DATE 3/29/06	SUSPENSE 4/14/06	ENGINEER Will Jones	LOGGED IN 3/29/06	TYPE SWD	APP NO. pTDSO608853498

ABOVE THIS LINE FOR DIVISION USE ONLY

1026

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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

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]

[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.

Print or Type Name	Signature	Title	Date

e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT
(continuation)

III. WELL DATA

See attached "As Is" and "Proposed" Injection Well Data Sheets (Attachments 1-3)

IV. IS THIS AN EXPANSION OF AN EXISTING PROJECT?

No

V. MAP

See attached maps with ½ mile and 2 mile radius circles (Attachments 4-5)

VI. WELLS WITHIN THE AREA OF REVIEW

There are 37 wells that penetrate the proposed San Andres injection zone within the Area of Review. See the attached Area of Review well data tabulation sheet (Attachment 6) for the details on these wells including the wellbore diagrams on the four P&A wells (Attachments 7-10)

VII. PROPOSED OPERATIONS

Overall Objective:

Nearburg Producing Company is proposing the following work on the temporarily abandoned CC Federal No. 5 in Unit K, Section 9, T18S-R27E, Eddy County, New Mexico for the purpose of converting the well to water disposal in the San Andres.

- **Retrieve the 5-1/2" cement retainer and clean out the wellbore to the top of the debris above the 35' cement plug and 5-1/2" CIBP at 2850'.**
- **Perforate additional San Andres porosity intervals from 1995- 2117' OA.**
- **Break down the new (1995-2117' OA) and existing (2146-2226' OA) San Andres perforations using pin-point packers and acid.**
- **Fracture stimulate all perforations with a suitable frac fluid and proppant, if necessary.**
- **Run 2-7/8" internally coated tubing with a packer set within 100' of the top-most perforation at 1995'.**
- **Dispose of Yeso, Glorieta, and San Andres water from new wells to be drilled in Sections 32 and 33, T17S-R27E.**

1. Proposed average and maximum daily rate and volume of fluids to be injected.

500 BWPD and 1000 BWPD, respectively

2. The system is closed or open.

Open

3. Proposed average and maximum injection pressure.

800 psi and 1536 psi, respectively

The above maximum pressure is based on an average 0.77 psi/ft wellhead pressure gradient to the top perforation at 1995'. It is requested that this pressure gradient be granted to Nearburg based on fracture gradient and wellhead pressure gradient data submitted by Devon on eight of their West Red Lake San Andres Waterflood Unit injection wells in 1997. The data submitted is contained in Division Order WFX-708 and resulted in the OCD granting Devon wellhead pressures ranging from 0.6 to 0.9 psi/ft for additional unit injection wells. The wells listed in their application offset CC Federal No. 5 to the northwest. Please see Attachment 11 that summarizes the data contained in Devon's injection applications and the resulting OCD Division Order.

4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than re-injected produced water.

Disposal water will come from new Red Lake Glorieta, Yeso (Glorieta-Yeso Pool), and San Andres wells drilled in Sections 32 and 33, T17S-R27E. The water will be injected into the San Andres formation in CC Federal No. 5. Attachments 12 and 13 report the water analyses for the Yeso, San Andres, and Glorieta-Yeso respectively. Overall, Nearburg has been advised by MCI Chemicals and Consulting that carbonate scaling and iron sulfides could be a problem, but both are easily dealt with and extremely economical to treat.

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.

Fifteen wells currently produce only from the San Andres within one half mile of CC Federal No. 5.

VIII. GEOLOGICAL DATA

Injection Zone:

Geologic Name: **San Andres of the Red Lake Queen-Grayburg-San Andres Pool**

Lithologic Detail: **Porous Shelf Dolomite**

Thickness: **+/-1450'**

HOLLAND&HART LLP

Ocean Munds-Dry
omundsdry@hollandhart.com

2006 MAR 28 PM 3 22

March 28, 2006

HAND-DELIVERED

Mark E. Fesmire, P.E.
Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Re: C-108 Application of FDW, Inc. for Authorization to Inject Produced Water into its CC Federal No. 5 Well, 2310 FSL and 1650 FWL of Section 9, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico

Dear Mr. Fesmire:

Please find attached FDW, Inc.'s (an affiliate of Nearburg Producing Company) Form C-108 Application for Authorization to Inject. FDW seeks authorization to dispose of off-lease disposal water by injecting into its CC Federal No. 5 Well. Also enclosed is the openhole log for the proposed injection well for your review.

On the date this application was filed, notice was provided to the owner of the surface of the land on which the disposal well is to be located and to each leasehold operator within one-half mile of the well by providing each with a copy of this application by certified mail and advising each that they have 15 days from the date of the notice letter to file an objection with the Santa Fe Office of the Oil Conservation Division and that, if no objection is received by the Division, the application will be approved.

A copy of the notice list and the letter are attached as Exhibit A. A notice affidavit is attached as Exhibit B.

Proof of publication as required in Division Rule 701(C) is attached as Exhibit C.

A copy of this application has also been sent to the Artesia District Office.

HOLLAND&HART LLP

Your attention to this matter is appreciated.

Sincerely,

Ocean Munds-Dry

Ocean Munds-Dry
Attorney for FDW, Inc.
and Nearburg Producing Company

Enclosures

cc: Bob Shelton
Artesia District Office

ADMINISTRATIVE APPLICATION OF FDW, INC. FOR AUTHORIZATION TO INJECT PRODUCED WATER INTO ITS CC FEDERAL NO. 5 WELL, EDDY COUNTY, NEW MEXICO

EXHIBIT A

Bureau of Land Management
Carlsbad Field Office
320 East Greene Street
Carlsbad, New Mexico 88220

Devon Energy Corporation
20 North Broadway, Suite 1500
Oklahoma City, OK 73102

BP America Production Company
P. O. Box 1089
Eunice, New Mexico 88231

CC Federal #5

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

April Hernandez, being first duly sworn, on oath says:

That she is HR/Administrative Assistant 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:

March 22 2006

2006

2006

2006

That the cost of publication is $59.32
and that payment thereof has been made and will be assessed as court costs.

April Hernandez

Subscribed and sworn to before me this
22 day of March, 2006

Stephanie Dobson
Notary Public

My commission Expires on _____

OFFICIAL SEAL
STEPHANIE DOBSON
Notary Public
State of New Mexico
My Comm. Expires 1/25/2010

March 22, 2006

LEGAL NOTICE

Nearburg Producing Company, 3300 North "A" Street, Building 2, Suite 120, Midland, Texas, 79705, is in the process of filing an Application with the New Mexico Oil Conservation Division seeking authorization to convert and inject produced water into CC Federal No. 5 at a surface location of 2310 feet from the south line and 1650' feet from the west line (Unit K) of Section 9, Township 18 South and Range 27 East, NMPM, Eddy County, New Mexico. The sources of the disposed water will be from oil and gas wells in the area that produce from the Red Lake Field Glorieta, Yeso, and San Andres formations. The water will be injected into the San Andres formation, which is currently under waterflood in the West Red Lake Unit whose boundary is 1650' west and 1650' north of the CC Federal No. 5. The maximum surface injection pressure will be 1536 pounds per square inch, and the maximum injection rate will be 1000 barrels of water per day. Any interested party with questions or comments may contact Brian Huzzey at Nearburg Producing Company at the above address, or call 432-686-8235, extension 206. 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 (15) days of the date of the publication of this notice.

HOLLAND&HART LLP

Ocean Munds-Dry
omundsdry@hollandhart.com

March 28, 2006

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Land Owner:
Bureau of Land Management
Carlsbad Field Office
320 East Greene Street
Carlsbad, New Mexico 88220

Leasehold Operators:
Devon Energy Corporation
20 North Broadway, Suite 1500
Oklahoma City, OK 73102

BP America Production Company
P.O. Box 1089
Eunice, New Mexico 88231

Re: Application of FDW, Inc. for Administrative Approval of Salt Water Disposal (CC Federal No. 5 Well), Eddy County, New Mexico

Ladies and Gentlemen:

This letter is to advise you that FDW, Inc., an affiliate of Nearburg Producing Company, is in the process of filing the enclosed application with the New Mexico Oil Conservation Division seeking authorization to dispose of produced water into its CC Federal No. 5 well at a surface location of 2310 feet from the South line and 1650 feet from the West line (Unit K) of Section 9, Township 18 South and Range 27 East, NMPM, Eddy County, New Mexico. The sources of the produced water will be from wells in the area that produce from the Red Lake Field Glorieta, Yeso and San Andres formations.

FDW proposes to convert the subject well to water disposal into the San Andres formation, which is currently under waterflood in the West Red Lake Unit whose boundaries are 1650 feet from the west and north of the well. The proposed initial injection will be at 800 pounds per square inch and a maximum surface injection pressure of 1536 pounds per square inch. The average daily injection rate will be 500 barrels of water and the maximum daily injection rate will be 1000 barrels of water.

HOLLAND&HART LLP

If you have any questions concerning this application, you may contact Brian Huzzey at (432) 686-8235 (Ext. 206) or at Nearburg Producing Company, 3300 North "A" Street, Building 2, Suite 120, Midland, Texas, 79705.

Objections to this application or requests for hearing must be filed with the New Mexico Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505 within fifteen (15) days of the date of this letter. If no objection is received within fifteen (15) days after the Division Director receives this application, the application will be approved.

Sincerely,

Ocean Munds-Dry

Ocean Munds-Dry
Attorney for FDW, Inc. and Nearburg Producing Company

Enclosures
cc: Mr. Bob Shelton

BEFORE THE OIL CONSERVATION DIVISION
NEW MEXICO ENERGY, MINERALS AND
NATURAL RESOURCES DEPARTMENT

C-108 APPLICATION OF FDW, INC. FOR AUTHORIZATION TO INJECT PRODUCED WATER INTO ITS CC FEDERAL NO. 5 WELL, EDDY COUNTY, NEW MEXICO

AFFIDAVIT

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

Ocean Munds-Dry, attorney in fact and authorized representative of FDW, Inc., the Applicant herein, being first duly sworn, upon oath, states that notice of the above-referenced Application was mailed to the interested parties shown on Exhibit "A" attached hereto in accordance with Oil Conservation Division Rules, and that true and correct copies of the notice letter and proof of notice are attached hereto.

Ocean Munds-Dry
Ocean Munds-Dry

SUBSCRIBED AND SWORN to before me this 28th day of March 2006.

OFFICIAL SEAL
LISAMARIE ORTIZ
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires 1/14/07

Notary Public

My Commission Expires:
January 14, 2007

EXHIBIT B

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 __XX__ Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No

II. OPERATOR: ~~Nearburg Producing Company~~ FDW, INC

ADDRESS: 3300 N A St., Bldg 2, Ste 120, Midland, TX 79705

CONTACT PARTY: Brian Huzzey PHONE: 432/686-8235

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 __XX__ 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: Brian Huzzey TITLE: Sr. Staff Engineer

SIGNATURE: Brian R/ Huzzey DATE: 3-20-06

E-MAIL ADDRESS: bhuzzey@nearburg.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

Side 2

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.

