

## APPLICATION FOR AUTHORIZATION TO INJECT

RECEIVED

- I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  Yes  No  20

II. Operator: S & J OPERATING COMPANYAddress: P O BOX 2249, WICHITA FALLS, TEXAS 76307Contact party: PEYTON S. CARNES, JR. Phone: (817) 723-2166

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  no  
If yes, give the Division order number authorizing the project R-3001.

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 geological data on the injection zone including appropriate lithologic detail, geological 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 source 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 source 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: PEYTON S. CARNES, JR. Title PETROLEUM ENGINEER

Signature: Peyton S. Carnes Date: 10-21-91

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal. The Denton North Wolfcamp Unit was effective January 1, 1966; Water

injection was started in November, 1966.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

**III. WELL DATA**

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

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and 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, P. O. Box 2088, Santa Fe, New Mexico 87501 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.

S & J OPERATING COMPANY  
DENTON NORTH WOLFCAMP UNIT  
LEA COUNTY, NEW MEXICO

Data on Proposed Waterflood Expansion  
for Wells No. 5-12, 7-3 and 8-1:

1. Proposed average and maximum daily rate and volume of water to be injected will be 400 BWPD (average) and 500 BWPD (maximum).
2. The system is a closed system.
3. Proposed average and maximum injection pressure will be 2600 psig (average) and 3500 psig (maximum).
4. Source of water is the produced water from the project and produced water from offset leases which is composed of both Wolfcamp saltwater and Devonian saltwater which are compatible.

## INJECTION WELL DATA SHEET

SHEET 1

OPERATOR

S &amp; J Operating Company

WELL NO. 100147 LOCATION

Denton North Wolfcamp Unit SECTION

TOWNSHIP RANGE

5-12

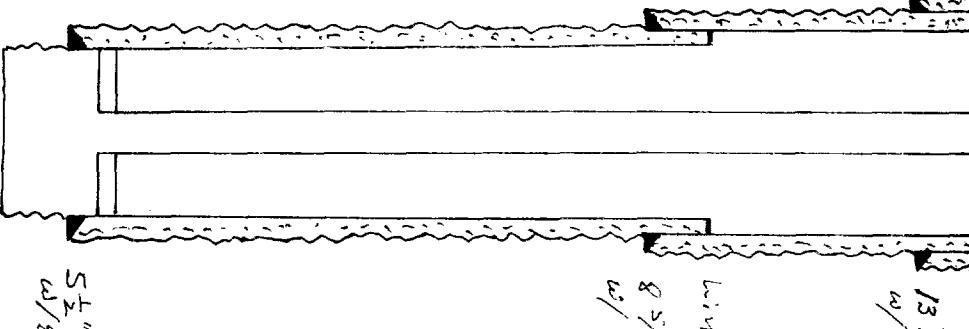
E 1980' FNL &amp; 810' FWL

35

14S

37E

Originally drilled as Ralph Lowe, Dickinson "D" #12

SchematicSurface Casing

Liner Top 4250'  
 $13\frac{3}{8}$ " @ 340' w/ 400 sks  
 Size  $13\frac{3}{8}$ " " Cemented with 400 sks.

10C Surface feet determined by observed

Hole size  $17\frac{1}{4}$ "

Intermediate Casing

Liner Top 4250'  
 $8\frac{5}{8}$ " @ 4250' w/ 2100 sks  
 Size  $8\frac{5}{8}$ " " Cemented with 2100 sks.

10C Surface feet determined by observed

Hole size  $12\frac{1}{4}$ " best.

Long string Liner

Size  $5\frac{1}{2}$ " " Cemented with 800 sks.  
 Records show liner fully cemented from top to bottom

Total depth 9380'

Injection interval Open-Hole

$5\frac{1}{2}$ " @ 9280' w/ 800 sks  
 $\frac{9280}{9380}$  feet to 9380 feet  
 (perforated or open-hole, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" EUE lined with Saltap PVC liner  
(material)  
Baker Lok-set  
(brand and model) to be set in a

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Wolfcamp
2. Name of Field or Pool (if applicable) Denton North Wolfcamp
3. Is this a new well drilled for injection?  Yes  No

If no, for what purpose was the well originally drilled? Production from Wolfcamp

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Devonian at 12500'

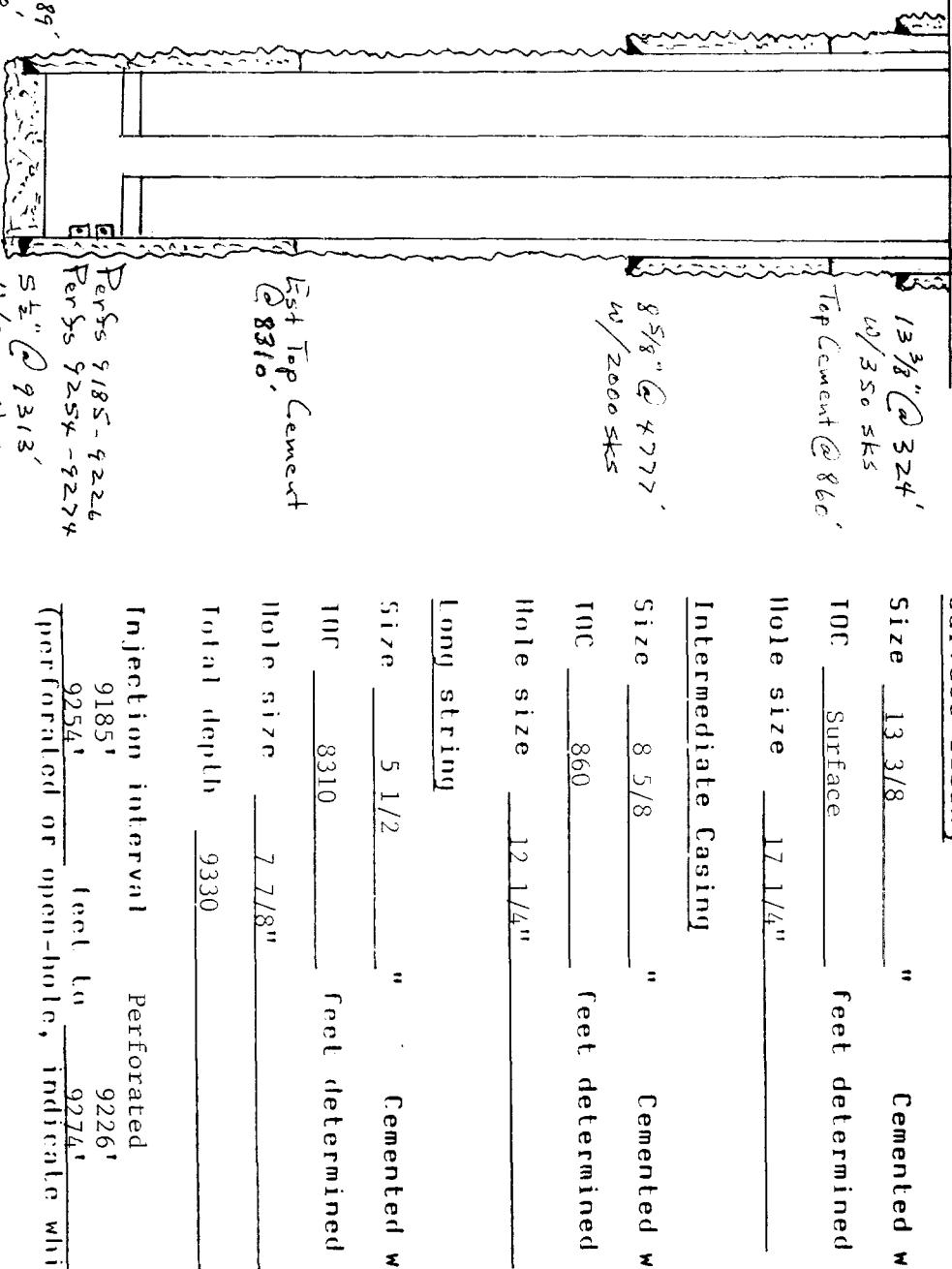
## INJECTION WELL DATA SHEET

SHEET 1

OPERATORLEASE

S & J Operating Company WELL NO.	FOOTAGE LOCATION	Denton North Wolfcamp Unit SECTION	TOWNSHIP	RANGE
7-3	M 660' FSL & 660' FWL	36	14S	37E

Originally drilled as Sinclair Oil & Gas Co., T. D. Pope #3

SchematicSurface Casing

Size 13 3/8" " Cemented with 350 sx.  
w/ 350 sks  
Top Cement @ 860 feet determined by observed  
hole size 17 1/4"

Intermediate Casing

Size 8 5/8" " Cemented with 2000 sx.

TIC 860 feet determined by Temperature Survey

Hole size 12 1/4"

long string

Size 5 1/2" " Cemented with 200 sx.

TIC 8310 feet determined by Temperature Survey

Hole size 7 7/8"

Total depth 9330

Tabular Data

Perfs 9185 - 9226 Perfs 9254 - 9274 9185' 9254' feet to 9274' feet  
PBTD 9289' TD 9330' w/ 200 sks

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" EUE lined with Saltar PVC liner to be set in a  
(material)

Baker Lok-Set packer at approximately 9050 feet  
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Wolfcamp
2. Name of Field or Pool (if applicable) Denton North Wolfcamp
3. Is this a new well drilled for injection?  Yes  No  
If no, for what purpose was the well originally drilled? Production from Wolfcamp
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Devonian at 12500'

## INJECTION WELL DATA SHEET

SHEET 1

OPITERATORLEASER

S &amp; J Operating Company

WELL NO. 100141 LOCATION

Denton North Wolfcamp Unit SECTION

TOWNSHIP

RANGE

8-1 0 660' FSL &amp; 2310' FEL

36

14S

37E

Originally drilled as Sinclair Oil &amp; Gas Co., W. T. Mann "A" #1

SchematicSurface Casing13  $\frac{3}{8}$ " @ 305'  
w/ 325 sks

Size 13 3/8" Cemented with 325 sks.

Top Cement @ 1160'

TOC Surface feet determined by observed

Hole size 17 1/4"

Intermediate Casing

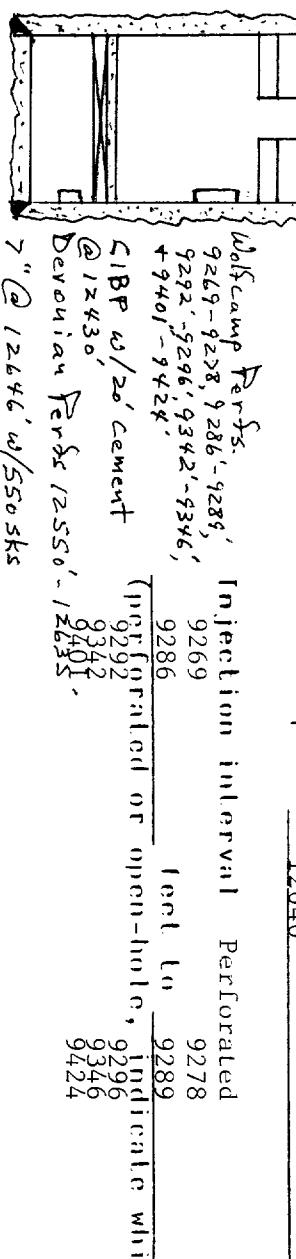
Size 9 5/8" Cemented with 2200 sks.

