10/10/11	10/26/11	WVJ	10.10.11	TYPE SWD	pEd 1128366215

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

Cimarex, 162387

RECEIVED OCD

2011 OCT 27 P 12

ABOVE THIS LINE FOR DIVISION USE ONLY

Federal 11

30-025-36192

ADMINISTRATIVE APPLICATION CHECKLIST

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]

Fed

[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 **X** SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

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

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

[B] **X** Offset Operators, Leaseholders or Surface Owner

[C] **X** Application is One Which Requires Published Legal Notice

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

[E] **X** 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.

Kay Havenor	Kay C Havenor	Consultant	10/3/2011
Print or Type Name	Signature	Title	Date

KHavenor@georesources.com
e-mail Address

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? ____X____Yes _____No

II. OPERATOR: Cimarex Energy Co. of Colorado

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

CONTACT PARTY: Kay Havenor PHONE: 575-626-4518

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: Kay Havenor TITLE: Agent

SIGNATURE: Kay C Havenor DATE: October 3, 2011

E-MAIL ADDRESS: KHavenor@georesources.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 (OGRID 162383)

WELL NAME & NUMBER: Thyme APY Federal #1 30-025-36192

WELL LOCATION: 1650' FSL & 990' FWL | L | 1 | 23S | 32E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

See attached diagram

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 14-¾" Casing Size: 11-¾" 40# H-40

Cemented with: 700 sx. ***or*** _____ ft³

Top of Cement: Surface Method Determined: Opr

Intermediate Casing

Hole Size: 11" Casing Size: 8-⅝" 32# J-55

Cemented with: 1350 sx. ***or*** _____ ft³

Top of Cement: Surface Method Determined: Opr

Production Casing

Hole Size: 7-⅞" Casing Size: 5-½" 17&15.5#

Cemented with: 2300 sx. or _____ ft³

Top of Cement: Surface Method Determined: Opr

Total Depth: 9,150'

Injection Interval

5,458' To 6,092'

(Perforated or Open Hole; indicate which) Perforated

INJECTION WELL DATA SHEET

Tubing Size: 3-1/2" 9.3# L-80 Lining Material: Fiberglass coated

Type of Packer: Lok-Set or equivalent

Packer Setting Depth: Approx 5,400 ft

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? Originally drilled as oil/gas well

2. Name of the Injection Formation: Delaware lower Bell Canyon and upper Cherry Canyon

3. Name of Field or Pool (if applicable): _____

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. Yes, see detail in Item VI (a) 1

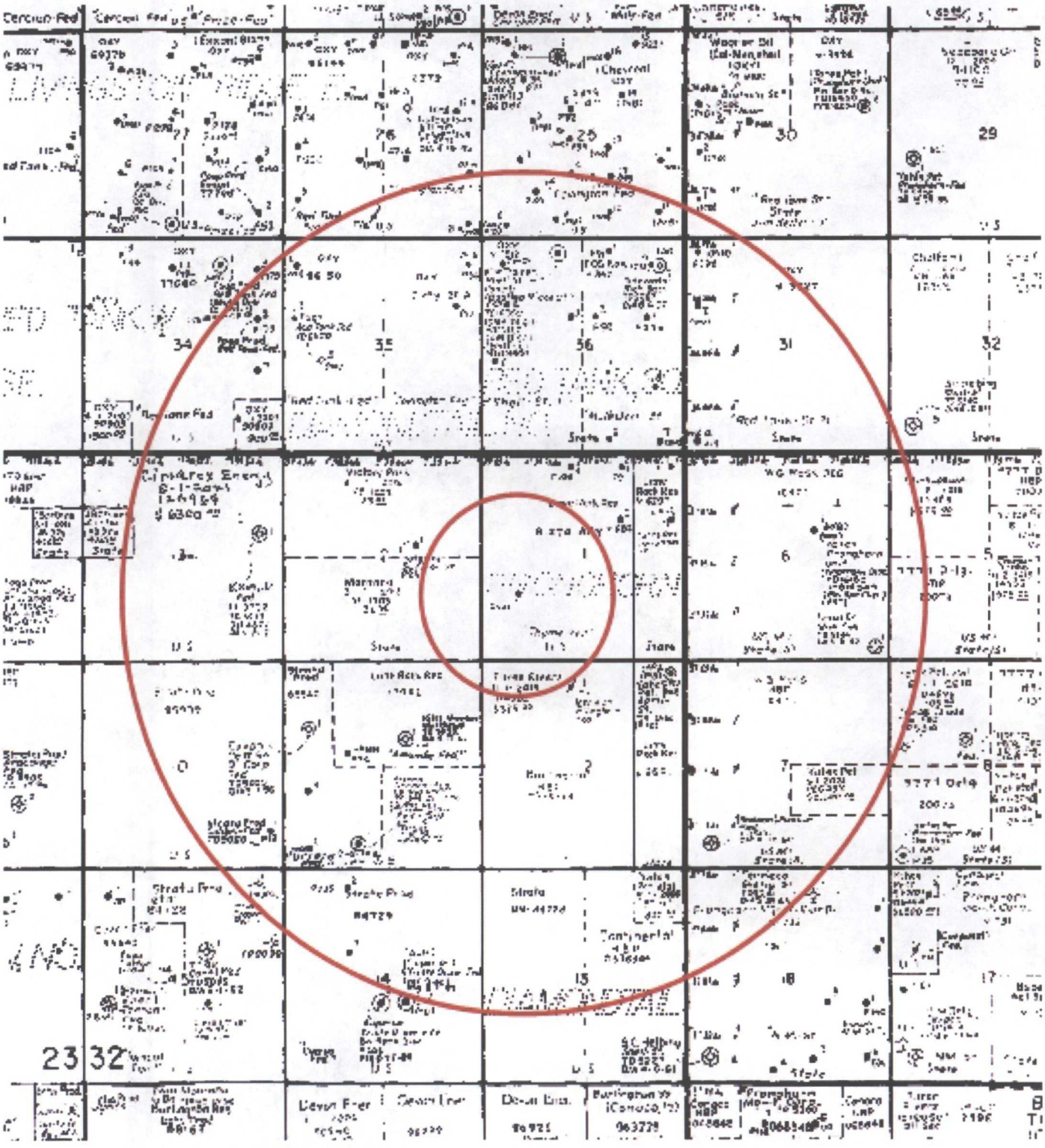
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Delaware Brushy Canyon - Bone Springs 7100' - 9100, Morrow 14600'

Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

Item V:

Area of Review
½ Mile AOR and 2 Mile Radius



Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

Item VI: Data on wells in AOR:

Item VI(a): Known wells in the AOR that penetrate the proposed Disposal interval:

API	WELL_NAME	STATUS	SEC	TWNSP	RANGE	FT	NS	FT	EW	OCD	OPERATOR	LAND	WELL	PLUG_DATE	SPUD_DATE	ELEVGL	TVD_DEPTH
3002538599	Thyme APY Federal #11	Inactive	1	23S	32E	1650	S	990	W	L	CIMAREX ENERGY CO. OF COLORADO	F	O		26-Aug-03	3749	9150

1. 30-025-36192 Cimarex Energy Company of Colorado Thyme APY Federal #11. Unit l, 1650' FSL & 990' FWL Sec. 1, T23S-R29, Lea Co. Elev 3749' GL. Spud 8/26/2003. 14-¾" hole set 11-¾ 42# H-40 @1280 w/700 sx circ to surface. 11" hole set 8-⅝" 32# J-55 @ 4,850' w/1,360 sx, circ to surface. 7-⅞" hole set 5-½" 15.5 &17# @9,150' w/1,300 sx 1st stage, TOC 5,500', DV @4821 Recent Haliburton revaluation reports 2nd stage cmt went down DV tool then to surface. Perfs, treatments, and perf sqzs shown in tables below (filed 10/20/2003, no subsequent changes reported). See comments and emails concerning cement job beneath well diagram.

Perforation Record			
Perforated Interval	Size	No. Holes	Perf. Status
8992-99'		16	Open
9017-20'		8	Open
8608-18'		22	Open
8664-74'		22	Open
8754-58'		10	Open
8820-25'		12	Open
8058-68'		22	Sqz
7355-62'		16	Sqz
7558-62'		10	Sqz
7640-52'		22	Sqz
7670-76'		14	Sqz
7160-64'		10	Sqz
7170-73'		8	Sqz
7176-79'		8	Sqz
7182-85'		8	Sqz
6724-30'		14	Sqz
6738-44'		14	Sqz

Acid, Fracture, Treatment, Cement Squeeze, Etc.	
Depth Interval	Amount and Type of Material
8992-9020'	500g 7-1/2% IC HCl w/30 BS
8992-9020'	Frac w/68300# Super L/C
8608-8825'	7-1/2% IC HCl in 4 Stages
8058-68'	500g 7-1/2% NEFE HCL w/25 BS
8058-68'	Squeeze w/100 sx H Neat
7640-76'	1000g 7-1/2% NEFE HCl w/45 BS
7558-62'	500g 7-1/2% NEFE HCl w/15 BS
7355-62'	500g 7-1/2% NEFE HCl w/20 BS
7160-85'	1500g 7-1/2% NEFE HCl w/45 BS
6724-44'	1000g 7-1/2% acid w/35 BS
7355-7676'	Squeeze w/200 sx H Neat
7160-85'	Squeeze w/100 sx H Neat
6724-44'	Squeeze w/100 sx H Neat

Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

Item VII:

1. The maximum injected volume anticipated is 6,000 BWPD. Average anticipated is 4,000 BWPD.
2. Injection will be through a closed system.
3. Maximum injection pressure is expected to be 1,091 psi, or as allowed by depth.
4. Sources will be produced water. These will be compatible with waters in the disposal zone.
5. Water sample analysis from the Cimarex Thyme APY Federal #2 Bone Springs. This water quality will be similar and compatible with proposed disposal into the Cimarex Thyme APY Federal #11. This sample has TDS of approximately 109,000 mg/l.