CC FEDERAL NO. 5

SAN ANDRES

APPLICATION FOR AUTHORIZATION TO INJECT

WELL NAME: CC Fed. # 5 FIELD AREA: NE Red Lake

LOCATION: Sec. 9 T18S R27E "K" 2310 FSL + 1650 FWL

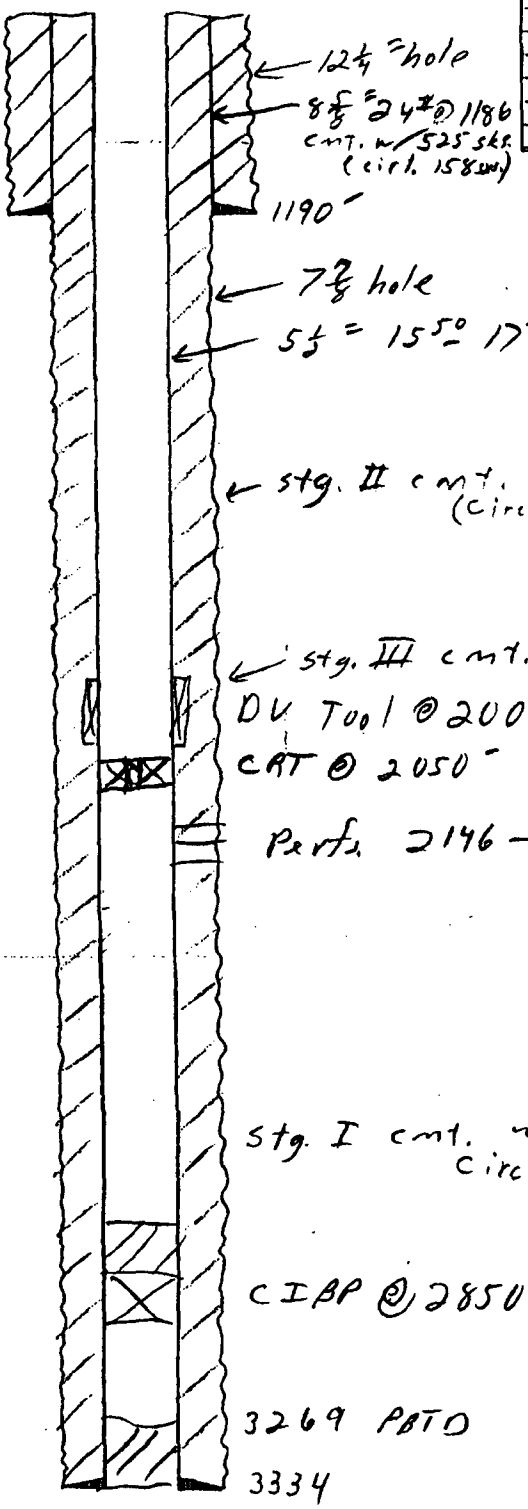
GL: 3531' ZERO: _____' AGL: _____'

KB: _____' ORIG. DRLG./COMPL. DATE: _____

COMMENTS: API # 30-015-34163

CASING PROGRAM:

SIZE/WT./GR./CONN.	DEPTH SET
8 5/8" 24# J-55	1186
cmt. w/ 325 sks. lead 200 sk.	
"C" Tail circ. 158 sks.	
5 1/2" = 15.5# - 17# J-55	3334'
Cmt. Thru DV Tool @ 2000'	
in 3 Stgs.	
Stg. I 325 sks. H. (circ.)	
Stg. II 420 sks. H (circ.)	
Stg. III 200 sks. & close Tool	



- SKETCH NOT TO SCALE -

REVISED: 11/7/05

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Friday, March 31, 2006 1:05 PM
To: 'Brian Huzzey'
Cc: Bob Shelton; Fred White; Catanach, David, EMNRD
Subject: SWD Applications: CC Federal #3 and #5 from Nearburg

Hello Brian:
Thanks for the newly found information.

The CC Federal #3 permit to inject has already been issued. You can apply to David Catanach for any pressure increase - as soon as you want. He may require a step rate test - you can ask him.

I will use this pumpin data for the #5 well to issue a higher pressure when permitting the #5 well. We always stay 50 psi less than parting pressure on a valid Step Rate Test. This test looks similar to a Step Rate Test - we normally ask for the raw data also, but this looks OK.

Regards,

Will Jones

-----Original Message-----
From: Brian Huzzey [mailto:bhuzzey@nearburg.com]
Sent: Friday, March 31, 2006 8:28 AM
To: Jones, William V., EMNRD
Cc: Bob Shelton; Fred White
Subject: Nearburg C-108 Applications

Here is some data I pulled from the files (we just received the files from SDX) for your perusal.

Please review and give me a call at 432-686-8235 ext 206.

Thanks !!!

<<Red Lake Injection Data.xls>>

Tracking:

Recipient	Read
'Brian Huzzey'	
Bob Shelton	
Fred White	
Catanach, David, EMNRD	Read: 3/31/2006 1:24 PM

Depth: **Based on geologic reports from 8 wells within ½ mile of CC Federal No. 5, the top of San Andres occurs at an average subsea depth of +2020' (or 1515' average measured depth – the topography is relative flat in this area with an average KB elevation of 3534')**

Oil/Water Contact: **Unknown to Nearburg**

Sources of Drinking Water Overlying the Proposed Injection Zone:

Geologic Names: **Unknown to Nearburg**

Depth to Bottom of Sources: **The deepest fresh water well in T18S-R27E is 305' located in Section 31 according to the New Mexico Office of the State Engineer website. Other wells in the township have been drilled to +/- 90'.**

Sources of Drinking Water Underlying the Proposed Injection Zone:

None

IX. PROPOSED STIMULATION PROGRAM

The existing San Andres perforations in CC Federal No. 5 have never been stimulated. Plans are to perforate additional San Andres porosity intervals, break down all perforations with pin-point packers and acid, and then fracture stimulate with a suitable frac fluid and proppant, if necessary.

X. LOGS AND TEST DATA

Well data has been filed with the OCD. Copies of the openhole logs are attached for the OCD. The following is a summary of the test data on the well:

San Andres Completion Attempt (11/2/05-11/4/05)
Perf'ed San Andres. Ran in with 5-1/2" full-bore tension packer on tubing. Set packer at 2042'. Tubing began to run over with water. Blew down to pit. Swabbed dry in 3 runs. Pumped down tubing and broke formation at 1750 psi. Pumped in at various rates up to a maximum of 1.5 bpm (2160 BPD) at 1150 psi. Blew well down to pit and measured 230 BWPD flowing. Unseated packer and pulled 44 joints. Next day found 700 psi casing pressure. Flowed no oil and 230 BWPD.

XI. ANALYSIS OF FRESH WATER WELLS WITHIN ONE MILE OF DISPOSAL WELL

No fresh water well is located within one mile of the proposed disposal well according to records obtained from the website of the New Mexico Office of the State Engineer.

XII. AFFIRMATIVE STATEMENT OF NON-COMMUNICATION BETWEEN DISPOSAL ZONE AND ANY UNDERGROUND SOURCES OF DRINKING WATER.

Re: Proposed CC Federal No. 5 San Andres Disposal Well

We have examined the available, seismic, geologic, and engineering data and find no evidence of open faults or any other hydraulic connection between the disposal zone and any underground source of drinking water.

Nearburg Producing Company

Date: 3-20-06

Brian Huzzey
Senior Staff Engineering

Attachments

1. "As Is" injection well data sheet with wellbore diagram
2. "Proposed" injection well data sheet with wellbore diagram
3. Injection well data sheet
4. Map with well locations
5. Map with lease data
6. "Area of Review" tabulation sheet (5 pages)
7. Empire Abo Unit No. 4 wellbore diagram
8. Empire Abo Unit "N" No. 6 wellbore diagram
9. Empire Abo Unit "P" No. 7E wellbore diagram
10. Empire Abo Unit "N" No. 701 wellbore diagram
11. Summary of Devon's Application to Inject (4 pages)
12. Yeso and San Andres water analysis
13. Glorieta-Yeso water analysis (2 pages)

Attachment 1

"AS IS"

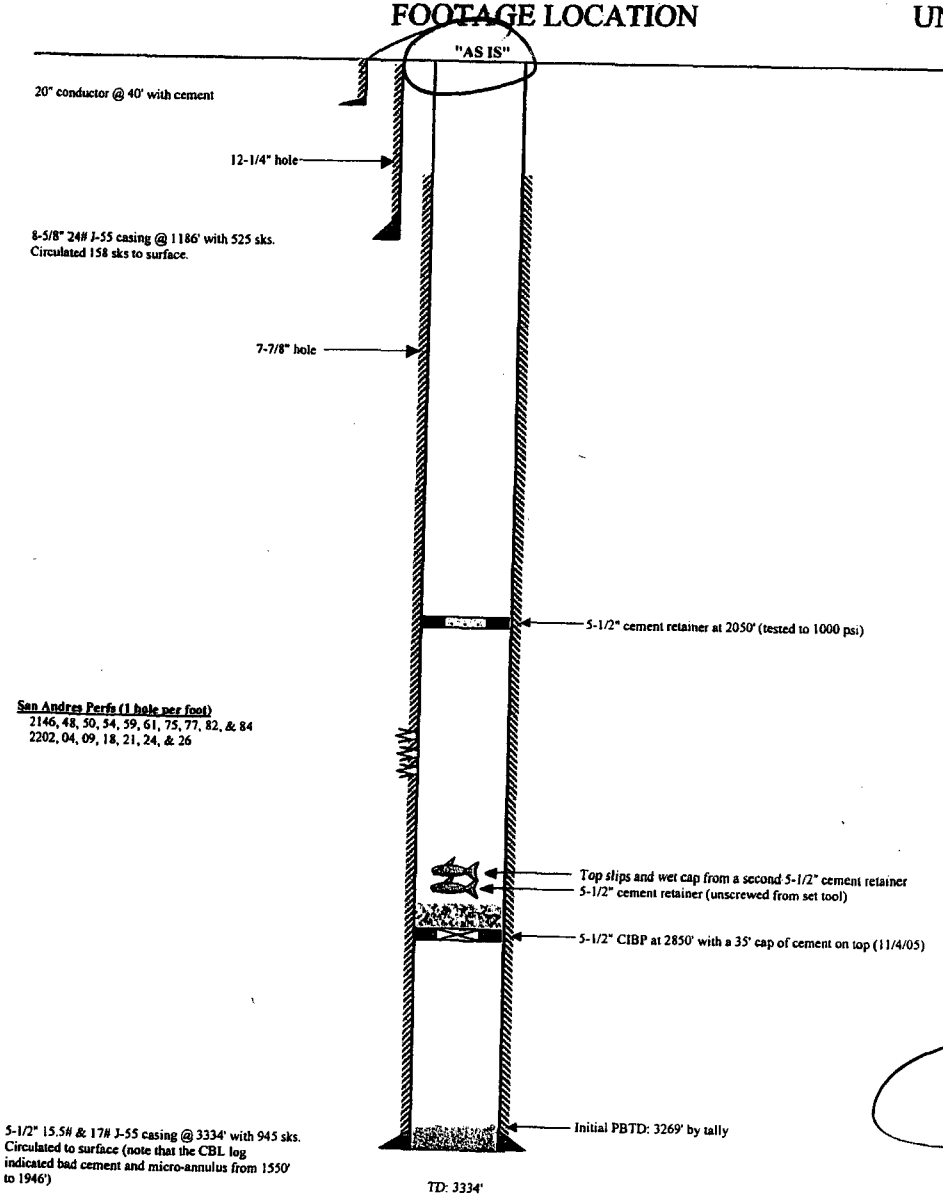
Side 1

FDW 10C affidavit INJECTION WELL DATA SHEET

OPERATOR: Nearburg Producing Company

WELL NAME & NUMBER: CC Federal No. 5 (30-015-34163)

WELL LOCATION: 2310 FSL & 1650 FWL	K	9	18S	27E
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12-1/4 Casing Size: 8-5/8

Cemented with: 525 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft³

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: 7-7/8 Casing Size: 5-1/2

Cemented with: 945 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circulated

Total Depth: 3334

NOTE: CBL indicated bad cmt and microannulus from 1550-1946

Production ~~Injection~~ Interval

Current 2146 feet to 2226

(Perforated or ~~Open Hole~~, indicate which)

Attachment 2

"PROPOSED"

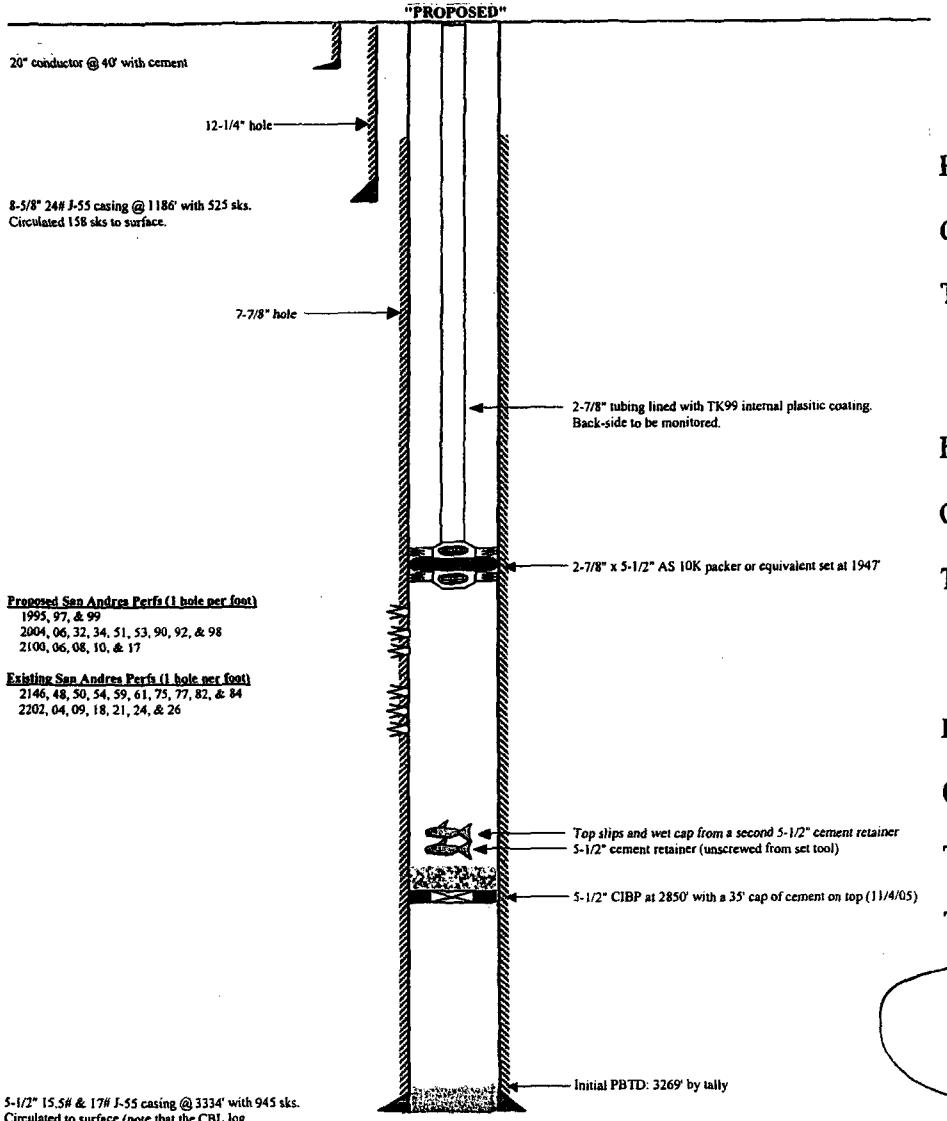
Side 1

INJECTION WELL DATA SHEET

OPERATOR: Nearburg Producing Company

WELL NAME & NUMBER: CC Federal No. 5 (30-015-34163)

WELL LOCATION:	2310 FSL & 1650 FWL	K	9	18S	27E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12-1/4 Casing Size: 8-5/8

Cemented with: 525 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft³

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: 7-7/8 Casing Size: 5-1/2

Cemented with: 945 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circulated

Total Depth: 3334

NOTE: CBL indicated bad cmt and microannulus from 1550-1946

Injection Interval

Proposed

1995 feet to 2226

(Perforated or ~~Open Hole~~; ~~indicate which~~)

Side 2

PROPOSED

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8 Lining Material: TK99 Plastic Coating

Type of Packer: 2-7/8 x 5-1/2 "AS" 10K pkr or equivalent

Packer Setting Depth: 1947'

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 to 3334' and completed as a San Andres producer. The San Adres tested only water and the well was Temporarily Abandoned..

2. Name of the Injection Formation: San Andres

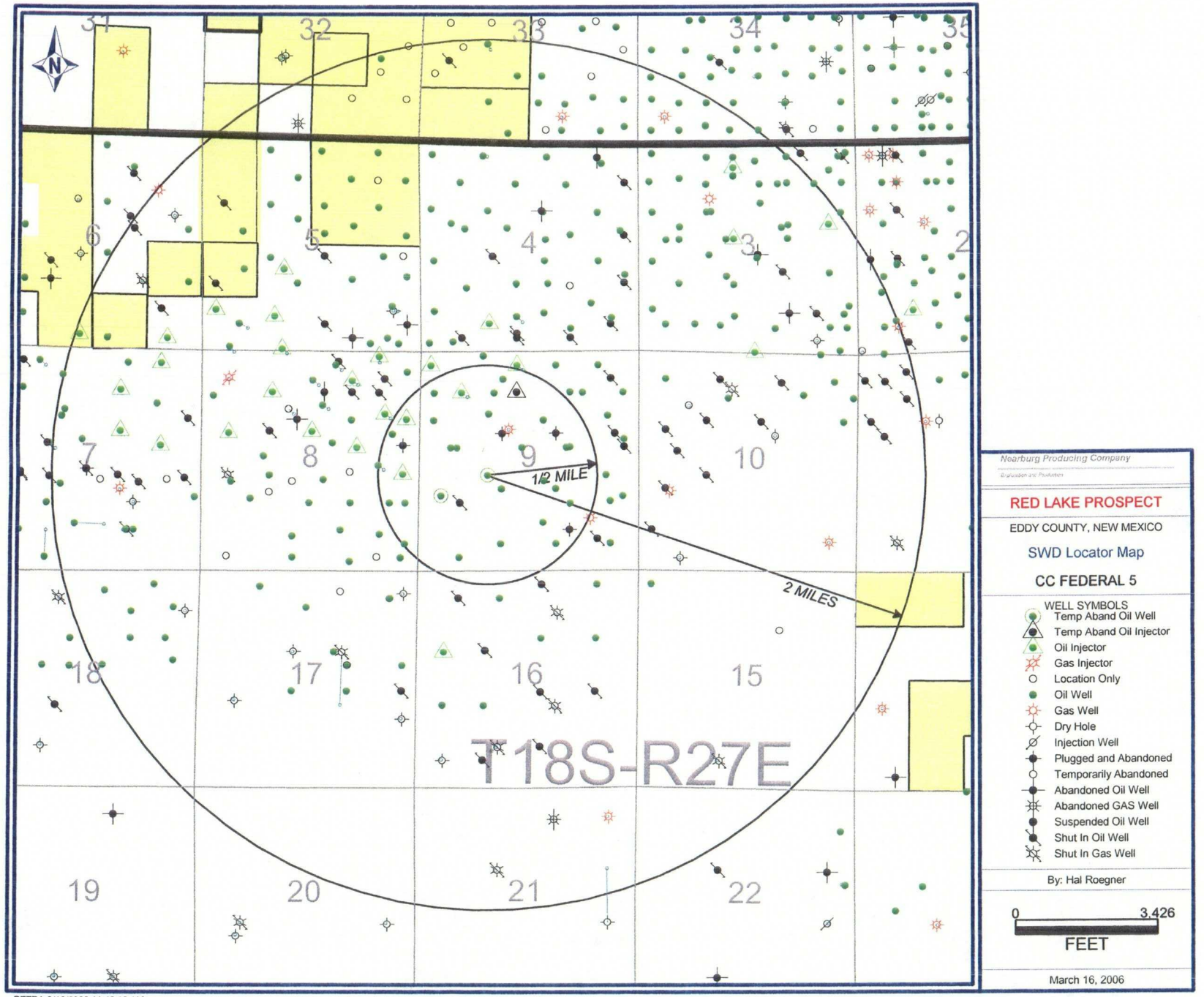
3. Name of Field or Pool (if applicable): Red Lake Queen-Grayburg-San Andres

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. No

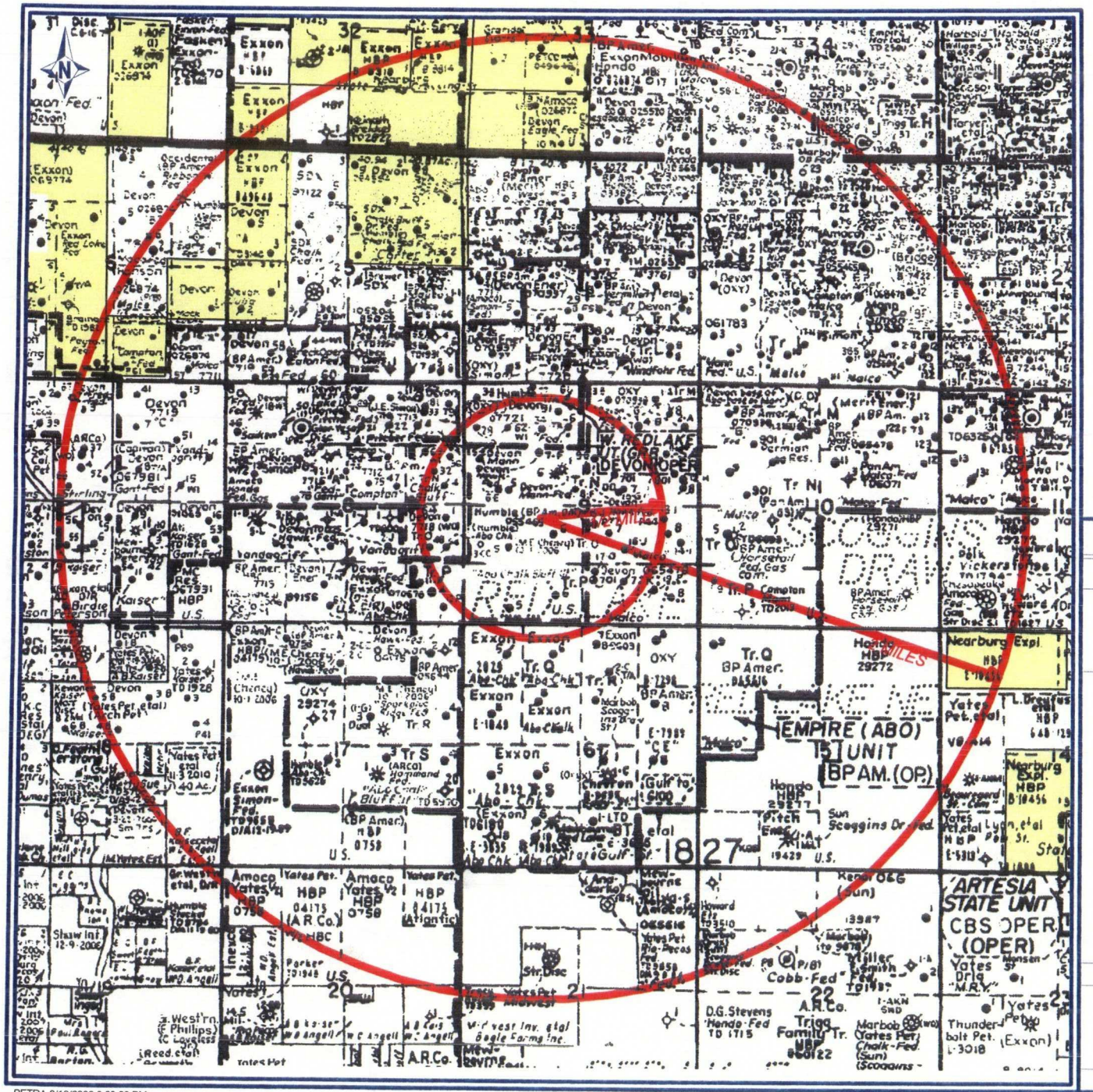
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

   Underlying "Area of Review": Yeso, Abo, Atoka, Morrow and Pennsylvanian

   Overlying "Area of Review": Premier



Attachment 4



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Attachment 5

CC FEDERAL NO. 5 PROPOSED SAN ANDRES WATER DISPOSAL WELL

"AREA OF REVIEW" WELL DATA TABULATION SHEET

Well	API #	Location	TD (PBTD)	Date TD Reached	Hole Sizes	Casing Sizes	Setting Depths	Cement	Top of Cement[1]	Perforations	Well Type	Current Status	Comments
	30-015-		Feet	M/D/Y	Inches	Inches	Feet	Sacks	Feet	Feet			
Empire Abo Unit No. 4	00823	2260' FNL 400 ' FEL 8-18S-27E Unit H	9580	07/05/57	15 11 7-7/8	11-3/4 8-5/8 5-1/2	570 3088 9580	750 1100 1090	Surface Surface 3960' (TS)	Abo 5176-5418 OA Pennsylvanian 9505-9555 OA	Abo Oil - Penn Gas Producer	P&A	See attached P&A wellbore diagram.
Empire Abo Unit No. 4A	00824	660' FSL 330 ' FEL 8-18S-27E Unit P	5591 (5555)	10/31/60	11 NR	8-5/8 4-1/2	1529 5591	800 800	Surface NR	5346-5480 OA	Abo Oil Producer	Active	Suspect that reported perfs from 5500-5510', which swabbed all water, have been squeezed or are below a bridge plug.
Empire Abo Unit No. 4B	00825	1650' FSL 330 ' FEL 8-18S-27E Unit I	5576 (5545)	1/17/61	11 7-7/8	8-5/8 4-1/2	1534 5576	800 850	Surface 400' (TS)	5370-5400	Abo Oil Producer	Active	
Empire Abo Unit No. 5	00839	330' FSL 990 ' FWL 9-18S-27E Unit M	5768 (5740)	5/10/60	11 NR	8-5/8 4-1/2	1519 5768	750 1050	Surface 900' (TS)	5378-5674 OA	Abo Oil Producer	Active	
Empire Abo Unit No. 5A	00840	2310' FNL 990' FWL 9-18S-27E Unit E	5666 (5639)	05/06/60	11 NR	8-5/8 4-1/2	1518 5665	750 800	Surface 300' (TS)	5548-5572 OA	Abo Oil Producer	Active	
Empire Abo Unit No. 5B	00841	1650' FSL 990' FWL 9-18S-27E Unit L	5700 (5677)	06/07/60	11 NR	8-5/8 4-1/2	1501 5700	800 800	Surface Surface	5569-5597 OA	Abo Oil Producer	Inactive	Last reported production date is 2/04.
Empire Abo Unit "N" No. 6	00836	1980' FNL 1980' FWL 9-18S-27E Unit F	5703	02/27/60	11 NR	8-5/8 4-1/2	1481 5703	700 350	Surface 3720' (?)	5475-5608 OA	Abo Oil Producer	P&A	See attached P&A wellbore diagram.
Empire Abo Unit No. 6A	00835	1980' FSL 1980' FWL 9-18S-27E Unit K	5717 (5686)	2/2/60	11 NR	8-5/8 4-1/2	1476 5717	750 350	Surface 3730' (Calc.)	5348-5560 OA (Currently open)	Abo Oil Producer	Active	Perfs at 5600-5628' are under a RPB set at 5590' on 6/28/04. Casing hole at 3670' squeezed with 1000 sacks cement on 7/1/04. Currently open perfs were added on 7/6/04.

Empire Abo Unit No. 6B	00837	660' FSL 1980' FWL 9-18S-27E Unit N	5790 (5761)	3/11/60	11 NR	8-5/8 4-1/2	1497 5789	700 350	1078' (TS) 3910' (TS)*	5490-5682 OA	Abo Oil Producer	Active	*On 4/15/94, perf'ed 4 holes at 3880' and squeezed with 630 sacks of cement. Circulated 113 sacks to the surface.
Empire Abo Unit "M" No. 6C	00838	990' FNL 2310' FWL 9-18S-27E Unit C	5670 (5641)	3/19/60	11 NR	8-5/8 4-1/2	1499 5670	700 820	Surface 1400' (TS)	5330-5584 OA	Abo Oil Producer and Gas Injector	Temporarily Abandoned	In 1974, a hole in the 4-1/2" casing between 4043' and 4105' was squeezed with 150 sacks of cement. In May 2004, a CIBP was set at 5273' and capped with 35' of cement to temporarily abandon the well.
Empire Abo Unit "O" No. 7B	00845	1980' FSL 1980' FEL 9-18S-27E Unit J	5800 (5765)	8/9/59	11 7-7/8	8-5/8 4-1/2	1484 5800	700 700	NR 980' (TS)	5236-5602 OA	Abo Oil Producer	Active	In January 2005, the original perforatons from 5710-5750' OA were abandoned below a RBP set at 5670' with 1 bag of sand on top.
Empire Abo Unit "N" No. 7D	20141	2300' FNL 1642' FEL 9-18S-27E Unit G	5709 (5652)	5/25/68	11 7-7/8	8-5/8 4-1/2	1520 5709	800 300	Surface 4240 (?)*	5056-5640 OA	Abo Oil Producer	Active	*In August 1998, the 4-1/2" casing was perforated at 4210' (hole found between 3286-3298') and squeezed with cement (number of sacks not reported), and then perforated at 1970' and squeezed with 100 sack of cement (circulated to surface). In June 2004, hole(s) between 4179-4273' were squeezed with cement (number of sacks not reported).
Empire Abo Unit "P" No. 7E	20310	986' FSL 1643' FEL 9-18S-27E Unit O	5950 (5915)	7/1/70	11 7-7/8	8-5/8 4-1/2	1495 5950	750 300	Surface NR	5826-5884 OA	Abo Oil Producer	P&A	See attached wellbore diagram.
Empire Abo Unit N No. 701	00846	1980' FNL 1980' FEL 9-18S-27E Unit G	5700 6112	9/3/59 1/27/68	NR NR	8-5/8 4-1/2	1483 5700	NR 800	Surface NR	5496-5697 OA 5700-6112 Open Hole	Abo Oil Producer	P&A	See attached wellbore diagram. Note that in February 1968, the well was deepened to 6112' and tested unsuccessfully in the lower Abo.
Empire Abo Unit No. 701P	00849	985' FSL 2297' FEL 9-18S-27E Unit O	5835 (5804)	11/22/59	NR NR	8-5/8 4-1/2	1496 5835	NR 850	Surface NR*	5629-5742 OA	Abo Oil Producer	Active	*In July 1968, perf'ed 2 holes at 5579' and squeezed with 100 sacks of cement. In March 1969, the original perforations from 5610-5640' were squeezed with 125 sacks of cement.
West Red Lake Unit No. 26	00821	2340' FSL 400' FEL 8-18S-27E Unit I	2125 (?)	4/12/38	NR NR NR NR	10 8-5/8 7 4-1/2	580 1140 1336 2125	NR NR NR 325	Surface Surface (Est) NR Surface	1884-2081 OA	San Andres Water Injector	Active	Very old well with no drilling or completion data reported in OCD Online. The data that is reported here came largely from an "Area of Review" table contained in Administrative Order WFX-708.

West Red Lake Unit No. 28	00834	990' FNL 330' FWL 9-18S-27E Unit D	2001 (1973)	10/27/49	NR NR NR	8-5/8 7 5-1/2	1123 1568 1909	75 100 100	Surface (Est) 440' (Calc) 1375' (Est)	1943-1958 Open Hole	San Andres Oil Producer	Active	Very old well with no drilling or completion data reported in OCD Online. The data that is reported here came largely from an "Area of Review" table contained in Administrative Order WFX-708.
West Red Lake Unit No. 31	00833	660' FNL 1980' FWL 9-18S-27E Unit C	2350 (?)	1/15/62	NR NR	10-3/4 4-1/2	27 2350	53 475	Surface NR	2066-2254 OA	San Andres Oil Producer	Active	
West Red Lake Unit No. 32	24638	1980' FNL 660' FEL 8-18S-27E Unit H	2156 (2109)	12/6/83	11 7-7/8	8-5/8 5-1/2	353 2156	300 625	Surface Surface	1953-2055 OA	San Andres Oil Producer	Active	Perf'ed, stimulated, tested, and squeezed off (240 total sacks of cement in 3 tries) the Premier sand from 1236-42' and 1300-13' in 6/84.
West Red Lake Unit No. 34	26422	990' FNL 1770' FWL 9-18S-27E Unit C	2409 (2362)	8/3/90	12-1/4 7-7/8	8-5/8 4-1/2	1105 2400	550 590	Surface Surface	2052-2298 OA	San Andres Oil Producer	Active	
West Red Lake Unit No. 36	27474	1630' FNL 330' FEL 8-18S-27E Unit H	3000 (2903)	8/25/93	12-1/4 7-7/8	8-5/8 5-1/2	1137 2999	655 430	Surface 150' (Est.)	1657-2104 OA	San Andres Water Injector	Active	In 9/95, added and stimulated Premier sand perfs from 1290-1298'. Commingled with existing and new San Andres perfs. In 3/97, squeezed the Premier sand perfs with 100 sacks of cement. Stimulated new and existing San Andres perfs and converted the well to water injection (injection packer at 1589').
West Red Lake Unit No. 48	28277	1650' FSL 710' FEL 8-18S-27E Unit I	2249 (2191)	2/21/95	12-1/4 7-7/8	8-5/8 5-1/2	1151 2249	550 375	Surface Surface	1868-2128 OA	San Andres Oil Producer	Active	
West Red Lake Unit No. 62	28734	990' FNL 990' FWL 9-18S-27E Unit D	2400 (2357)	4/2/96	12-1/4 7-7/8	8-5/8 5-1/2	1015 2400	500 460	Surface Surface	1894-2132 OA	San Andres Water Injector	Active	In 4/99, stimulated new and existing San Andres perfs and converted the well to water injection (injection packer set at 1796').
West Red Lake Unit No. 64	28782	2550' FSL 990' FEL 8-18S-27E Unit I	2350 (2311)	4/16/96	12-1/4 7-7/8	8-5/8 5-1/2	1033 2350	550 460	Surface Surface	1689-2126 OA	San Andres Oil Producer	Active	
Hawk "9E" Federal No. 5	29025	1650' FNL 330' FWL 9-18S-27E Unit E	2411 (2364)	8/18/96	12-1/4 7-7/8	8-5/8 5-1/2	1095 2410	500 425	Surface Surface	1674-2128 OA	San Andres Oil Producer	Active	

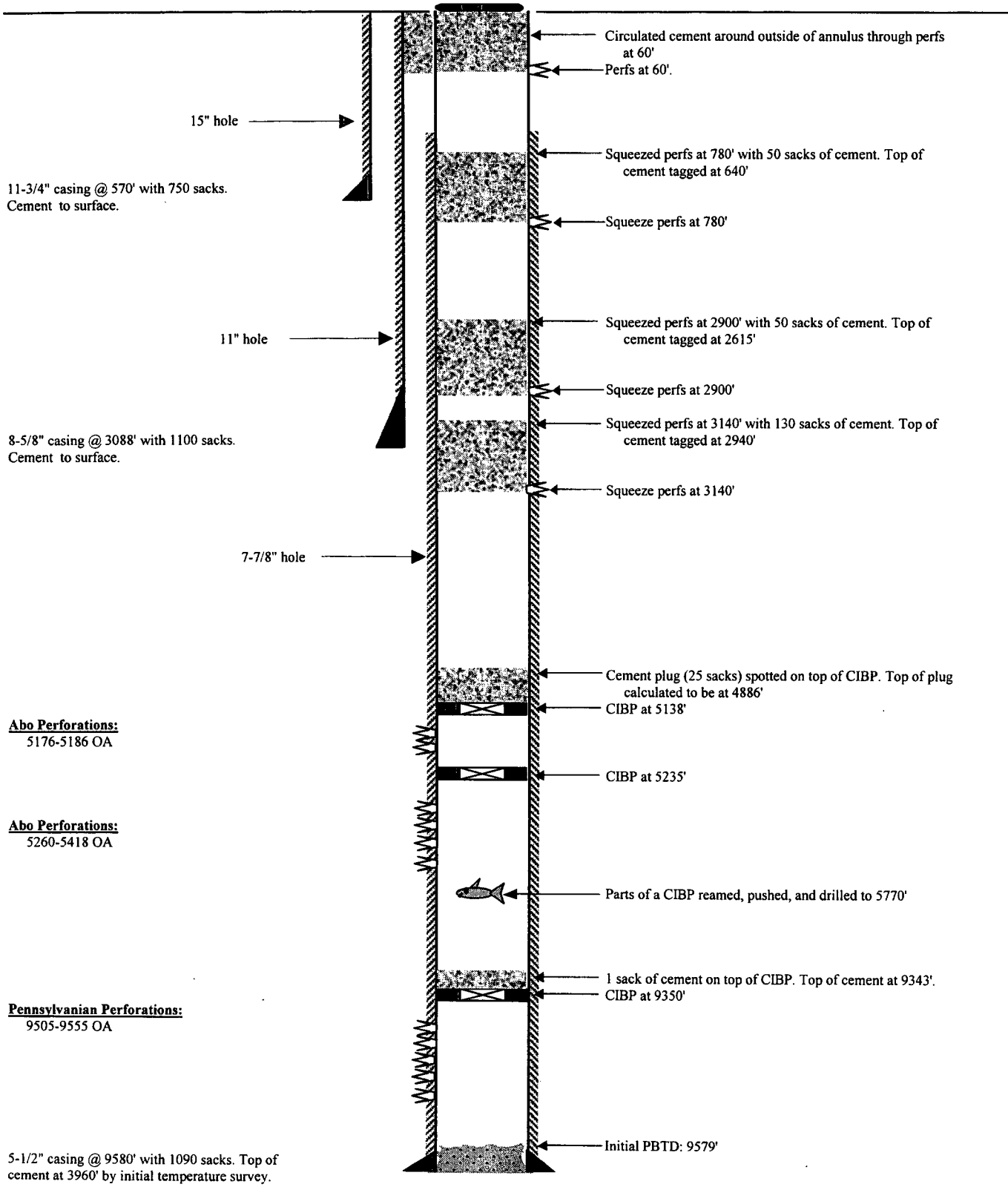
Hawk "9E" Federal No. 6	29097	2310' FNL 750' FWL 9-18S-27E Unit E	2400 (2352)	9/25/96	12-1/4 7-7/8	8-5/8 5-1/2	1112 2399	500 450	Surface Surface	1758-2190 OA	San Andres Oil Producer	Active	
Hawk "9F" Federal No. 7	29026	1500' FNL 1650' FWL 9-18S-27E Unit F	2400 (2352)	8/24/96	12-1/4 7-7/8	8-5/8 5-1/2	1011 2399	600 500	Surface Surface	1580-2225 OA	San Andres Oil Producer	Active	
Hawk "9F" Federal No. 8	29093	2310' FNL 2460' FWL 9-18S-27E Unit F	2500 (2454)	10/24/96	12-1/4 7-7/8	8-5/8 5-1/2	1065 2499	500 575	Surface Surface	1534-2288 OA	San Andres Oil Producer	Active	
Hawk "9G" Federal No. 9	29155	1650' FNL 2310' FEL 9-18S-27E Unit G	2500 (2444)	11/8/96	12-1/4 7-7/8	8-5/8 5-1/2	1062 2499	500 500	Surface Surface	1877-2318 OA	San Andres Oil Producer	Active	
Hawk "9G" Federal No. 10	29634	2310' FNL 1750' FEL 9-18S-27E Unit G	2649 (2609)	8/5/97	12-1/4 7-7/8	8-5/8 5-1/2	1153 2649	550 550	Surface Surface	1664-2362 OA	San Andres Oil Producer	Active	
Hawk "9J" Federal No. 15	29516	2180' FSL 2290' FEL 9-18S-27E Unit J	2650 (2600)	8/21/97	12-1/4 7-7/8	8-5/8 5-1/2	1151 2650	550 525	Surface Surface	1580-2371 OA	San Andres Oil Producer	Active	
Hawk "9J" Federal No. 16	29483	1630' FSL 1650' FEL 9-18S-27E Unit J	2649 (2605)	5/9/97	12-1/4 7-7/8	8-5/8 5-1/2	1156 2649	550 550	Surface Surface	1627-2437 OA	San Andres Oil Producer	Active	
Hawk "9O" Federal No. 17	29484	1170' FSL 2310' FEL 9-18S-27E Unit O	2649 (2611)	5/2/97	12-1/4 7-7/8	8-5/8 5-1/2	1184 2649	550 500	Surface Surface	1576-2360 OA	San Andres Oil Producer	Active	
CC Federal No. 3	33548	1822' FSL 532' FWL 9-18S-27E Unit L	3400 (3349)	12/22/04	12-1/4 7-7/8	8-5/8 5-1/2	1174 3398	650 550	Surface Surface	San Andres 1928-2193 OA Yeso 3086-3184 OA	San Andres - Yeso Oil Producer	Temporarily Abandoned	The perfs from 1928-2057 OA were squeezed with 400 sacks of cement on 3/27/05 and then drilled out. Three CIBPs have been set in the well at 3065' (w/2 sacks cement on top), 2810' (w/3 sacks cement on top), and 1850' (no cement on top)
CC Federal No. 5	34163	2310' FSL 1650' FWL 9-18S-27E Unit K	3334 (3269)	10/20/05	12-1/4 7-7/8	8-5/8 5-1/2	1186 3334	525 945	Surface Surface	2146-2226 OA	San Andres Oil Producer	Temporarily Abandoned	On 11/4/05, one CIBP was set at 2850' with 35' of cement on top, and one cement retainer was set at 2050' and tested to 1000 psi.

Mann Federal No. 1	25357	1880' FNL 2130' FWL 9-18S-27E Unit F	9811 (9480)	9/17/85	17-1/2 11 7-7/8	13-3/8 8-5/8 5-1/2	509 2100 9811	550 750 1675	Surface Surface 1000' (TS)	9251-9256	Atoka Gas Producer	Active	Morrow perfs from 9524-9623' OA were squeezed with 125 sacks of cement in 10/85.
Horsetail "9" Federal No.1	34171	Surface 1261' FSL 1144' FEL 9-18S-27E Unit P	9929 MD (9873 MD)	10/12/05	17-1/2 12-1/4 8-3/4	13-3/8 8-5/8 5-1/2	427 3105 9915	530 1630 695	Surface Surface Surface	9628-9875 OA	Morrow Gas Producer	Active	
		[1] Top of cement abbreviations:											
		TS = Temperature Survey											
		Calc = Calculated											
		Est = Estimated											
		? = How determined not recorded											
		NR = Not recorded											

WELLBORE SCHEMATIC

Attachment 7

FIELD:	**Red Lake**	**COMPLETED:**	**P&A - 8/12/04**
WELL:	**Empire Abo Unit No. 4**	**BY:**	**Roegner - 1/13/06**
OPERATOR:	**BP America Production Company**	**KB:**	
SEC:	**8** **TWP:** **18S** **RGE:** **27E**	**GL:**	**KB Ele:**
LOCATION:	**2260' FNL and 400 FEL, Unit H**	**API #:**	**30-015-00823**

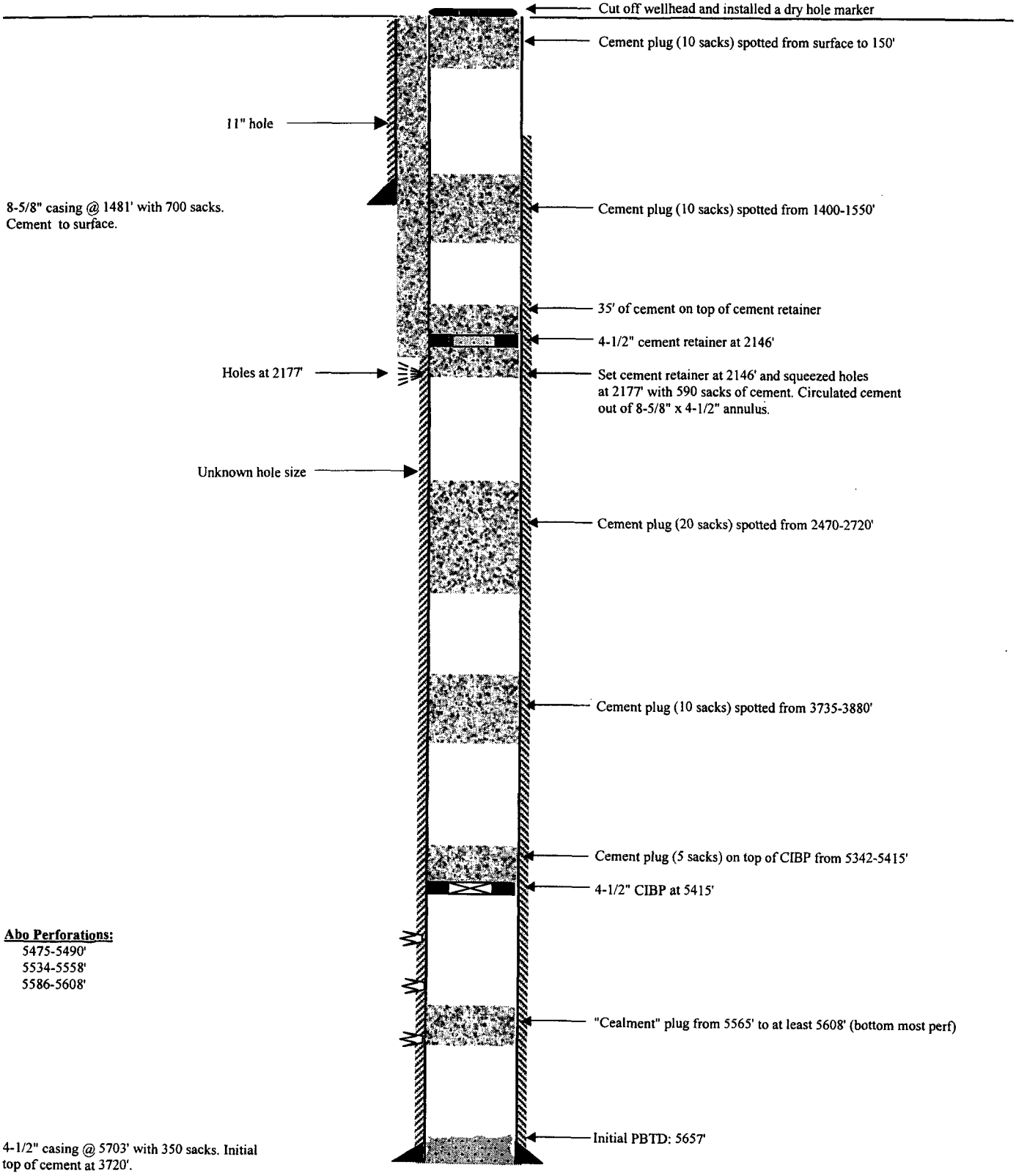


TD: 9580' on 07/05/57

WELLBORE SCHEMATIC

Attachment 8

FIELD:	**Red Lake**	**COMPLETED:**	**P&A - 10/2/92**
WELL:	**Empire Abo Unit "N" No. 6**	**BY:**	**Roegner - 1/12/06**
OPERATOR:	**Arco Oil & Gas Company**	**KB:**	
SEC: 9 **TWP:** 18S **RGE:** 27E		**GL:**	**KB Ele:**
LOCATION:	**1980' FNL and 1980' FWL, Unit F**	**API #:**	**30-015-00836**

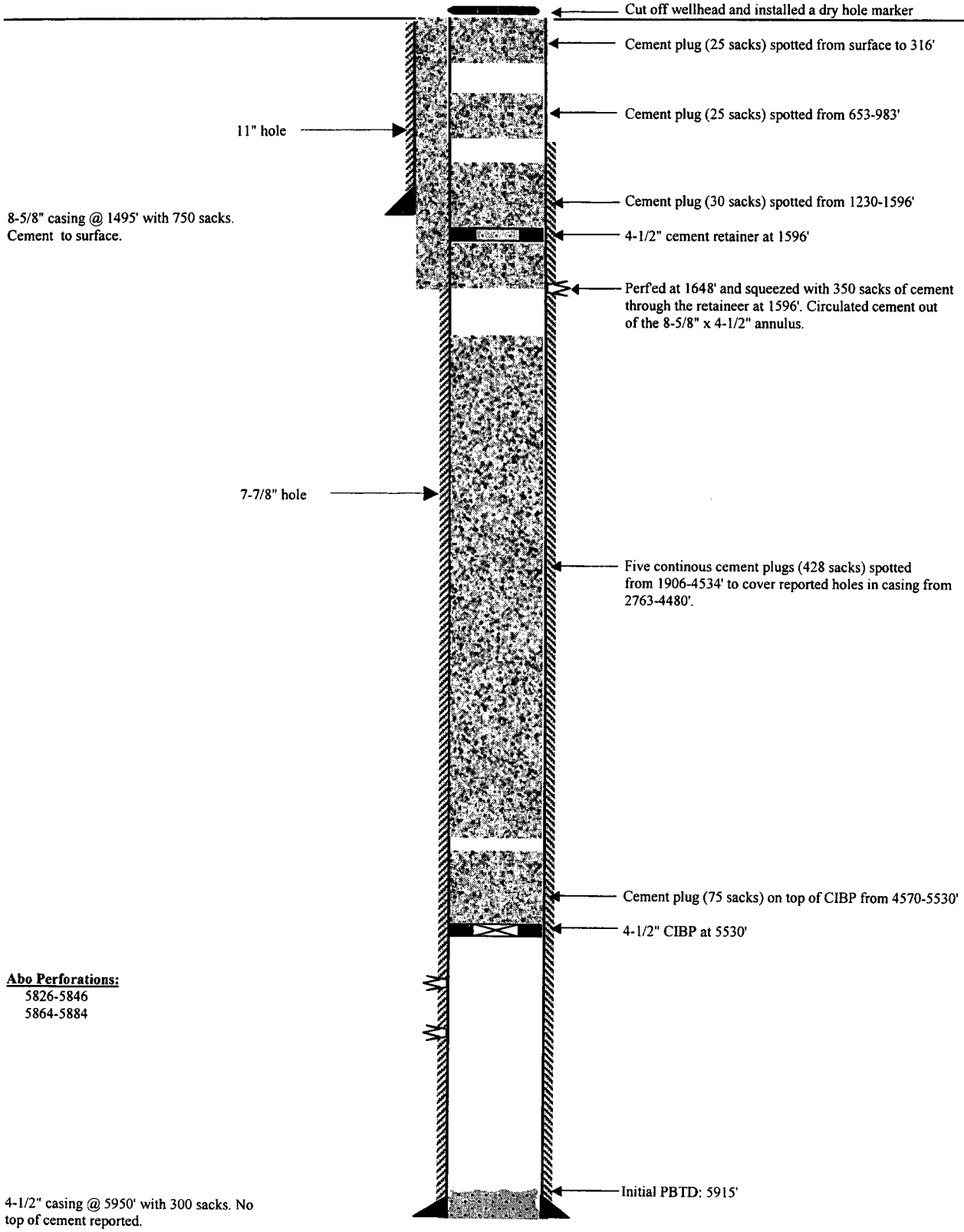


TD: 5703' on 02/27/60

WELLBORE SCHEMATIC

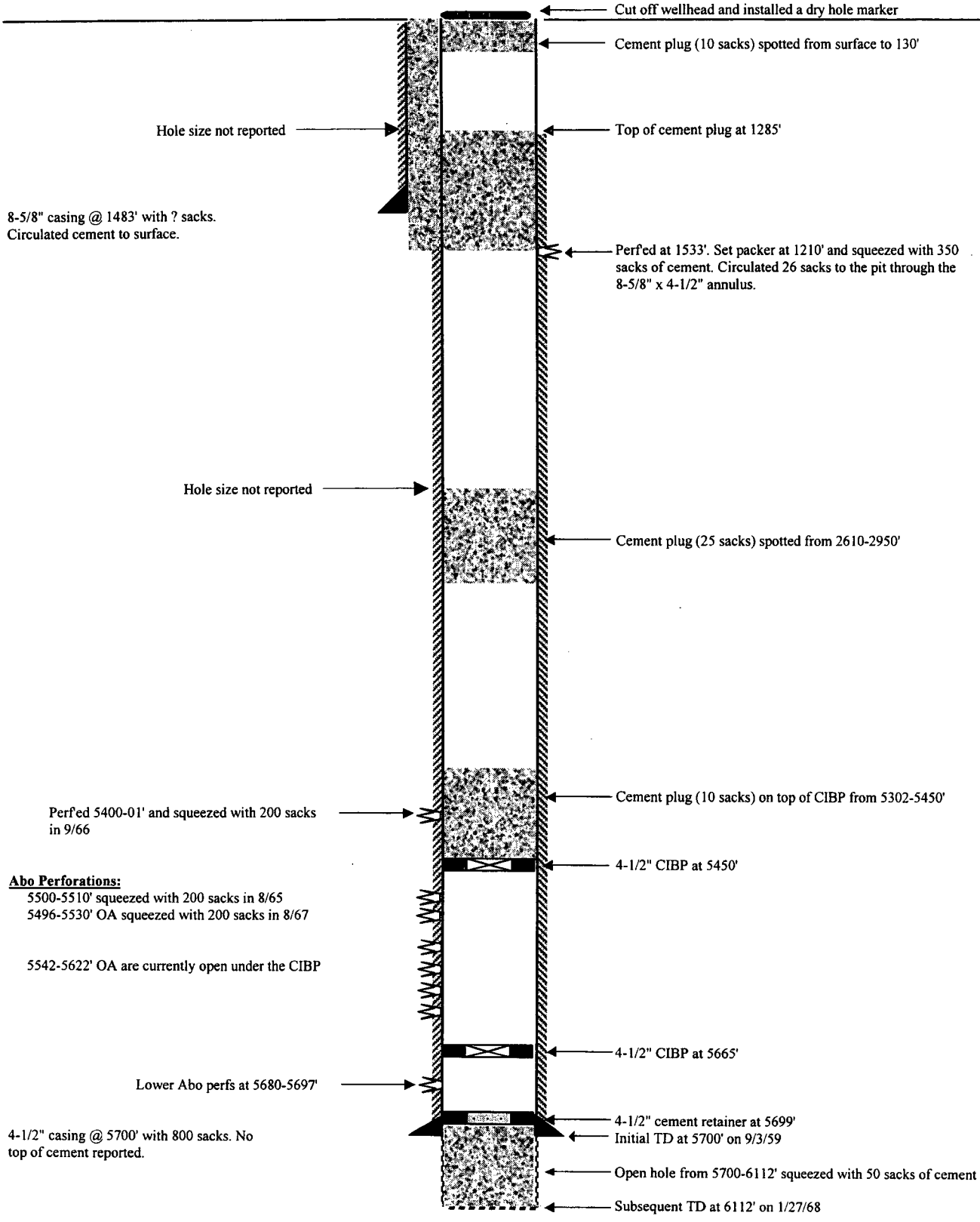
Attachment 9

FIELD:	**Empire Abo**	**COMPLETED:**	**P&A - 12/23/88**
WELL:	**Empire Abo Unit "P" No. 7E**	**BY:**	**Roegner - 3/14/06**
OPERATOR:	**Arco Oil & Gas Company**	**KB:**	**3508'**
SEC: 9	**TWP:** 18S **RGE:** 27E	**GL:**	**KB Ele:**
LOCATION:	**986' FSL and 1643' FEL, Unit O**	**API #:**	**30-015-20310**



WELLBORE SCHEMATIC

FIELD:	**Empire Abo**	**COMPLETED:**	**P&A - 2/20/05**
WELL:	**Empire Abo Unit "N" No. 701**	**BY:**	**Roegner - 3/14/06**
OPERATOR:	**BP America Production Company**	**KB:**	**3547**
SEC:	**9** **TWP:** **18S** **RGE:** **27E**	**GL:**	**KB Ele:**
LOCATION:	**1980' FNL and 1980' FEL, Unit G**	**API #:**	**30-015-00846**



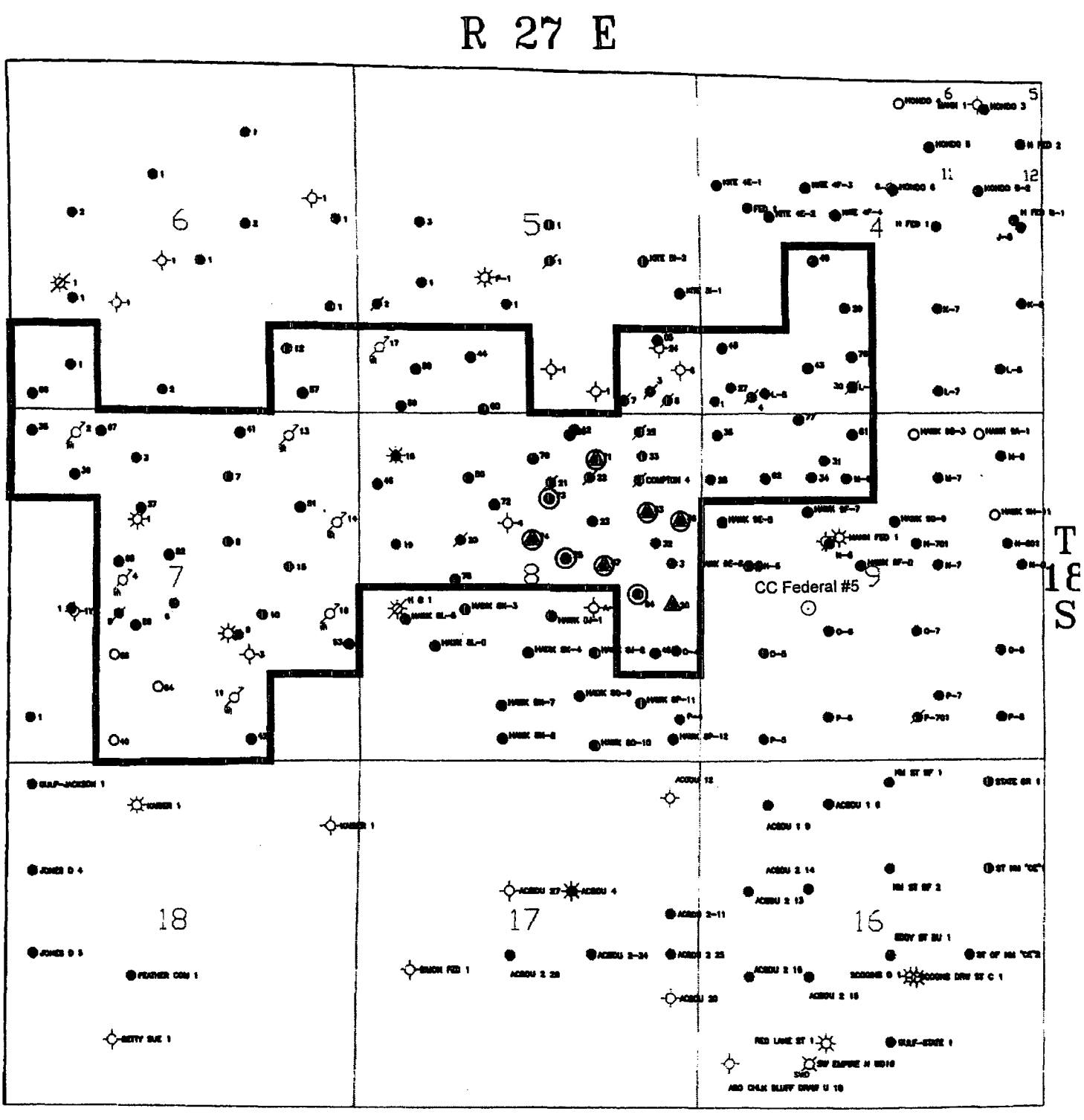
SUMMARY OF DEVON'S APPLICATIONS TO INJECT AT PRESSURES ABOVE 0.2 PSI/FT IN THEIR WEST RED LAKE WATERFLOOD UNIT

Table 1 was attached to a January 28, 1997 cover letter from Devon to the OCD that contained their "Applications for Authorization to Inject" into six additional San Andres wells in the West Red Lake Waterflood Unit. Devon stated in that cover letter that the data contained in this table were based on the frac gradients obtained from stimulation treatments on eight wells in the area.

Figure 1 was also attached to Devon's January 28, 1997 cover letter and shows the locations of the eight wells from which frac gradient information was obtained and reported on their Table 1. The location of CC Federal No. 5 has been added to their map to show its proximity to the eight wells with frac gradient data.

Exhibit "A" was attached to a March 12, 1997 Administrative Order No. WFX-708 approving Devon's applications to inject into six additional San Andres wells in their West Red Lake Waterflood Unit. The table provides for well specific injection pressure gradients ranging from 0.6 psi/ft to 0.9 psi/ft.

TABLE I AVERAGE INJECTION WELLHEAD PRESSURE GRADIENTS WEST RED LAKE UNIT			
W. RED LAKE UNIT WELL NO.	DEPTH TO TOP PERF (FT)	FRAC GRADIENT (PSI/FT)	WELLHEAD PRESSURE GRADIENT (PSI/FT)
36	1657	1.22	0.75
47	1656	1.11	0.64
63	1656	1.24	0.77
64	1689	1.25	0.78
71	1194	1.23	0.76
73	1552	1.19	0.72
74	1196	1.41	0.94
75	1580	1.32	0.85
Average	**1522**	**1.24**	**0.77**



N

devon

WEST RED LAKE UNIT

EDDY COUNTY, NEW MEXICO

FIGURE 1

△ PROPOSED INJECTOR

○ FRAC GRADIENT INFORMATION

Scale in Feet

1000 0 1000 2000 3000 4000

Attachment 11

EXHIBIT "A"
DIVISION ORDER NO. WFX-708
WEST RED LAKE UNIT WATERFLOOD PROJECT
APPROVED INJECTION WELLS

[illegible]	Well No.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Packer Depth	Tubing Size	Pressure Gradient	Injection Pressure
West Red Lake Unit	26	2340' FSL & 400' FEL	I	8-18S-27E	N/A	1972'-2081'	1875'	2 3/8"	.75 psi/ft	1479 PSIG
West Red Lake Unit	36	1630' FNL & 330' FEL	H	36-18S-27E	1290'-1298'	1657'-2104'	1575'	2 3/8"	.71 psi/ft	1176 PSIG
West Red Lake Unit	47	2310' FNL & 1510' FEL	G	8-18S-27E	N/A	1656'-2068'	1575'	2 3/8"	.60 psi/ft	994 PSIG
West Red Lake Unit	63	1500' FNL & 850' FEL	H	8-18S-27E	N/A	1656'-2065'	1575'	2 3/8"	.75 psi/ft	1242 PSIG
West Red Lake Unit	71	710' FNL & 1650' FEL	B	8-18S-27E	1194'-1196'	1268'-1996'	1200'	2 3/8"	.72 psi/ft	913 PSIG
West Red Lake Unit	74	1930' FNL & 2600' FEL	G	8-18S-27E	1196'-1225'	1517'-1996'	1450'	2 3/8"	.90 psi/ft	1365 PSIG

All wells in Eddy County, New Mexico

BAKER HUGHES
Baker Petrolite

Analysis: 24190

Water Analysis Report from Baker Petrolite

Summary of Mixing Waters		
Sample Number	133534	112998
Company	DEVON ENERGY	DEVON ENERGY
Lease	HAWK B	HAWK "B"
Well	WELL # 3 yeso	BATTERY SAN ANDRES
Sample Location	WELLHEAD	FWKO
Anions (mg/L)		
Chloride	106,253	99,569
Bicarbonate	573	497
Carbonate	0.00	0.00
Sulfate	3,912	4,489
Phosphate	0.00	0.00
Borate	0.00	0.00
Silicate	0.00	0.00
Cations (mg/L)		
Sodium	67,918	63,725
Magnesium	369	509
Calcium	1,749	1,770
Strontium	36.0	49.0
Barium	0.06	0.10
Iron	48.0	0.40
Potassium	523	269
Aluminum	0.00	0.00
Chromium	0.00	0.00
Copper	0.00	0.00
Lead	0.00	0.00
Manganese	0.00	0.00
Nickel	0.00	0.00
Anion/Cation Ratio	*1.00*	*1.00*
TDS (mg/L)	181,381	170,877
Density (g/cm)	1.12	1.11
Sampling Date	10/26/99	7/28/99
Account Manager	CURRY PRUIT	CURRY PRUIT
Analyst	JOANNA RAGAN	JOANNA RAGAN
Analysis Date		8/4/99
pH at time of sampling	5.90	7.90
pH at time of analysis		
pH used in Calculations	5.90	7.90

Attachment 13

MCI
CHEMICALS and CONSULTING

MILLER CHEMICALS, INC.
Post Office Box 298
Artesia, N.M. 88211-0298
(505) 746-1919 Artesia Office
(505) 392-2893 Hobbs Office
(505) 746-1918 Fax
mci@plateautel.net

WATER ANALYSIS REPORT

Company : Nearburg
Address :
Lease :
Well :
Sample Pt. : Glorietta Yeso

Date : 1/25/06
Date Sampled : 1/25/06
Analysis No. :