TOC 1160 feet determined by Temperature Survey

Hole size 12 1/4"

long stringSize 7" Cemented with 550 sks.  
Original Top Cement 1160 8512 feet/determined by Temperature Survey  
Cemented through 9269' w/800 sks

Perforated 9269-9289', 9286-9289', 9286-9292', 9292-9296', 9342-9346', 9342-9401', 9401-9424'.  
 CLBP w/20' cement 9292-9342', 9342-9346', 9346-9424'.  
 Devonian Perfs 12550', 12646' w/550 sks.

Tabular Data

## INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" EUE lined with Salta PVC liner  
(material) to be set in a

Baker Lok-Set packer at approximately 9100 feet  
(brand and model)

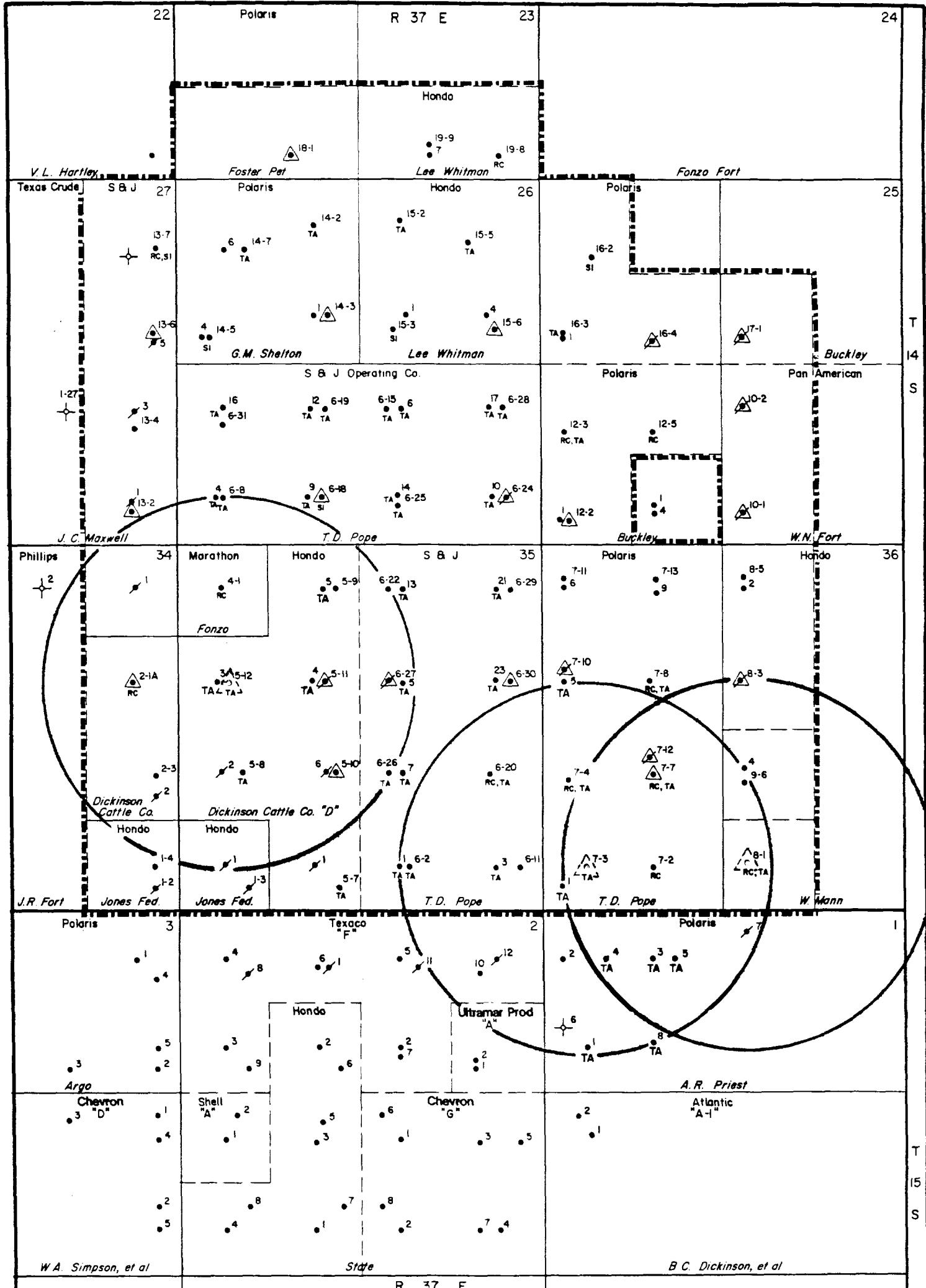
(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Wolfcamp
  2. Name of Field or Pool (if applicable) Denton North Wolfcamp
  3. Is this a new well drilled for injection?  Yes  No
- If no, for what purpose was the well originally drilled? Production from Devonian at 12550'.  
Later was plugged back for production from Wolfcamp.

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) Devonian perforations  
12550'-12635'. Set CIBP and 20' of cement at 12430'.

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Devonian at 12550'



— LEGEND —

- PRODUCING OIL WELL
- ▲ WATER INJECTION WELL
- ✗ PLUGGED & ABANDONED WELL
- TA TEMPORARILY ABANDONED
- SI SHUT IN
- RC RECOMPLETED
- ◆ DRY HOLE
- ■ ■ UNIT BOUNDARY

S & J OPERATING COMPANY  
DENTON NORTH WOLFCAMP UNIT  
LEA COUNTY, NEW MEXICO

— SCALE —



ONE HALF MILE RADIUS REVIEW AREA  
FOR PROPOSED WATER INJECTION WELLS

PETROLEUM ENGINEERS  
STEPHEN'S ENGINEERING  
WICHITA FALLS, TEXAS



S & J OPERATING COMPANY  
DENTON NORTH WOLFCAMP UNIT  
LEA COUNTY, NEW MEXICO

AREA OF REVIEW DATA FOR INJECTION PERMITS

<u>Section, Twp, Rg</u>	<u>Operator</u>	<u>Well No.</u>	<u>Date Drilled</u>	<u>Type of Well</u>	<u>Location</u>	<u>Size</u>	<u>Casing Record</u>	<u>Total Depth</u>	<u>Completion Zone</u>	<u>Remarks</u>	
	<u>Operator Lease</u>										
<u>26-14S-3/E</u>	<u>S &amp; J Operating Co.</u>	<u>6-8</u>	<u>3-53</u>	<u>TA Producer</u>	<u>M-26-14S-3/E</u>	<u>10 3/4</u> <u>7 5/8</u> <u>5 1/2</u> <u>Liner</u>	<u>450</u> <u>2070</u> <u>270</u> <u>to 4176</u>	<u>475</u> <u>4405</u> <u>9352</u>	<u>9355</u>	<u>Wolfcamp: 9262'</u> <u>to 9304'</u> <u>Perf.</u>	<u>Squeezed top of liner w/550 sks.</u>
<u>T. D. Pope</u>		<u>4</u>	<u>3-15-53</u>	<u>TA Producer</u>	<u>M-26-14S-3/E</u>	<u>13 3/8</u> <u>9 5/8</u> <u>5 1/2</u> <u>Liner</u>	<u>425</u> <u>3100</u> <u>1800</u> <u>to 4855</u>	<u>409</u> <u>4855</u> <u>12640</u>	<u>12640</u>	<u>Devonian: 12305'</u> <u>to 12594'</u> <u>Perf.</u>	
<u>30-14S-3/E</u>	<u>S &amp; J Operating Co.</u>	<u>2-1</u>	<u>4-12-53</u>	<u>Water Inj.</u>	<u>H-34-14S-3/E</u>	<u>13 3/8</u> <u>9 5/8</u> <u>7</u>	<u>400</u> <u>3000</u> <u>650</u>	<u>296</u> <u>4710</u> <u>12712</u>	<u>12720</u>	<u>Wolfcamp: 9420'</u> <u>to 9480'</u> <u>Perf.</u>	<u>Set CIBP at 9610'</u>
<u>2-3</u>	<u>B. C. Dickinson</u>	<u>10-53</u>		<u>Producer</u>	<u>I-34-14S-3/E</u>	<u>13 3/8</u> <u>9 5/8</u> <u>5 1/2</u>	<u>300</u> <u>4743</u> <u>500</u>	<u>296</u> <u>9412</u> <u>9405</u>	<u>9412</u>	<u>Wolfcamp: 9368'</u> <u>to 9405'</u> <u>Perf.</u>	
<u>Phillips Petroleum</u>	<u>J. R. Fort</u>	<u>1</u>	<u>10-3-51</u>	<u>P&amp;A Producer</u>	<u>A-34-14S-3/E</u>	<u>13 3/8</u> <u>8 5/8</u> <u>5 1/2</u>	<u>350</u> <u>4750</u> <u>1380</u>	<u>348</u> <u>4752</u> <u>12799</u>	<u>12804</u>	<u>Devonian: 12564'</u> <u>to 12/10'</u> <u>Perf.</u>	<u>P&amp;A 3-61</u>
<u>Atlantic Richfield</u>		<u>2</u>	<u>I-20-53</u>	<u>P&amp;A Producer</u>	<u>I-34-14S-3/E</u>	<u>13 3/8</u> <u>9 5/8</u> <u>5 1/2</u>	<u>350</u> <u>3000</u> <u>575</u>	<u>297</u> <u>4729</u> <u>12603</u>	<u>12604</u>	<u>Devonian: 12490'</u> <u>to 12590'</u> <u>Perf.</u>	<u>P&amp;A 6-4-11</u>
<u>33-14S-3/E</u>	<u>S &amp; J Operating Co.</u>	<u>4-1</u>	<u>8-6-52</u>	<u>Producer</u>	<u>D-35-14S-3/E</u>	<u>13 3/8</u> <u>8 5/8</u> <u>5 1/2</u>	<u>350</u> <u>3175</u> <u>1500</u>	<u>360</u> <u>479</u> <u>12732</u>	<u>12732</u>	<u>Wolfcamp: 9304'</u> <u>to 9448'</u> <u>Perf.</u>	<u>Originally perf. Devonian 12315' to 12318'</u> <u>12-66 set CIBP and 20' cement at 9542'</u>
<u>5-8</u>		<u>6-53</u>		<u>TA Producer</u>	<u>L-35-14S-3/E</u>	<u>13 3/8</u> <u>8 5/8</u> <u>5 1/2</u> <u>Liner</u>	<u>400</u> <u>2200</u> <u>700</u> <u>to 4543</u>	<u>335</u> <u>4750</u> <u>9283</u>	<u>9350</u>	<u>Wolfcamp: 9283'</u> <u>to 9350'</u> <u>OH</u>	
<u>5-9</u>		<u>7-53</u>		<u>Producer</u>	<u>C-35-14S-3/E</u>	<u>13 3/8</u> <u>8 5/8</u> <u>5 1/2</u> <u>Liner</u>	<u>400</u> <u>2200</u> <u>700</u> <u>to 4558</u>	<u>337</u> <u>4737</u> <u>9180</u>	<u>9250</u>	<u>Wolfcamp: 9180'</u> <u>to 9250'</u> <u>OH</u>	