NM WAIDS

DATA MAPS HOME SCALE CORROSION

Water Samples for Well THYME APY FEDERAL 002
API = 3002533529
Formation = B SPG
Field = RED TANK
Current Water Production Information

Instructions:

Click — For general information about this sample.

Click — For scale calculation pages (Stiff-Davis or Oddo Tomson methods).

Click — To select this water sample for water mixing. It will lead to the main page, and add the sample ID to the mixing table.

Click 664 — Click the hyperlinked sample number to make a .csv for that sample, or select several check boxes and click Submit for multiple samples

The ions are in (mg/L) units.

	SampleID	T	R	S	SO4	CL	CO3	HCO3	K	Na	Ca	Mg
☑	6681	23S	32E	01	1150	104976	null	781	null	null	0	2025

☐ SELECT/DESELECT ALL

Submit

New Mexico Tech PRRC

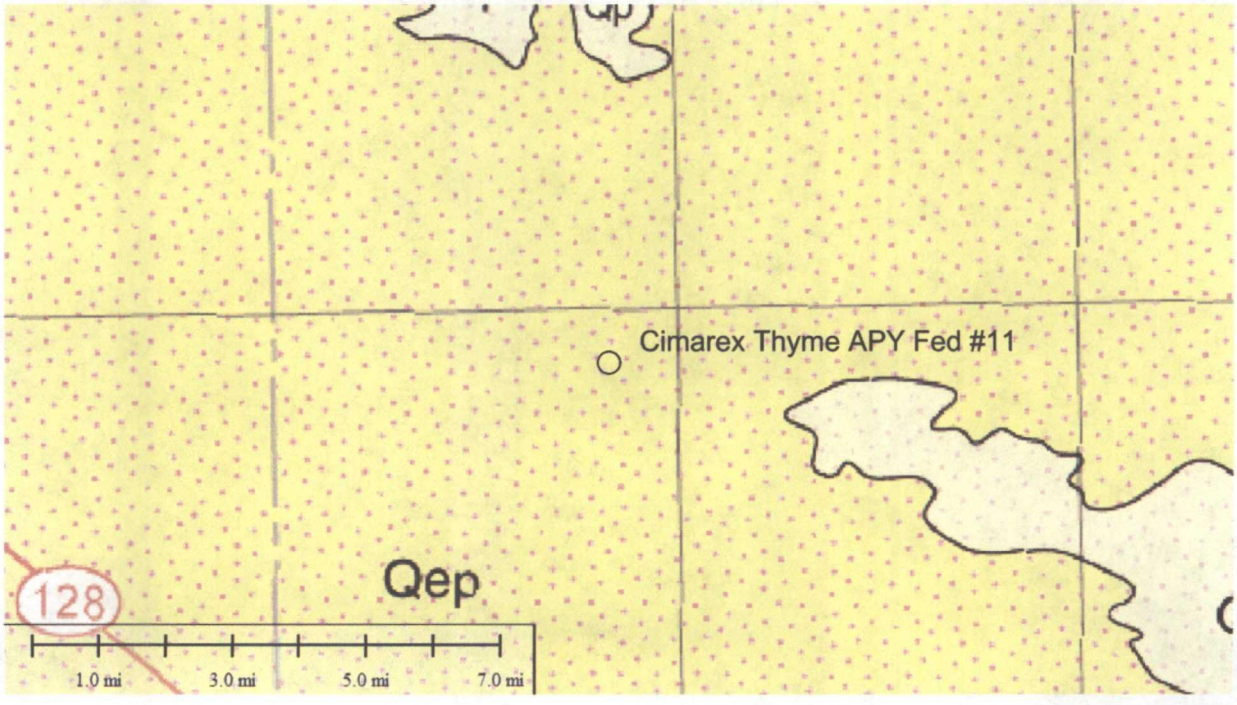
Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

Item VIII:

The surface of the area included in the 2-mile radius, as shown in Item V above, is Quaternary alluvium and Recent blow-sand deposited on Cretaceous/Triassic Dewey Lake redbeds. No shallow samples have been found in the greater area to clearly define shallow tops. E-logs show the Dewey Lake and Rustler Formation extend down to about 1260'.

The surface geology of the greater area, including the 2-mile radius as shown in Item V above, is Quaternary eolian and piedmont (Qep) deposits of Holocene to middle Pleistocene age. These are underlain by the Permian Rustler Formation and evaporites. An excerpt from the NM Bureau of Geology map of New Mexico is shown below with the location of the Thyme APY Federal #11.



NM Bureau of Geology and Mineral Resources, 2003

E-logs suggest the Quaternary deposits could be as much as 310' thick.

Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02349		STK	ED	2	3	03	23S	32E		625678	3578004*	2980	525		

Average Depth to Water: –
Minimum Depth: –
Maximum Depth: –

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 628647 **Northing (Y):** 3577744 **Radius:** 3300

***UTM location was derived from PLSS - see Help**

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/20/11 4:44 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Stock water well located approximately 1.85 miles west of Thyme APY Federal #11 well. Depth to water or thickness of water column not reported.

Item IX:

Acidize perforations 5,468' to 6,092' in 5-½" casing with approximately 20,000 gal of 15% HCl. Selective sand fracs may be applied.

Item X:

Logs are on file with the OCD.

Item XI:

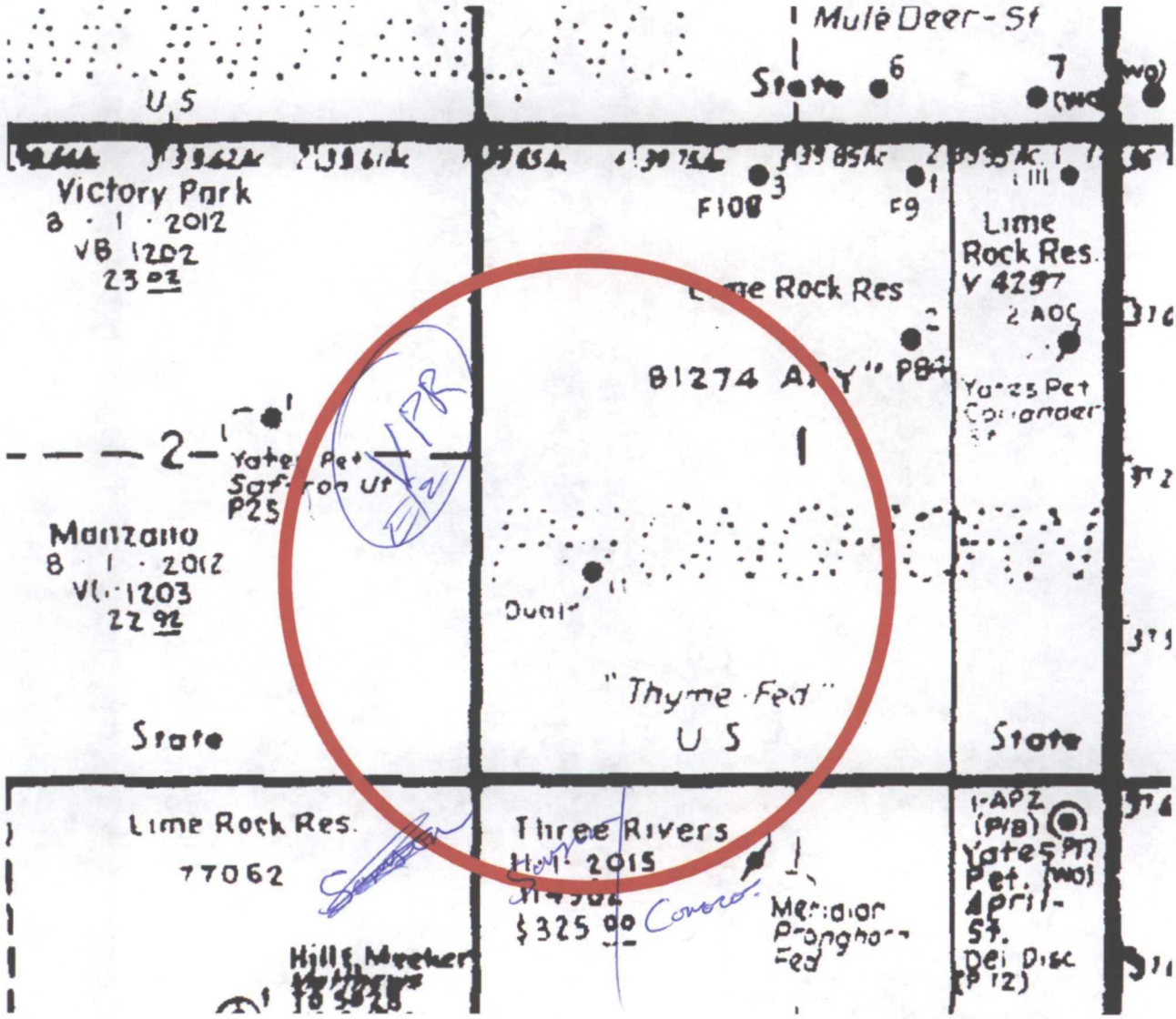
No water wells are reported within a 1-mile radius of the proposed SWD. Please note Item VIII discussion above.

