

DATE IN <u>2.21.11</u>	SUSPENSE	ENGINEER <u>WJ</u>	LOGGED IN <u>2.21.11</u>	TYPE <u>SWD</u>	APP NO. <u>1105334223</u>
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



Cimarex
112683

SPRIKE TAIL SWD #1

ADMINISTRATIVE APPLICATION CHECKLIST

30-015-27871

38599

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]

State
Eddy

[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 _____

[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.

<u>Zeno Farris</u> Print or Type Name	<u>Zeno Farris</u> Signature	<u>Mgr Operations Admin</u> Title	<u>02-04-11</u> Date
		<u>zfarris@cimarex.com</u> e-mail Address	

RECEIVED OOD
ZNF FEB 14 4:11:49 PM

I got this on the 22nd
with 9300
3 1/2
1770 psi

600 N. Marienfeld St
Suite 600
Midland, TX 79701
432-620-1938 (phone)
432-620-1938 (fax)

RECEIVED OGD

FEB 14 A 11:49

Cimarex Energy Co. of Colorado

February 4, 2011

New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505
Attn: Mr. Will V. Jones

RE: Spiketail ~~5 State No. 1~~ SWD ~~A~~ 1
New Drill
SWD Administrative Application

Dear Mr. Jones,

Enclosed is an original C-108 (Application for Authroization to Inject) for the above-mentioned new drill.

The well is proposed to be drilled to a depth of 9400 with a Cisco-Canyon injection interval of 8850-9300.

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

If you have any questions or need further information, please call me at 432-620-1938.

Sincerely,



Zeno Farris
Mgr Operations Administration

zfarris@cimarex.com

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: 2-4-11
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: _____

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.

INJECTION WELL DATA SHEET

OPERATOR: Cimarex Energy Co. of ColoradoWELL NAME & NUMBER: Spiketail SWD No. 1WELL LOCATION: 2610 FSL & 1980 FWL
FOOTAGE LOCATIONUNIT LETTER K

29E

17S

5

RANGE

TOWNSHIP

SECTION

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing-PROPOSEDHole Size: 17 1/2" Casing Size: 13 3/8" 48# H-40 @ 450'Cemented with: 500 sx. or ft³Top of Cement: Surface Method Determined: CircIntermediate Casing-PROPOSEDHole Size: 12 1/4" Casing Size: 9 5/8" 40# J55 @ 1200'Cemented with: 470 sx. or ft³Top of Cement: Surface Method Determined: CircProduction Casing - PROPOSEDHole Size: 8 3/4" Casing Size: 7" 17#/26#LN80 @ 9400'Cemented with: 950 sx. or ft³Top of Cement: Surface Method Determined: CirculateTotal Depth: 9400' TVD Injection Interval8850' feet To 9300'(Perforated or Open Hole; indicate which) Perforated

INJECTION WELL DATA SHEETTubing Size: 3 1/2", 9.3#, J-55 Lining Material: Nylon (IPC 101)Type of Packer: 7" AS-1X PkrPacker Setting Depth: +/- 8750'

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

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: Cisco/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. NA New Drill See proposed WBD.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
Grayburg (2050) San Andres (2400) Paddock (3860) Blinbry (4365) – Overlying
No Strawn, Atoka, Morrow prod underlying – Cisco/Canyon underlying in 15&28-17S-29E

C-108 Attachment

Section VI – There is one well within the area of review that penetrated the injection interval. See attached WBD.

1. Jenna Com No. 1, 2110' FSL & 990' FEL Sec 5-17S-29S drilled to a depth of 11720'. Active Injector.

Section VII – Data on Proposed Operation

1. Proposed Average and Maximum Daily Rate and Volume of Fluids to be Injected
 - a. Average Daily Rate: 3000 BWPD
 - b. Maximum Daily Rate: 4000 BWPD
2. Open or Closed System:
 - a. Injection System is a closed System
3. Proposed Average & Maximum* Injection Pressure
 - a. Average Injection Pressure: 1200 psi
 - b. Maximum Injection Pressure: 1770 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 Paddock/Blinbry wells in the area (see attached representative water analysis).
5. Analysis of disposal zone formation water
 - a. The nearest Cisco/Canyon production is to the south in the Grayburg Upper Penn in section 28-17S-29E at an interval of 8823'-8870' (20' of proposed injection interval) and in section 15-17S-29E at an interval of 9820'-9847' (Below proposed injection interval). The Jenna Com No. 1 in the area of review was perforated in the Cisco/Canyon but was unproductive and converted to a Cisco/Canyon injection well from 8876'-8998'. Paddock/Blinbry formation water is compatible in offset injector.

Section VIII – Geologic Data on Injection Zone

1. The injection interval 8850' – 9300' is in the Cisco/Canyon formations of the Devonian System with dolomite geology. The estimated top of the Cisco formation is at 8548' while the bottom of the Canyon is at 9952'. Gross thickness is 1404'.
2. The Office of the State Engineer indicates the average depth to usable quality ground water in the area is 62' in the Ogallala aquifer.

Section IX – Proposed stimulation program:

1. Spiketail # 1 SWD
 - a. Acidize with 1500 gals 7 1/2% type acid

Section X – Logs for the offsetting Jenna Com No. 1 have previously been filed and Spiketail # 1 SWD logs will be filed upon completion

