

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Thursday, April 12, 2007 1:40 PM
To: 'garyw@chienergyinc.com'
Cc: Arrant, Bryan, EMNRD; Ezeanyim, Richard, EMNRD; Sanchez, Daniel J., EMNRD
Subject: SWD Application: Wizard Federal Com #1 API No. 30-015-31715 Delaware from 5410 to 6200 feet

Hello Mr. Gary Womack:

The Division received your application April 8 and after reviewing, have the following questions and comments:

- 1) Please let us know if Chi has complied with the new notice rules as stated in Rule 704. In other words are Oxy and Chi the only lessees and/or operators of all oil and gas rights in the Delaware within the circle formed by a 1/2 mile radius of this well? If any tract in this circle is unleased within the Delaware, Chi must notice the mineral interest owners of that tract.
- 2) Please send all clogs for this well including the Cement Bond Log to Hobbs for scanning into our imaged well files.
- 3) Send records for this well to this office showing the depth of the DV tool used in this well and cement volumes pumped above and below.
- 4) Injection into this interval in this well can only be after the following two uncemented offsetting wells are repaired by raising cement from the current cement top to cover the corresponding Delaware injection interval. Does Chi agree to repair these two wells prior to injecting water into the Delaware?

Wizard Federal Com #2 (30-015-31875) operated by Chi is not cemented from 4212 feet to 10,440 feet.

Hackberry 6 Federal #2 (30-015-31419) operated by Oxy is not cemented from surface to 8950 feet.

Please reply as soon as possible for the Division to continue processing this application.

Thank You,

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

(no response)
Cancelled
4/24/07

4/12/2007

MILLER STRATVERT
LAW OFFICES

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Elizabeth B. Driggers
Jerome A. O'Connell
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Reply to Santa Fe
2007 MAY 22 PM 4:32
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* Board Certified Specialist: Natural Resources - Oil & Gas Law
** Board Certified Specialist: Real Estate Law

May 22, 2007

HAND-DELIVERED

Mark Fesmire, Director
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: CHI Operating, Inc. Application for Authorization to Inject (SWD) Wizard Federal
Com No. 1; 1750' FSL, 760' FEL (I) Section 1 T19S R30E NMPM, Eddy County,
New Mexico

Dear Mr. Fesmire:

This firm represents Occidental Permian Ltd., ("Oxy Permian"). Oxy Permian is the owner of record title lease interests and is the operator of the Oxy Hackberry 6 Fed Com No. 2 located 1980' FSL and 810' FWL in Section 6 T19S R31E, approximately 1,600' from the proposed disposal well.

Oxy Permian objects to the Application for Authorization to Inject and requests that the Application for administrative approval be denied. Alternatively, if administrative denial of the Application is not issued, then a hearing on the Application may be deemed advisable pursuant to Rule 701 D.

Very truly yours,

MILLER STRATVERT P.A.

J. Scott Hall
J. Scott Hall

JSH/glb

cc: Will Jones, New Mexico Oil Conservation Division UIC Bureau
Gary Womack, Chi Operating, Inc.
Elizabeth Bush-Ivie, Occidental Permian Ltd.

A PROFESSIONAL ASSOCIATION

ALBUQUERQUE
(505) 842-1950

FARMINGTON
(505) 326-4521

LAS CRUCES
(505) 523-2481

SANTA FE
(505) 989-9614

WUT 5/22/07
No APPL. From CHI on this well yet

Injection Permit Checklist 2/8/07

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

Well Name/Num: WIZARD FEDERAL COM. #1 Date Spudded: _____

A PI Num: (30-) 015-31715 County: EDDY

Footages 1750 FSL/160 FEL Sec 1 Tsp 19S Rge 30E

Operator Name: CHI OPERATING, INC Contact GARY WUMACK

Operator Address: 212 N. MAIN, MIDLAND, TX, 79701

Current Status of Well: _____ Planned Work: _____ Inj. Tubing Size: 2 7/8

	Hole/Pipe Sizes		Depths	Cement	Top/Method
Surface	<u>17 1/2</u>	<u>13 3/8</u>	<u>490'</u>	<u>500</u>	<u>CIRC</u>
Intermediate	<u>11"</u>	<u>8 5/8</u>	<u>3244</u>	<u>1201</u>	<u>CIRC</u>
Production	<u>7 7/8</u>	<u>5 1/2</u>	<u>12265</u>	<u>900</u>	<u>5,350 C.B.L.</u>
Last DV Tool					
Open Hole/Liner					
Plug Back Depth					