Cimarex Energy Company of Colorado
Thyme APY Federal #1
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

Item V (a):

Area of Review
½ Mile AOR



Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

Item XII:

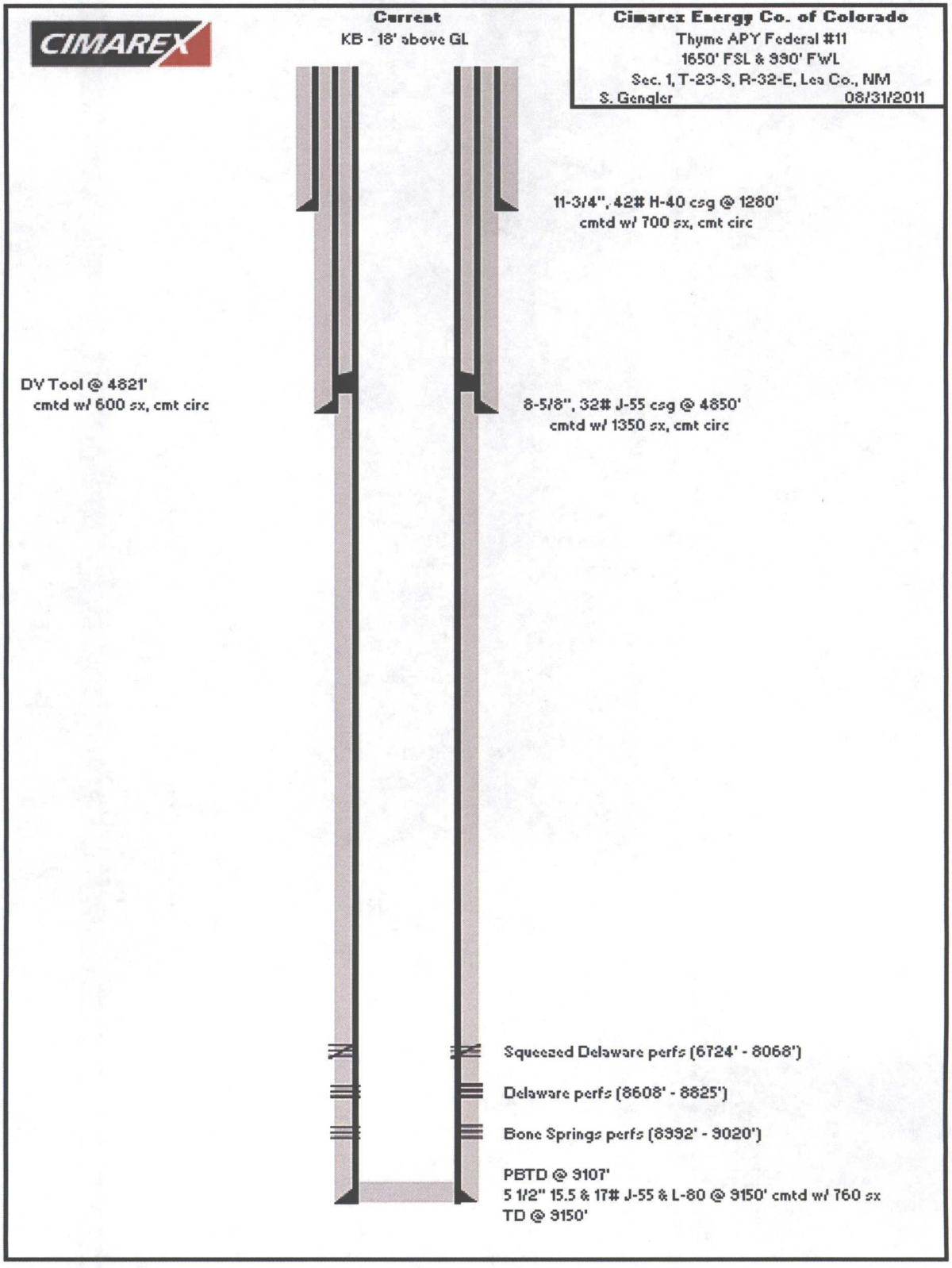
There is no geological evidence of open faults nor hydrologic connection between the disposal zone and any possible underground source of protectable water.

Extensive geophysical logging/evaluation and mud logging with sample examination of the sub-upper Delaware Bell Canyon and upper Cherry Canyon has not indicated evidence for viable hydrocarbon production. Production quality porosity in these intervals is accompanied by low resistivity yielding high water saturations.

Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

Present Configuration of Well

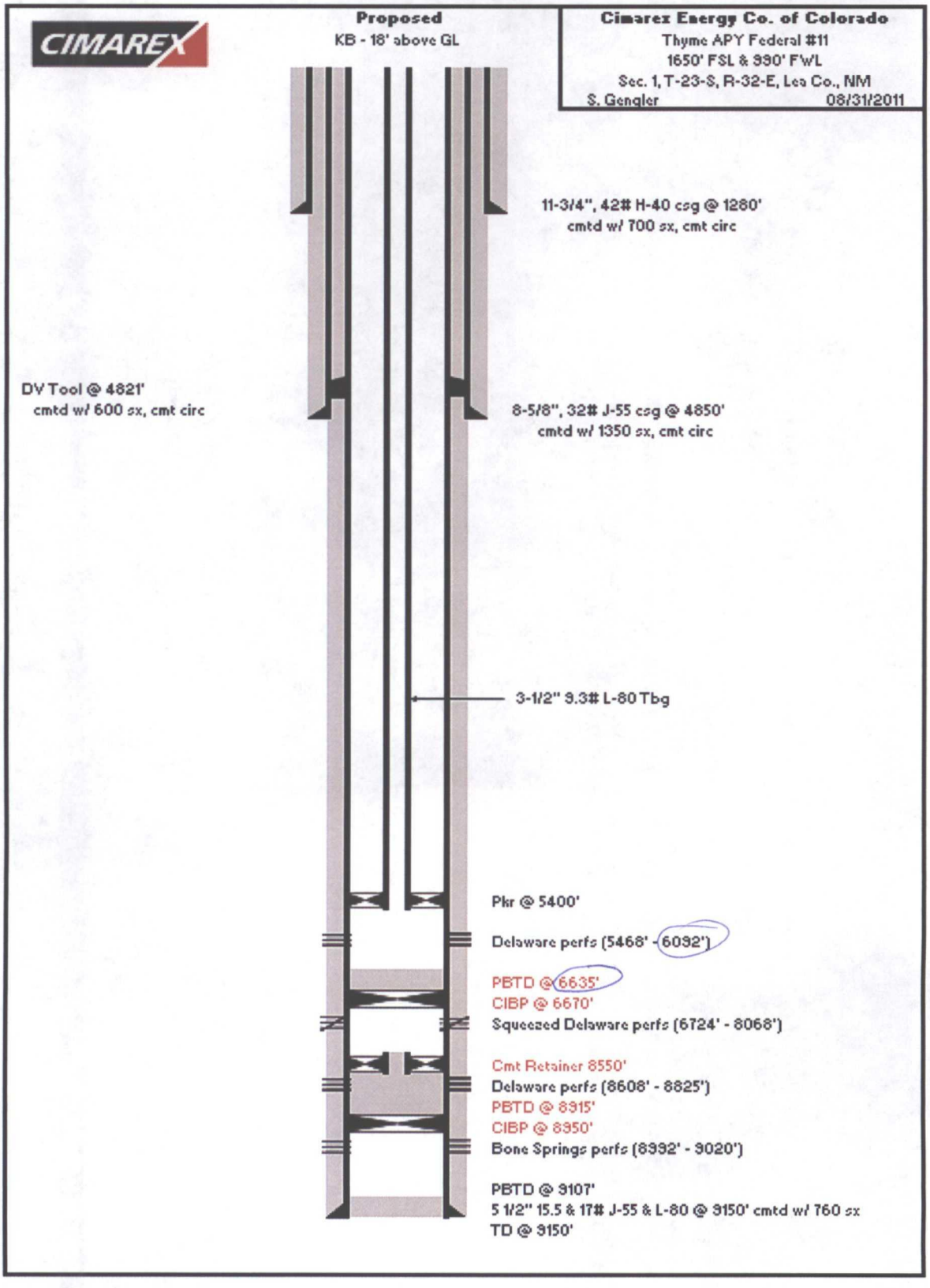


See following page discussion on original 5½" casing cement job.

Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

Proposed Configuration for SWD Conversion



B. CEMENTING PROGRAM:

Surface Casing: 550 sx Pacesetter Lite "C" w/ ¼# Cellocel + 3% CaCl2 (YLD 1.84 WT 12.4) + 250 sx Class "C" w/2% CaCl2 (YLD 1.32 WT 14.8). Cement calculated to circulate to surface.

Intermediate Casing: 1500 sx Pacesetter Lite "C" w/ ¼# Cellocel + 3% CaCl2 (YLD 1.32 WT 14.8) + 250 sx Class "C" w/2% CaCl2 (YLD 1.32 WT 14.8). Cement calculated to circulate to surface.

Production Casing: 1st Stage: 250 sx "H" w/8# sx CSE + 0.6% CF-14 + 5# sx Gilsonite (YLD 1.75 WT 13.6). Cement calculated to 8000' DV tool set @ approximately 8000'.

2nd Stage: 650 sx Pacesetter Lite "C" w/5# sx Gilsonite, ¼# sx Cellocel + 0.5% CF-14 (YLD 1.84 WT 12.7) + 150 sx "H" w/0.5% CF-14 (YLD 1.78 WT 13.6). Cement calculated to tie back to intermediate casing 100'.

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

Interval	Type	Weight	Viscosity	Fluid Loss
0-1270'	FW GEL	8.6-9.6	32-36	N/C
1270'-4810'	Brine	10.0-10.2	28	N/C
4810'-9200'	Cut Brine/Starch	8.9-9.1	30	<15/cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

6. EVALUATION PROGRAM:

Samples: Every 20' from surface to 4000', 10' from 4000' to TD.
Logging: CNL/LDT from TD to casing, w/ GR-CNL up to surface, DLL w/RXO from TD to casing; CMR over selected intervals.
Coring: None anticipated
DST's: As warranted.

7. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Anticipated BHP:

From:	0	TO: 1270'	Anticipated Max. BHP: 250 PSI
From:	1270'	TO: 4810'	Anticipated Max. BHP: 2062 PSI
From:	4810'	TO: TD	Anticipated Max. BHP: 3800 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None.

Maximum Bottom Hole Temperature: 140 F

8. ANTICIPATED STARTING DATE:
Plans are to drill this well as soon as possible after receiving approval. It should take approximately 15 days to drill the well with completion taking another 20 days.

Cimarex Energy Company of Colorado API 30-025-36192

Thyme APY Federal #11

1650' FSL & 990' FWL

Sec. 1, T23S-R32E Lea County, NM

Note: 5-½" cement job has been re-evaluated by Halliburton engineer CBL specialist and concluded original drilling/completion reports of TOC @5,500' (below 4,821' DV) was incorrect, instead cement went above and below DV tool. Second stage circulated cement to surface.

Email communication Cimarex request for statement from Halliburton re: Thyme #11 cement bond log analysis:

Scott Gengler, Sr. Petroleum Engineer, Cimarex Energy Co. Permian New Mexico Team

600 N. Marienfeld St., Suite 600

Midland, Texas 79701 Office: 432-571-7852

From: Jeff Laufer [mailto:Jeff.Laufer@Halliburton.com]
Sent: Monday, October 03, 2011 7:45 AM
To: Scott Gengler
Subject: RE: Cement Bond Log

Scott,

How about I write you an email stating that the log you sent me has no free pipe. We (Halliburton) believe that there is cement across the logged section of well bore. We see formation arrivals through out the logged interval which suggests that the there is cement to formation bond. However, there are sections that do not have good cement to pipe bond. This can be caused by a micro-annulus between the pipe and cement due to pressure difference between when the cement was setting and when the bond log was run. It can also be cause by the formation breaking down and taking cement during the hydration process. I believe you told me that the cement job went smoothly and cement was circulated to surface. This would eliminate the hydration issue. I believe you will not be able to squeeze this interval because there is cement present. Jeff

Yates Petroleum Corporation

CASING REPORT

Production Casing (Long String)

Section : 1 Township : 23S Range : 32E

Well Name : THHYME APY FEDERAL # 11

T.D. Hole Time : 7:15 A.M. Date : #######

Total Depth : 9,150 Hole Size : 7 7/8

Total Ran :	216	Jts.		Set at : 9,150	As follows
a. Ran :	16	Jts.	5 1/2 17# L-80	Total Feet :	653.62
b. Ran :	21	Jts.	5 1/2 17# J-55	Total Feet :	895.83
c. Ran :	164	Jts.	5 1/2 15.5# J-55	Total Feet :	6,982.71
d. Ran :	15	Jts.	5 1/2 17# J-55	Total Feet :	621.64
e. Ran :		Jts.		Total Feet :	
f. Ran :		Jts.		Total Feet :	
h. Ran :		Jts.		Total Feet :	
g. Ran :		Jts.		Total Feet :	
Totals:	216	Jts.		Total Feet :	9153.80

	Regular Guide Shoe	Set @ :	
X	Float Shoe	Set @ :	9150
	Insert Float	Set @ :	
X	Float Collar	Set @ :	9107
X	D.V. Tool(s)	Set @ :	4821
X	Bottom Marker	Set @ :	6808
X	Top Marker	Set @ :	5909

Cemented As Follows.

Stage #1 : 660 SXS. SUPER H W/ 5/10% HALAD-344, 4/10% CFR-3, 3#/SK SALT, 2/10% HR-7

5 LBS./SK GILSONITE Yield : 1.72 Weight : 13

Tailed In With : 100 SXS. PREMIUM THX-SET W/ 1% COMPONENT A, .25% COMPONENT B

Yield : 1.42 Weight : 14.4

Plug Down @ : 6:00 P.M. 07/11/2003 Bumped To: 1,025 P.S.I. For 1 Mins.

Cement Circulated : NO Sacks Circulated Thru D.V. Tool : Hrs.

Stage #2 : 500 SXS. HALIBURTON LIGHT PREMIUM W/ 2% CALCIUM CHLORIDE, 1/4 LBS/SK FLOCELE

Yield : 1.96 Weight : 12.5

Tailed In With : 100SKS. PREMIUN PLUS W/ 2% CALCIUM CHLORIDE

Yield : 1.34 Weight : 14.8

Plug Down @ : 8:00 P.M. 07/11/2003 Bumped To: 2,922 P.S.I. For 1 Mins.

Cement Circulated : 86 Sacks Circulated Thru D.V. Tool : Hrs.

Stage #3 :

Yield : Weight :

Tailed In With :

Yield : 1.32 Weight : 14.81

Plug Down @ : Bumped To: P.S.I. For Mins.

Cement Circulated : Sacks Float and Casing Held (Y/N):

IF CEMENT WAS NOT CIRCULATED,THE TOP OF CEMENT WAS CALCULATED TO: FEET

Rig Released @: 2:00 A.M. 07/12/2003 N. MEK Set Pounds on Slips.

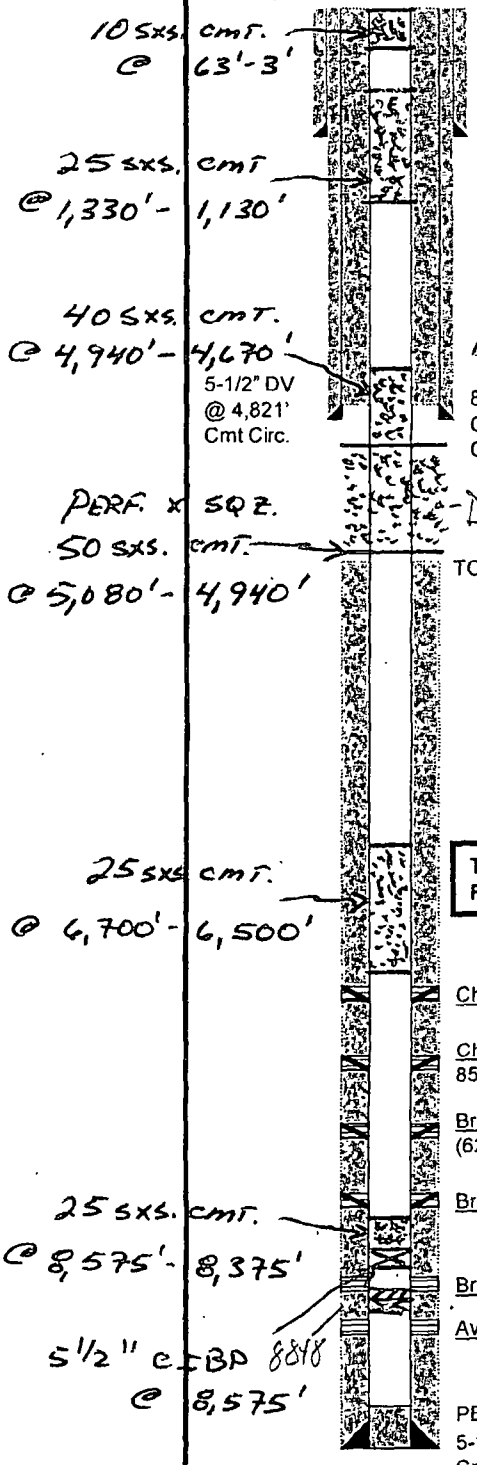
Comments : CENTRALIZERS ON JOINT S # 1-4-7-10-13-16-19-22-25-28-31-34-37-40-43-46-49-52-55-58-61-64-67-70-73-76-79-82-85-88

PUMPED 150 BBLS. MUD AHEAD W/ 150 SCF/BBL OF N2

Well Site Supervisor: D.M. LARKIN

CIMAREX

Thyme APY Federal #11



Elevation: 3,749' GL	
Date Spud: 06/26/03	
Date TD'd: 07/11/03	
Date Completed: 10/10/03	
Zone	**Acid/Frac**
Cherry Canyon (6,724-44')	1,000 gals 7-1/2% HCl
Cherry Canyon (7,160-85')	1,500 gals 7-1/2% HCl
Brushy Canyon (7,355-62')	500 gals 7-1/2% HCl
Brushy Canyon (7,558-62')	500 gals 7-1/2% HCl
Brushy Canyon (7,640-76')	1,000 gals 7-1/2% HCl
Brushy Canyon (8,058-68')	500 gals 7-1/2% HCl
Brushy Canyon (8,608-825')	10,000 gals 7-1/2% HCl
Bone Springs Avalon (8,992-20')	500 gals 7-1/2% HCl 26,600 gals x-linked gel w/ 68,300# 20/40 Super LC sand
Recompletions & Workovers	
Date	
Current Status:	Shut in, 3/2010
Last Well Test:	

Tubing: 2-7/8" w/ TA @ 8,345'; SN @ 8,889' & EOT @ 8,926'
Rods: 70 - 1"; 128 – 7/8"; 145 – ¾"; 10 – 1"; 1 – 2.5"x1.5" Pump

Cherry Canyon **SQUEEZED:** 6,724-30' & 6,738-44' (28 – 0.42" DIA holes)

Cherry Canyon **SQUEEZED:** 7,160-64'; 7,170-73'; 7,176-79' & 7,182-85' (34 – 0.42" DIA holes)

Brushy Canyon **SQUEEZED:** 7,355-62'; 7,558-62'; 7,640-52' & 7,670-76' (62 – 0.42" DIA holes)

Brushy Canyon **SQUEEZED:** 8,058-68' (22 – 0.42" DIA holes)

Brushy Canyon : 8,608-18'; 8,664-74'; 8,754-58' & 8,820-25' (66 – 0.42" DIA holes)
Add 8992'+/- Cap w/35' cmt (DB)
Avalon Sand : 8,992-99' & 9,017-20' (24 – 0.42" DIA holes)

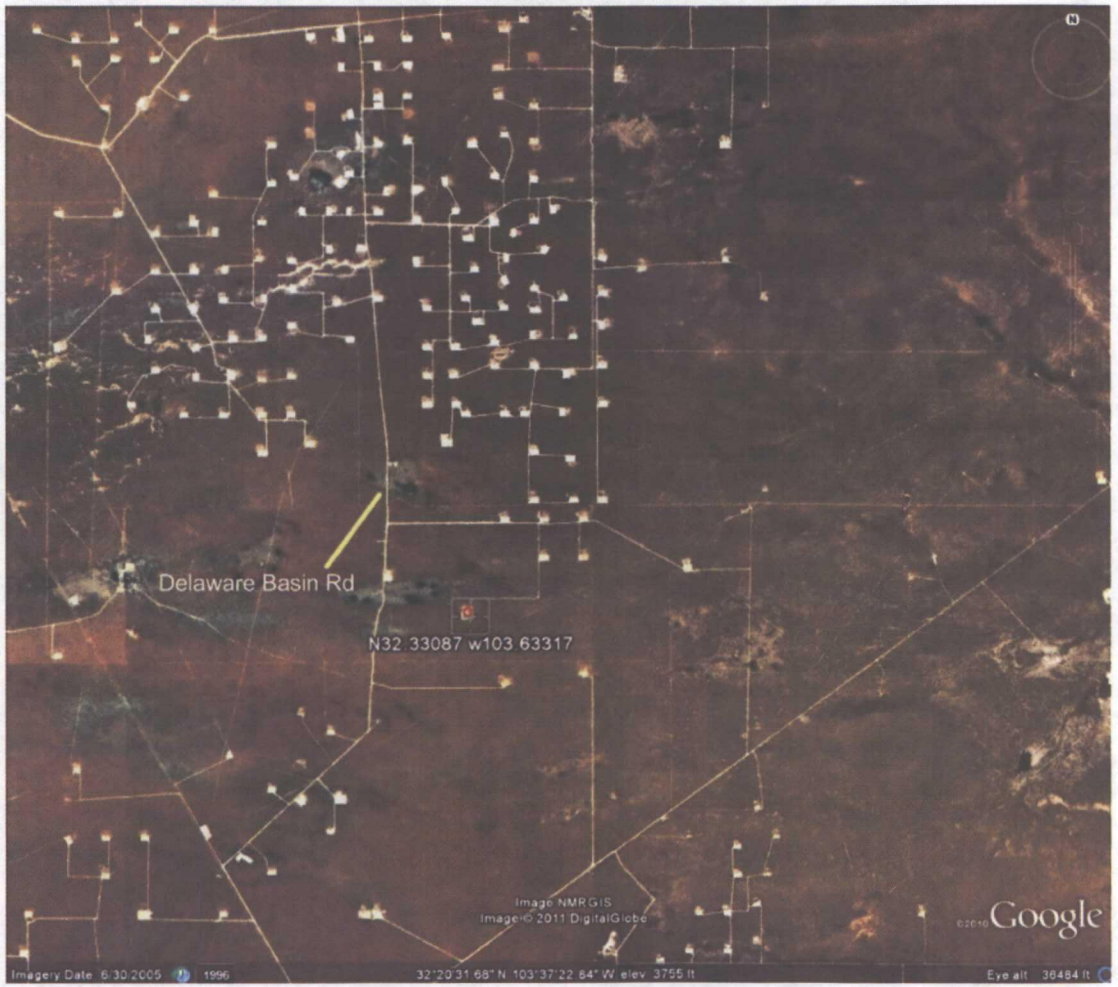
Sec 1-L, 23-S, 32-E
Lea County, NM
Updated: 8 June 2011 - JJP

Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

Approximately 6-miles southeast of Halfway onto NM-178 then south on Delaware Basin Road 5.9 miles, east 1.0 miles, then south and west on lease road.

Google Earth image of Proposed SWD Location



▫ Cimarex Thyme APY Federal #11

Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

Item XIII: Proof of Notice

Minerals Owner:

Bureau of Land Management
c/o Carlsbad Field Office
620 E. Greene Street
Carlsbad, NM 88220

Operators:

Manzano, LLC P.O. Box 2107 Roswell, NM 88202-2107	Lease Sec. 2 sold to VPR
VPR Operating, LLC 1406 Camp Craft Road Austin, TX 78746	Sec 2 - E/2
Samson Resources Company 200 N. Loraine, Ste. 1010 Midland, TX 79701	Sec. 12 - NW/4
ConocoPhillips Company 3401 E. 30th St. Farmington, NM 87402	Sec. 12 - W/2 E/2

Surface Lessee:

Slash 46, Inc.
P.O. Box 1358
Loving, NM 88256

Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

API 30-025-36192

Item XIII: Legal Publication

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertisting Director of THE LOVINGTON LEADER, a thrice a week newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled Legal Notice was published in a regular and entire issue of THE LOVINGTON LEADER and not in any supplement thereof, for one (1) day(s), beginning with the issue of October 4, 2011 and ending with the issue of October 4, 2011.

And that the cost of publishing said notice is the sum of $ 34.34 which sum has been (Paid) as Court Costs.

Joyce Clemens

Joyce Clemens, Advertising Manager
Subscribed and sworn to before me this 4th day of October, 2011.

Gina Fort

Gina Fort
Notary Public, Lea County, New Mexico
My Commission Expires June 30, 2014

OFFICIAL SEAL
GINA FORT
Notary Public
State of New Mexico
My Comm. Expires 6/30/14

LEGAL NOTICE
Cimarex Energy Company of Colorado, 600 N. Marienfeld St., Ste 600, Midland, Texas, 432-571-7800, is seeking approval from the New Mexico Oil Conservation Division to recomplete the Cimarex Energy Company Thyme APY Federal #1 located 1650 feet from the north line and 990 feet from the west line of Section 1, T23S, R32E, Lea County, NM, 8.2 miles northeast of junction Buck Jackson Road and NM-128, and complete for non-commercial produced water disposal as the Cimarex Energy Company Thyme APY Federal #1. The proposed disposal interval is into the sub-upper Delaware Bell Canyon and upper Cherry Canyon Formations through 5½" casing at 5,468 feet to 6,092 feet. Cimarex Energy Company plans to dispose of a maximum of 6,000 BWPD at a maximum pressure of 1,093 psi, or as allowed by depth. Parties with questions regarding this proposal are urged to contact Cimarex at the address or phone number above. Interested parties must file objections or requests for hearing within 15 days to the New Mexico Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, NM 87505.

Published in the Lovington Leader October 4, 2011.

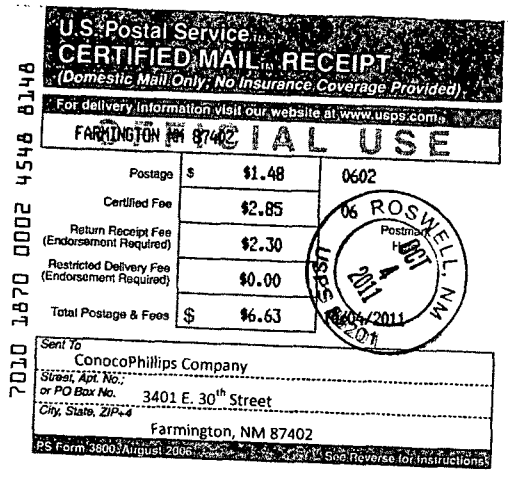
API=? SOUTH

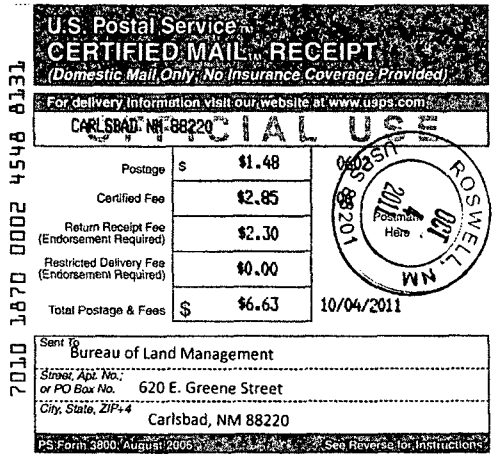
Cimarex Energy Company of Colorado
Thyme APY Federal #11
1650' FSL & 990' FWL
Sec. 1, T23S-R32E Lea County, NM

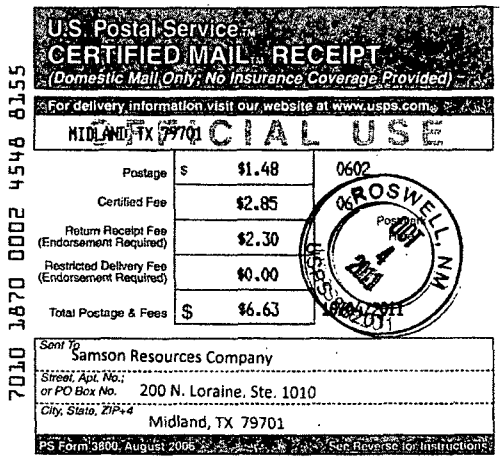
API 30-025-36192

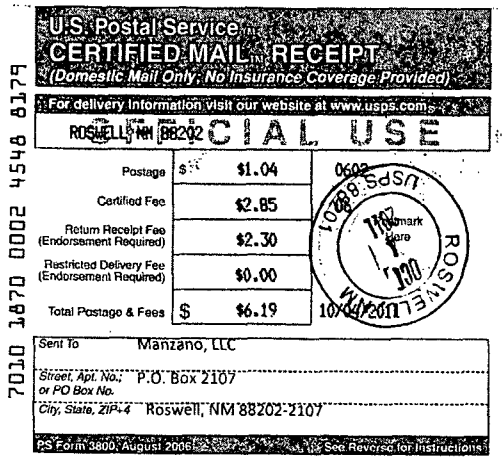
Item XIII:

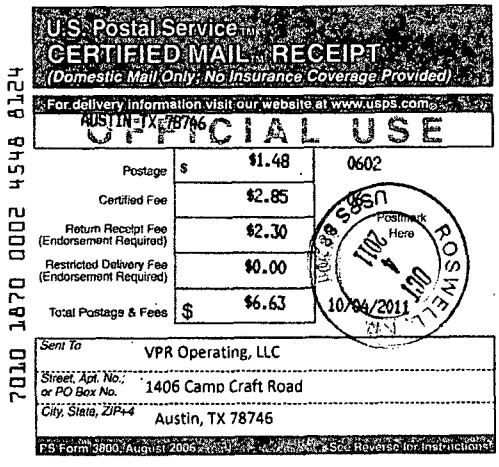
Certified Mail Receipts

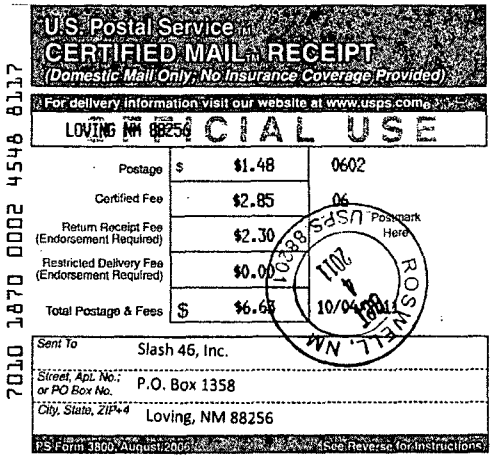

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
FARMINGTON NM 87402 OFFICIAL USE
Postage $1.48 0602
Certified Fee $2.85
Return Receipt Fee (Endorsement Required) $2.30
Restricted Delivery Fee (Endorsement Required) $0.00
Total Postage & Fees $6.63
10/04/2011
Sent To ConocoPhillips Company
Street, Apt. No.; or PO Box No. 3401 E. 30th Street
City, State, ZIP+4 Farmington, NM 87402
PS Form 3800, August 2006 See Reverse for Instructions
7010 1870 0002 4548 8148


U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
CARLSBAD NM 88220 OFFICIAL USE
Postage $1.48 0602
Certified Fee $2.85
Return Receipt Fee (Endorsement Required) $2.30
Restricted Delivery Fee (Endorsement Required) $0.00
Total Postage & Fees $6.63
10/04/2011
Sent To Bureau of Land Management
Street, Apt. No.; or PO Box No. 620 E. Greene Street
City, State, ZIP+4 Carlsbad, NM 88220
PS Form 3800, August 2006 See Reverse for Instructions
7010 1870 0002 4548 8131


U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
MIDLAND TX 79701 OFFICIAL USE
Postage $1.48 0602
Certified Fee $2.85
Return Receipt Fee (Endorsement Required) $2.30
Restricted Delivery Fee (Endorsement Required) $0.00
Total Postage & Fees $6.63
10/04/2011
Sent To Samson Resources Company
Street, Apt. No.; or PO Box No. 200 N. Loraine, Ste. 1010
City, State, ZIP+4 Midland, TX 79701
PS Form 3800, August 2006 See Reverse for Instructions
7010 1870 0002 4548 8155


U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
ROSWELL NM 88202 OFFICIAL USE
Postage $1.04 0602
Certified Fee $2.85
Return Receipt Fee (Endorsement Required) $2.30
Restricted Delivery Fee (Endorsement Required) $0.00
Total Postage & Fees $6.19
10/04/2011
Sent To Manzano, LLC
Street, Apt. No.; or PO Box No. P.O. Box 2107
City, State, ZIP+4 Roswell, NM 88202-2107
PS Form 3800, August 2006 See Reverse for Instructions
7010 1870 0002 4548 8179


U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
AUSTIN TX 78746 OFFICIAL USE
Postage $1.48 0602
Certified Fee $2.85
Return Receipt Fee (Endorsement Required) $2.30
Restricted Delivery Fee (Endorsement Required) $0.00
Total Postage & Fees $6.63
10/04/2011
Sent To VPR Operating, LLC
Street, Apt. No.; or PO Box No. 1406 Camp Craft Road
City, State, ZIP+4 Austin, TX 78746
PS Form 3800, August 2006 See Reverse for Instructions
7010 1870 0002 4548 8124


U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
LOVING NM 88256 OFFICIAL USE
Postage $1.48 0602
Certified Fee $2.85
Return Receipt Fee (Endorsement Required) $2.30
Restricted Delivery Fee (Endorsement Required) $0.00
Total Postage & Fees $6.63
10/04/2011
Sent To Slash 46, Inc.
Street, Apt. No.; or PO Box No. P.O. Box 1358
City, State, ZIP+4 Loving, NM 88256
PS Form 3800, August 2006 See Reverse for Instructions
7010 1870 0002 4548 8117

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	1		***Operator, Well, and Contact info:***
	2	II	Name of person submitting the application: Kay Havenor Other Contact?
	3	II	Did you Include a contact Email in the application? Yes and Mailing Address? Yes and Phone? Yes
	4	II	Operator Name: Cimarex Energy Company of Colorado OGRID Num: 162683
	5		RULE 5.9 Compliance..... Number of Inactive Wells 70 vs Total Wells Operated 1233 ...: Is financial assurance required on any well? No
	6		Is there any hearing order finding this operator out of compliance with Division Rule 19.15.5.9 NMAC?
	7		Are all Rule 5.9 issues OK to allow the Division to issue Disposal Permits?
	8	III	Well Name: Thyme APY Federal #1
	9	III	API Num: 30-025-36192 Spud Date: 8/26/2003
	10		Have you included API numbers on all wellbore diagrams and well list(s) in this application? Yes
	11	III	Proposed well...Footages 1650 FSL & 990 FWL Unit L Sec 1 Tsp 23S Rge 32E County Lea
	12		General Location (i.e. Y miles NW of Z): 8.2 miles northeast of junction Buck Jackson Road and NM-128
	13		Current Well Status: Inactive
	14	I	General Summary of Planned Work to Well: Plug-back and perforate 5468' - 6092' (OA)
	15		***INTERVAL TOP and BOTTOM:***
	16	IIIB.(2)	Proposed disposal Top Depth: 5468 Formation Name: middle Bell Canyon (include Member Names for Delaware or Mesaverde)
	17	IIIB.(2)	Proposed disposal Bottom Depth: 6092 Formation Name: upper Cherry Canyon
	18	IIIB.(2)	Is the disposal interval OpenHole? or Perfed? X or Both?
	19	IIIB.(2)	What will be the disposal tubing size OD? 3-1/2" Packer Seat, Feet: approx 5,400'

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	20	VII	What max surf inj. psi are you proposing? __1093__ If differing from 0.2 psi/ft surf. Grad., is supporting data attached such as a Step Rate Test?_____
	21		***FRESH WATERS:***
	22	VIII	Depth to bottom of Fresh Waters: _est max 310'_____Formation Name(s)?__Quaternary alluvium_____
	23	XI	Any Fresh Water Wells Within 1 Mile? __No___ If so, did you attach an analysis from these Wells? _____
	24		Are all "Fresh" waters isolated with Casing and Cement? __Yes___ ("Fresh" water is defined as less than 10,000 mg/l of TDS)
	25	XII	Included "Affirmative Statement" concerning any Connection from Disposal Depths to existing Fresh Waters?___Yes_____
	26		***WASTE WATERS:***
	27	XIV	Will this be a Lease Only disposal well? _____ or only used for the Operator's own waste needs? _YES___or Commercial Disposal? _____
	28	VII	Which formations will supply the waste waters to be disposed into this well... List most common...? Brushy Canyon and Bone Springs
	29	VII	Are Waste waters compatible with proposed disposal interval waters?___Yes__ Did you include waste water analysis? __Yes_____
	30		***AT PROPOSED WELL....INSITU WATERS AND HYDROCARBON POTENTIAL:***
	31		Is a discussion included of the potential for future OIL/GAS recovery from the proposed disposal interval? __Yes_____
	32		If your proposed well for disposal is a depleted producer (within the proposed interval); do you know what was the cumulative oil/gas/water? __NA____ and did you include a Rate-Time plot of this depleted interval?_____
	33	VII	Insitu water analysis Included?_____Is the salinity within the disposal interval more than 10,000 mg/l of TDS?__Yes_____ or how will you determine this insitu water salinity?_
	34	VIII	Does the application include a list of Formation tops down to and including the bottom of the target formation? __No, reported in well file_____
	35		What is the top __2830'__and bottom __4734'__ of the Salado Salt (....If this well is in the Southeast and the Salt is present)
	36	X	Are all existing Logs (including any CBL over the disposal interval) are on the OCD Web Site? __*Yes, except CBL*__If logs not there, please send_____
	37	IIIA.	Are the wellbore diagrams for this well included in the Application.....Before Conversion?_Yes___ and After Conversion?__Yes__

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	38		Are the top and bottom footage of the proposed disposal interval marked on the "after" diagram? Yes
	39		***NOTICE:***
	40	XIV	Date of the Newspaper Notice in the County: 10/4/2011
	41	V	Within 1/2 mile, did you clearly identify (either on a map or by legal description) all separately owned tracts of lands within the disposal interval? Yes
	42	XIII	Did you identify the owner(s) of each of these separately owned tracts? Yes Were they all formally noticed? Yes
	43	XIII	If reentering a P&Aed well, are there depth divisions of ownership within that well? NA .....If so, have you also noticed all the shallower interests of the intent to use the well for disposal?
	44	XIII	Is the proposed well within the R-111-P defined Potash Area or the BLM Secretaries Potash Area? No ..... If so, did you send notice to the nearest Potash lessee?
	45	XIV	Who owns the surface lands at the disposal well site (BLM, SLO, or who)? Was that party formally noticed? Yes
	46		***Area of Review:***
	47	V	Did you include a map identifying all wells within 2 miles? Yes
	48	VI	Did you include a list of all AOR wells? Yes Is the list available to be emailed (if requested) in spreadsheet format? Yes
	49	VI	Does this list identify all wells penetrating (at least the top of) the disposal interval within 1/2 mile of the proposed well? Yes
	50	VI	Did you include wellbore diagrams for all P&Aed wells that exist within the 1/2 mile AOR that penetrate the disposal interval? Yes
	51	VI	How many wells exist within the 1/2 mile AOR that penetrate the disposal interval? 1 How many of these are Plugged/Dry and Abandoned? None
	52	VI	Are details included on cement coverage of the proposed disposal interval for all wells penetrating the disposal interval within 1/2 mile of the roposedwell? Yes
	53	VI	Do all reported cement tops describe how that "top" was determined? If Available Yes If you calculated any tops, what fillup efficiency factor did you use?
	54	VI	Did you identify the presence and depth of all Cement Stage Tools (DV) in the subject well and in the AOR wells? Yes, when info is available
	55	VIII	For the target formation, is there significant formation structural depth changes within the 1/2 mile AOR? No

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	56	VIII	Is there any Karst or Massive Limestone in this target formation? No ...or in the formations directly above or below? No
	57		***Administrative or Hearing:***
	58	VI	How many wells within the 1/2 mile AOR currently are producing (or still have open perforations) within the disposal interval? None is it "gas" or "oil"?
	59		.... NOTE: If the proposed disposal interval is a "Gas" interval or if any AOR wells are producing or have open perforations within this interval then this application may not be properly classified as a "disposal". These types of applications must be processed at an examiner hearing.
	60		Any other Issues..?

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Monday, October 17, 2011 4:21 PM
To: 'Kay Havenor'
Cc: Ezeanyim, Richard, EMNRD; Gonzales, Elidio L, EMNRD
Subject: Disposal application from Cimarex Energy Co. of Colorado: Thyme APY Federal #11 API 30-025-36192 Delaware 5468 to 6092 feet

Hello Kay,
Reviewed this application today and have a couple of questions:

a. Who owns the Delaware rights in the NE/4 of Section 11 and were they notified? (didn't see that acreage in the notification list)
b. Who owns those Delaware rights within Section 1 outside the 40 acre spacing unit covered by this well (and inside the AOR)?
c. The OCD still shows this well to be operated by Cimarex Energy Company. Does Cimarex really intend to operate this under Cimarex Energy Co. of Colorado?
d. The OCD well file does not have the completion report (that I saw) from the 5-1/2 inch showing casing, cement, DV, etc. Since this is a federal well we may have missed it. Would you ask Cimarex to find their internal records of this casing/cement job and send to the OCD office in Hobbs? The intended DV tool depth in our files shows 8800 feet, but your report shows much shallower.
e. Please send a copy of the CBL to Hobbs for scanning.
f. Due to the possible micro annulus as per the Halliburton report, the disposal permit may require an injection tracer/temp survey to verify disposed waters stay in the permitted interval – if not, some remedial work would need to be done. Please send any comments?

As always, thank you for the application,

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: Kay Havenor [khavenor@georesources.com]
Sent: Thursday, October 20, 2011 7:55 PM
To: Jones, William V., EMNRD
Subject: RE: Disposal application from Cimarex Energy Co. of Colorado: Thyme APY Federal #11 API 30-025-36192 Delaware 5468 to 6092 feet

Yes sir, Cimarex acquired the NE/4 of Sec 11 also.