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

1. The Office State Engineer records indicate there are 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.

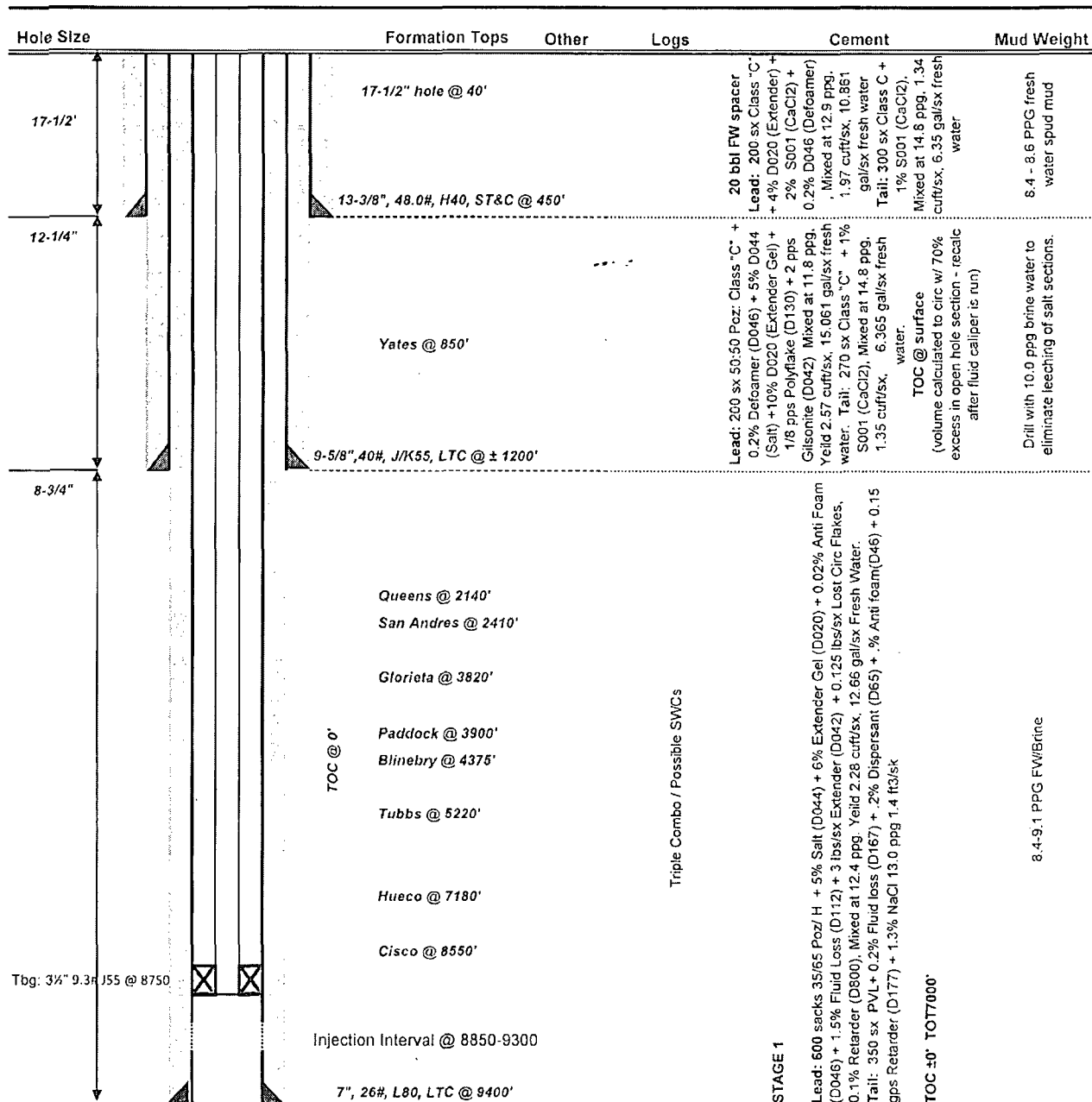


DRILLING PROGNOSIS Cimarex Energy Company

8/23/2010

Well: Spiketail-5 State + SWD #1
Location: Sec 5, T17S, R29E
County, State: Eddy County, NM
Surface Location: 2340' FNL & 850' TEL
Wellhead: Trns -13 3/8" 3000 x 11 3/4" SOW
"A" 8 5/8" SOW x 11" 3000
"B" 11" 3000 x 7 1/16" 5000

Lse Serial #
Field: Loco Hills
Objective: Cisco/Canyon
TVD/MD: 9400'
Tbg: 3-1/2"



NOTES:

Cement volumes for surface csg include a 100% excess in the open hole section. If drilling conditions deem necessary, fluid caliper hole and adjust volumes.

Cement volumes for intermediate csg include a 70% excess in the open hole section. If drilling conditions deem necessary, fluid caliper hole and adjust volumes. Csg set above the Yates, 20' into Tansill.

Cement volumes for production csg include a 25% excess in the open hole section. Adjust volumes after caliper + 25% excess.