**AREA OF REVIEW DATA FOR INJECTION PERMITS (Cont'd)**

<u>Section, Twp., Rg.</u>	<u>Operator</u>	<u>Well No.</u>	<u>Date Drilled</u>	<u>Type of Well</u>	<u>Location</u>	<u>Size</u>	<u>Casing Record</u>	<u>Total Depth</u>	<u>Completion Zone</u>	<u>Remarks</u>
35-14S-3/E S & J Operating Co. Denton North WCD		5-10	8-14-53	Water Inj.	K-35-14S-3/E	13 3/8 8 5/8 5 1/2	400 2100 750	350 4750 9160	9280	Wolfcamp: 9160' to 9280' OH
5-11		9-19-53		P&A Water Inj.	F-35-14S-3/E	13 3/8 8 5/8 5 1/2	400 2200 800	338 4740 9200	9300	Wolfcamp: 9200' to 9300' OH
6-2		12-52		TA Producer	0-35-14S-3/E	10 3/4 7 5/8 5 1/2	425 2600 750	428 4253 9230	9650	Wolfcamp: 9114' to 9234' Perf.
6-11		5-53		Producer	P-35-14S-3/E	10 3/4 7 5/8 5 1/2	450 1600 360	447 4350 9265	9265	Wolfcamp: 9179' to 9217' Perf.
6-20		9-8-53		TA Producer	I-35-14S-3/E	13 3/8 8 5/8 5 1/2	475 2180 1000	439 4850 12632	12632	Wolfcamp: 9128' to 9191' Perf.
6-22		9-53		Producer	B-35-14S-3/E	10 3/4 7 5/8 5 1/2	500 1850 240	450 4800 9350	9350	Squeezed top of liner w/190 sks. Originally perf. Devonian 12149' to 12615'. In 7-83 set CIB and cement at 11965'. Perforated Wolfcamp.
6-26		11-53		TA Producer	J-35-14S-3/E	10 3/4 7 5/8 5 1/2	450 2000 278	460 4760 9326	9370	Wolfcamp: 9154' to 9220' Perf.
6-27		11-20-53		P&A Water Inj.	G-35-14S-3/E	10 3/4 7 5/8 5 1/2	450 1565 415	448 4800 9355	9355	Squeezed top of liner w/300 sks. P&A 8-25-76.
T. D. Pope		1	10-30-51	TA Producer	O-35-14S-3/E	13 3/8 8 5/8 5 1/2	425 2900 1400	411 4746 12487	12702	Devonian: 12487' to 12596' OH
3		4-21-53		TA Producer	P-35-14S-3/E	13 3/8 8 5/8 5 1/2	425 2200 600	450 4806 12628	12628	Cemented liner w/500 sks cement w/4% gel and 100 sks neat cement. Top of cement by temperature survey at 8790'. Calculated top of cement behind liner at 8758'. Squeezed top of liner w/250 sks.

TC Perm Survey GTF

AREA OF REVIEW DATA FOR INJECTION PERMITS (Cont'd)

<u>Section, Twp, Rg Operator Lease</u>	<u>Well No.</u>	<u>Date Drilled</u>	<u>Type of Well</u>	<u>Location</u>	<u>Size</u>	<u>Casing Record</u>	<u>Cement</u>	<u>Depth</u>	<u>Total Depth</u>	<u>Completion Zone</u>	<u>Remarks</u>
<u>35-14S-3/E</u> <u>S &amp; J Operating Co.</u> <u>T. D. Pope</u>	5	4-15-53	TA Producer	G-35-14S-3/E	13 3/8 8 5/8 5 1/2	450 3700 740	430 4820 12010	12342	Devonian: 12010' to 12342' OH		Squeezed top of liner w/200 sks.
<u>Hondo Oil &amp; Gas (Atlantic-Richfield)</u> <u>Dickinson vDII</u>	2	2-29-52	P&A Producer	L-35-14S-3/E	13 3/8 8 5/8 5 1/2	365 1500 875	333 4741 12586	12685	Devonian: 12586' to 12685' OH	P&A 5-4-72	
3	7-11-52	TA Producer	E-35-14S-3/E	13 3/8 8 5/8 5 1/2	400 4760 875	337 1700 12508	12670	Devonian: 12508' to 12670' OH			
4	11-4-52	TA Producer	F-35-14S-3/E	13 3/8 8 5/8 5 1/2	400 1'00 1300	348 4737 12298	12400	Devonian: 12298' to 12400' OH			
5	3-1-53	TA Producer	G-35-14S-3/E	13 3/8 8 5/8 5 1/2	400 1700 1000	336 4730 12178	12415	Devonian: 12118' to 12415'			
6	6-14-53	P&A Producer	K-35-14S-3/E	13 3/8 8 5/8 5 1/2	400 1700 900	339 4749 12369	12560	Devonian: 12369' to 12560' OH		P&A 4-29-72	
Jones Federal	1	7-21-51	P&A Producer	M-35-14S-3/E	13 3/8 9 5/8 7	400 300 855	313 4678 12697	12700	Devonian: 12460' to 12632' Perf.	P&A 4-11-73	
<u>36-14S-3/E</u> <u>S &amp; J Operating Co.</u> <u>Denton North WCU</u>	7-2	8-5-53	Producer	N-36-14S-3/E	13 3/8 9 5/8 7	300 1700 600	316 4769 12649	12650	Wolfcamp: 9193' to 9356' Perf.	Calculated top of cement behind 7" casing at 81' originally perf. Devonian 12410' to 12635'. In 7-83 set CIBP and cement at 12200'. Perf. Wolf camp.	
7-4	1-54	TA Producer	I-36-14S-3/E	13 3/8 9 5/8 7	350 2816 700	320 4767 12642	1264/ to 9229' Perf.	Wolfcamp: 9138' to 9229' Perf.	Calculated top of cement behind 7" casing at 74' originally perf. Devonian 12295' to 12620'. In 7-83 set CIBP and cement at 12100'. Perf. Wolf camp.		
7-7	6-21-54	TA Water Inj.	K-36-14S-3/E	13 3/8 9 5/8 7 5/8 5 1/2	350 2300 200 600	327 4772 6842 12614	12640	Wolfcamp: 9197' to 9375' Perf.	Originally perf. Devonian 12500' to 12604'. In 61 set CIBP at 12490', cmt retainer at 12442' and perf. 12317' to 12401'. In 7-83 set CIBP a 35' cmt at 12082'. Perf. Wolfcamp.		

AREA OF REVIEW DATA FOR INJECTION PERMITS (Cont'd)

<u>Section, Twp, Rg</u>	<u>Operator</u>	<u>Well No.</u>	<u>Date Drilled</u>	<u>Type of Well</u>	<u>Location</u>	<u>Size</u>	<u>Casing Record</u>	<u>Total Depth</u>	<u>Completion Zone</u>	<u>Remarks</u>
<u>36-14S-37E</u>	<u>S &amp; J Operating Co.</u>									
Denton North WCU		7-12	12-6-54	P&A	K-36-14S-37E	13 3/8 9 5/8	3 1/5 2000	314 4768	9469	Wolfcamp: 9232' to 9449' Perf.
						7	125	9469		P&A 7-5-66
		8-3	12-14-54	P&A Water Inj.	G-36-14S-37E	13 3/8 9 5/8	3 1/5 2500	318 4789	12642	Wolfcamp: 9284' to 9436' Perf.
						7	600	12641		Originally perf. Devonian 12410' to 12636'. In 1-66 set CIBP and 15' cement at 12330'. Set retainer at 9483' and squeeze perfs. 9502' w/50 skt.
		9-6	10-55	Producer	J-36-14S-37E	13 3/8 9 5/8	3 1/5 2600	307 4780	9500	Wolfcamp: 9286' to 9436' Perf.
						7	175	9498		
<u>Rondo Oil &amp; Gas (Sinclair Oil &amp; Gas)</u>	<u>W. T. Main "A"</u>									
		4	5-27-55	TA Producer	J-36-14S-37E	13 3/8 9 5/8	3 1/5 2200	311 4789	12630	Devonian: 12499' to 12624' Perf.
						7	600	12630		Calculated top of cement behind 7" casing at 8170'
<u>Polaris (Sinclair Oil &amp; Gas)</u>	<u>T. B. Pope</u>	1	1-23-58	TA Producer	M-36-14S-37E	13 3/8 8 5/8 5 1/2	400 1700	316 4769	12640	Devonian: 12460' to 12590' Perf.
						8	900	12639		
		5	1-3-54	TA Producer	E-36-14S-37E	13 3/8 9 5/8	350 2450	311 4775	12643	Devonian: 12542' to 12639' Perf.
						7	700	12642		Calculated top of cement behind 7" casing at 8138' In 12-58 perforated 12295' to 12480'.
<u>1-15S-37E</u>	<u>Polaris (Shell Oil Co.)</u>									
	A. R. Priest	1	4-24-52	TA Producer	E-1-15S-37E	13 3/8 8 5/8 5 1/2	300 3500 1150	353 4762 12476	12675	Devonian: 12476' to 12675' OH
										In 6-63 perforated 12462' to 12472'.
		2	9-10-52	Producer	D-1-15S-37E	13 3/8 8 5/8 5 1/2	225 3500 700	351 4762 12470	12675	Devonian: 12470' to 12675' OH
	3	2-1-53	TA Producer	G-1-15S-37E	13 3/8 8 5/8 5 1/2	350 3500 700	360 4772 12534	12650	Devonian: 12534' to 12650' OH	
										Calculated top of cement behind 7" casing at 8019'
	4	2-15-53	TA Producer	D-1-15S-37E	13 3/8 8 5/8 5 1/2	350 2800 850	357 4750 9448	9450	Wolfcamp: 9160' to 9395' Perf.	
					Liner		to 4550			
	5	10-7-53	TA Producer	G-1-15S-37E	13 3/8 8 5/8 5 1/2	350 1700 9450	355 4800 9450	9485	Wolfcamp: 9168' to 9380' Perf.	275 275 8300