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

Checks (Y/N): Well File Reviewed _____ ELogs in Imaging NO LOGS

Intervals:	Depths	Formation	Producing (Yes/No)
(Salt/Potash)	<u>438 TO 2490'</u>		
Capitan Reef	<u>JUST NORTH of Reef</u>		
Cliff House, Etc:			
Formation Above	<u>3074</u>	<u>Over</u>	
Top Inj Interval	<u>5410 - 4500</u>	<u>dd 485</u>	
Bottom Inj Interval	<u>6200</u>	<u>dd</u>	
Formation Below	<u>6234 - 6112</u>	<u>B.S. 6234</u>	

PSI Max. WHIP

Open Hole (Y/N)

Deviated Hole (Y/N)

Fresh Water: Depths: 0-200' Wells(Y/N) NO Analysis Included (Y/N): _____ Affirmative Statement ☒

Salt Water Analysis: Injection Zone (Y/N/NA) _____ DispWaters (Y/N/NA) _____ Types: _____

Notice: Newspaper(Y/N) ☒ Surface Owner BLM Mineral Owner(s) _____

Other Affected Parties: OXY

AOR/Repairs: NumActiveWells _____ Repairs? _____ Producing in Injection Interval in AOR _____

AOR Num of P&A Wells 0 Repairs? _____ Diagrams Included? _____ RBDMS Updated (Y/N) _____

Well Table Adequate (Y/N) _____ AOR STRs: Sec _____ Tsp _____ Rge _____ UIC Form Completed (Y/N) _____

New AOR Table Filename _____ Sec _____ Tsp _____ Rge _____ This Form completed _____

Conditions of Approval: _____ Sec _____ Tsp _____ Rge _____ Data Request Sent _____

new 704?

G&E CBL, G&E GAT Reads/loc of DV

Close to BS which may be too?

AOR Required Work: Send notice to Mark, Ray, and others

Required Work to this Well: _____

FIX 2 offset wells.

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APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: CHI Operating, Inc.
ADDRESS: 212 N. Main, Midland, Texas 79701
CONTACT PARTY: Gary Womack PHONE: 432-685-5001
- 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: GARY WOMACK TITLE: ENGINEER
SIGNATURE: [Signature] DATE: 3-23-07
E-MAIL ADDRESS: garyw@chienergyinc.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: _____

INJECTION WELL DATA SHEET

OPERATOR: Chi Operating, Inc. _____

WELL NAME & NUMBER: Wizard Federal Com. #1 _____

WELL LOCATION: 1750' FSL & 760' FEL I 1-T19S-R30E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATA
Surface Casing

Hole Size: 17 1/2" Casing Size: 13 3/8"

Cemented with: 500 sx. or ft³

Top of Cement: surface Method Determined: Circulated

Intermediate Casing

Hole Size: 11" Casing Size: 8 5/8"

Cemented with: 1201 sx. or ft³

Top of Cement: surface Method Determined: Circulated

Production Casing

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

Cemented with: 900 sx. or ft³

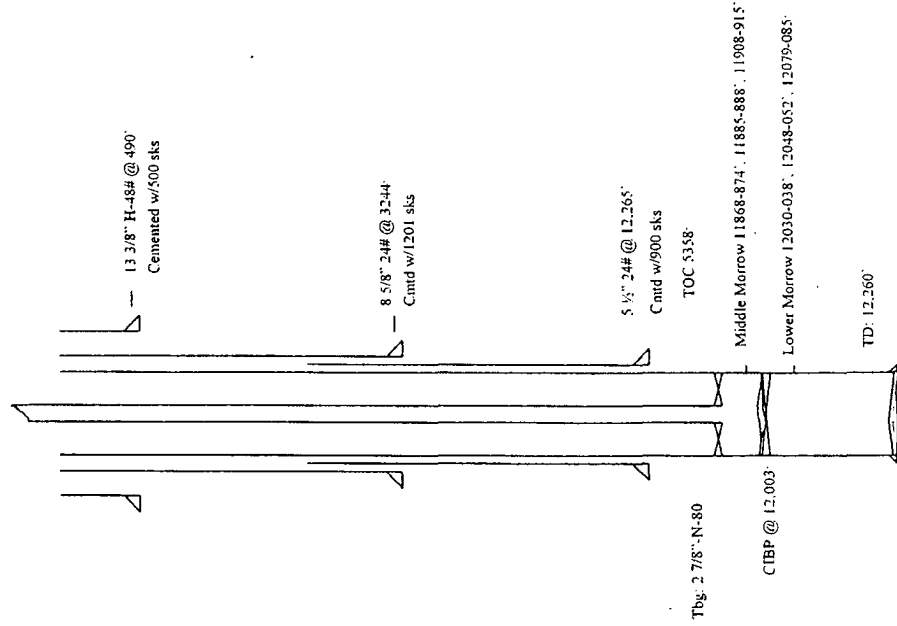
Top of Cement: 5350' Method Determined: CBL