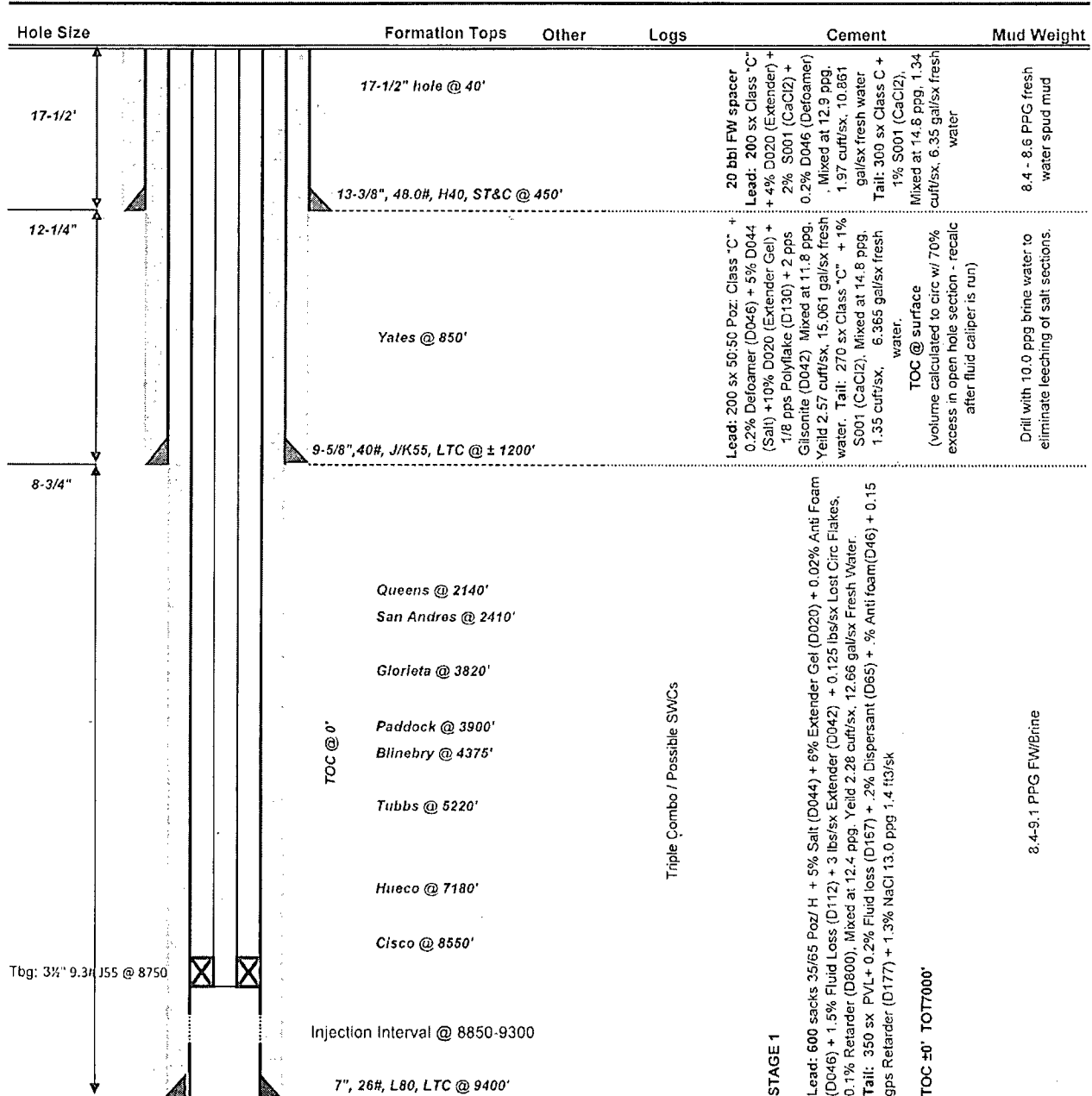


DRILLING PROGNOSIS Cimarex Energy Company

8/23/2010

Well: Spiketail SWD 1
Location: Sec 5, T17S, R29E
County, State: Eddy County, NM
Surface Location: 2310' ENL & 890' FEL
Wellhead: Trns -13_3/8" 3000 x 11_3/4" SOW
"A" 8_5/8" SOW x 11" 3000
"B" 11" 3000 x 7_1/16" 5000

Lse Serial #
Field: Loco Hills
Objective: Cisco/Canyon
TVD/MD: 9400'
Tbg: 3-1/2"



NOTES:

Cement volumes for surface csg include a 100% excess in the open hole section. If drilling conditions deem necessary, fluid caliper hole and adjust volumes.

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Cement volumes for production csg include a 25% excess in the open hole section. Adjust volumes after caliper + 25% excess.

Section XIII and XIV – Proof of Notice

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

State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87504
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

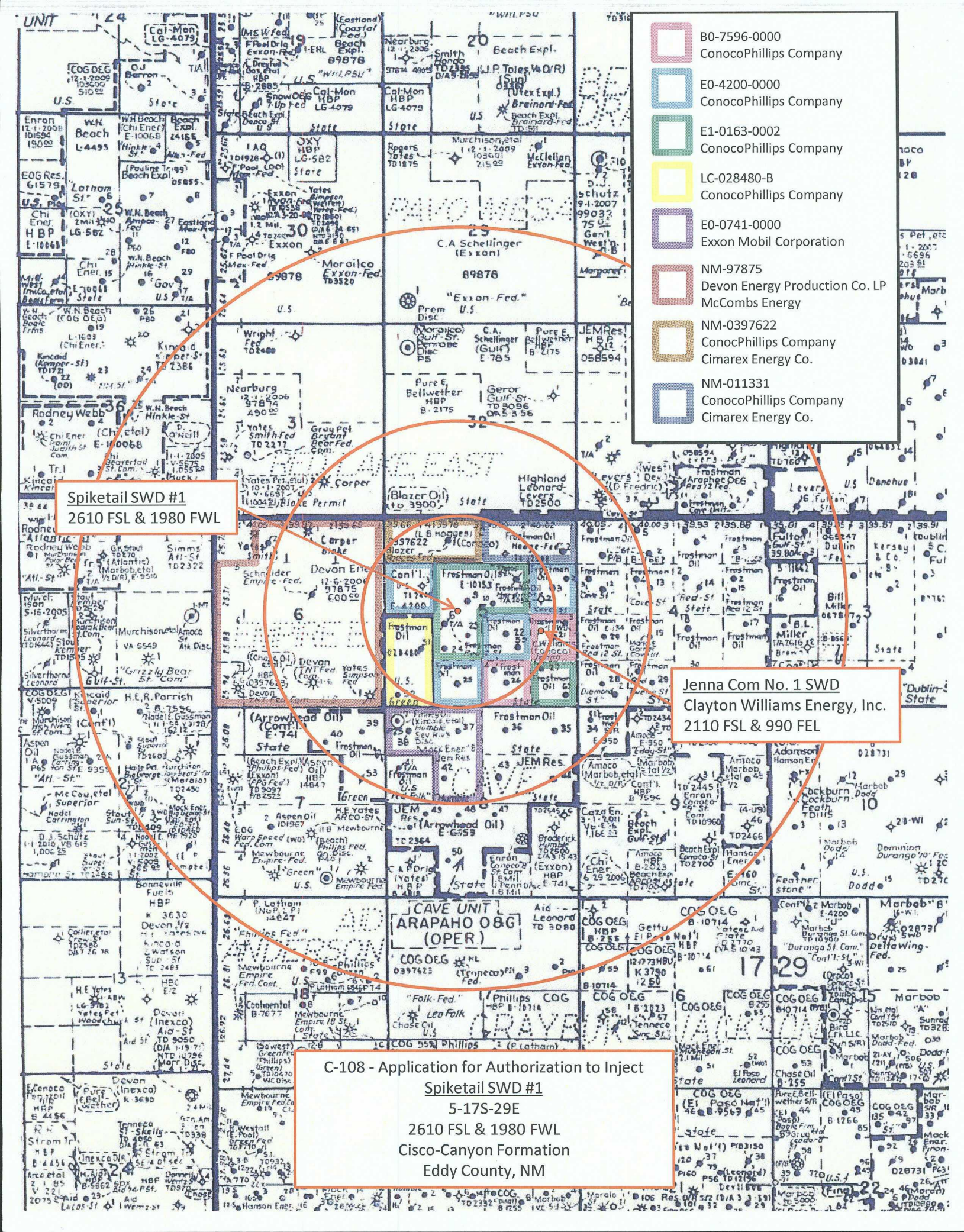
ConocoPhillips Company
600 N Dairy Ashford
Houston, TX 77079