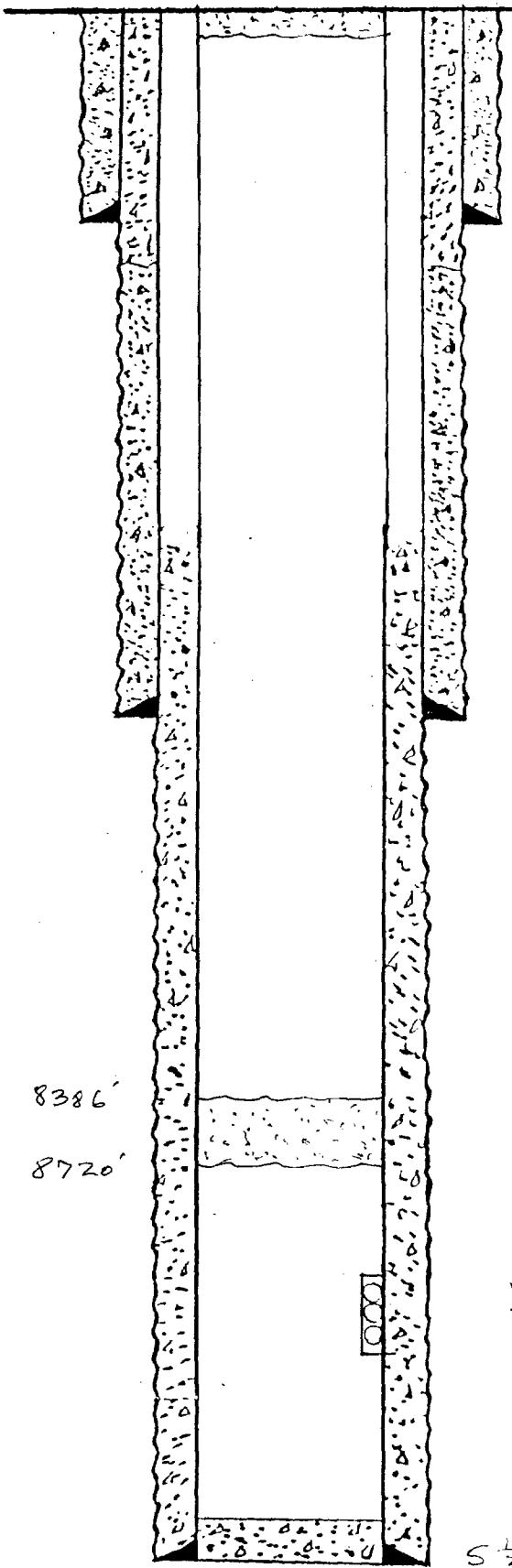
AREA OF REVIEW DATA FOR INJECTION PERMITS (Cont'd)

<u>Section, Twp, Rg</u>	<u>Operator</u>	<u>Well No.</u>	<u>Date Drilled</u>	<u>Type of Well</u>	<u>Location</u>	<u>Size</u>	<u>Casing Record</u>	<u>Total Depth</u>	<u>Completion Zone</u>	<u>Remarks</u>
<u>1-15S-3/E</u> <u>Polaris</u> (Shell oil Co.)	A. R. Priest	6	1-7-54	Dry Hole	E-1-15S-3/E	13 3/8 8 5/8 5 1/2	350 2250 150	377 4752 9447	Wolfcamp: 9165' to 9404' Perf.	D&A 1-7-54
<u>1-15S-3/E</u> <u>Texaco</u> (Skelly oil)	State "P"	10	9-30-52	Producer	A-2-15S-3/E	13 3/8 8 5/8 5 1/2	340 3000 1750	342 4782 12599	Devonian: 12500' to 12574' Perf.	
		12	5-1-53	P&A Producer	A-2-15S-3/E	13 3/8 8 5/8 5 1/2	318 1850 700	324 4752 9253	Wolfcamp: 9174' to 9224' Perf.	P&A 8-28-73

Phillips Petroleum Co.  
Section 34 T 14 S R 37 E  
Unit A

J. R. Fort  
Denton Field

Well No. 1  
GL NA  
DF 3829'



5 1/2' Plug at Surface

13 3/8" 35.6#/Ft. CSG Set @ 348' w/ 350 SX CMT.  
Circ. to Surface.

8 5/8" 32#/Ft. CSG Set @ 4752' w/ 4750 SX. CMT  
Circ. to Surface.

50 SX. Plug From 8386' to 8720'.

Devonian perforations 12564' to 12710'.

5 1/2" 17#/Ft. CSG Set @ 12799' w/ 1380 SX. CMT.

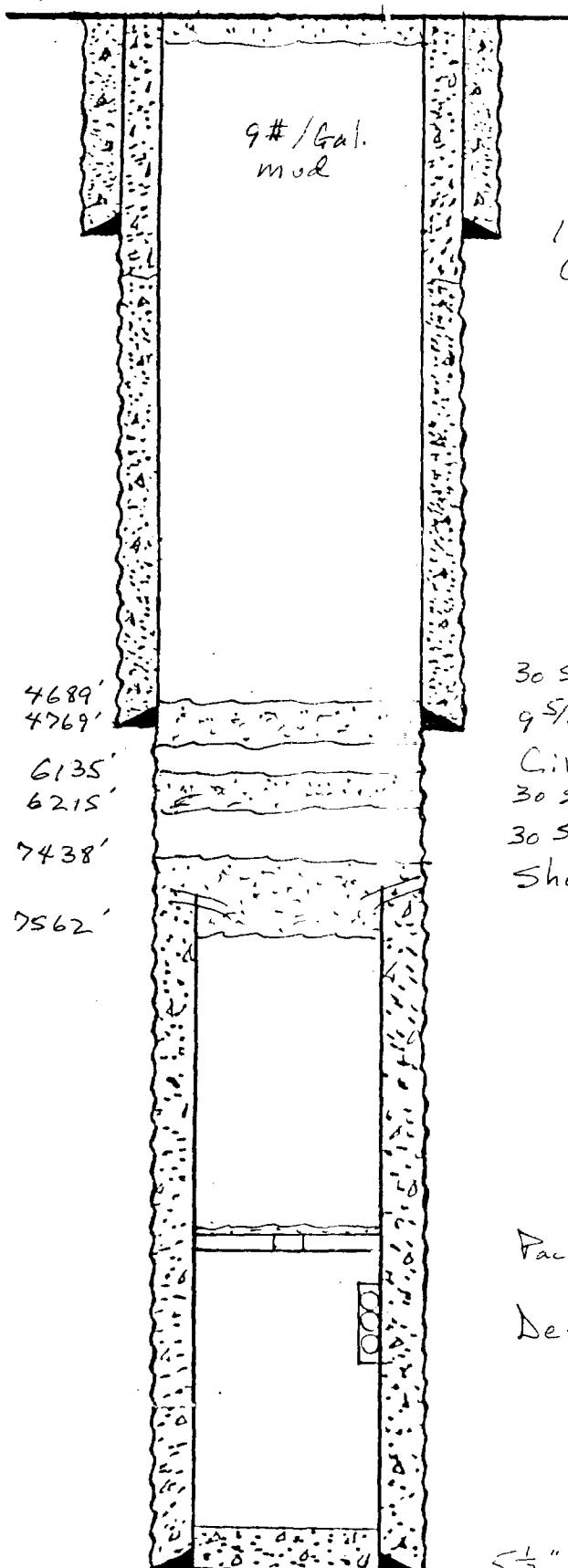
TD 12804

F+A 3-61

Atlantic Richfield Co.  
Section 34 T14S R37E  
Unit I

B.C. Dickinson A-34  
Denton Devonian Field

Well No. 2  
Gh NA  
DF 3825'



5 1/2" 17#/Ft. CSG Set @ 12603' w/ 575 5x. CMT.

P + A 6-4-21

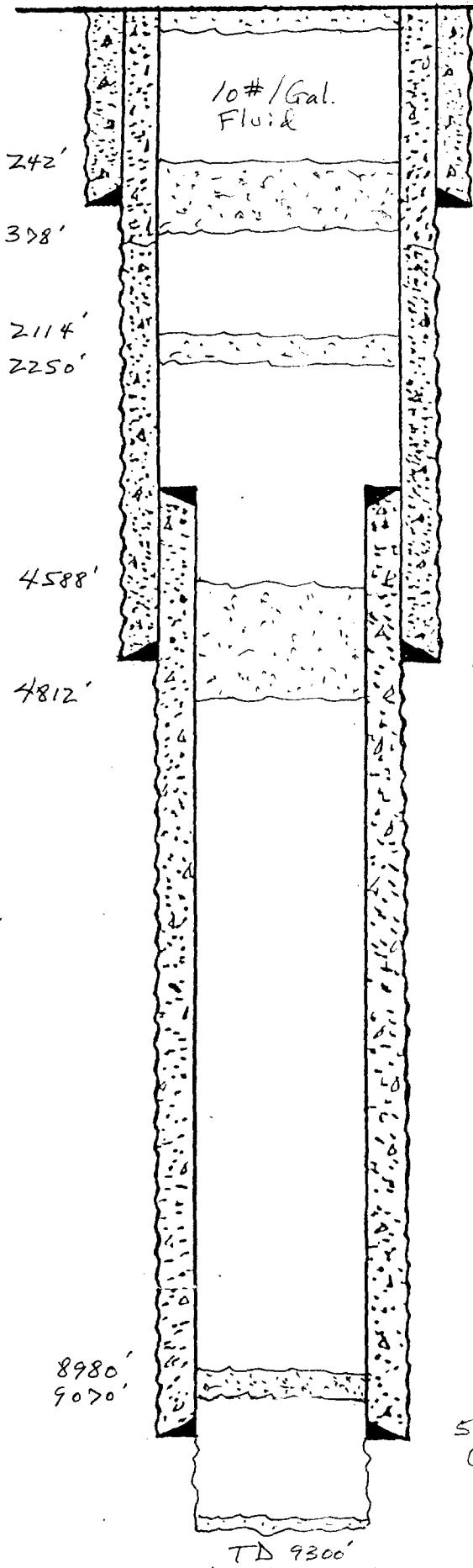
Mobil Oil Corp.