Total Depth: 12,260'

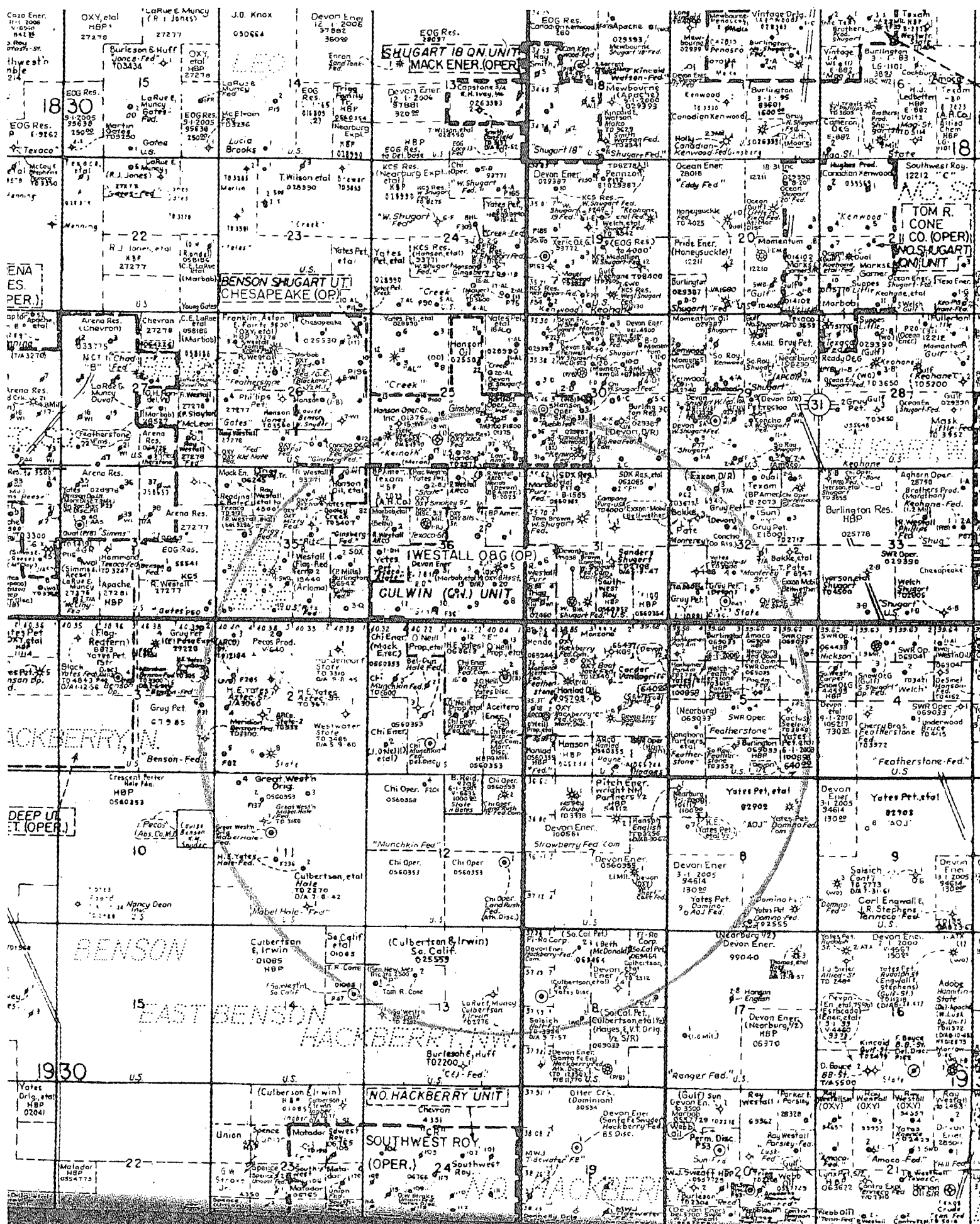
Injection Interval

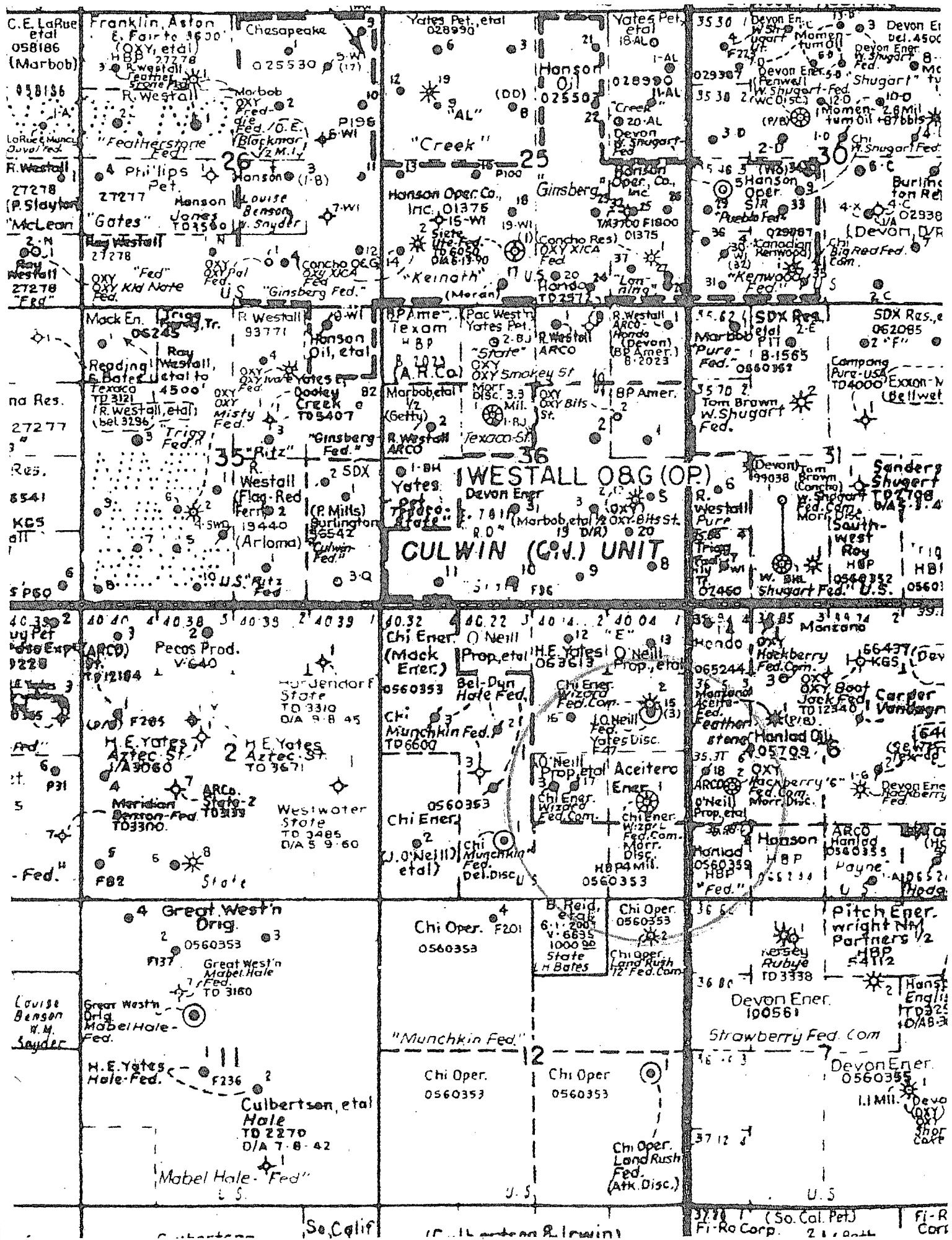
5410 feet to 6200' perf

(Perforated or Open Hole; indicate which)



INJECTION WELL DATA SHEETTubing Size: 2 7/8" Lining Material: plastic coatedType of Packer: 2 7/8 x 5 1/2" Arrow Set IXPacker Setting Depth: (+/-) 5300'Other Type of Tubing/Casing Seal (if applicable): Additional Data1. Is this a new well drilled for injection? Yes X NoIf no, for what purpose was the well originally drilled? Oil & Gas production Gas2. Name of the Injection Formation: DELAWARE3. Name of Field or Pool (if applicable): N. HACKBERRY4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. SEE SCHEMATIC5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Marrow 11,746Bone Spring 6,234Delaware 4,344Queen 3,074Yates Seven Rivers 2,250





WELL NAME	LOCATION	SPUD DATE	SUR CSG	INT CSG	PROD CSG	COMPLETION
Chi Operating #2 Wizard Fed. 507,500.00 to 1200' Future = 1,780 CBL	1H-19S-30E DVE 422' / CBL Tob = 1,104' CBL Toc = 1,780 CBL	11/11/2001	13 3/8" @ 450' 225 sxs	8 5/8" @ 3200' 1000 sxs	5 1/2" @ 12,300' 750sxs	12108-12160' N. Hackberry Morrow Gas
Chi Operating #2 Land Rush 12 Fed.	12A-19S-30E DVE 6992' CBL	5/30/2002	13 3/8" @ 475' 200 sxs	8 5/8" @ 3210' 450 sxs	5 1/2" @ 12,260' 850sxs	11819-11887' N. Hackberry Morrow Gas
OXY USA #2 Hackberry 6 Fed.	6-19S-31E Calc Toc @ 6300' Toc = 8950 CBL	2/2/2001	13 3/8" @ 670' 600 sxs	9 5/8" @ 3200' 1130 sxs	5 1/2" @ 12,300' 720sxs	11920-11970' N. Hackberry Morrow Gas

Attn: John Wolf
Fax # 1-915-687-2662

B J Services Water Analysis

Artesia District Laboratory
(505)-746-3140

Date: 5-Aug-02 Test #: # 1
Company Chi Operating Well #: #2
Lease: Wizard Fed Com County: Eddy
State: NM Formation:
Depth: Source: Grab

pH	8.52	Temp (F):	92
Specific Gravity	1.026		

CATIONS	mg/l	me/l	ppm
Sodium (calc.)	25902	1126.7	25246
Calcium	1724	86.0	1681
Magnesium	365	30.0	355
Barium	< 25	---	---
Potassium	< 10	---	---
Iron	780	27.9	760

ANIONS	mg/l	me/l	ppm
Chloride	42000	1184.8	40936
Sulfate	975	20.3	950
Carbonate	< 1	---	---
Bicarbonate	4270	70.0	4162

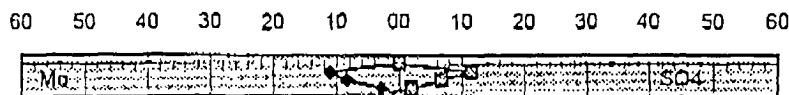
Total Dissolved Solids(calc.)	76015		74089
Total Hardness as CaCO ₃	5807	116.0	5660

COMMENTS: Resistivity (ohm-meters--calc.) 0.090469

SCALE ANALYSIS:

CaCO₃ Factor 7362761 Calcium Carbonate Scale Probability-> Probable
CaSO₄ Factor 1724300 Calcium Sulfate Scale Probability -> Remote

Stiff Plot



30-015-21715

Agriol - 4378

Peeps - 27989

Porc - 96785

Geol. Tops per 1361

Rustler 437

Salado ~ 634

Base Salt 21900

Gates 2250

TRivers 2614

Bowers 2872

Queen 3074

San Andres 3708

Delaware 4685

Bone Spring 6234

1st BS Sand 7647

2nd BS Sand 8457

3rd BS Sand 9355

Wolfcamp 9883

STrawn 10895

Atoka 11210

Morrow 11595

Barnett 12205

8-30-01

PLAT EXP/AZ-LL/MICROCEP-NGT

3245-12258

PLAT EXP/3D-LD/COMP NEUT/NGT

200-12248