McCombs Energy LLC
5559 San Felipe Suite 1220
Houston TX 77056

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

ExxonMobil Production Company
396 West Greens Road
Houston TX 770067

Clayton Williams Energy Inc
6 Desta Dr. Suite 6500
Midland, TX 79705
3. Publication and proof of notice - Attached



- B0-7596-0000
ConocoPhillips Company
- E0-4200-0000
ConocoPhillips Company
- E1-0163-0002
ConocoPhillips Company
- LC-028480-B
ConocoPhillips Company
- E0-0741-0000
Exxon Mobil Corporation
- NM-97875
Devon Energy Production Co. LP
McCombs Energy
- NM-0397622
ConocoPhillips Company
Cimarex Energy Co.
- NM-011331
ConocoPhillips Company
Cimarex Energy Co.

Spiketail SWD #1
2610 FSL & 1980 FWL

Jenna Com No. 1 SWD
Clayton Williams Energy, Inc.
2110 FSL & 990 FEL

C-108 - Application for Authorization to Inject
Spiketail SWD #1
5-17S-29E
2610 FSL & 1980 FWL
Cisco-Canyon Formation
Eddy County, NM



SPIKETAIL SWD #1

Located 2610' FSL and 1980' FWL
 Section 5, Township 17 South, Range 29 East,
 N.M.P.M., Eddy County, New Mexico.

basin
surveys

focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
 basinsurveys.com

W.O. Number: JMS 22978

Scale: 1" = 2000'