	ANALYSIS		mg/L		* meq/L
1.	pH	6.0			
2.	H2S	0			
3.	Specific Gravity	1.105			
4.	Total Dissolved Solids		157232.7		
5.	Suspended Solids				
6.	Dissolved Oxygen				
7.	Dissolved CO2				
8.	Oil In Water				
9.	Phenolphthalein Alkalinity (CaCO3)				
10.	Methyl Orange Alkalinity (CaCO3)				
11.	Bicarbonate	HCO3	878.4	HCO3	14.4
12.	Chloride	Cl	92868.0	Cl	2619.7
13.	Sulfate	SO4	3125.0	SO4	65.1
14.	Calcium	Ca	5600.0	Ca	279.4
15.	Magnesium	Mg	975.3	Mg	80.2
16.	Sodium (calculated)	Na	53784.8	Na	2339.5
17.	Iron	Fe	1.3		
18.	Barium	Ba	0.0		
19.	Strontium	Sr	0.0		
20.	Total Hardness (CaCO3)		18000.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter

279	*Ca <----- *HCO3	14
	/------->	
80	*Mg -----> *SO4	65
	<----------/	
2339	*Na -----> *Cl	2620

Saturation Values Dist. Water 20 C
CaCO3 13 mg/L
CaSO4 * 2H2O 2090 mg/L
BaSO4 2.4 mg/L

Compound	Equiv wt	X meq/L	= mg/L
Ca(HCO3)2	81.0	14.4	1167
CaSO4	68.1	65.1	4429
CaCl2	55.5	200.0	11096
Mg(HCO3)2	73.2		
MgSO4	60.2		
MgCl2	47.6	80.2	3820
NaHCO3	84.0		
Na2SO4	71.0		
NaCl	58.4	2339.5	136720

REMARKS:

Attachment 13

MCI
CHEMICALS and CONSULTING

MILLER CHEMICALS, INC.
Post Office Box 298
Artesia, N.M. 88211-0298
(505) 746-1919 Artesia Office
(505) 392-2893 Hobbs Office
(505) 746-1918 Fax
mci@plateautel.net

SCALE TENDENCY REPORT

Company	: Nearburg	Date	: 1/25/06
Address	:	Date Sampled	: 1/25/06
Lease	:	Analysis No.	:
Well	:	Analyst	:
Sample Pt.	: Glorietta Yeso		

STABILITY INDEX CALCULATIONS
(Stiff-Davis Method)
CaCO3 Scaling Tendency

S.I. =	0.4	at	70 deg. F or	21	deg. C
S.I. =	0.5	at	90 deg. F or	32	deg. C
S.I. =	0.6	at	110 deg. F or	43	deg. C
S.I. =	0.6	at	130 deg. F or	54	deg. C
S.I. =	0.7	at	150 deg. F or	66	deg. C

****

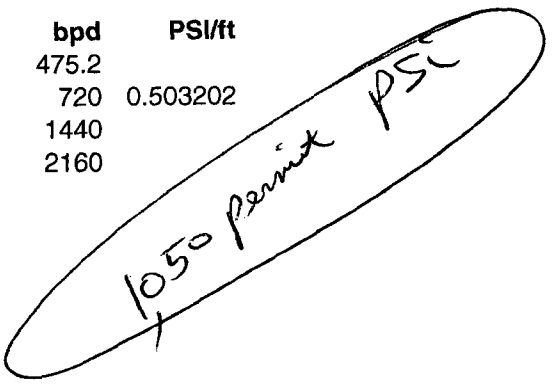
CALCIUM SULFATE SCALING TENDENCY CALCULATIONS
(Skillman-McDonald-Stiff Method)
Calcium Sulfate

S =	3152	at	70 deg. F or	21	deg C
S =	3363	at	90 deg. F or	32	deg C
S =	3508	at	110 deg. F or	43	deg C
S =	3570	at	130 deg. F or	54	deg C
S =	3580	at	150 deg. F or	66	deg C

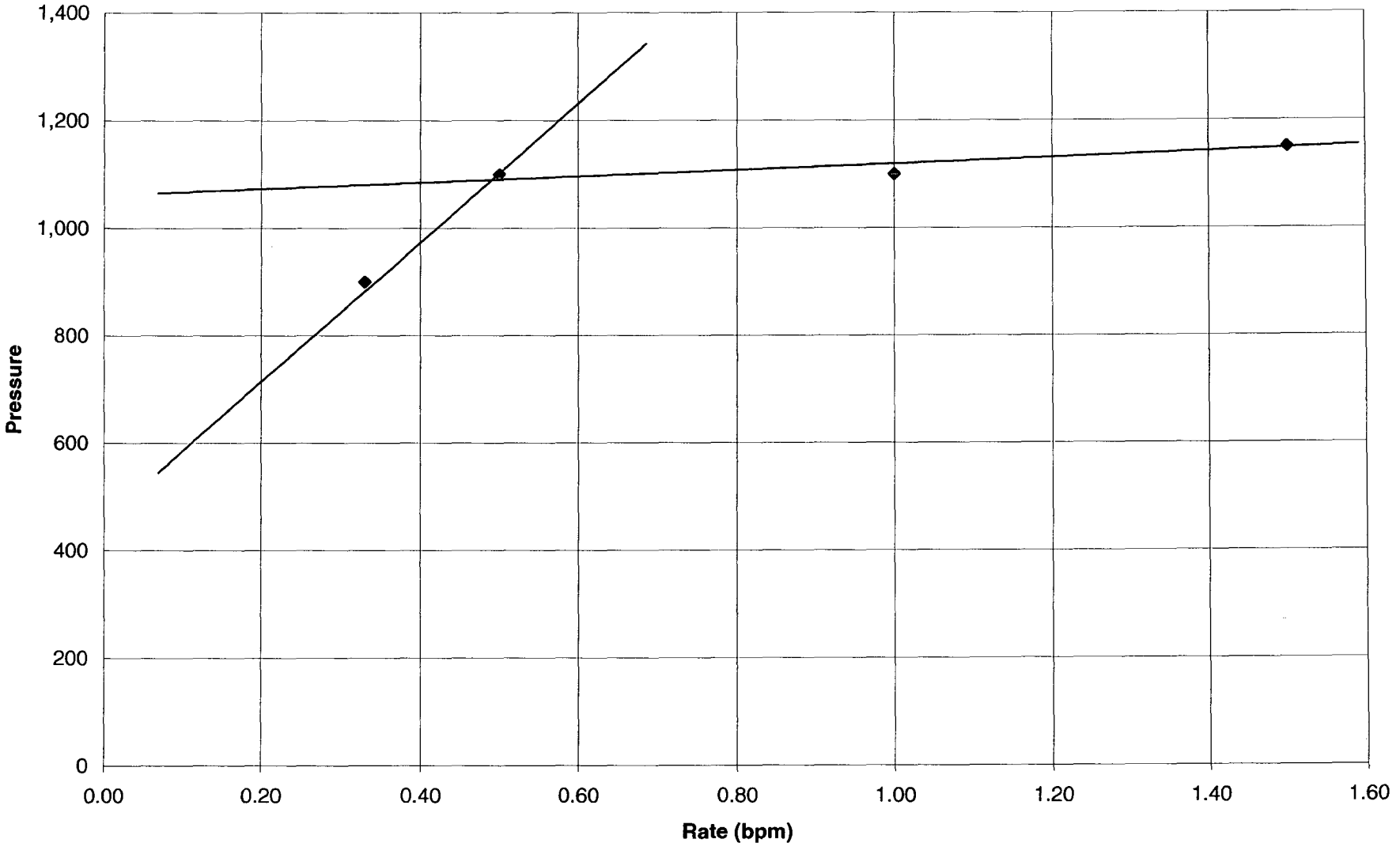
Respectfully submitted, Josh Miller

CC#5 Pump in test (Perfs 2146-2226')
broke formation @ 1750#.

Rate (bpm)	Pressure (psi)	bpd	PSI/ft
0.33	900	475.2	
0.50	1100	720	0.503202
1.00	1100	1440	
1.50	1150	2160	



CC #5 Injection Test



Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Wednesday, April 12, 2006 1:25 PM
To: 'Brian Huzzey'
Subject: RE: SWD Application: CC Federal #5

Brian:
The State Engineer does not have records of all windmills or other water drinking wells. Someone needs to drive around and look for these.

Let me know if your field people can find any.

William V.Jones - Engineering Bureau

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Wednesday, April 12, 2006 9:11 AM
To: Brian Huzzey; Ocean Munds-Dry
Subject: SWD Application: CC Federal #5

Hello Brian:
Your SWD applications list Nearburg as the operator, but our records show that the "Operator of Record" is FDW, Inc. from Dallas Texas. I will mail the permit to Ocean Munds-Dry with Holland and Hart as attorney for FDW, Inc.

Two concerns:

I am having trouble locating a fresh water analysis in your application. Please have someone verify there are no windmills or other wells within 1 mile of these wells. If so, let me know if an analysis will be forthcoming. I can send the permit if you promise to send the analysis. If no wells exist, let me know.

I am also having trouble locating the newspaper notice in the CC Fed #5 application. We could have lost it...Please fax a copy to me?

Regards,

Will Jones

Injection Permit Checklist

SWD Order Number _____ Dates: Division Approved _____ District Approved _____

Well Name/Num: CC FEDERAL #5 Date Spudded: 2/10/05

API Num: (30-) 015-34163 County: EDDY

Footages 2310 FSL / 1650 FWL Sec 9 Tsp 18S Rge 27E

Operator Name: ~~Headington~~ FDW, INC Contact BRIAN HUZZEY as agent FOR

Operator Address: 3300 N. A. St BUILDING 2 Suite 120 MIDLAND TX 79705

	Hole/Pipe Sizes	Depths	Cement	Top/Method
Surface	12 1/4 8 5/8	1186	525	CIRC.
Intermediate				
Production	7 7/8 5 1/2	3334	~~395~~	CIRC Surface (Bond CMT 1550-1946')
Last DV Tool		2000'	420	CIRC
Open Hole/Liner				
Plug Back Depth				

Diagrams Included (Y/N): Before Conversion ✓ After Conversion ✓

Checks (Y/N): ELogs in Imaging ✓ Well File Reviewed ✓

Intervals:	Depths	Formation	Producing (Yes/No)
Salt/Potash			
Capitan Reef			
In Reef, Cliff House, Etc:			
Formation Above			
Top Inj Interval	1995	SA.	WET
Bottom Inj Interval	2226	SA.	
Formation Below			

_____ PSI Max. WHIP

Yes Perfs and Open Hole (Y/N)

N Deviated Hole (Y/N)

Water Analysis Included (Y/N): Fresh Water ✓ Injection Zone ✓ Disposal Waters ✓

Affirmative Statement Included (Y/N): ✓

Surface Owner BLM Mineral Owner(s) _____

Checks (Y/N): Newspaper Notice _____ Well Table _____ Adequate Well Table _____

Adequate Certified Notice: Surface Owner ✓ AOR Owners ✓ CID/Potash/Others _____

AOR Num Active Wells 33 Repairs? NO Producing in Injection Interval Yes SA Inj/Prod wells

AOR Number of P&A Wells 4 Diagrams Included? Yes Repairs Required? NO

Data to Generate New AOR Table _____ New Table Generated? (Y/N)

	STR	E-W Footages	N-S Footages
Wellsite			
Northeast			
North			
Northwest			
West			
Southwest			
South			
Southeast			
East			

Conditions of Approval:

1. _____
2. _____
3. _____

RBDMS Updated (Y/N) _____

UIC Form Completed (Y/N) _____

This Form completed _____