mallon 34, #12 (DELAWARE)

Lab Test No:	2008115459	Sample Date:	04/14/2008
Specific Gravity:	1.132		
TDS:	201754		
pH:	5.50		

Cations:	mg/L	as:
Calcium	24763	(Ca^{++})
Magnesium	5150	(Mg^{++})
Sodium	45325	(Na^{+})
Iron	43.09	(Fe^{++})
Potassium	1391.0	(K^{+})
Barium	0.81	(Ba^{++})
Strontium	620.59	(Sr^{++})
Manganese	2.12	(Mn^{++})
Anions:	**mg/L**	**as:**
Bicarbonate	183	(HCO_3^{-})
Sulfate	975	($SO_4^{=}$)
Chloride	123300	(Cl^{-})
Gases:		
Carbon Dioxide	300	(CO_2)
Hydrogen Sulfide	2	(H_2S)

Lab Comments:
FORMATION DELAWARE

Cimarex Lab Test No: 2008115459

DownHole SAT™ Scale Prediction @ 170 deg. F

Chemical Services

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO3)	.149	-.0015
Aragonite (CaCO3)	.121	-.0019
Witherite (BaCO3)	< 0.001	-31.37
Strontianite (SrCO3)	< 0.001	-.705
Magnesite (MgCO3)	.0852	-.00237
Anhydrite (CaSO4)	1.18	4.91
Gypsum (CaSO4*2H2O)	.882	-4.85
Barite (BaSO4)	.0295	-12.7
Celestite (SrSO4)	.0803	-285.98
Silica (SiO2)	0	-91.3
Brucite (Mg(OH)2)	< 0.001	-.125
Magnesium silicate	0	-137.75
Siderite (FeCO3)	.174	-.00144
Halite (NaCl)	.0936	-116730
Thenardite (Na2SO4)	< 0.001	-94673
Iron sulfide (FeS)	.0713	-1.21

Interpretation of DHSat Results:

The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The scale is logarithmic, i.e. a Saturation Index of 3 is 10 times more saturated than a value of 2.

The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) to positive (precipitating) values. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

Cimarex Energy Co. of Colorado
600 N. Marienfeld St. ♦ Suite 600 ♦ Midland, TX 79701 ♦ (432) 620-1938 ♦ Fax (432) 620-1940
A subsidiary of Cimarex Energy Co. • A NYSE Listed Company • "XEC"

Date: October 26, 2010

Bureau of Land Management
620 E Greene St.
Carlsbad, New Mexico 88220

Re: Pipeline Deep Unit No. 1
API No. 30-025-24470
SWD Administrative Application

Ladies and Gentlemen:

Enclosed please find a copy of Form C-108 which has been submitted with supporting documents to the New Mexico Oil Conservation Division. This letter is notice only. No action is required unless you have questions or objections.

This application requests authority to inject produced water into the Cimarex operated Pipeline Deep Unit No. 1 well located at 1980' FSL & 1650' FEL of section 17-19S-34E, Lea County New Mexico. Cimarex proposes to inject into the Delaware formation of the Permian system through an open hole interval of 6010'-6900'. The initial maximum injection pressure proposed is 1200 psi with a maximum rate of 3000 barrels of water per day.

If you have any questions regarding this application please feel free to call or write the undersigned.

Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 within 15 days of receipt of this letter.

Sincerely,

Zeno Farris

Zeno Farris
Manager, Operations Administration
Permian Basin Region
Phone: 432-620-1938
Fax: 432-620-1940

Confirmation Services

Package ID: 9171082133393767847449
Destination ZIP Code: 88220
Customer Reference:
Recipient: BLM
Address:

E-CERTIFIED
1ST CLASS FLAT
PBP Account #: 35644897
Serial #: 3132785
OCT 26 2010 2:37P

Cimarex Energy Co. of Colorado
600 N. Marienfeld St. ♦ Suite 600 ♦ Midland, TX 79701 ♦ (432) 620-1938 ♦ Fax (432) 620-1940
A subsidiary of Cimarex Energy Co. • A NYSE Listed Company • "XEC"

Date: October 26, 2010

Amtex Energy Inc.
P.O. Box 3418
Midland, TX 79702

Re: Pipeline Deep Unit No. 1
API No. 30-025-24470
SWD Administrative Application

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Sincerely,

Zeno Farris

Zeno Farris
Manager, Operations Administration
Permian Basin Region
Phone: 432-620-1938
Fax: 432-620-1940

Confirmation Services

Package ID: 9171082133393767847456
Destination ZIP Code: 79702
Customer Reference:
Recipient: Amtex
Address:

E-CERTIFIED
1ST CLASS FLAT
PBP Account #: 35644897
Serial #: 3132785
OCT 26 2010 2:37P

Cimarex Energy Co. of Colorado
600 N. Marienfeld St. ♦ Suite 600 ♦ Midland, TX 79701 ♦ (432) 620-1938 ♦ Fax (432) 620-1940
A subsidiary of Cimarex Energy Co. • A NYSE Listed Company • "XEC"

Date: October 26, 2010

Devon Energy Production Company, LP
20 N. Broadway
Oklahoma City, OK 73102

Re: Pipeline Deep Unit No. 1
API No. 30-025-24470
SWD Administrative Application

Ladies and Gentlemen:

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Sincerely,

Zeno Farris

Zeno Farris
Manager, Operations Administration
Permian Basin Region
Phone: 432-620-1938
Fax: 432-620-1940

Confirmation Services
Package ID: 9171082133393767847470
Destination ZIP Code: 73102
Customer Reference:
Recipient: Devon
Address:
E-CERTIFIED
1ST CLASS FLAT
PBP Account #: 35644897
Serial #: 3132785
OCT 26 2010 2:36P

Cimarex Energy Co. of Colorado
600 N. Marienfeld St. ♦ Suite 600 ♦ Midland, TX 79701 ♦ (432) 620-1938 ♦ Fax (432) 620-1940
A subsidiary of Cimarex Energy Co. • A NYSE Listed Company • "XEC"

Date: October 26, 2010

Linn Operating, Inc.
600 Travis Suite 5100
Houston, TX 77002

Re: Pipeline Deep Unit No. 1
API No. 30-025-24470
SWD Administrative Application

Ladies and Gentlemen:

Enclosed please find a copy of Form C-108 which has been submitted with supporting documents to the New Mexico Oil Conservation Division. This letter is notice only. No action is required unless you have questions or objections.

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Sincerely,

Zeno Farris

Zeno Farris
Manager, Operations Administration
Permian Basin Region
Phone: 432-620-1938
Fax: 432-620-1940

Confirmation Services

Package ID: 9171082133393767847432
Destination ZIP Code: 77002
Customer Reference:
Recipient: Linn Operating
Address:

E-CERTIFIED
1ST CLASS FLAT
PBP Account #: 35644897
Serial #: 3132785
OCT 26 2010 2:37P

Affidavit of Publication

State of New Mexico,
County of Lea.

I, DORA YANEZ
OFFICE MANAGER
of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period

of 1 issue(s).
Beginning with the issue dated
October 10, 2010
and ending with the issue dated
October 10, 2010

OFFICE MANAGER
Sworn and subscribed to before me
this 13th day of
October, 2010

Notary Public

My commission expires
June 16, 2013
(Seal)

OFFICIAL SEAL
Linda M Jones
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires: _____

This newspaper is duly qualified to publish legal notices or advertisments within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said publication has been made.

LEGAL NOTICE
OCTOBER 10, 2010

Cimarex Energy Co. of Colorado, 600 N Marienfeld St. Ste. 600, Midland, Texas 79701 is filing an Application for Authorization to Inject (Oil Conservation Division Form C-108) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Pipeline Deep Unit No. 1 is located 1980 feet FSL and 1650 feet FEL of Section 17, Township 19 South, Range 34 East, NMPM Lea County, New Mexico. The source of the disposal water will be Cimarex operated wells in the area that produce from the Bone Spring, and Morrow formations. The disposal water will be injected into the Delaware formation of the Permian system at a depth interval of 6010 feet to 6900 feet at a maximum injection pressure of 1200 PSI (Subject to increase after Division approved testing) and a maximum rate of 3000 BWPD. Any interested party with questions or comments may contact Zeno Farris at Cimarex Energy Co. of Colorado, 600 N Marienfeld St, Ste. 600, Midland TX 79701 or call (432) 620-1938. Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within fifteen days of the date of the publication of this notice.
#26151

02108629 00060898

LACI LUIG
CIMAREX ENERGY CO.
600 N. MARIENFELD STREET SUITE 600
MIDLAND, TX 79701

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Wednesday, October 27, 2010 3:09 PM
To: 'Zeno Farris'
Cc: Brooks, David K., EMNRD; Kautz, Paul, EMNRD; Hill, Larry, EMNRD
Subject: Disposal application from Cimarex Energy Co of Colorado: Pipeline Deep Unit Federal #1 30-025-24470 Delaware open hole from 6010 to 6900

Hello Zeno:
Just reviewed this application.
Unless an objection is received the only items I see are some AOR issues. Put in Requirement after Permit

a. Would you please run a bradenhead ~~survey~~ on 30-025-02387 and send a copy of the results here?
b. Please send a quick, approximate log analysis of the deeper Delaware interval from 6900 to 7960 in 30-025-26098 with estimate of potential productivity.
c. The 30-025-02388 is very close to the proposed well, and has very scarce data as to plugs set over this interval. From your diagram it seems this well would need to be re-entered and replugged to isolate this proposed 6010 to 6900 feet disposal interval. This could be a condition of the SWD permit – let me know if Cimarex agrees to this or wants to go another route.

Regards,

William V Jones, P.E.
Engineering, Oil Conservation Division
1220 South St. Francis Drive, Santa Fe, NM 87505
Tel 505.476.3448 ~ Fax 505.476.3462

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Wednesday, November 17, 2010 11:28 AM
To: 'Zeno Farris'
Cc: Ezeanyim, Richard, EMNRD
Subject: RE: Disposal application from Cimarex Energy Co of Colorado: Pipeline Deep Unit Federal #1 30-025-24470 Delaware open hole from 6010 to 6900

Zeno:
I have this ready to release... but still need item b. below.

Regards,

Will Jones
New Mexico
Oil Conservation Division
Images Contacts

From: Jones, William V., EMNRD
Sent: Wednesday, October 27, 2010 3:09 PM
To: 'Zeno Farris'
Cc: Brooks, David K., EMNRD; Kautz, Paul, EMNRD; Hill, Larry, EMNRD
Subject: Disposal application from Cimarex Energy Co of Colorado: Pipeline Deep Unit Federal #1 30-025-24470 Delaware open hole from 6010 to 6900

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Regards,

William V Jones, P.E.
Engineering, Oil Conservation Division
1220 South St. Francis Drive, Santa Fe, NM 87505
Tel 505.476.3448 ~ Fax 505.476.3462

Jones, William V., EMNRD

From: Zeno Farris [zfarris@cimarex.com]
Sent: Tuesday, December 07, 2010 8:01 AM
To: Jones, William V., EMNRD
Cc: Natalie Krueger
Subject: FW: Amtex Energy, Inc. Lea State NCT A #3
Attachments: SCAN0001.pdf

Will, below is log analysis for requested well and re-plugging sundry submitted to BLM for the Mescalero Unit Fed # 2. Let me know if you need additional information. Thanks

---

From: Tim Miller
Sent: Tuesday, December 07, 2010 8:50 AM
To: Zeno Farris; Chad McGehee; Rebecca Morrison; Jesse Parkison
Subject: Amtex Energy, Inc. Lea State NCT A #3

The Lea ED State NCT A #3--16-19S-34E (1980 FSL & 660 FWL): 30-025-260980000 was analyzed on logs for possible productivity in the Delaware interval from 6900'-7950'. The Lea ED State NCT A #3 was broken into 6 sections. After running log analysis in the Delaware from 6900'-7950' the potential for productivity is non-existent. The water saturations in the Lea ED State NCT A #3 run from 61%-100%.

Lea ED State NCT A #3

1. 6900-6922: Sandstone.
   a. Porosity=10.6%.
   b. Resistivity=4.5 ohms.
   c. SW=75%.
   d. RW=.035.
2. 6922-6944: Dolomite.
   a. Porosity=6.5%.
   b. Resistivity=16.8 ohms.
   c. SW=70%.
   d. RW=.035.
3. 6944-7300: Sandstone.
   a. Porosity=11.6%.
   b. Resistivity=2.5 ohms.
   c. SW=92%.
   d. RW=.035.
4. 7300-7500: Sandstone.
   a. Porosity=13%.
   b. Resistivity=2 ohms.
   c. SW=89%.
   d. RW=.035.
5. 7500-7700: Sandstone.
   a. Porosity=11%.
   b. Resistivity=2 ohms.
   c. SW=100%.
   d. RW=.035.
6. 7700-7950: Sandstone.
   a. Porosity=14.5%.
   b. Resistivity=3.6 ohms.

c. SW=61%.
d. RW=.035.

H. Tim Miller--Senior Geologist
12/7/2010

H. Tim Miller
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Injection Permit Checklist (08/27/2010)

12/8/10

WFX ___ PMX ___ SWD 1255 Permit Date ~~[illegible]~~ UIC Qtr (O(N/D))

Wells 1 Well Name(s): Pipeline Deep Unit, Federal #1

API Num: 30-0 25-24470 Spud Date 7/16/73 New/Old O (UIC primacy March 7, 1982)

Footages 1980 FSL/1650 FEL Unit J Sec 17 Tsp 19S Rge 34E County Lea

General Location: ~~Just~~ NE of Reef.

Operator: Cimarex Energy Co. of Colorado Contact Zeno Farris

OGRID: 162683 RULE 5.9 Compliance (Wells) 8/1165 (Finan Assur) OK IS 5.9 OK? OK

Well File Reviewed ___ Current Status: ~~[illegible]~~ Morrow Gas Well

Planned Work to Well: Pull old 5 1/2" RB To 6900 ~~[illegible]~~ Run New 5 1/2 & Tubg

Diagrams: Before Conversion ✓ After Conversion ✓ Elogs in Imaging File: ✓

Well Details:	Sizes Hole.......Pipe		Setting Depths	Stage Tool	Cement Sx or Cf	Determination Method
New __Existing ✓ Surface	15	11 3/4	447	—	400	CIRC
New __Existing ✓ Interm	11	8 5/8	5,352	—	500	CIRC
New ✓ Existing ~~✓~~ LongSt	7 7/8	5 1/2	6010'		600	CIRC
New__Existing __ Liner			~~[illegible]~~			
New__Existing ✓ OpenHole			6010-6900		OLD 13472 TD	

Depths/Formations:	Depths, Ft.	Formation	Tops?		
Formation(s) Above	5580'	Del	✓		
Injection TOP:	6010	Cherry Del.	Max. PSI 1202	OpenHole ✓	Perfs ___
Injection BOTTOM:	6900	Brushy Del.	Tubing Size 2 7/8	Packer Depth 5900'	
Formation(s) Below	7952	Bone Spring	✓		

~~Capitan Reef? ___ (Potash? ___ Noticed? ___)~~ [~~WIPP? ___ Noticed? ___~~] Salado Top/Bot (1850-3100) ~~Cliff House? ___~~

Fresh Water: Depths: 0-200 Formation Ogallala Wells? NO Analysis? — Affirmative Statement ✓

Disposal Fluid Analysis? ✓ Sources: Bone Spring / Morrow ✓ (is compatible)

Disposal Interval: Analysis? ✓ Production Potential/Testing: No Shows

Notice: Newspaper Date 10/13/10 Surface Owner BLM Mineral Owner(s)

RULE 26.7(A) Affected Persons: Amtek / Linn OP. / Devon

AOR: Maps? ✓ Well List? ✓ Producing in Interval? NO Wellbore Diagrams? ✓

.......Active Wells 1 Repairs? Monitor WhichWells?

.........P&A Wells 3 Repairs? 1 Which Wells? 30-025-02388 Re-enter / REPLUG (No LOGS)

PE AED 30-025-26098 ← is 6900 To 7960 Production?

Questions: Request Sent Reply:

Run BH Survey on 30-025-02387 Now / Later