YELLOW TINT - USA LAND
 BLUE TINT - STATE LAND
 NATURAL COLOR - FEE LAND



CIMAREX
ENERGY CO.
OF COLORADO

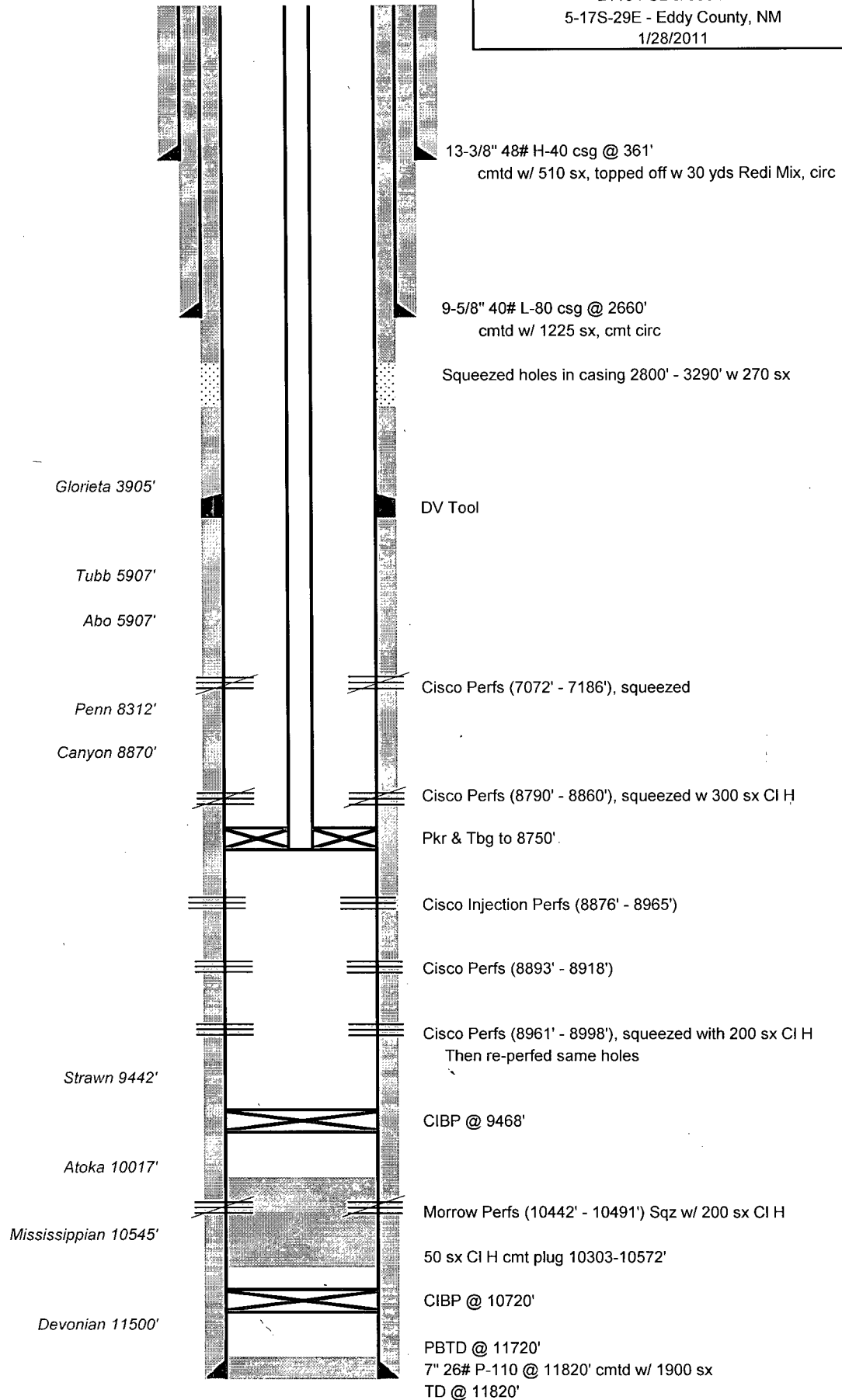
Clayton Williams Energy, Inc

Jenna Com No. 1 SWD

2110 FSL & 990 FEL

5-17S-29E - Eddy County, NM

1/28/2011



North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	CIMAREX ENERGY	Sales RDT:	33521
Region:	PERMIAN BASIN	Account Manager:	STEVE HOLLINGER (575) 910-9393
Area:	CARLSBAD, NM	Sample #:	496874
Lease/Platform:	SPIKETAIL '5' LEASE	Analysis ID #:	101797
Entity (or well #):	4	Analysis Cost:	\$90.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 496874 @ 75 °F					
Sampling Date:	07/06/10	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	07/16/10	Chloride:	80451.0	2269.23	Sodium:	34608.4	1505.38
Analyst:	SANDRA GOMEZ	Bicarbonate:	134.0	2.2	Magnesium:	2270.0	186.74
TDS (mg/l or g/m3):	133761.9	Carbonate:	0.0	0.	Calcium:	12240.0	610.78
Density (g/cm3, tonne/m3):	1.095	Sulfate:	2905.0	60.48	Strontium:	267.0	6.09
Anion/Cation Ratio:	1	Phosphate:			Barium:	0.1	0.
		Borate:			Iron:	23.0	0.83
Carbon Dioxide:	140 PPM	Silicate:			Potassium:	863.0	22.07
Oxygen:		Hydrogen Sulfide:		0 PPM	Aluminum:		
Comments:		pH at time of sampling:		6.5	Chromium:		
RESISTIVITY 0.059 OHM-M @ 75°F		pH at time of analysis:			Copper:		
		pH used in Calculation:		6.5	Lead:		
					Manganese:	0.400	0.01
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
140	0	0.54	10.46	0.33	855.99	0.55	932.92	0.52	121.23	-0.27	0.00	0.49
160	0	0.63	12.62	0.31	826.46	0.64	1001.22	0.54	123.38	-0.39	0.00	0.57
180	0	0.73	14.46	0.30	808.30	0.74	1067.07	0.56	126.46	-0.48	0.00	0.65
200	0	0.82	16.62	0.30	799.38	0.86	1125.22	0.59	129.85	-0.55	0.00	0.72

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

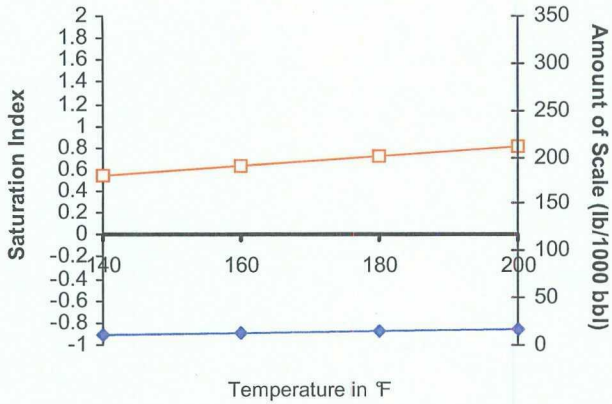
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