Section 35 T<sub>1</sub>N R<sub>37</sub>E  
Unit F

Denton North Wolfcamp Unit  
Denton North Wolfcamp Field

Well 5-11

GL NA  
DF 3813'



10 SX Plug at surface

40 SX. Plug from 242' to 338'  
13  $\frac{3}{8}$ ", 35.6 #/Ft CSG Set @ 338' w/ 400 SX CMT.  
Circ. to surface.

40 SX. Plug from 2114' to 2250'

Top liner @ 4740'

25 SX. Plug from 4588' to 4812'.  
8  $\frac{5}{8}$ " 32 #/Ft. CSG. Set @ 4740' w/ 2200 SX. CMT.  
Circ. to surface.

10 SX. Plug from 8980' to 9070'

5  $\frac{1}{2}$ " 17 #/Ft. liner Set @ 9200' w/ 800 SX CMT.  
Circ. to top of liner.

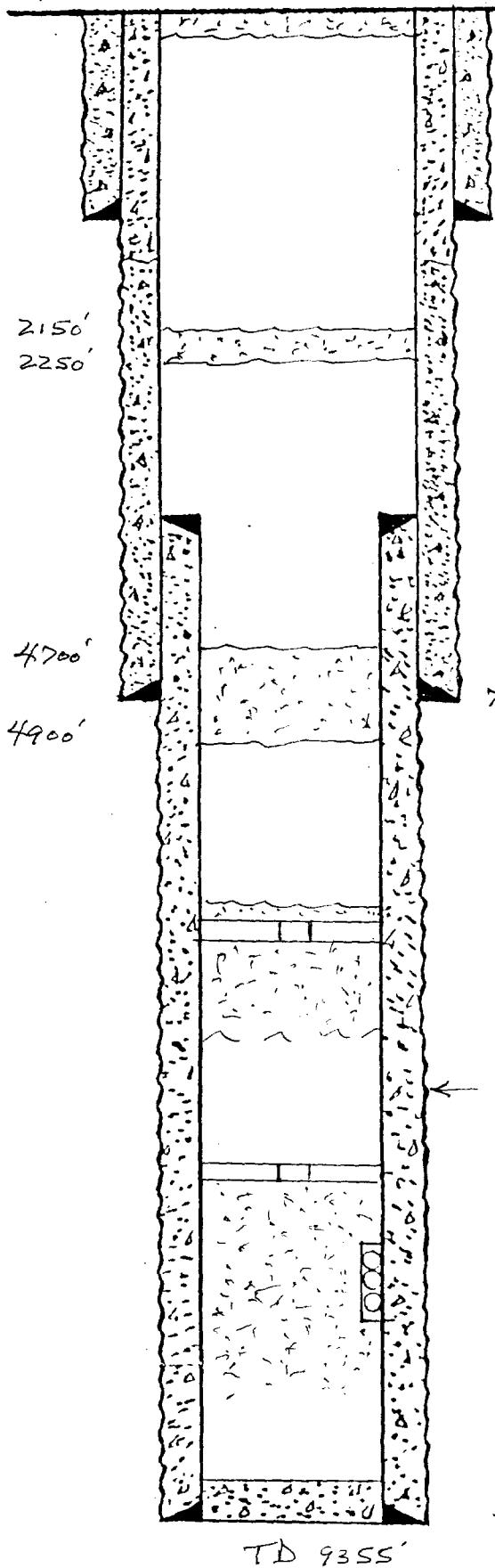
Wolfcamp Open hole 9200' to 9288'

P+A 11-8-26

Mobil Oil Corp.  
Section 35 T14 S R 37 E  
Unit G

Denton North Wolfcamp Unit  
Denton North Wolfcamp Field

Well 6-27  
GL 3794'  
DF 3805'



10 SX. Plug @ Surface 0' to 30'

10 3/4", 35.75#/Ft. CSG. Set @ 448' w/ 450 SX. CMT.  
Circ. to Surface.

25 SX. Plug From 2150' to 2250'

Top liner @ 4623'. Squeezed top of liner w/ 300 SX.

25 SX. Plug From 4700' to 4900'

7 5/8" 24# + 26.4#/Ft. CSG. Set @ 4800' w/ 1565 SX. CMT.  
Circ. to Surface.

5 1/2" EZ Drill Retainer @ 5321' + pumped 250 SX  
CMT. below Retainer

TOC @ 6455' (Temp Survey)

5 1/2" CMT Retainer @ 8987' Squeezed 85 SX. CMT  
below Retainer.

Wolfcamp perforations 9181' to 9206'

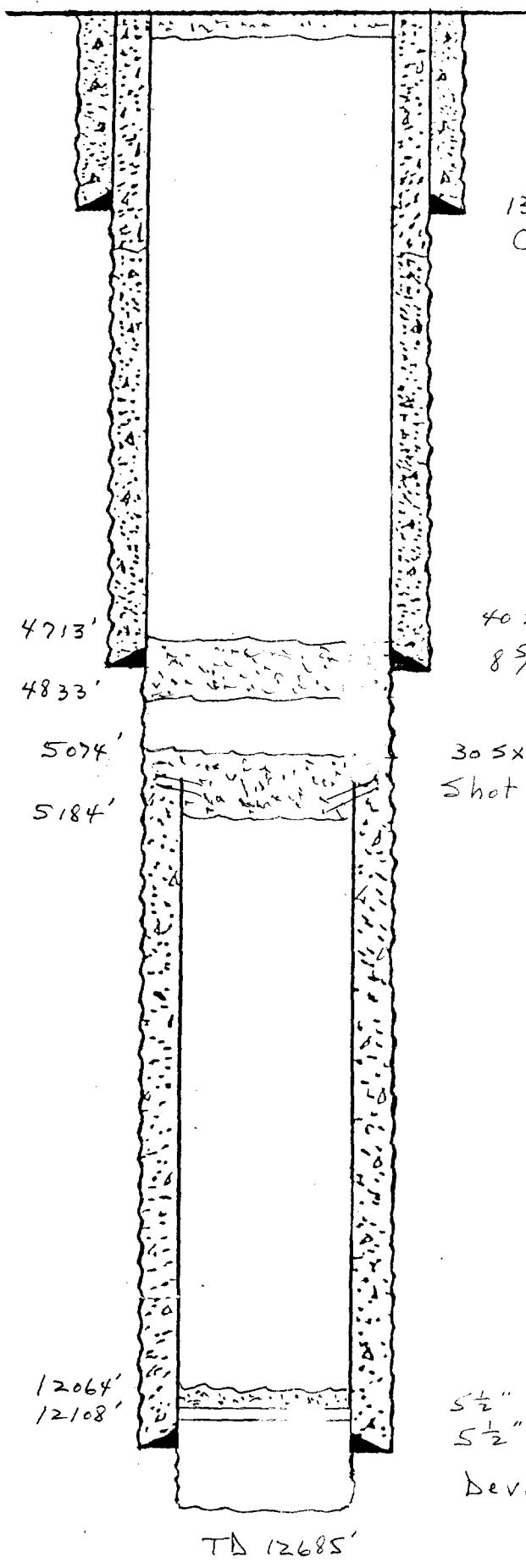
5 1/2" 17#/Ft. liner set @ 9355' w/ 415 SX CMT.  
TOC @ 6455' (Temp. Survey)

P+A 8-25-76

Atlantic Richfield Co.  
Section 35 T14S R37E  
Unit L

Dickinson "D"  
Denton Devonian Field

Well No. 2  
GL NA  
DF 3820'



13 3/8" 50#/Ft. CSG Set @ 332' w/ 365 SX CMT.  
Circ. to Surface.

40 SX Plug From 4713' to 4833'.

8 5/8" 32#/Ft CSG Set @ 4741' w/ 1500 SX CMT.

30 SX Plug From 5074' to 5184'.  
Shot off 5 1/2" CSG @ 5166'.

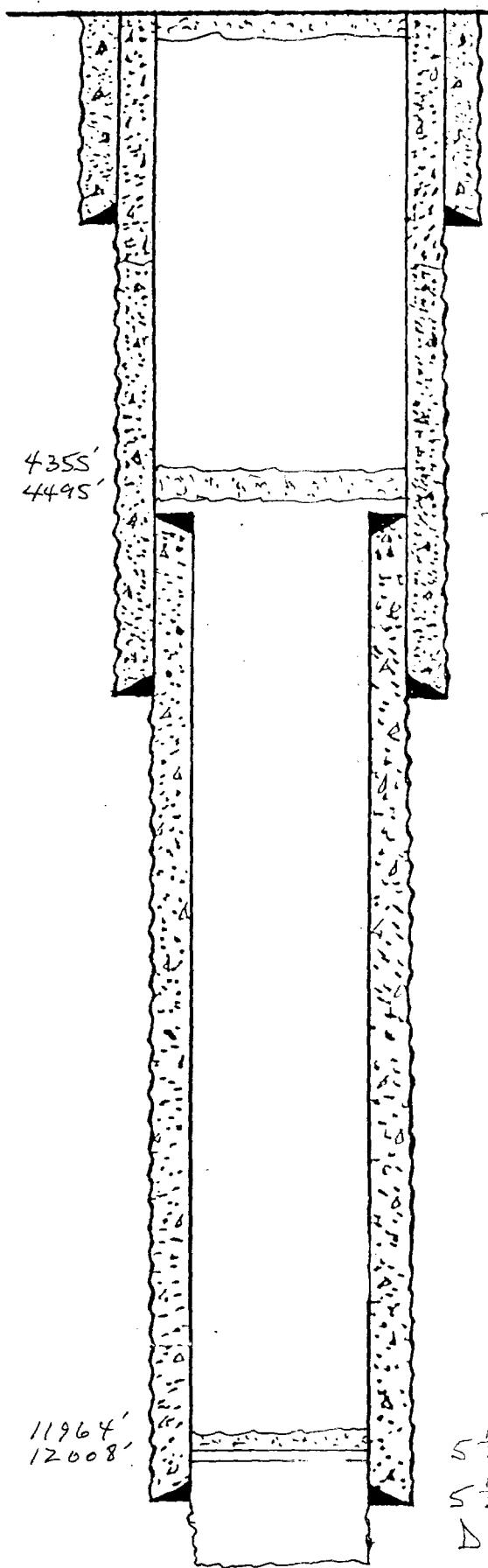
5 1/2" C1BP @ 12108' + 5 SX CMT to 12064'  
5 1/2" 17#/Ft. CSG Set @ 12586' w/ 875 SX CMT  
Devonian Openhole 12586' to 12685'

P+A S-4-72

Atlantic Richfield Co.  
Section 35 T 14S R 32E  
Unit K

Dickinson "D"  
Denton Devonian Field

Well No. 6  
GL NA  
DF 3816'



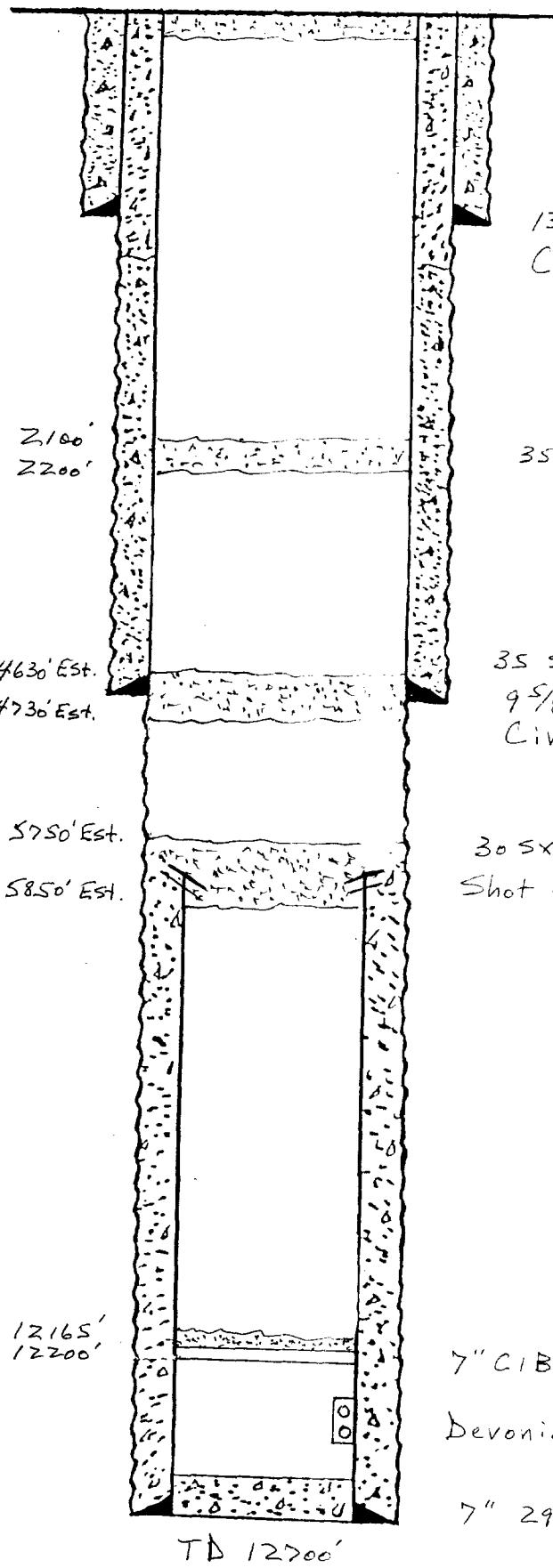
P+A 4-29-72

Montane Richfield Co.  
Section 35 T14S R 37E  
Unit K

Jones Federal  
Denton Devonian Field

Well No. 1

GL NA  
DF 3820'



P+A 4-11-23

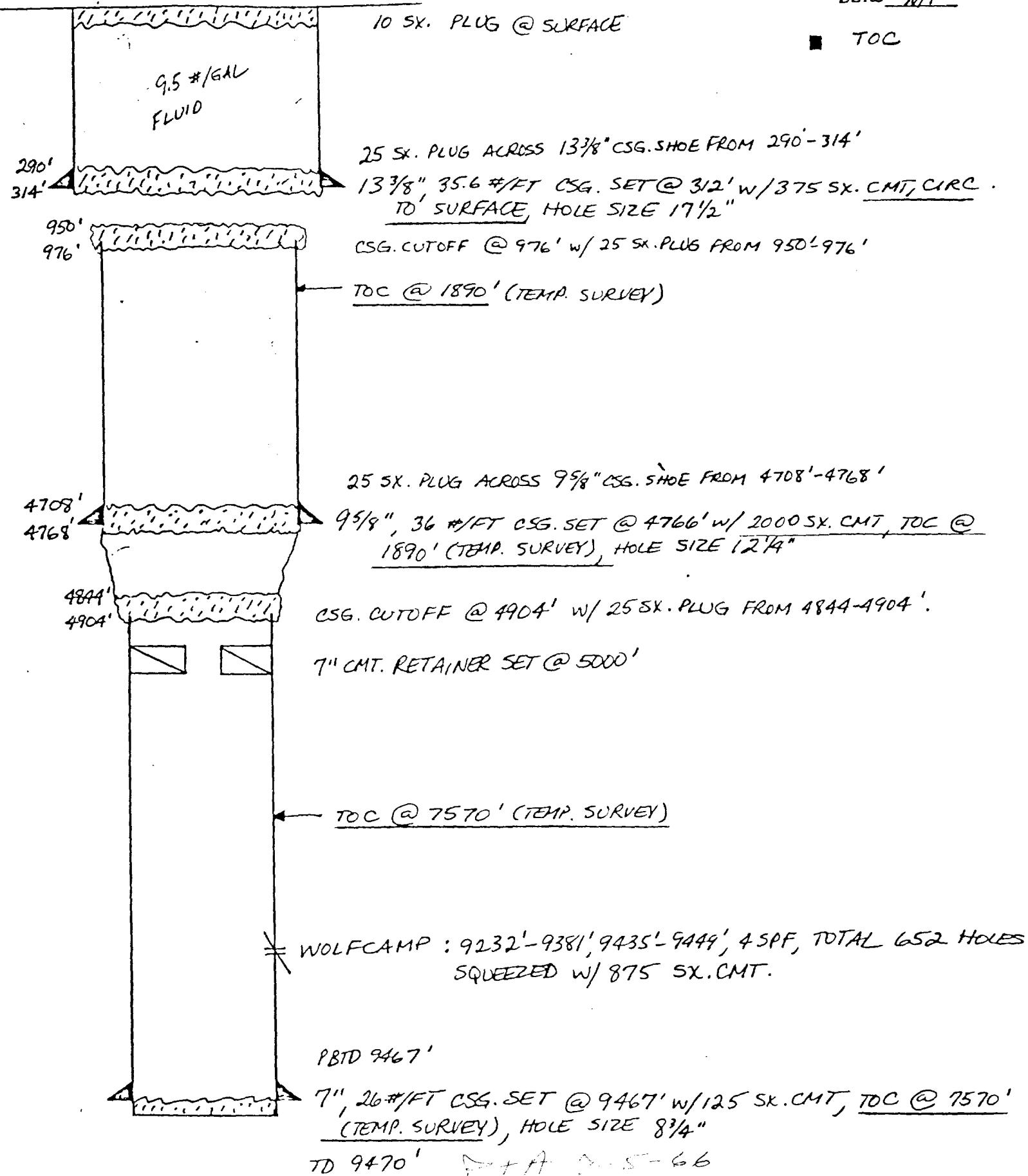
DATE 12-20-82

TRACT 7  
WE NO. 12-K LEASE ARCO-T.D.A. E FIELD DENTON WOLFCAMP

LOCATION SEC. 36, T14S, R37E,  
2130' FSL & 1650' FWL --

SIGNED J. BOUBEL

G.L. 3801'  
D.F. NA  
K.B. NA  
ZERO NA



DATE 12-20-82WE NO. 3

TRACT 8-

MOBIL -

LEASE DENTON NORTH

AMP UNIT FIELD DENTON WOLFCAMP

LOCATION SEC. 36, T14S, R37E,  
1980' EAL & 2300' E.L.SIGNED J. BOUBELG.L. 3801'  
D.F. 3812'  
K.B. NA  
ZERO NA

10 SX. PLUG @ SURFACE

P&A

TOC

250'

G.S #/GAL  
FLUID

372'

40 SX. PLUG OVER 13 $\frac{1}{8}$ " CSG. SHOE FROM 250'-372'13 $\frac{1}{8}$ ", 35.6 #/FT CSG. SET @ 318' w/ 375 SX. CMT, CRC. TO SURFACE← TOC @ 1030' (TEMP. SURVEY)

1900'

2093'

60 SX. PLUG OVER SALT ZONE FROM 1900'-2093'

4630'

9 $\frac{5}{8}$ ", 36 #/FT CSG. SET @ 4790' w/ 2500 SX. CMT, TOC @ 1030'  
(TEMP. SURVEY)

4870'

CSG. CUTOFF @ 4873' w/ 75 SX. PLUG FROM 4630'-4870'

PERFS 5160'-5260' SQ. w/ 30 SX. CMT

PERFS. 5904'-6049 SQ. w/ 50 SX. CMT

TOC @ 8060' (TEMP. SURVEY)

7" BAKER MODEL "D" PKR w/ DR PLUG @ 9250'. CAPPED w/ 30 SX. CMT

WOLFCAMP: 9284'-9436' SQUEEZED w/ 88 SX. CMT

7" CMT. RETAINER @ 9483'

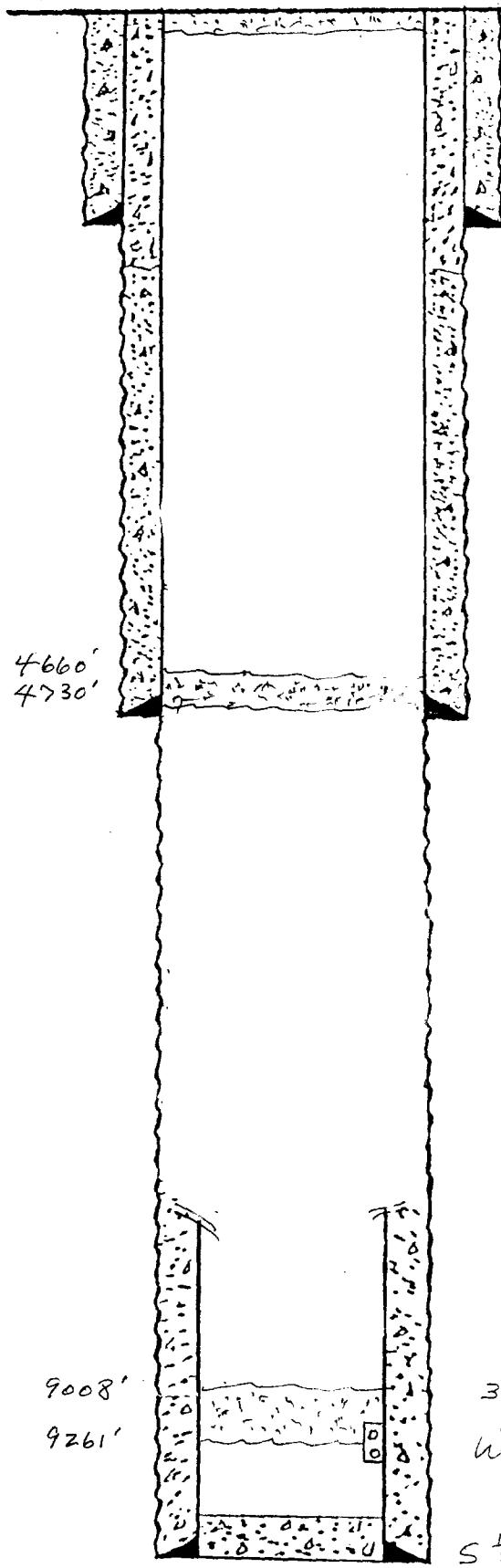
7", 29 #/FT CSG. SET @ 12641' w/ 600 SX. CMT, TOC @ 8060' (TEMP. SURVEY)  
TD 12641'

P&amp;A 12-12-82

Shell Oil Co.  
Section 1 T15S R37E  
Unit E

A. R. Priest  
Denton Wolfcamp Field

Well No. 6 D+A  
GL NA  
DF 3810'



10 SX Plug at Surface

13 3/8" 36+48#/Ft. CSG Set @ 377' w/ 350 SX CMT  
Circ. to Surface.

20 SX Plug from 4660' to 4730'.

8 5/8" 28# + 32# / Ft. CSG Set @ 4752' w/ 2250 SX CMT  
Circ. to Surface.

Shot off 5 1/2" CSG @ 8696'

30 SX Plug from 9008' to 9261'

Wolfcamp perforations 9165' to 9404'

5 1/2" 15.5#/Ft. CSG Set @ 9447' w/ 150 SX CMT.

TD 9447'

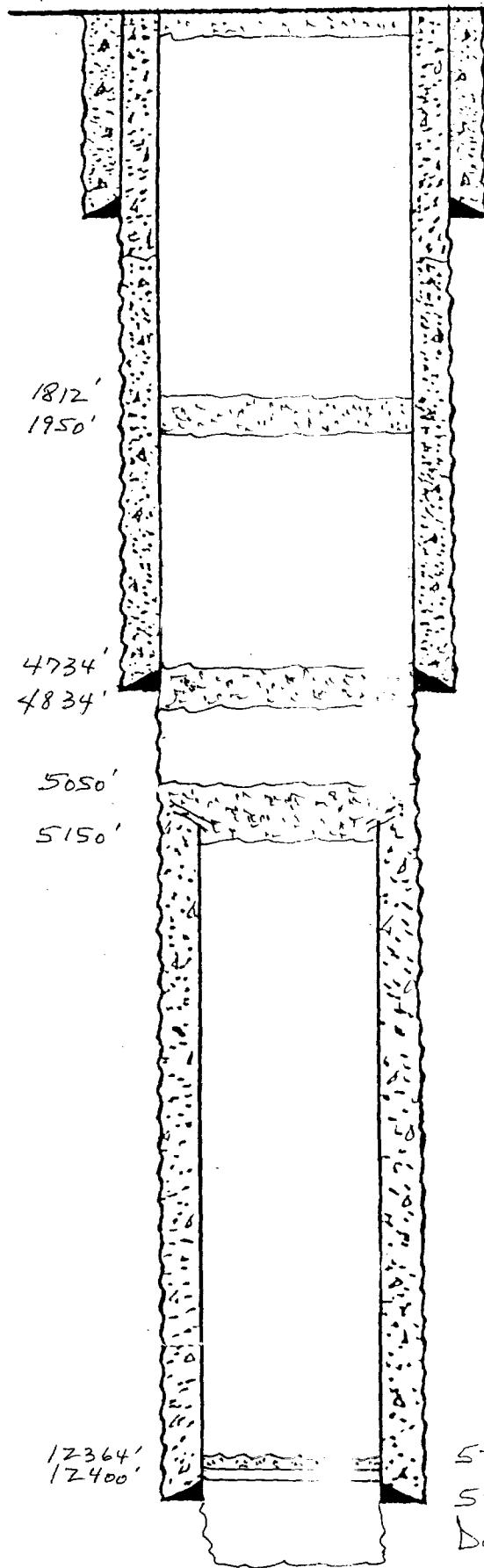
D+A 1-7-54

Hell Oil Co.  
Section 1 T15S R37E  
Unit B

A. R. Priest  
Denton Devonian Field

Well No. 7

GL NA  
DF 3806'



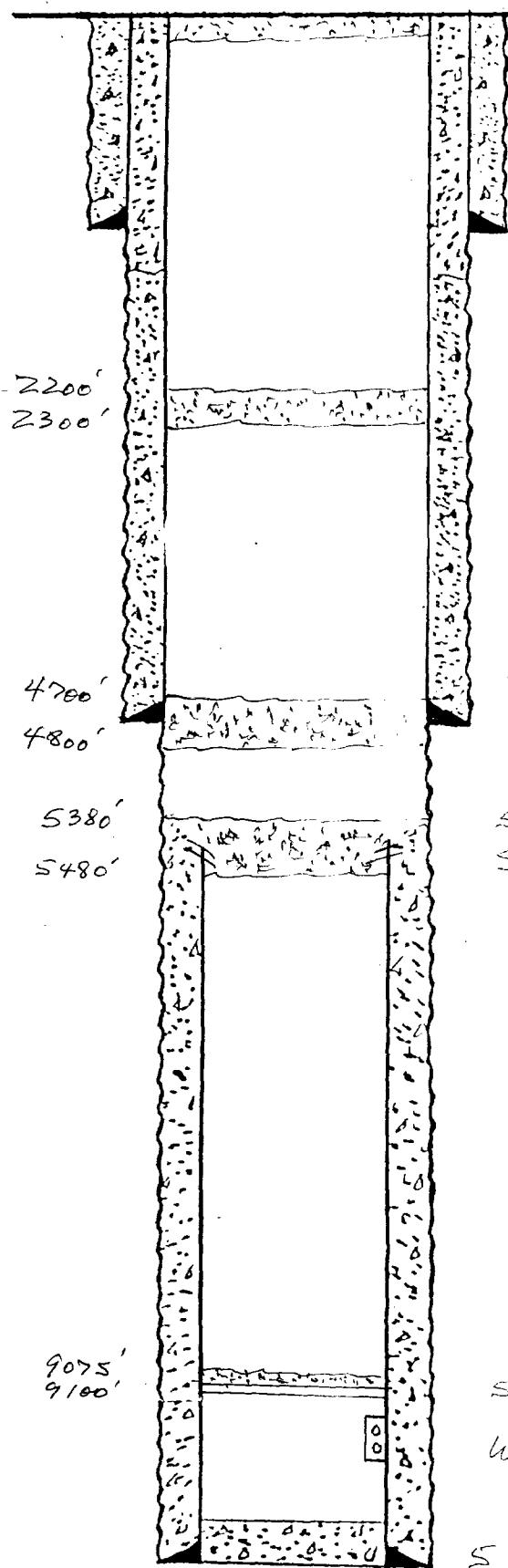
P+A S-31-75

D Kelly Oil Co.  
Section 2 T15S R37E  
Unit A

Mexico "F"  
Denton Wolfcamp Field

Well No. 12

GL NA  
DF 3812'



10 SX Plug at Surface

13 3/8" 48#/Ft. CSG Set @ 324' w/ 318 SX CMT  
Circ. to Surface

50 SX Plug from 2200' to 2300'

50 SX Plug from 4700' to 4800'  
8 5/8" 32#/Ft. CSG Set @ 4752' w/ 1850 SX CMT  
Circ. to Surface

50 SX Plug from 5380' to 5480'  
Shot off 5 1/2" CSG @ 5392'

5 1/2" C.I.B.P @ 9100' w/CMT to 9075'

Wolfcamp perforations 9174' to 9224'

5 1/2" 17#/Ft. CSG Set @ 9253' w/ 700 SX CMT.

TD 9253'

P+H 8-28-73

Reef Chemical Co., Inc.  
P. O. Box 529, Snyder, Texas 79549

## WATER ANALYSIS REPORT

SAMPLE

Company : S & J OPERATING  
Source : EAST WATERWELL  
Number : 23910

South of 7-8; North + Little West of 7-2  
Location : DENTON NORTH WOLFCAMP  
Date Sampled : 03-October-1991  
Attention :

ANALYSIS

MG/L    EQ. WT.    \*MEQ/L

1. pH	7.610			
2. Specific Gravity 60/60 F.	1.003			
3. Hydrogen Sulfide	NEGATIVE			
4. Carbon Dioxide	Not Determined			
5. Dissolved Oxygen	Not Determined			
6. Hydroxyl (OH-)	0	/ 17.0 =	0.00	
7. Carbonate (CO3=)	0	/ 30.0 =	0.00	
8. Bicarbonate (HCO3-)	342	/ 61.1 =	5.60	
9. Chloride (Cl-)	50	/ 35.5 =	1.41	
10. Sulfate (SO4=)	100	/ 48.8 =	2.05	
11. Calcium (Ca++)	80	/ 20.1 =	3.98	
12. Magnesium (Mg++)	49	/ 12.2 =	4.02	
13. Sodium (Na+)	(Calculated)	25 / 23.0 =	1.09	
14. Barium (Ba++)	Not Determined			
15. Total Iron (Fe)	0	/ 18.2 =	0.01	
16. Dissolved Solids	646			
17. Filtrable Solids	0.00			
18. Total Solids	646.00			
19. Total Hardness As CaCO3	400			
20. Suspended Oil	0.00			
21. Volume Filtered (ml)	0			
22. Resistivity @ 75 F. (Calculated)	2.593 /cm.			
23. CaCO3 Saturation Index @ 30 F.	+1.002	@ 140 F. +1.602		

PROBABLE MINERAL COMPOSITION

COMPOUND    EQ. WT. X \*meq/L = mg/L

Ca(HCO3)2	81.04	3.98	323
CaSO4	68.07	0.00	0
CaCl2	55.50	0.00	0
Mg(HCO3)2	73.17	1.62	118
MgSO4	60.19	2.05	123
MgCl2	47.62	0.35	17
NaHCO3	84.00	0.00	0
NaSO4	71.03	0.00	0
NaCl	58.46	1.06	62

\*Milli Equivalents per Liter

Calculated Calcium Sulfate solubility in  
this brine is 2,393 mg/L at 90 F.

Rodney K. Johnson  
Chemist

Reef Chemical Co., Inc.  
P. O. Box 529, Snyder, Texas 79549

## WATER ANALYSIS REPORT

SAMPLE

Company : S & J OPERATING  
Source : INJECTION PLANT  
Number : 23909

Location : DENTON NORTH WOLFCAMP  
Date Sampled : 03-October-1991  
Attention :

ANALYSIS

MG/L      EQ. WT.      \*MEQ/L

1. pH	6.510		
2. Specific Gravity 60/60 F.	1.052		
3. Hydrogen Sulfide	POSITIVE		
4. Carbon Dioxide	Not Determined		
5. Dissolved Oxygen	Not Determined		
6. Hydroxyl (OH <sup>-</sup> )	0	/ 17.0 =	0.00
7. Carbonate (CO <sub>3</sub> <sup>=</sup> )	0	/ 30.0 =	0.00
8. Bicarbonate (HCO <sub>3</sub> <sup>-</sup> )	586	/ 61.1 =	9.59
9. Chloride (Cl <sup>-</sup> )	50,989	/ 35.5 =	1,436.31
10. Sulfate (SO <sub>4</sub> <sup>=</sup> )	2,500	/ 48.8 =	51.23
11. Calcium (Ca <sup>++</sup> )	3,046	/ 20.1 =	151.54
12. Magnesium (Mg <sup>++</sup> )	827	/ 12.2 =	67.79
13. Sodium (Na <sup>+</sup> )	(Calculated)	29,423 / 23.0 =	1,279.26
14. Barium (Ba <sup>++</sup> )	Not Determined		
15. Total Iron (Fe)	1	/ 18.2 =	0.05
16. Dissolved Solids	87,371		
17. Filtrable Solids	0.00		
18. Total Solids	87,371.00		
19. Total Hardness As CaCO <sub>3</sub>	11,010		
20. Suspended Oil	0.00		
21. Volume Filtered (ml)	0		
22. Resistivity @ 75 F. (Calculated)	0.111 /cm.		
23. CaCO <sub>3</sub> Saturation Index @ 80 F.	+0.003	@ 140 F.	+0.933

PROBABLE MINERAL COMPOSITION

COMPOUND      EQ. WT. X \*meq/L = mg/L

Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	9.59	777
CaSO <sub>4</sub>	68.07	51.23	3,487
CaCl <sub>2</sub>	55.50	90.72	5,035
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17	0.00	0
MgSO <sub>4</sub>	60.19	0.00	0
MgCl <sub>2</sub>	47.62	67.79	3,228
NaHCO <sub>3</sub>	84.00	0.00	0
NaSO <sub>4</sub>	71.03	0.00	0
NaCl	58.46	1,277.80	74,700

\*Milli Equivalents per Liter

Calculated Calcium Sulfate solubility in  
this brine is 4,334 mg/L at 90 F.

Rodney Kuhn

Chemist

Reef Chemical Co., Inc.  
P. O. Box 529, Snyder, Texas 79549

**W A T E R   A N A L Y S I S   R E P O R T**

**S A M P L E**

Company : S & J OPERATING  
Source : WEST WATER WELL  
Number : 23911

Location : DENTON NORTH WOLFCAMP  
Date Sampled : 03-October-1991  
Attention : South of 5-10

**A N A L Y S I S**

		MG/L	EQ. WT.	*MEQ/L	
1.	pH	7.510			
2.	Specific Gravity 60/60 F.	1.003			
3.	Hydrogen Sulfide		NEGATIVE		
4.	Carbon Dioxide		Not Determined		
5.	Dissolved Oxygen		Not Determined		
6.	Hydroxyl (OH <sup>-</sup> )	0	/ 17.0 =	0.00	
7.	Carbonate (CO <sub>3</sub> <sup>=</sup> )	0	/ 30.0 =	0.00	
8.	Bicarbonate (HCO <sub>3</sub> <sup>-</sup> )	366	/ 61.1 =	5.99	
9.	Chloride (Cl <sup>-</sup> )	40	/ 35.5 =	1.13	
10.	Sulfate (SO <sub>4</sub> <sup>=</sup> )	100	/ 48.8 =	2.05	
11.	Calcium (Ca <sup>++</sup> )	80	/ 20.1 =	3.98	
12.	Magnesium (Mg <sup>++</sup> )	24	/ 12.2 =	1.97	
13.	Sodium (Na <sup>+</sup> )	(Calculated)	75	/ 23.0 =	3.26
14.	Barium (Ba <sup>++</sup> )		Not Determined		
15.	Total Iron (Fe)	0	/ 18.2 =	0.01	
16.	Dissolved Solids	685			
17.	Filtrable Solids	0.00			
18.	Total Solids	685.00			
19.	Total Hardness As CaCO <sub>3</sub>	300			
20.	Suspended Oil	0.00			
21.	Volume Filtered (ml)	0			
22.	Resistivity @ 75 F. (Calculated)	2.589 /cm.			
23.	CaCO <sub>3</sub> Saturation Index @ 80 F.	+0.933	@ 140 F.	+1.533	

**PROBABLE MINERAL COMPOSITION**

COMPOUND	EQ. WT.	*MEQ/L = mg/L
----------	---------	---------------

Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	3.98	323
CaSO <sub>4</sub>	68.07	0.00	0
CaCl <sub>2</sub>	55.50	0.00	0
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17	1.97	144
MgSO <sub>4</sub>	60.19	0.00	0
MgCl <sub>2</sub>	47.62	0.00	0
NaHCO <sub>3</sub>	84.00	0.04	4
NaSO <sub>4</sub>	71.03	2.05	146
NaCl	58.46	1.13	66

\*Milli Equivalents per Liter

Calculated Calcium Sulfate solubility in  
this brine is 2,393 mg/L at 90 F.

*Rodney Kuhn*  
Chemist

AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea.

I, Kathi Bearden

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of \_\_\_\_\_

One weeks.  
Beginning with the issue dated

Oct. 10, 1991  
and ending with the issue dated

Oct. 10, 1991

Kathi Bearden  
General Manager  
Sworn and subscribed to before

me this 14 day of

Oct, 1991  
Pamela Parrish  
Notary Public.

My Commission expires \_\_\_\_\_

Aug. 5, 1995  
(Seal)

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

**LEGAL NOTICE**

**October 10, 1991**

These wells will inject water into the Wolfcamp at a depth of approximately 9100' in the Denton North Wolfcamp Unit as an expansion of an existing waterflood. The expected maximum injection rate is 500 barrels per day per well and the maximum expected injection pressure is 3500 psig.

Following is the pertinent information for each of these proposed injection wells:

Well No.	5-12	7-3	8-1
Location	E-35-14S-37E 1980' FNL & 810' FWL 9280'-9380'	M-36-14S-37E 660' FSL & 660' FWL 9185'-9274	0-36-14S-37E 2310 FEL 9269'-9424'

Injection Interval  
In the event that any interested party wishes to file any objections or wishes to request a hearing, these objections of request must be filed within 15 days to the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501.

Peyton S. Carnes, Jr.  
S & J Operating Company  
P.O. Box 2249  
Wichita Falls, Texas 76307  
817-723-2166

P 247 650 268

**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

\* U.S.G.P.O. 1985-480-794

Sent to Mr. Joe Pope	Street and No. Rt 1, Box 504
P.O. State and ZIP Code Lovington, NM 88260	
Postage	\$ 1.44
Certified Fee	1.00
Special Delivery Fee	
Return Receipt Fee	
Restricted Delivery Fee	
Return Receipt showing to whom delivered	1.00
Return Receipt showing to whom delivered and address of delivery	
TOTAL Postage and Fees	\$ 3.44

PS Form 3800, June 1985

P 247 650 315

**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

\* U.S.G.P.O. 1985-480-794

Sent to DICKINSON Cattle Co.	Street and No. P.O. Box 247
P.O. State and ZIP Code Roswell NM 88202	
Postage	\$ 1.44
Certified Fee	1.00
Special Delivery Fee	
Return Receipt Fee	
Restricted Delivery Fee	
Return Receipt showing to whom delivered	1.00
Return Receipt showing to whom delivered and address of delivery	
TOTAL Postage and Fees	\$ 3.44

PS Form 3800, June 1985

P 663 976 818

**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

\* U.S.G.P.O. 1985-480-794

Sent to Mr. Norman Caswell	Street and No. Rt 1, Box 134
P.O. State and ZIP Code Meadow, TX 79345	
Postage	\$ 1.44
Certified Fee	1.00
Special Delivery Fee	
Return Receipt Fee	
Restricted Delivery Fee	
Return Receipt showing to whom delivered	1.00
Return Receipt showing to whom delivered and address of delivery	
TOTAL Postage and Fees	\$ 3.44

PS Form 3800, June 1985

Proof of certified mailed copies to surface owners on October 24, 1991.

S & J Operating Company  
Denton North Wolfcamp Unit  
Conversion of Wells 5-12, 7-3 and 8-1 to water injection  
Lea County, New Mexico

*[Handwritten Signature]*

P 247 650 270

## RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

\* U.S.G.P.O. 1985-480-794

Sent to <b>Polaris Production Corp.</b>	
Street and No. P O Box 1749	
P.O. State and ZIP Code Midland, TX 79702-1749	
Postage	1.44
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	1.00
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	3.44
Postmark or Date OCT 24 1991 USPS	

PS Form 3800, June 1985

P 247 650 269

## RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Attn: Mr. E. J. Wentworth  
Hondo Oil & Gas Co.

\* U.S.G.P.O. 1985-480-794

Sent to P. O. Box 2208	
Street and ZIP Code Roswell, NM 88202	
Postage	1.44
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	1.00
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	3.44
Postmark or Date OCT 24 1991 USPS	

PS Form 3800, June 1985

P 247 650 316

## RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

\* U.S.G.P.O. 1985-480-794

Sent to <b>Ultramar Production Co.</b>	
Street and No. 16825 Northchase Dr., Ste 1200	
P.O. State and ZIP Code Houston, TX 77060	
Postage	1.44
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	1.00
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	3.44
Postmark or Date OCT 24 1991 USPS	

PS Form 3800, June 1985

P 247 650 271

## RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Attn: Mr. James Head  
Texaco Inc.

\* U.S.G.P.O. 1985-480-794

Sent to P O Box 730	
Street and ZIP Code Hobbs, NM 88240	
Postage	1.44
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	1.00
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	3.44
Postmark or Date OCT 24 1991 USPS	

PS Form 3800, June 1985

Proof of certified mailed copies to offset operators on October 24, 1991.

S & J Operating Company  
Denton North Wolfcamp Unit  
Conversion of Wells 5-12, 7-3 and 8-1 to water injection  
Lea County, New Mexico





STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

BRUCE KING  
GOVERNOR

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC \_\_\_\_\_  
DHC \_\_\_\_\_  
NSL \_\_\_\_\_  
NSP \_\_\_\_\_  
SWD \_\_\_\_\_  
WFX  \_\_\_\_\_  
PMX \_\_\_\_\_

Gentlemen:

I have examined the application for the:

~~J.S. operating in unit 1, 2, 3, 4, 5, 6, 7, 8~~ Lease & Well No. Unit S-T-R  
Operator \_\_\_\_\_

Tr. 5 #12-E 35-14-37  
Tr. 7 #3-M 36-14-37

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton  
Supervisor, District 1

/ed