Thank you.
Kay

At 09:35 AM 10/20/2011, you wrote:

Hello Kay:
Does Cimarex now own the NE/4 of Section 11?
Cimarex can easily do an operator change to get the well under the "Colorado" entity.

Thanks for your reply, I have the permit ready to release.

Will Jones
New Mexico
Oil Conservation Division
Images Contacts

From: Kay Havenor [mailto:khavenor@georesources.com]
Sent: Tuesday, October 18, 2011 8:45 AM
To: Jones, William V., EMNRD
Subject: Re: Disposal application from Cimarex Energy Co. of Colorado: Thyme APY Federal #11 API 30-025-36192 Delaware 5468 to 6092 feet

Will,

Relative to your questions on C-108 Cimarex Thyme API 30-025-39192.

a. Cimarex purchased the Lime Rock Resources leases in and adjacent to AOR - all rights.

b. Cimarex owns the Delaware rights in Sec. 1 adjacent to the AOR.

c. Cimarex Energy Company of Colorado does/will operate the well and will operate the SWD.
d. You are correct in that Yates (original operator) did not supply cement data and DV info for the record. The DV tool depth of 8000' is in Yates' APD and shown as page 5 in the OCD online. Yates' BLM completion 3160-4 (OCD online image page 20) reports 5-½" 15.5# & 17# was run from surface to TD 9,150' cemented to surface with 1360 sx cmt, but does not report DV tool depth. Cimarex's well diagram dated June 8, 2011, in the well file (page 37), shows DV tool at 4,821' and TOC for 5-½" at 5,500'.
That reported TOC 5,500' in the Cimarex diagram was in conflict with Yates' reported data. I requested clarification. Cimarex engineers examined my query and opp-ed further confirmation by the Midland Halliburton cement log expert. I incorporated Halliburton's response along with a revised "Present Configuration of Well" diagram prepared by Cimarex into the submitted C-108. I have today requested Cimarex examine original (Yates) data, if any, to obtain details on cement and that cement job.

e. Cimarex has been requested to submit a copy of the Thyme APY #11 CBL to Hobbs.
f. I am confident Cimarex will comply with any injection survey requirements included in a SWD permit. They are anxious to handle their produced water.
Please let me know if the above adequately responds to your concerns. Thank you for the opportunity to respond.

Kay Havenor

At 04:20 PM 10/17/2011, you wrote:

Hello Kay,
Reviewed this application today and have a couple of questions:

a. Who owns the Delaware rights in the NE/4 of Section 11 and were they notified? (didn't see that acreage in the notification list)
b. Who owns those Delaware rights within Section 1 outside the 40 acre spacing unit covered by this well (and inside the AOR)?
c. The OCD still shows this well to be operated by Cimarex Energy Company. Does Cimarex really intend to operate this under Cimarex Energy Co. of Colorado?
d. The OCD well file does not have the completion report (that I saw) from the 5-1/2 inch showing casing, cement, DV, etc. Since this is a federal well we may have missed it. Would you ask Cimarex to find their internal records of this casing/cement job and send to the OCD office in Hobbs? The intended DV tool depth in our files shows 8800 feet, but your report shows much shallower.
e. Please send a copy of the CBL to Hobbs for scanning.
f. Due to the possible micro annulus as per the Halliburton report, the disposal permit may require an injection tracer/temp survey to verify disposed waters stay in the permitted interval – if not, some remedial work would need to be done. Please send any comments?

As always, thank you for the application,

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

Kay C. Havenor, Ph.D., PG. CPG
GeoScience Technologies
904 Moore Ave
Roswell, NM 88201-1144
(575) 626-4518

Jones, William V., EMNRD

From: Kay Havenor [khavenor@georesources.com]
Sent: Wednesday, October 19, 2011 12:45 PM
To: Jones, William V., EMNRD
Subject: Re: Disposal application from Cimarex Energy Co. of Colorado: Thyme APY Federal #11 API 30-025-36192 Delaware 5468 to 6092 feet
Attachments: Thyme Yates 5.5 csg doc.tif

Will,

As follow-up to my previous email: attached is a copy of the original Yates casing report on their 5-1/2" string with all cementing data. Fundamentally, it confirms the DV tool was set at 4821' and second stage circulated. Cimarex also sent me a digital copy of the CBL that Halliburton reviewed. I am arranging for that to go to Patricia Martinez in Hobbs. Let me know if you wish to view the digital log. Thank you.

Kay

Will,

Relative to your questions on C-108 Cimarex Thyme API 30-025-39192.

a. Cimarex purchased the Lime Rock Resources leases in and adjacent to AOR - all rights.

b. Cimarex owns the Delaware rights in Sec. 1 adjacent to the AOR.

c. Cimarex Energy Company of Colorado does/will operate the well and will operate the SWD.

d. You are correct in that Yates (original operator) did not supply cement data and DV info for the record. The DV tool depth of 8000' is in Yates' APD and shown as page 5 in the OCD online. Yates' BLM completion 3160-4 (OCD online image page 20) reports 5-½" 15.5# & 17# was run from surface to TD 9,150' cemented to surface with 1360 sx cmt, but does not report DV tool depth. Cimarex's well diagram dated June 8, 2011, in the well file (page 37), shows DV tool at 4,821' and TOC for 5-½" at 5,500'.
That reported TOC 5,500' in the Cimarex diagram was in conflict with Yates' reported data. I requested clarification. Cimarex engineers examined my query and opp-ed further confirmation by the Midland Halliburton cement log expert. I incorporated Halliburton's response along with a revised "Present Configuration of Well" diagram prepared by Cimarex into the submitted C-108. I have today requested Cimarex examine original (Yates) data, if any, to obtain details on cement and that cement job.

e. Cimarex has been requested to submit a copy of the Thyme APY #11 CBL to Hobbs.

f. I am confident Cimarex will comply with any injection survey requirements included in a SWD permit. They are anxious to handle their produced water.

Please let me know if the above adequately responds to your concerns. Thank you for the opportunity to respond.

Kay Havenor

Injection Permit Checklist (11/15/2010)

WFX_____ PMX_____ SWD 1305 Permit Date 10/26/11 UIC Qtr (O/N/D)

Wells 1 Well Name(s): THYME APY Federal #11

API Num: 30-0 25-36192 Spud Date: ~~8/26/03~~ 6/23/03 New/Old: N (UIC primacy March 7, 1982)

Footages 1650FSL/990FWL Unit L Sec 1 Tsp 23S Rge 32E County LEA

General Location: 8 mi East SE of WIPP

Operator: CIMAREX Energy Co. of COLORADO Contact Kay Havenor

OGRID: 162383 RULE 5.9 Compliance (Wells)_____ (Finan Assur)_____ IS 5.9 OK? ?

215099 Well File Reviewed ✓ Current Status: Inactive Lower Del. Producer

Planned Work to Well: PLUG BACK & Perf. ~~SQ~~

Diagrams: Before Conversion ✓ After Conversion ✓ Elogs in Imaging File: ✓ +CBL (NOT There)

O Pends Chang

Well Details:	Sizes Hole.......Pipe	Setting Depths	Stage Tool	Cement Sx or Cf	Determination Method
New __Existing __Surface	14 3/4 11 3/4	1280'	—	700 SX	Surf.
New__Existing __Interm	11 8 5/8	4850'	—	1350	Surf.
New__Existing __ LongSt	7 7/8 5 1/2	9150 TD	4821	2300 (1300/1000)	Surf.
New__Existing __ Liner				1360 cf	
New__Existing __ OpenHole					

MISSING From File

Depths/Formations:	Depths, Ft.	Formation	Tops?
Formation(s) Above	5010	Bell C.	✓
Injection TOP:	5468	Bell C.	Max. PSI 1094 OpenHole____ Perfs ✓
Injection BOTTOM:	6092	Cherry C.	Tubing Size 3 1/2 Packer Depth 5400'
Formation(s) Below	8680	Bone S.	✓

5468 / 2 = 1093.6

~~Capitan Reef? (Potash? Noticed?) [WIPP? Noticed?]~~ Salado Top/Bot 1295 595' - 4680' ~~2830-4734~~ ~~Cliff House?~~

Fresh Water: Depths: 250-750' 7310 Formation QAL Wells? NO Analysis? ✓ (1.85 mi Away) Affirmative Statement ✓

Disposal Fluid Analysis? Sources: Cimarex Wells Brushy C. / Bone SPRING

Disposal Interval: Analysis? Production Potential/Testing: Statement in application ?

Notice: Newspaper Date 10/4/11. Surface Owner BLM / Slash 46, INC. Mineral Owner(s) Sec 1 = ? NE/4 Sec 11 = ?

RULE 26.7(A) Affected Persons: Monzano / Sanson / Conoco / VPR

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

.......Active Wells 0 Repairs? — WhichWells? —

.........P&A Wells 0 Repairs? — Which Wells? —

Issues: Request Sent _____ Reply: _____