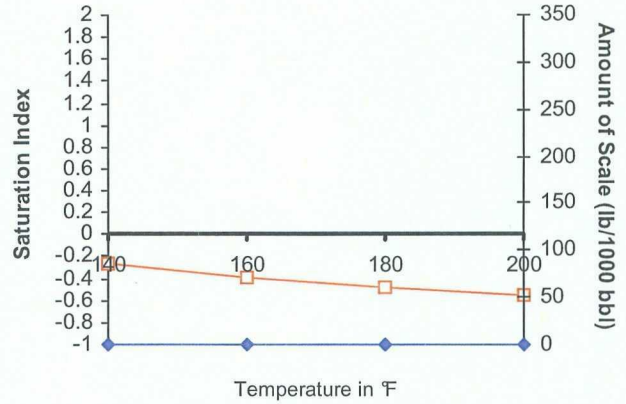
Scale Predictions from Baker Petrolite

Analysis of Sample 496874 @ 75 °F for CIMAREX ENERGY, 07/16/10

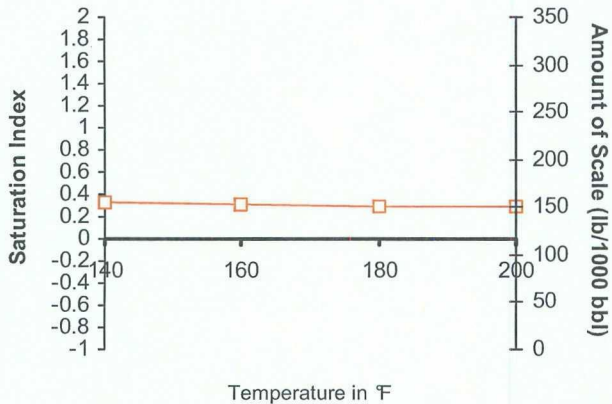
Calcite - CaCO_3



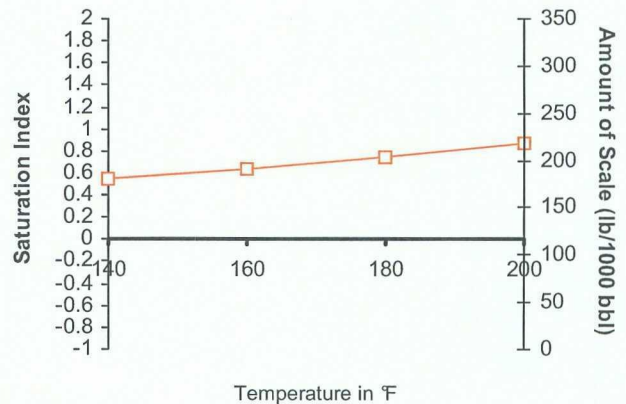
Barite - BaSO_4



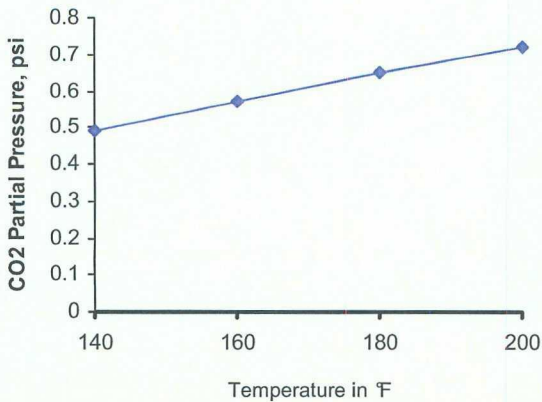
Gypsum - $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$



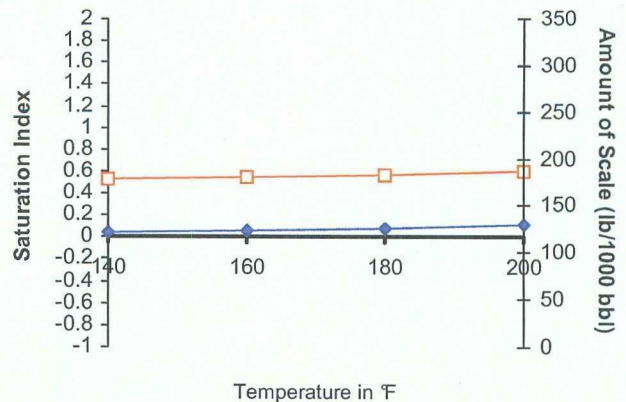
Anhydrite - CaSO_4



Carbon Dioxide Partial Pressure



Celestite - SrSO_4



Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Kathy McCarroll, being first duly sworn,
on oath says:

That she is the Classified Supervisor of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

November 18 2010

That the cost of publication is **\$62.07** and that payment thereof has been made and will be assessed as court costs.

Kathy McCarroll

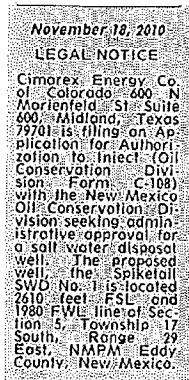
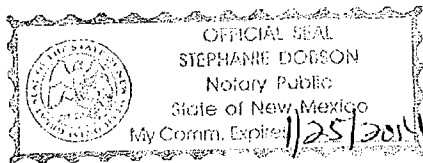
Subscribed and sworn to before me this

18th day of November, 2010

Stephanie Dobson

My commission Expires on 1/25/2014

Notary Public



The source of the disposal water will be wells in the area operated by Cimarex that produce from the Paddock and Blinberry formations. The disposal water will be injected into the Cisco Canyon formation of the Pennsylvanian system at a depth interval of 8850 feet to 9300 feet at a maximum injection pressure of 1770 PSI. (Subject to increase after Division approved testing) and a maximum rate of 4000 BWPD. Any interested party with questions or comments may contact Zeno Farris at Cimarex Energy Co. of Colorado, 600 N. Marlenfeld St. Suite 600, Midland, Texas, 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.

November 18, 2010

LEGAL NOTICE

Cimarex Energy Co.
of Colorado, 600 N
Marionfield St Suite
600, Midland, Texas
79701 is filing an Ap-
plication for Authori-
zation to Inject (Oil
Conservation Divi-
sion Farm C-108)
with the New Mexico
Oil Conservation Di-
vision seeking admin-
istrative approval for
a salt water disposal
well. The proposed
well, the Spiketail
SWD No. 1 is located
2610 feet FSL and
1980 FWL line of Sec-
tion 5, Township 17
South, Range 29
East, NMPM Eddy
County, New Mexico.

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Kathy McCarroll, being first duly sworn,
on oath says:

That she is the Classified Supervisor of the
Carlsbad Current-Argus, a newspaper
published daily at the City of Carlsbad, in
said county of Eddy, state of New Mexico
and of general paid circulation in said county;
that the same is a duly qualified newspaper
under the laws of the State wherein legal
notices and advertisements may be
published; that the printed notice attached
hereto was published in the regular and
entire edition of said newspaper and not in
supplement thereof on the date as follows, to
wit:

November 18 2010

That the cost of publication is **\$62.07** and that
payment thereof has been made and will be
assessed as court costs.

Kathy McCarroll

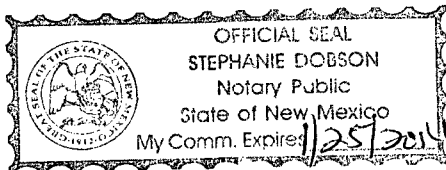
Subscribed and sworn to before me this

18th day of November, 2010

Stephanie Dobson

My commission Expires on 1/25/2014

Notary Public



Jones, William V., EMNRD

From: Zeno Farris [zfarris@cimarex.com]
Sent: Thursday, February 24, 2011 9:16 AM
To: Jones, William V., EMNRD
Cc: Natalie Krueger
Subject: Spiketail 5 State # 1 SWD
Attachments: 20110224095444064.pdf; C-108 Spiketail 5 ~~SWD~~ [#] SWD.pdf

Will, did you received the attached SWD filing? It's dated 2-4-11 but didn't get mailed out until 2-11-11. I noticed that we didn't include the notification letter to the affected parties with the protest statement in our submittal to you. Also attached are copies of the letters that were mailed to the affected parties with the application stating they have 15 days from date of receipt to protest.

Do you guys have a lot of injection applications in the hopper? Barring any protests or issues with the application does a mid to late March approval time frame sound reasonable. Thanks for your assistance Will. Zeno

.....

600 N. Marienfeld St
Suite 600
Midland, TX 79701
432-620-1938 (phone)
432-620-1938 (fax)

Cimarex Energy Co. of Colorado

February 4, 2011

ConocoPhillips Company
600 N Dairy Ashford
Houston, TX 77079

RE: Spiketail 5 State No. 1 SWD
New Drill
SWD Administrative Application

Dear Ladies and Gentlemen,

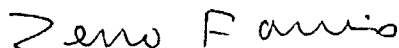
Enclosed is a copy of a C-108 (Application for Authroization to Inject) for the above-mentioned new drill.

The well is proposed to be drilled to a depth of 9400 with a Cisco-Canyon injection interval of 8850-9300. The requested maximum injection pressure will be 1770 psi and maximum injection rate will be 4000 barrels of water per day.

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 15 days of the date of the receipt of this letter.

If you have any questions or need further information regarding this application, please call me at 432-620-1938.

Sincerely,



Zeno Farris
Mgr Operations Administration
Cimarex Energy Co., Permian Basin Region

zfarris@cimarex.com

.....

.....

600 N. Marienfeld St
Suite 600
Midland, TX 79701
432-620-1938 (phone)
432-620-1938 (fax)

Cimarex Energy Co. of Colorado

February 4, 2011

McCombs Energy LLC
5559 San Felipe Suite 1220
Houston TX 77056

RE: Spiketail 5 State No. 1 SWD
New Drill
SWD Administrative Application

Dear Ladies and Gentlemen,

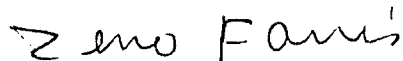
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If you have any questions or need further information regarding this application, please call me at 432-620-1938.

Sincerely,



Zeno Farris
Mgr Operations Administration
Cimarex Energy Co., Permian Basin Region

zfarris@cimarex.com

.....

.....

600 N. Marienfeld St
Suite 600
Midland, TX 79701
432-620-1938 (phone)
432-620-1938 (fax)

Cimarex Energy Co. of Colorado

February 4, 2011

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

RE: Splketail 5 State No. 1 SWD
New Drill
SWD Administrative Application

Dear Ladies and Gentlemen,

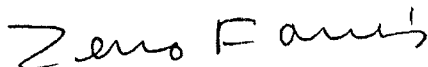
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If you have any questions or need further information regarding this application, please call me at 432-620-1938.

Sincerely,



Zeno Farris
Mgr Operations Administration
Cimarex Energy Co., Permian Basin Region

zfarris@cimarex.com

.....

.....

600 N. Marienfeld St
Suite 600
Midland, TX 79701
432-620-1938 (phone)
432-620-1938 (fax)

Cimarex Energy Co. of Colorado

February 4, 2011

ExxonMobil Production Company
396 West Greens Road
Houston TX 770067

RE: Spiketail 5 State No. 1 SWD
New Drill
SWD Administrative Application

Dear Ladies and Gentlemen,

Enclosed is a copy of a C-108 (Application for Authroization to Inject) for the above-mentioned new drill.

The well is proposed to be drilled to a depth of 9400 with a Cisco-Canyon injection interval of 8850-9300. The requested maximum injection pressure will be 1770 psi and maximum injection rate will be 4000 barrels of water per day.

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 15 days of the date of the receipt of this letter.

If you have any questions or need further information regarding this application, please call me at 432-620-1938.

Sincerely,



Zeno Farris
Mgr Operations Administration
Cimarex Energy Co., Permian Basin Region

zfarris@cimarex.com

.....

.....

600 N. Marienfeld St
Suite 600
Midland, TX 79701
432-620-1938 (phone)
432-620-1938 (fax)

Cimarex Energy Co. of Colorado

February 4, 2011

Clayton Williams Energy Inc
6 Desta Dr. Suite 6500
Midland, TX 79705

RE: Spiketail 5 State No. 1 SWD
New Drill
SWD Administrative Application

Dear Ladies and Gentlemen,


Enclosed is a copy of a C-108 (Application for Authroization to Inject) for the above-mentioned new drill.

The well is proposed to be drilled to a depth of 9400 with a Cisco-Canyon injection interval of 8850-9300. The requested maximum injection pressure will be 1770 psi and maximum injection rate will be 4000 barrels of water per day.

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 15 days of the date of the receipt of this letter.

If you have any questions or need further information regarding this application, please call me at 432-620-1938.

Sincerely,



Zeno Farris
Mgr Operations Administration
Cimarex Energy Co., Permian Basin Region

zfarris@cimarex.com

.....

.....

600 N. Marienfeld St
Suite 600
Midland, TX 79701
432-620-1938 (phone)
432-620-1938 (fax)

Cimarex Energy Co. of Colorado

February 4, 2011

New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87504
Attn: Jeff Albers

RE: Spiketail 5 State No. 1 SWD
New Drill
SWD Administrative Application

Dear Ladies and Gentlemen,

Enclosed is a copy of a C-108 (Application for Authroization to Inject) for the above-mentioned new drill.

The well is proposed to be drilled to a depth of 9400 with a Cisco-Canyon injection interval of 8850-9300. The requested maximum injection pressure will be 1770 psi and maximum injection rate will be 4000 barrels of water per day.

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If you have any questions or need further information regarding this application, please call me at 432-620-1938.

Sincerely,



Zeno Farris
Mgr Operations Administration
Cimarex Energy Co., Permian Basin Region

zfarris@cimarex.com

.....

.....

600 N. Marienfeld St
Suite 600
Midland, TX 79701
432-620-1938 (phone)
432-620-1938 (fax)

Cimarex Energy Co. of Colorado

February 4, 2011

New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505
Attn: Mr. Will V. Jones

RE: Spiketail 5 State No. 1 SWD
New Drill
SWD Administrative Application

Dear Mr. Jones,


Enclosed is an original C-108 (Application for Authroization to Inject) for the above-mentioned new drill.

The well is proposed to be drilled to a depth of 9400 with a Cisco-Canyon injection interval of 8850-9300.

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

If you have any questions or need further information, please call me at 432-620-1938.

Sincerely,



Zeno Farris
Mgr Operations Administration

zfarris@cimarex.com

.....

Confirmation Services	Package ID: 9171082133393803870820	E-CERTIFIED
	Destination ZIP Code: 77079	1ST CLASS FLAT
	Customer Reference:	
	Rec ConocoPhillips Company	PBP Account #: 35644897
	Addr 600 N Dairy Ashford	Serial #: 3132785
	Houston, TX 77079	FEB 11 2011 1:18P

Confirmation Services	Package ID: 9171082133393803870837	E-CERTIFIED
	Destination ZIP Code: 77056	1ST CLASS FLAT
	Customer Reference:	
	Rec McCombs Energy LLC	PBP Account #: 35644897
	Addr 5559 San Felipe Suite 1220	Serial #: 3132785
	Houston TX 77056	FEB 11 2011 1:19P

Confirmation Services	Package ID: 9171082133393803870844	E-CERTIFIED
	Destination ZIP Code: 73102	1ST CLASS FLAT
	Customer Reference:	
	Recip Devon Energy Production Company, LP	P Account #: 35644897
	Addr 20 N Broadway	Serial #: 3132785
	Oklahoma City, OK 73102	FEB 11 2011 1:19P

Confirmation Services	Package ID: 9171082133393803870851	E-CERTIFIED
	Destination ZIP Code: 77067	1ST CLASS FLAT
	Customer Reference:	
	Rec ExxonMobil Production Company	PBP Account #: 35644897
	Addr 396 West Greens Road	Serial #: 3132785
	Houston TX 77067	FEB 11 2011 1:19P

Confirmation Services	Package ID: 9171082133393803870875	E-CERTIFIED
	Destination ZIP Code: 87504	1ST CLASS FLAT
	Customer Reference:	
	Rec New Mexico State Land Office	PBP Account #: 35644897
	Add 310 Old Santa Fe Trail	Serial #: 3132785
	Santa Fe, NM 87504	FEB 11 2011 1:19P
	Attn: Jeff Albers	

Confirmation Services	Package ID: 9171082133393803870868	E-CERTIFIED
	Destination ZIP Code: 79705	1ST CLASS FLAT
	Customer Reference:	
	R Clayton Williams Energy Inc	PBP Account #: 35644897
	A 6 Desta Dr. Suite 6500	Serial #: 3132785
	Midland, TX 79705	FEB 11 2011 1:19P

Injection Permit Checklist (07/9/2010)

WFX

PMX

(SWD -1268)

Permit Date

3/28/10

UIC Qtr

(J(F/M))

Wells

1 Well Name(s): SPIKE TIRE STAKE #1

API Num: 30-0

15-38599

Spud Date

NOT SPUD

New/Old: N

(UIC primacy March 7, 1982)

Footages

2610 ESL / 1180 FWL

Unit

#

Sec

5

Tsp

17S

Rge

29E

County

EDDY

General Location:

LOGO HILLS

Operator:

CIMAREX Energy Co. of Colorado

Contact

Zero Farris

OGRID:

162683

RULE 5-9 Compliance (Wells)

5/1154

(Finan Assur)

OK IS 5.9 OK?

OK

Well File Reviewed

✓

Current Status:

New APD

Planned Work to Well:

Drill Complete / INJECT

Diagrams: Before Conversion

After Conversion

Elogs in Imaging File:

NOT Drilled / St

Well Details:

Hole.....Pipe

Setting
DepthsStage
ToolCement
Sx or CfCement Top and
Determination MethodNew ☒ Existing ☐ Surface

17 1/2 13 3/8

450

200 + 300 SX

CIRC

New ☒ Existing ☐ Interm

12 1/4 9 5/8

+ 1200 in / yds

200 + 270

CIRC

New ☒ Existing ☐ Long St

8 3/4 7"

9400

600 + 350

New ☐ Existing ☐ LinerNew ☐ Existing ☐ Open Hole

Depths/Formations:

Depths, Ft.

Formation

Tops?

Formation(s) Above

8548'

CISCO

✓

Injection TOP:

8850

CISCO

Max. PSI

1770

Open Hole

Perfs

✓

Injection BOTTOM:

9300

CANYON

Tubing Size

3 1/2

Packer Depth

8750

Formation(s) Below

(none Below Productive)

Produce several MILES
S.E. of Here
(28/17S/29E)

Capitan Reef?

(Polash? Noticed?)

[WIPP? Noticed?]

Salado Top/Bot

Cliff House?

Fresh Water:

Depths:

0-62'

Formation

Ogallala

Wells?

NO

Analysis?

Affirmative Statement

✓

Disposal Fluid Analysis?

Sources:

Paddock / Blindry

Disposal Interval: Analysis?

Production Potential/Testing:

already SWD

Notice: Newspaper Date

11/18/10

Surface Owner

SLO-

Mineral Owner(s)

RULE 26.7(A) Affected Persons:

CONOCO / McComb / Denver / Exxon / Williams

AOR: Map?

Well List?

Active Wells

1 Injection

Producing in Interval?

✓

Repairs

0

Which Wells?

.....P&A Wells

0

Diagrams?

-

Repairs

-

Which Wells?

-

Questions:

Request Sent

Reply: