

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

June 17, 1991

Dwight A. Tipton
P.O. Box 1597
Lovington, New Mexico 88260

Attention: Joe D. Ramey

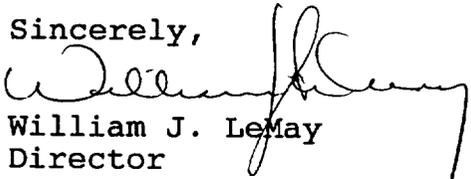
Dear Mr. Ramey:

Reference is made to your request dated May 15, 1991, for an amendment to Division Order No. R-5792, dated August 25, 1978, which order authorized the use of the State "14" Well No. 1, located in Unit L of Section 14, Township 9 South, Range 32 East, NMPM, Lea County, New Mexico, as a salt water disposal well with injection into the Devonian formation at approximately 11,085 feet to 11,102 feet. It is our understanding that due to mechanical problems you now wish to expand the injection interval in the subject well to include the Glorieta, Blinebry, Tubb, Abo, Wolfcamp, Pennsylvanian and Devonian formations from a depth of approximately 5,000 feet to 11,102 feet.

Inasmuch as the proposed wellbore configuration will not pose a threat to underground sources of fresh water, and no objections from any offset operators has been received by the Division, you are hereby authorized to expand the injection interval in the subject well as described above subject to the following conditions:

- 1) Injection into the subject well shall only be allowed as long as the water is being accepted on a vacuum.
- 2) At such time as pressure is required to inject water, the subject well shall be plugged and abandoned in accordance with Division procedures.
- 3) The packer in the subject well shall be set at a depth of approximately 4,850 feet.

Sincerely,



William J. LeMay
Director

xc: Case File 6259
OCD-Hobbs

JOE D. RAMEY
P. O. BOX 6016
HOBBS, NEW MEXICO 88241-6016
[505] 392-6525

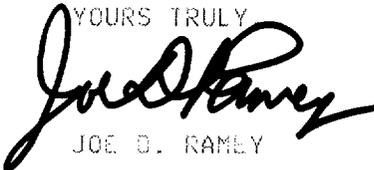
MAY 15, 1991

MR. DAVID CATANACH
NEW MEXICO OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

DEAR MR. CATANACH:

ATTACHED PLEASE FIND AN APPLICATION WHEREIN MR. DWIGHT A. TIPTON REQUESTS AN EXTENSION OF THE INJECTION INTERVAL AND AN EXCEPTION TO THE PACKER DEPTH REQUIREMENTS.

IF YOU HAVE ANY QUESTIONS ON THIS MATTER, YOU CAN REACH ME AT THE ABOVE ADDRESS.

YOURS TRULY

JOE D. RAMEY

COPIES OF THIS APPLICATION HAVE BEEN FURNISHED, BY CERTIFIED MAIL, TO
THE FOLLOWING:

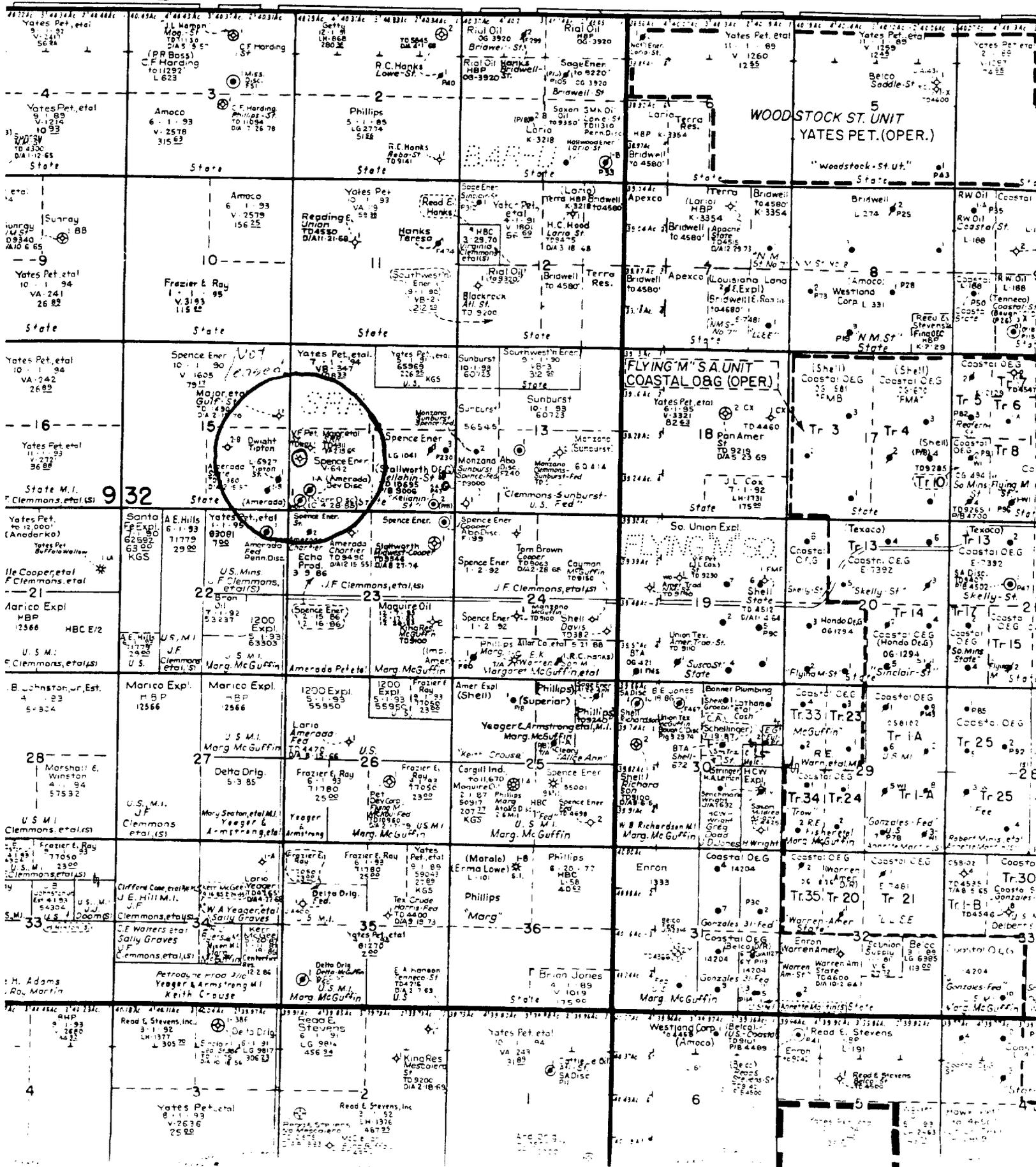
STATE LAND OFFICE
P. O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

SPENCE ENERGY COMPANY
381 TWO ENERGY SQUARE
4849 GREENVILLE AVENUE
DALLAS, TEXAS 75206

YATES PETROLEUM CORPORATION
105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210

RECEIVED
MAY 17 8 59 AM '91
STATE POLICE
SANTIA, N.M.

R32E



AVERAGE VOLUME DISPOSED 300 BPD
MAXIMUM VOLUME DISPOSED 400 BPD
INJECTION PRESSURE VACUUM
CLOSED SYSTEM

PRODUCED WATERS BEING DISPOSED OF ARE FROM THE SAN ANDRES, ABO AND PENNSYLVANIAN. NO COMPATIBILITY TESTS HAVE BEEN TAKEN BUT THE FLUIDS HAVE EXHIBITED NO CHARACTERISTICS OF INCOMPATIBILITY IN THE FOUR PLUS YEARS OF OPERATIONS BY MR. TIPTON. THERE IS NO SCALING NOR SEDIMENTS IN THE RECEIVING OR INJECTION TANKS AT THE FACILITY AND THE INJECTION WELL HAS MAINTAINED 18 - 20 INCHES OF VACUUM DURING THIS FOUR YEAR PERIOD.

THE ATTACHED ANALYSIS OF DEVONIAN WATER FROM A WELL IN SECTION 14 INDICATES CHLORIDES OF 24,000 PPM. PENNSYLVANIAN WATERS NORMALLY HAVE CHLORIDES OF AROUND 30,000, ABO AROUND 25,000 AND SAN ANDRES 34,000 PPM.

ALTHOUGH THE WELL HAS COLLAPSED PIPE AT AROUND 5000 FEET, INJECTED WATER IS BEING DISPOSED OF IN THE DEVONIAN. THE DEVONIAN IS THE ONLY FORMATION IN THE AREA THAT WILL TAKE WATER ON A VACUUM. MR. TIPTON WILL NOT INJECT ANY WATER IF PRESSURE IS NECESSARY. THE WELL WILL BE TREATED EVERY SIX MONTH WITH 1000 GALS. 15% ACID.

INJECTION ZONE INFORMATION

DEVONIAN:

TOP - 11,091'
THICKNESS - NOT COMPLETELY PENETRATED BY ANY WELL IN THE AREA,
ESTIMATED THICKNESS 450'
LITHOLOGY - VUGGY DOLOMITE

PENNSYLVANIAN:

TOP - 8668'
THICKNESS - 1762'
1302' TO TOP OF CEMENT
LITHOLOGY - SHALE, SANDY LIMESTONE, WITH TIGHT SAND STRINGERS

WOLFCAMP:

TOP - 8153'
THICKNESS - 514'
LITHOLOGY - DENSE LIMESTONE WITH SHALE STRINGERS

ABO:

TOP - 7180'
THICKNESS - 972'
LITHOLOGY - SHALE, DENSE SANDY LIMESTONE

TUBB:

TOP - 6317'
THICKNESS - 863'
LITHOLOGY - SHALE, SHALY SANDSTONE, DENSE SANDY LIMESTONE

CLEARFORK [BLINEBRY]

TOP - 5624'
THICKNESS - 690'
LITHOLOGY - DENSE SHALY SANDSTONE, SHALE AND LIMESTONE

GLORIETA:

TOP - 4853'
THICKNESS - 771'
LITHOLOGY - SHALE, SHALY LIMESTONE

THE ONLY KNOWN FRESH WATER IN THE AREA IS IN THE OGALLALA FORMATION THE BASE OF WHICH IS AROUND 300 FEET. THERE ARE NO KNOWN FRESH WATER WELLS WITHIN THREE MILES OF THE DISPOSAL WELL. THE OGALLALA WATERS IN THE AREA ARE ASSUMED TO BE TYPICAL OGALLALA WATERS THAT ARE FOUND IN MOST OF LEA COUNTY.

THE ONLY OIL PRODUCTION WITHIN TWO MILES OF THE DISPOSAL WELL IS IN THE E/2 E/2 SECTION 14, N/2 SW/4 SECTION 13 AND THE NE/4 NE/4 SECTION 23. THIS PRODUCTION IS FROM THE ABO AT A DEPTH OF AROUND 7000 FEET. THERE IS ALSO A WELL IN THE SE/4 SE/4 SECTION 14 THAT IS PRESENTLY BEING TESTED IN THE BOUGH C AT A DEPTH OF AROUND 8800 FEET.

ALL AVAILABLE GEOLOGIC AND ENGINEERING DATA HAS BEEN EXAMINED AND THERE IS NO EVIDENCE OF OPEN FAULTS OF ANY OTHER HYDROLOGIC CONNECTION BETWEEN THE DISPOSAL ZONE AND ANY UNDERGROUND SOURCE OF DRINKING WATER.

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: Dwight A Tipton
Address: P.O. Box 1597 Lovington, NM 88260
Contact party: Joe D. Ramey Phone: (505) 392-6525
- 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 _____.
- 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: Joe D. Ramey Title Consultant
Signature: Joe D. Ramey Date: 5/15/91
- * 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.

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.

INJECTION WELL DATA SHEET

Dwight A. Tipton State 14 SWD
OPERATOR LEASE

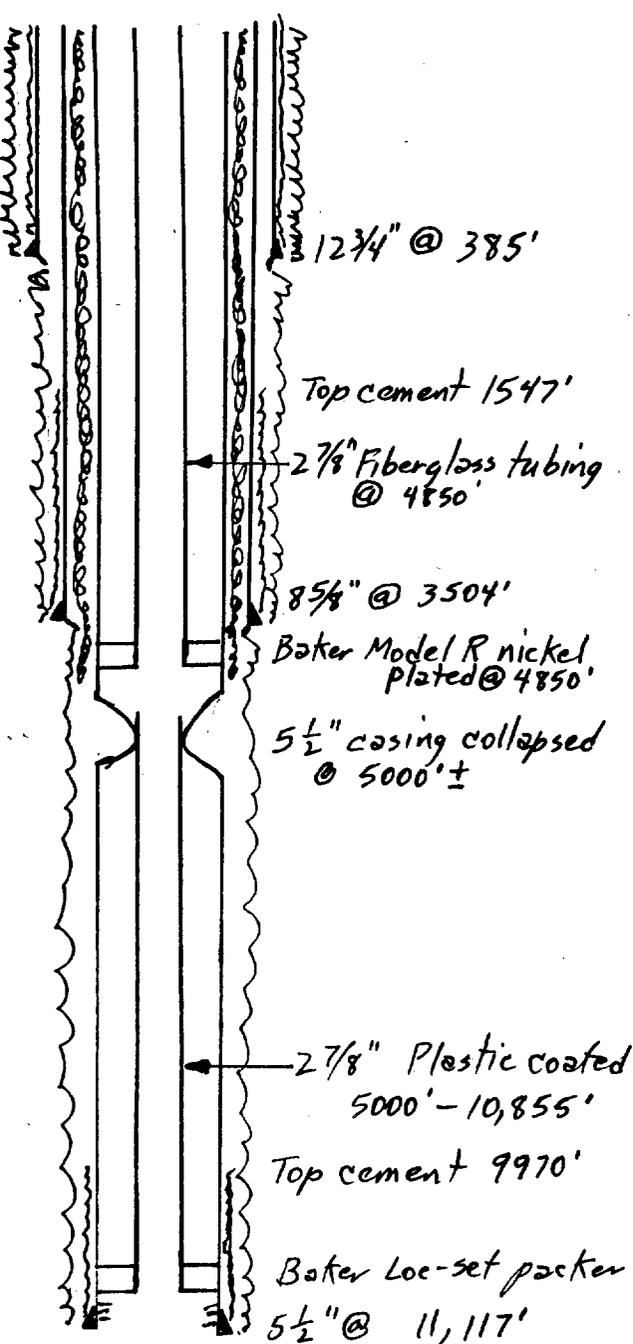
1 1650 S 330 W 14 95 32E
WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE

Well drilled as a non-producing oil well

Schematic

Drilled in 1977

Tabular Data



Surface Casing

Size 12 3/4 " Cemented with 450 sx.
 TOC Surface feet determined by Circulated
 Hole size 15

Intermediate Casing

Size 8 5/8 " Cemented with 400 sx.
 TOC 1547 feet determined by Form C-103 Calculated
 Hole size 11

Long string

Size 5 1/2 " Cemented with 200 sx.
 TOC 9970 feet determined by Form C-103 Calculated
 Hole size 7 7/8
 Total depth 11,117

Injection interval

11,099.5 feet to 11,102.5 feet
(perforated or open hole, indicate which)

Tubing size 2 7/8 " lined with Fiberglass set in a
(material)
Baker Model R nickel plated packer at 4850 feet
(brand and model)
 (or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Devonian, Pennsylvanian, Wolfcamp, Abo, Tubb, Blinberry, Glorieta
- Name of Field or Pool (if applicable) SRRD
- Is this a new well drilled for injection? Yes No
 If no, for what purpose was the well originally drilled? Oil prospect
- 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
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. SRR Abo - 7000'
Undesignated Bough C - 8800'

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ST. LOUIS
ST. LOUIS

THE SUBJECT WELL WAS DRILLED IN 1977 AS A DEVONIAN OIL PRODUCER IN THE SRR DEVONIAN POOL. IN DECEMBER, 1984 THE WELL WAS CONVERTED TO A SALT WATER DISPOSAL WELL BY VF PETROLEUM AS AUTHORIZED BY DIVISION ORDER R-5792.

IN THE PROCESS OF CONVERSION THE WELL WAS FOUND TO HAVE HOLES IN THE 5 1/2 CASING AT 2911 FEET, 3099 FEET AND 5275 FEET. THESE HOLES WERE SQUEEZE CEMENTED AND IN THE PROCESS THE 5 1/2" X 8 5/8" ANNULUS WAS CIRCULATED AND FILLED WITH CEMENT. THE CASING WAS THEN TESTED TO 1000 POUNDS, TUBING AND PACKER RUN AND INJECTION COMMENCED.

IN 1986, DWIGHT A. TIPTON ASSUMED OPERATIONS. THE TUBING AND PACKER WERE REPLACED WITH PLASTIC COATED TUBING AND A NICKEL PLATED LOC-SET PACKER SET AT 10,855 FEET. THE ANNULUS WAS FILLED WITH A NON-CORROSIVE PACKER FLUID AND TESTED TO 400 PSI. THE WELL WAS TREATED WITH 1000 GALLONS 15% ACID AND RETURNED TO INJECTION ON A VACUUM.

A MECHANICAL INTEGRITY TEST WAS CONDUCTED IN 1990 AND THE WELL TESTED MECHANICALLY SOUND. A SIMILAR TEST WAS CONDUCTED IN 1991 AND THE CASING-TUBING, ANNULUS WOULD NOT HOLD PRESSURE. WHILE ATTEMPTING TO PULL THE TUBING, THE TUBING PARTED AT 4900 FEET. THE TUBING WAS CUT AT 5200 FEET BUT WOULD NOT JAR LOOSE. TUBING WAS BACKED-OFF AND TWO ADDITIONAL JOINTS PLUS ONE ALMOST COMPLETE, WHICH PARTED, WERE RECOVERED.

IN ATTEMPTING TO RECOVER ADDITIONAL TUBING, MR. TIPTON COULD GET TOOLS NO DEEPER THAN AROUND 5000 FEET AND IT WAS CONCLUDED THAT THE 5 1/2 CASING HAD COLLAPSED AND PROBABLY PARTED AT JUST BELOW 5000 FEET.

AFTER DISCUSSING THE SITUATION WITH MR. JERRY SEXTON AND SINCE THE WELL WAS STILL TAKING WATER ON A VACUUM, NEW 2 7/8" FIBERGLASS TUBING WAS RUN IN THE HOLE WITH A BAKER MODEL R. NICKELBUCKEL PLATED PACKER SET AT 4850 FEET AND THE WELL WAS RETURNED TO VACUUM.

THE WELL IS MECHANICALLY SOUND FROM THE SURFACE TO AROUND 5000 FEET. SURFACE PIPE IS CEMENTED TO THE SURFACE, INTERMEDIATE IS CEMENTED FROM 3504 FEET TO 1547 FEET AND THE 5 1/2 X 5 5/8 ANNULUS WAS CIRCULATED FROM ABOUT 4750 FEET TO THE SURFACE [SEE ATTACHED BONDLOG]. SO IT CAN BE CONCLUDED THAT NO DISPOSAL WATER, PARTICULARLY IF INJECTION IS ON A VACUUM, CAN ENDANGER ANY FRESH WATER SUPPLIES IN THE AREA.

THE ABO IN THIS WELL IS ESSENTIALLY SHALE IN THE UPPER PART AND VERY DENSE SANDY LIMESTONE IN THE BOTTOM. POROSITIES ARE IN THE TWO TO THREE PERCENT RANGE. THE BOUGH C IS PRESENT IN THIS WELL, BUT AGAIN THE POROSITY IS SUCH THAT IT WOULD NOT BE CONDUCTIVE TO WATER INJECTION.

THE ONLY DRILL STEM TEST, OTHER THAN THE TWO CONDUCTED IN THE DEVONIAN, WAS FROM 9174 FEET TO 9230 FEET AND THE RECOVERY WAS 96 FEET MUD WITH NO SHOWS OF OIL OR GAS.

SO IT CAN BE CONCLUDED THAT INJECTION INTO THIS WELL WOULD NOT BE DETRIMENTAL TO ANY OIL AND GAS PRODUCTION IN THE AREA. FURTHER IT CAN BE CONCLUDED THAT DEVONIAN IS THE ONLY ZONE IN THE WELL CAPABLE OF TAKING WATER IN OTHER THAN INSIGNIFICANT QUANTITIES.

Ernest A. Hanson
OPERATOR

S RR State A No. 1
LEASE

1
WELL NO.

1980 S 660 W
FOOTAGE LOCATION

14
SECTION

95
TOWNSHIP

32 E
RANGE

Well drilled as a dry hole - Swabbed 5 hbbls. water per hour

Schematic

Drilled in 1965

Tabular Data

Surface Casing

Size 13 " Cemented with 250 sx.
TOC Surface feet determined by Circulated
Hole size 16 "

Intermediate Casing

Size 8 5/8 " Cemented with 20 sx.
TOC 1600 feet determined by Estimated
Hole size 12 "

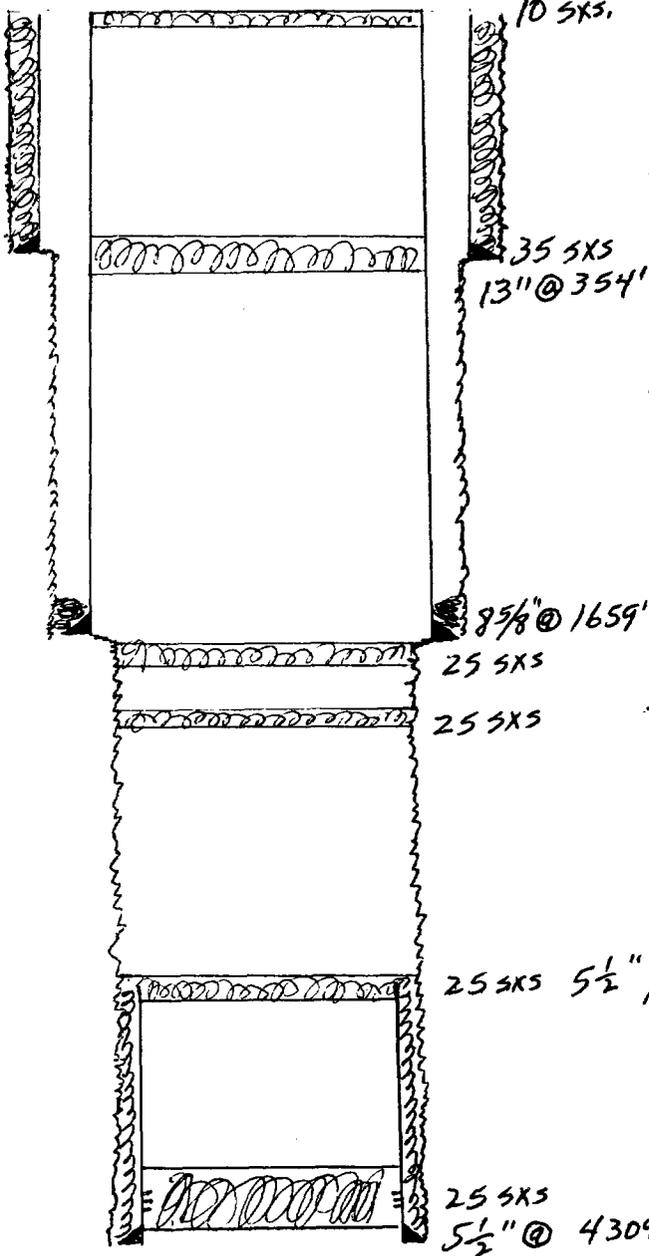
Long string

Size 5 1/2 " Cemented with 150 sx.
TOC 3300' feet determined by Free point
Hole size 7 7/8 "

Total depth 4311

Injection interval

4183 feet to 4201 feet
(perforated or open hole, indicate which)



Tubing size _____ lined with _____ set in a

(material)

_____ packer at _____ feet

(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation _____

2. Name of Field or Pool (if applicable) _____

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

Major Giebel & Forster Gulf State

OPERATOR

LEASE

1
WELL NO.

2310 N 330 E
FOOTAGE LOCATION

15
SECTION

95
TOWNSHIP

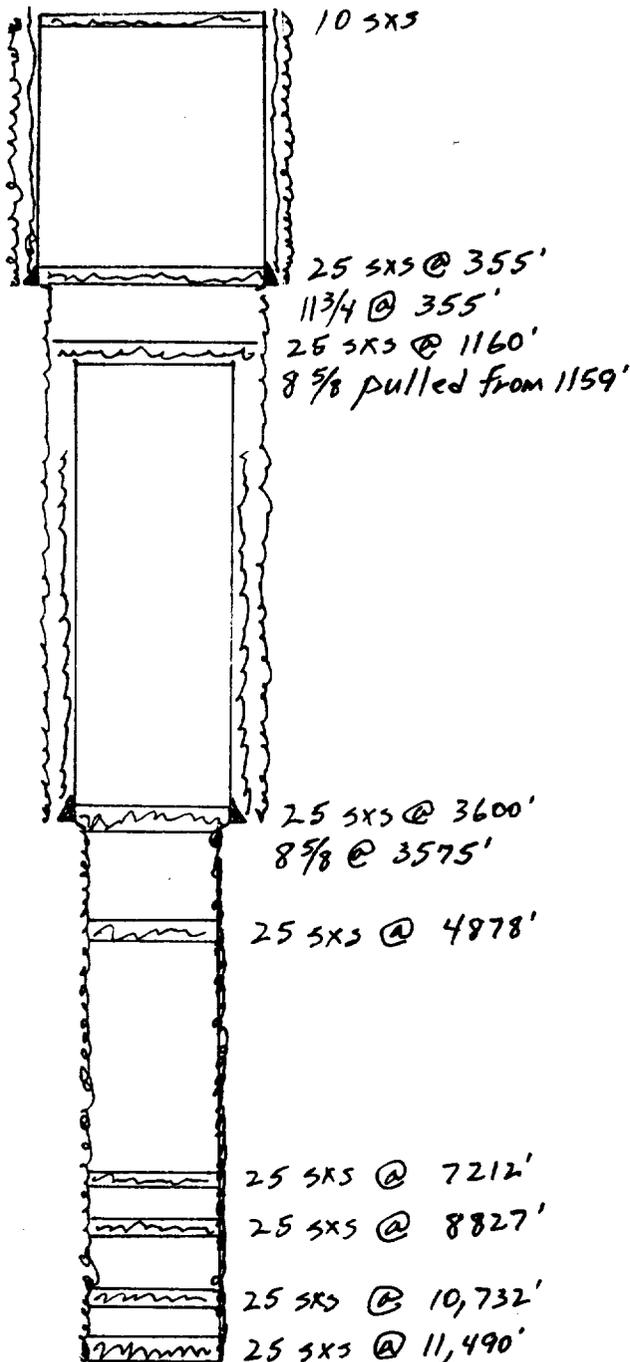
32 E
RANGE

Drilled as dry hole

Drilled in 1970

Schematic

Tabular Data



Surface Casing

Size 1 3/4 " Cemented with 355 sx.
TOC Surface feet determined by Circulated
Hole size 15

Intermediate Casing

Size 8 5/8 " Cemented with 400 sx.
TOC 1845 feet determined by Calculated
Hole size 11

Long string

Size _____ " Cemented with _____ sx.
TOC _____ feet determined by _____
Hole size _____
Total depth 11,490'

Injection interval

_____ feet to _____ feet
(perforated or open-hole, indicate which)

Tubing size _____ lined with _____ set in a
(material)
_____ packer at _____ feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation _____
- Name of Field or Pool (if applicable) _____

Amerada Petroleum Corporation State SR "B"

OPERATOR

LEASE

2
WELL NO.

1980S 1980E
FOOTAGE LOCATION

15
SECTION

9S
TOWNSHIP

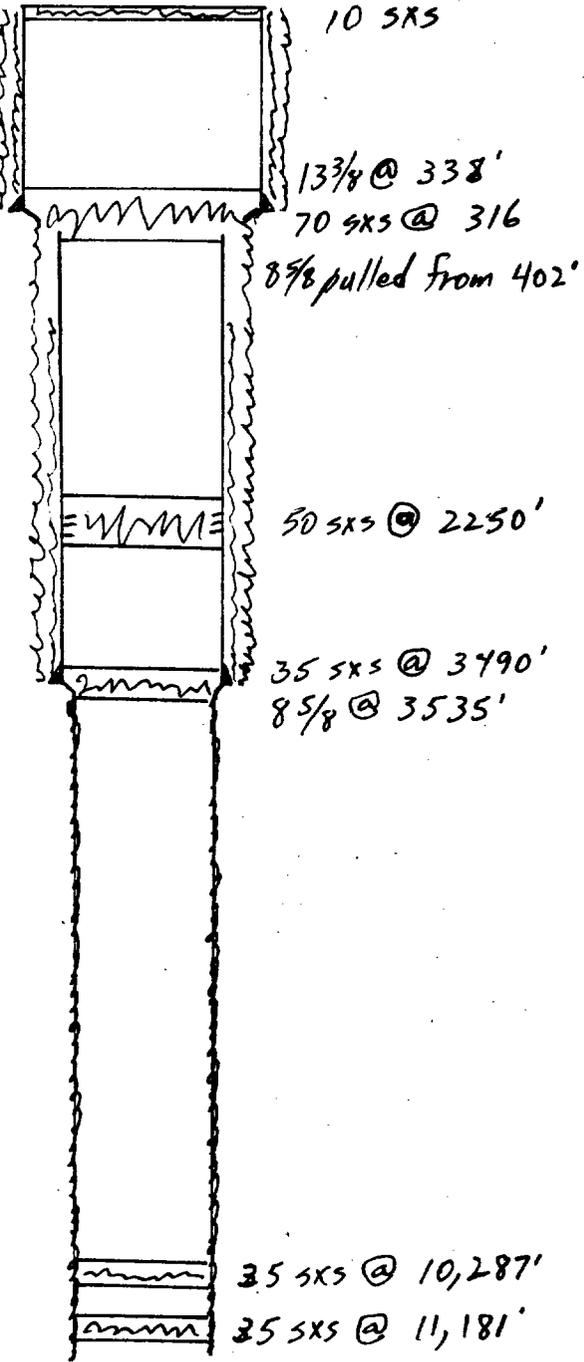
32E
RANGE

Drilled as a dry hole

Schematic

Drilled in 1956

Tabular Data



Surface Casing

Size 13 3/8 " Cemented with 275 sx.

TOC Surface feet determined by Circulated

Hole size 17 1/2

Intermediate Casing

Size 8 5/8 " Cemented with 1500 sx.

TOC 810' feet determined by Temp. Survey

Hole size 11

Long string

Size " Cemented with sx.

TOC feet determined by

Hole size 7 7/8

Total depth 11,360

Injection interval

2272 feet to 2365 feet
(perforated or open-hole, indicate which)

Tested for salt water disposal:

Perforated Yates 2272-2365

Pumped 4320 BWPD @ 1000#

Tubing size lined with (material) set in a

(brand and model) packer at feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation

2. Name of Field or Pool (if applicable)

Amerada Petroleum Corp. State SR "B"

OPERATOR

LEASE

1

660 S 660 E

15

9 S

32 E

WELL NO.

FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

Drilled as a Devonian producer - Now PFA

Schematic

Drilled in 1956

Tabular Data



10 SXS.

13 3/8 @ 338'

40 SXS @ 313'

40 SXS @ 525'

8 5/8 pulled from 600'

25 SXS @ 3505'

8 5/8 @ 3550'

25 SXS @ 4802'

5 1/2 pulled from 6600'

25 SXS @ 6542'

30 SXS @ 10,965'

5 1/2 @ 11,085'

Surface Casing

Size 13 3/8" Cemented with 275 sx.

TOC Surface feet determined by Circulated

Hole size 17 1/2

Intermediate Casing

Size 8 5/8" Cemented with 1500 sx.

TOC 644 feet determined by Temp Survey

Hole size 11

Long string

Size 5 1/2" Cemented with 900 sx.

TOC 7315 feet determined by Temp. Survey

Hole size 7 3/4

Total depth 11,125

Injection interval

11,085 feet to 11,125 feet (perforated or open-hole, indicate which)

Tubing size lined with set in a

(material)

packer at feet

(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation

2. Name of Field or Pool (if applicable)

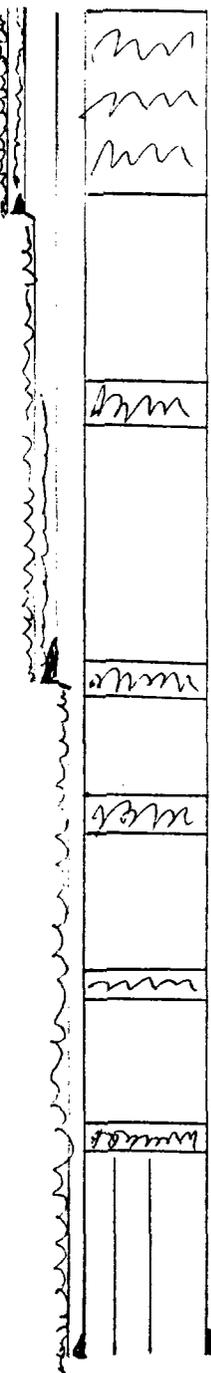
3. Is this a new well drilled for injection? [] Yes [] No

Dwight A. Tipton State 15
 OPERATOR LEASE
1 990 S 330 E 15 95 32 E
 WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE
Drilled as Devonian producer - New PTA

Schematic

Drilled in 1976

Tabular Data



Surface plug
0-350'

1 3/4 @ 361'

50 SXS @ 2200'

3 5/8 @ 3552'

50 SXS @ 5950'

2 5/8 @ 8150

30 SXS @ 9748'

Tubing pulled from 10,200'

4 1/2 @ 11,056

Surface Casing

Size 12 3/4 " Cemented with 415 sx.
 TOC Surface feet determined by Circulated
 Hole size 15

Intermediate Casing

Size 8 5/8 " Cemented with 400 sx.
 TOC 1479' feet determined by Calculated
 Hole size 11 3/4

Long string

Size 4 1/2 " Cemented with 350 sx.
 TOC 9103 feet determined by Calculated
 Hole size 7 7/8

Total depth 11,087

Injection interval

11,056 feet to 11,087 feet
 (~~perforated~~ or open-hole, indicate which)

DST 9172-9241
 Flowed 260 MCF/Day
 Recovered 282' GCM
 1722 GCSW

DST 10,220-10,440
 Recovered 530' VSGCDF

Tubing size _____ lined with _____ set in a _____
 (material)
 _____ packer at _____ feet
 (brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation _____
- Name of Field or Pool (if applicable) _____
- Is this a new well drilled for injection? Yes No

Amerada Petroleum Corporation Federal E

OPERATOR

LEASE

1
WELL NO.

660 N 660 E
FOOTAGE LOCATION

22
SECTION

95
TOWNSHIP

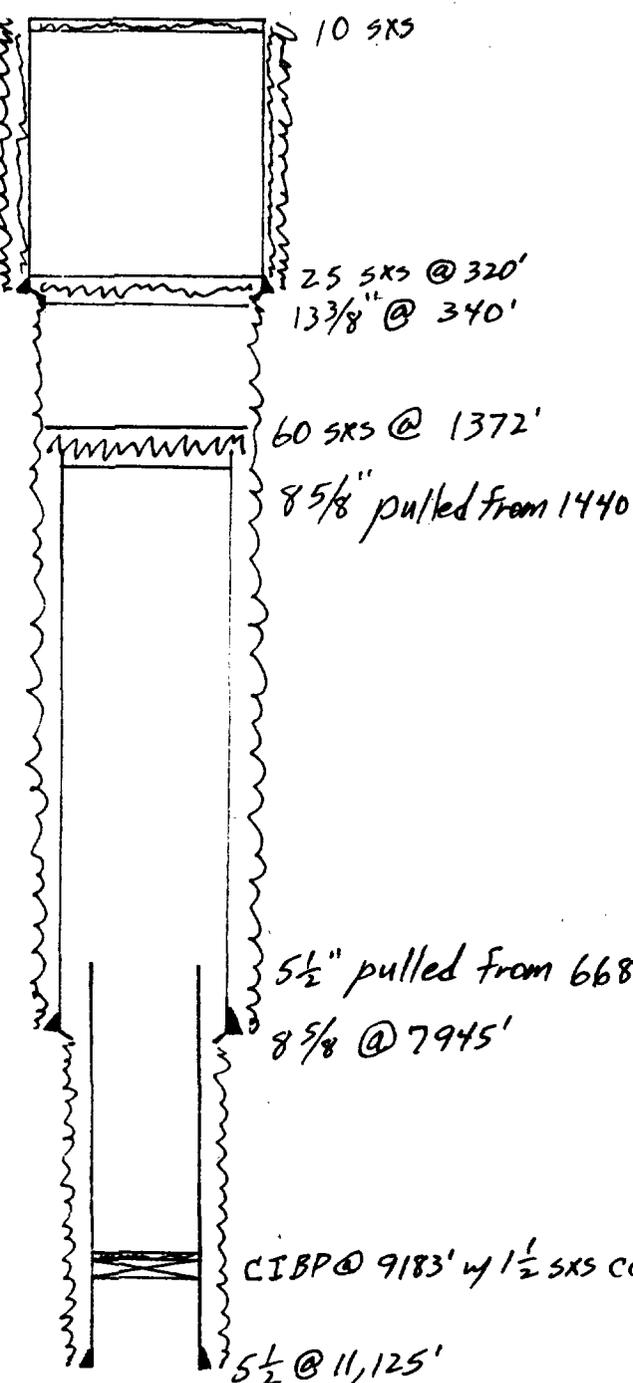
32 E
RANGE

Drilled as a dry hole in Devonian - Produced from Pennsylvanian

Drilled in 1955

Schematic

Tabular Data



Surface Casing

Size 13 3/8 " Cemented with _____ sx.

TOC Surface feet determined by _____

Hole size _____

Intermediate Casing

Size 8 5/8 " Cemented with _____ sx.

TOC Not available* feet determined by _____

Hole size _____

Long string

Size 5 1/2 " Cemented with _____ sx.

TOC Not available* feet determined by _____

Hole size _____

Total depth TD 11,125

Injection interval

_____ feet to _____ feet
(perforated or open-hole, indicate which)

Well file incomplete - Information on file with BLM is indicated here.

** See attached sheet*

Re-entry attempted by Ernest A. Hanson. Reach a TD of 1485' + P+A.

*60 SXS @ 1372'
35 SXS @ 320'
10 SXS Surface*

CIBP @ 9183' w 1 1/2 SXS cement on top

5 1/2 @ 11,125'

Tubing size _____ lined with _____ (material) set in a

_____ packer at _____ feet

(brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation _____
- Name of Field or Pool (if applicable) _____

RECEIVED
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STATE
SAND

AMERADA FEDERAL E

BASED ON AMERADA'S CEMENTING PRACTICES IN THE AREA, THE FOLLOWING CAN BE ASSUMED:

TOP OF CEMENT BEHIND 5 1/2" CASING IS NEAR THE CUT-OFF POINT OF 6684 FEET

TOP OF CEMENT BEHIND 8 5/8 CASING IS AROUND 4000 FEET ASSUMING 1500 SXS, CEMENT USED

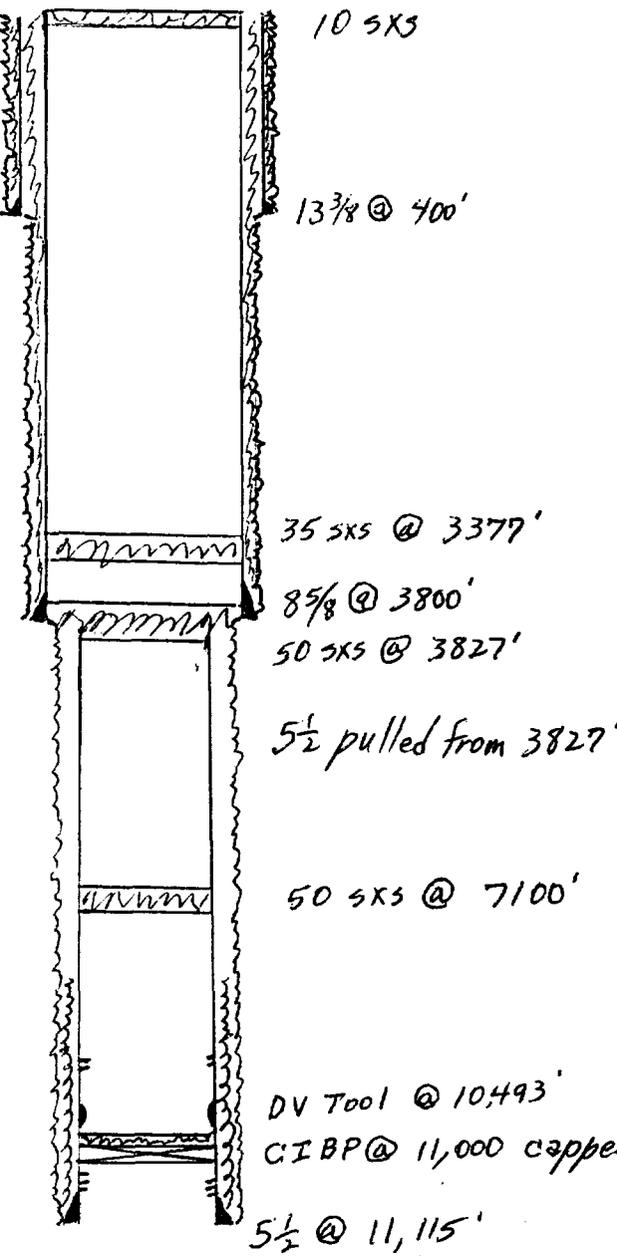
Spence Energy Company State 14
 OPERATOR LEASE
 1 330 S 330 W 14 95 32E
 WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE

Drilled as a dry hole - Tested Devonian and Atoka - Recovered water from both.

Schematic

Drilled in 1985

Tabular Data



Surface Casing

Size 13 3/8 " Cemented with 425 sx.

TOC Surface feet determined by Circulated

Hole size 17 1/2

Intermediate Casing

Size 8 5/8 " Cemented with 1100 sx.

TOC Surface feet determined by Circulated

Hole size 11

Long string

Size 5 1/2 " Cemented with 410 sx.

TOC 8600 feet determined by Calculated

Hole size 7 7/8

Total depth 11,115

Injection interval

10,030 feet to 10,036 feet
11,055 feet to 11,068 feet
 (perforated or ~~open hole~~, indicate which)

Tubing size _____ lined with _____ set in a
 (material)
 _____ packer at _____ feet
 (brand and model)

(or describe any other casing-tubing seal).

Other Data

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

~~INJECTION~~ WELL DATA SHEET

Amerada Petroleum Corporation F. E. Chartier
 OPERATOR LEASE

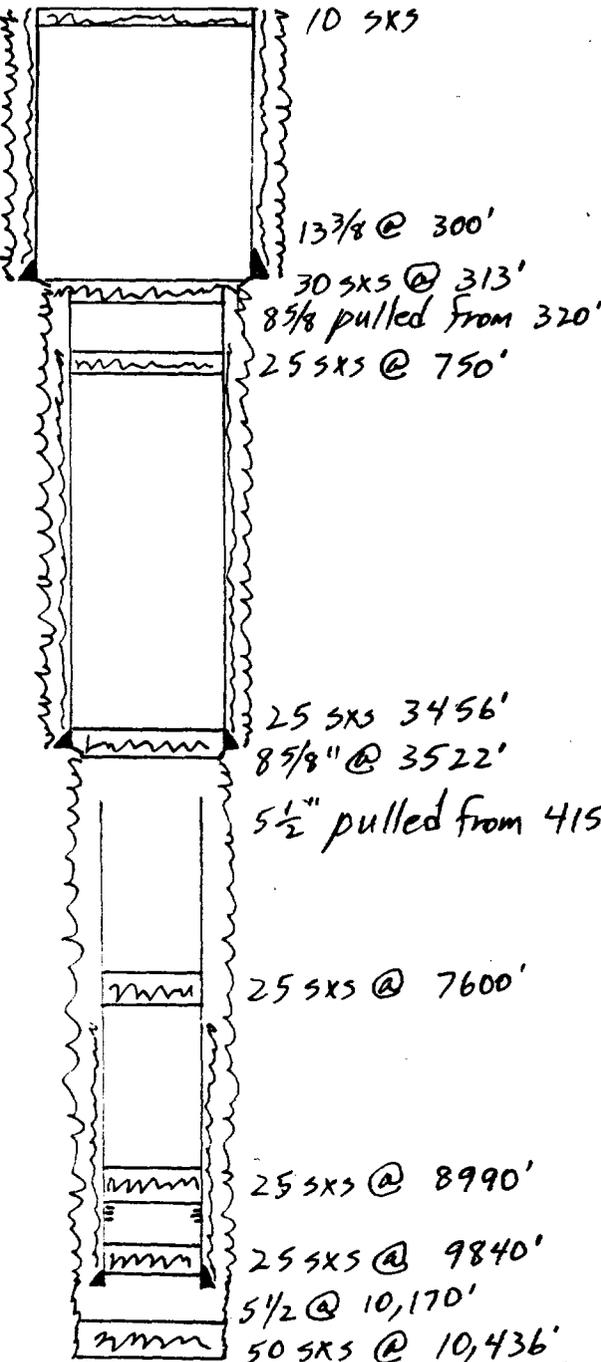
2 660N 660W 23 9S 32E
 WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE

Drilled as a Pennsylvania oil well

Drilled in 1955

Schematic

Tabular Data



Surface Casing

Size 13 3/8 " Cemented with 275 sx.
 TOC Surface feet determined by Circulated
 Hole size 17 1/2

Intermediate Casing

Size 8 5/8 " Cemented with 1500 sx.
 TOC 735 feet determined by Temp. Survey
 Hole size 11

Long string

Size 5 1/2 " Cemented with 600 sx.
 TOC 7516 feet determined by Temp. Survey
 Hole size 7 7/8
 Total depth 10,577

Injection interval

9202 feet to 9214 feet
 (perforated or open-hole, indicate which)

Tubing size _____ lined with _____ set in a
 _____ (material)
 _____ packer at _____ feet
 _____ (brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation _____
- Name of field or Pool (if applicable) _____

LEGAL NOTICE

APPLICANT:

DWIGHT A. TIPTON
P. O. 1597
LOVINGTON, NEW MEXICO 88260
[505] 396-2114

REQUESTS THE OIL CONSERVATION DIVISION TO AUTHORIZE A CHANGE IN THE PACKER SETTING DEPTH IN THE STATE 14 SALT WATER DISPOSAL WELL NO.1, LOCATED 1650 FEET FROM THE SOUTH AND 330 FEET FROM THE WEST OF SECTION 14, TOWNSHIP 9 SOUTH, RANGE 32 EAST, NMPM, LEA COUNTY, NEW MEXICO, FROM 10,855 FEET TO A DEPTH OF 4850 FEET. IT IS FURTHER REQUESTED THAT THE INJECTION INTERVAL BE EXTENDED TO INCLUDE THE INTERVAL FROM 5000-9970 FEET AND FROM 11,085-11,102 FEET TO INCLUDE THE FOLLOWING FORMATIONS:

GLORIETA
BLINEBRY
TUBB
ABO
WOLFCAMP
PENNSYLVANIAN
DEVONIAN

THE SUBJECT WELL IS USED TO DISPOSE OF PRODUCED OIL FIELD BRINE WATERS AND THE PRESENT VOLUME DISPOSED OF IS 300 BARRELS PER DAY WITH A MAXIMUM VOLUME OF 400 BARRELS PER DAY. THE PRESENT INJECTION PRESSURE IS ZERO AND THE INJECTION PRESSURE WILL NEVER EXCEED ZERO.

INTERESTED PARTIES MUST FILE OBJECTIONS OR REQUESTS FOR HEARING WITH THE OIL CONSERVATION DIVISION, P. O. BOX 2088, SANTA FE, NEW MEXICO 87504-2088 WITHIN 15 DAYS.

REQUESTS FOR FURTHER INFORMATION SHOULD BE MADE TO :

JOE D. RAMEY
P. O. BOX 6016
HOBBS, NEW MEXICO 88241-6016
[505] 392-6525

JOE D. RAMEY
P. O. BOX 6016
HOBBS, NEW MEXICO 88241-6016
[505] 392-6525

MAY 15, 1991

MR. DAVID CATANACH
NEW MEXICO OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

DEAR MR. CATANACH:

ATTACHED PLEASE FIND AN APPLICATION WHEREIN MR. DWIGHT A. TIPTON REQUESTS AN EXTENSION OF THE INJECTION INTERVAL AND AN EXCEPTION TO THE PACKER DEPTH REQUIREMENTS.

IF YOU HAVE ANY QUESTIONS ON THIS MATTER, YOU CAN REACH ME AT THE ABOVE ADDRESS.

YOURS TRULY,



JOE D. RAMEY

COPIES OF THIS APPLICATION HAVE BEEN FURNISHED, BY CERTIFIED MAIL, TO
THE FOLLOWING:

STATE LAND OFFICE
P. O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

SPENCE ENERGY COMPANY
381 TWO ENERGY SQUARE
4849 GREENVILLE AVENUE
DALLAS, TEXAS 75206

YATES PETROLEUM CORPORATION
105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210

P 661 765 494



Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	
Yates Petroleum Corp.	
Street & No.	
105 South Fourth Street	
P.O., State & ZIP Code	
Artesia, NM 88210	
Postage	\$ 98
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$ 298
Postmark or Date	

PS Form 3800, June 1990

P 661 765 493



Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	
Spence Energy Co.	
Street & No.	
381 Two Energy Square	
4949 Greenville Avenue	
P.O., State & ZIP Code	
Dallas, TX 75206	
Postage	\$ 98
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$ 298
Postmark or Date	

PS Form 3800, June 1990

P 661 765 492



Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	
State Land Office	
Street & No.	
P.O. Box 1148	
P.O., State & ZIP Code	
Santa Fe, NM 87504-1148	
Postage	\$ 98
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$ 298
Postmark or Date	

PS Form 3800, June 1990

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no

II. Operator: Dwight A. Tipton

Address: P.O. Box 1597 Lovington, NM 88260

Contact party: Joe D. Ramey Phone: (505) 392-6525

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 _____.

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: Joe D. Ramey Title Consultant

Signature: Joe D. Ramey Date: 5/15/91

* 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.

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.

AVERAGE VOLUME DISPOSED 300 BPD
MAXIMUM VOLUME DISPOSED 400 BPD
INJECTION PRESSURE VACUUM
CLOSED SYSTEM

PRODUCED WATERS BEING DISPOSED OF ARE FROM THE SAN ANDRES, ABO AND PENNSYLVANIAN. NO COMPATIBILITY TESTS HAVE BEEN TAKEN BUT THE FLUIDS HAVE EXHIBITED NO CHARACTERISTICS OF INCOMPATIBILITY IN THE FOUR PLUS YEARS OF OPERATIONS BY MR. TIPTON. THERE IS NO SCALING NOR SEDIMENTS IN THE RECEIVING OR INJECTION TANKS AT THE FACILITY AND THE INJECTION WELL HAS MAINTAINED 18 - 20 INCHES OF VACUUM DURING THIS FOUR YEAR PERIOD.

THE ATTACHED ANALYSIS OF DEVONIAN WATER FROM A WELL IN SECTION 14 INDICATES CHLORIDES OF 24,000 PPM. PENNSYLVANIAN WATERS NORMALLY HAVE CHLORIDES OF AROUND 30,000, ABO AROUND 25,000 AND SAN ANDRES 34,000 PPM.

ALTHOUGH THE WELL HAS COLLAPSED PIPE AT AROUND 5000 FEET, INJECTED WATER IS BEING DISPOSED OF IN THE DEVONIAN. THE DEVONIAN IS THE ONLY FORMATION IN THE AREA THAT WILL TAKE WATER ON A VACUUM. MR. TIPTON WILL NOT INJECT ANY WATER IF PRESSURE IS NECESSARY. THE WELL WILL BE TREATED EVERY SIX MONTH WITH 1000 GALS. 15% ACID.

INJECTION ZONE INFORMATION

DEVONIAN:

TOP - 11,091'
THICKNESS - NOT COMPLETELY PENETRATED BY ANY WELL IN THE AREA,
ESTIMATED THICKNESS 450'
LITHOLOGY - VUGGY DOLOMITE

PENNSYLVANIAN:

TOP - 8668'
THICKNESS - 1762'
1302' TO TOP OF CEMENT
LITHOLOGY - SHALE, SANDY LIMESTONE, WITH TIGHT SAND STRINGERS

WOLFCAMP:

TOP - 8153'
THICKNESS - 514'
LITHOLOGY - DENSE LIMESTONE WITH SHALE STRINGERS

ABO:

TOP - 7180'
THICKNESS - 972'
LITHOLOGY - SHALE, DENSE SANDY LIMESTONE

TUBB:

TOP - 6317'
THICKNESS - 863'
LITHOLOGY - SHALE, SHALY SANDSTONE, DENSE SANDY LIMESTONE

CLEARFORK [BLINEBRY]:

TOP - 5624'
THICKNESS - 693'
LITHOLOGY - DENSE SHALY SANDSTONE, SHALE AND LIMESTONE

GLORIETA:

TOP - 4853'
THICKNESS - 771'
LITHOLOGY - SHALE, SHALY LIMESTONE

THE ONLY KNOWN FRESH WATER IN THE AREA IS IN THE OGALLALA FORMATION THE BASE OF WHICH IS AROUND 300 FEET. THERE ARE NO KNOWN FRESH WATER WELLS WITHIN THREE MILES OF THE DISPOSAL WELL. THE OGALLALA WATERS IN THE AREA ARE ASSUMED TO BE TYPICAL OGALLALA WATERS THAT ARE FOUND IN MOST OF LEA COUNTY.

THE ONLY OIL PRODUCTION WITHIN TWO MILES OF THE DISPOSAL WELL IS IN THE E/2 E/2 SECTION 14, N/2 SW/4 SECTION 13 AND THE NE/4 NE/4 SECTION 23. THIS PRODUCTION IS FROM THE ABO AT A DEPTH OF AROUND 7000 FEET. THERE IS ALSO A WELL IN THE SE/4 SE/4 SECTION 14 THAT IS PRESENTLY BEING TESTED IN THE BOUGH C AT A DEPTH OF AROUND 8800 FEET.

ALL AVAILABLE GEOLOGIC AND ENGINEERING DATA HAS BEEN EXAMINED AND THERE IS NO EVIDENCE OF OPEN FAULTS OF ANY OTHER HYDROLOGIC CONNECTION BETWEEN THE DISPOSAL ZONE AND ANY UNDERGROUND SOURCE OF DRINKING WATER.

INJECTION WELL DATA SHEET

Dwight A. Tipton OPERATOR State 14 SWD LEASE

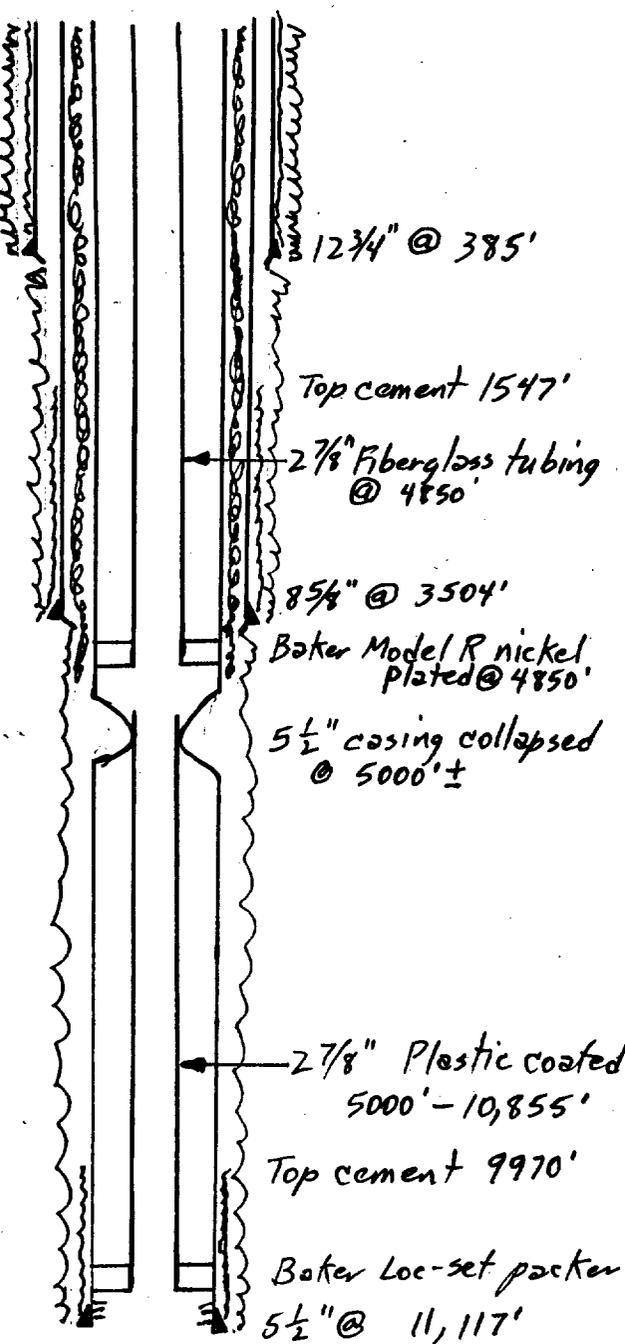
1 WELL NO. 1650 S 330 W FOOTAGE LOCATION 14 SECTION 95 TOWNSHIP 32E RANGE

Well drilled as a non-producing oil well

Schematic

Drilled in 1977

Tabular Data



Surface Casing

Size 12 3/4 " Cemented with 450 sx.
 TOC Surface feet determined by Circulated
 Hole size 15

Intermediate Casing

Size 8 5/8 " Cemented with 400 sx.
 TOC 1547 feet determined by Form C-103 Calculated
 Hole size 11

Long string

Size 5 1/2 " Cemented with 200 sx.
 TOC 9970 feet determined by Form C-103 Calculated
 Hole size 7 7/8
 Total depth 11,117

Injection interval

11,099.5 feet to 11,102.5 feet
 (perforated or open hole, indicate which)

Tubing size 2 7/8 " lined with Fiberglass (material) set in a
Baker Model R nickel plated (brand and model) packer at 4850 feet

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Devonian, Pennsylvanian, Wolfcamp, Abo, Tubb, Blinberry, Glorieta
- Name of Field or Pool (if applicable) SRR D
- Is this a new well drilled for injection? Yes No
 If no, for what purpose was the well originally drilled? Oil prospect
- 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
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. SRR Abo - 7000'
Undesignated Bough C - 8800'

THE SUBJECT WELL WAS DRILLED IN 1977 AS A DEVONIAN OIL PRODUCER IN THE SRR DEVONIAN POOL. IN DECEMBER, 1984 THE WELL WAS CONVERTED TO A SALT WATER DISPOSAL WELL BY VF PETROLEUM AS AUTHORIZED BY DIVISION ORDER R-5792.

IN THE PROCESS OF CONVERSION THE WELL WAS FOUND TO HAVE HOLES IN THE 5 1/2" CASING AT 2911 FEET, 3099 FEET AND 5275 FEET. THESE HOLES WERE SQUEEZE CEMENTED AND IN THE PROCESS THE 5 1/2" X 8 5/8" ANNULUS WAS CIRCULATED AND FILLED WITH CEMENT. THE CASING WAS THEN TESTED TO 1000 POUNDS, TUBING AND PACKER RUN AND INJECTION COMMENCED.

IN 1986, DWIGHT A. TIPTON ASSUMED OPERATIONS. THE TUBING AND PACKER WERE REPLACED WITH PLASTIC COATED TUBING AND A NICKEL PLATED LOC-SET PACKER SET AT 10,855 FEET. THE ANNULUS WAS FILLED WITH A NON-CORROSIVE PACKER FLUID AND TESTED TO 400 PSI. THE WELL WAS TREATED WITH 1000 GALLONS .5% ACID AND RETURNED TO INJECTION ON A VACUUM.

A MECHANICAL INTEGRITY TEST WAS CONDUCTED IN 1990 AND THE WELL TESTED MECHANICALLY SOUND. A SIMILAR TEST WAS CONDUCTED IN 1991 AND THE CASING-TUBING, ANNULUS WOULD NOT HOLD PRESSURE. WHILE ATTEMPTING TO PULL THE TUBING, THE TUBING PARTED AT 4900 FEET. THE TUBING WAS CUT AT 5200 FEET BUT WOULD NOT JAR LOOSE. TUBING WAS BACKED-OFF AND TWO ADDITIONAL JOINTS PLUS ONE ALMOST COMPLETE, WHICH PARTED, WERE RECOVERED.

IN ATTEMPTING TO RECOVER ADDITIONAL TUBING, MR. TIPTON COULD GET TOOLS NO DEEPER THAN AROUND 5000 FEET AND IT WAS CONCLUDED THAT THE 5 1/2" CASING HAD COLLAPSED AND PROBABLY PARTED AT JUST BELOW 5000 FEET.

AFTER DISCUSSING THE SITUATION WITH MR. JERRY SEXTON AND SINCE THE WELL WAS STILL TAKING WATER ON A VACUUM, NEW 2 7/8" FIBERGLASS TUBING WAS RUN IN THE HOLE WITH A BAKER MODEL R. NICKELBUCKET PLATED PACKER SET AT 4850 FEET AND THE WELL WAS RETURNED TO VACUUM.

THE WELL IS MECHANICALLY SOUND FROM THE SURFACE TO AROUND 5000 FEET. SURFACE PIPE IS CEMENTED TO THE SURFACE, INTERMEDIATE IS CEMENTED FROM 3504 FEET TO 1547 FEET AND THE 5 1/2" X 8 5/8" ANNULUS WAS CIRCULATED FROM ABOUT 4750 FEET TO THE SURFACE [SEE ATTACHED BONDLOG]. SO IT CAN BE CONCLUDED THAT NO DISPOSAL WATER, PARTICULARLY IF INJECTION IS ON A VACUUM, CAN ENDANGER ANY FRESH WATER SUPPLIES IN THE AREA.

THE ABO IN THIS WELL IS ESSENTIALLY SHALE IN THE UPPER PART AND VERY DENSE SANDY LIMESTONE IN THE BOTTOM. POROSITIES ARE IN THE TWO TO THREE PERCENT RANGE. THE BOUGH C IS PRESENT IN THIS WELL, BUT AGAIN THE POROSITY IS SUCH THAT IT WOULD NOT BE CONDUCTIVE TO WATER INJECTION.

THE ONLY DRILL STEM TEST, OTHER THAN THE TWO CONDUCTED IN THE DEVONIAN, WAS FROM 9174 FEET TO 9230 FEET AND THE RECOVERY WAS 96 FEET MUD WITH NO SHOWS OF OIL OR GAS.

SO IT CAN BE CONCLUDED THAT INJECTION INTO THIS WELL WOULD NOT BE DETRIMENTAL TO ANY OIL AND GAS PRODUCTION IN THE AREA. FURTHER IT CAN BE CONCLUDED THAT DEVONIAN IS THE ONLY ZONE IN THE WELL CAPABLE OF TAKING WATER IN OTHER THAN INSIGNIFICANT QUANTITIES.

Ernest A. Hanson
OPERATOR

SRR State A No. 1
LEASE

1
WELL NO.

1980 S 660 W
FOOTAGE LOCATION

14
SECTION

95
TOWNSHIP

32 E
RANGE

Well drilled as a dry hole - Swabbed 5 bbls. water per hour

Schematic

Drilled in 1968

Tabular Data

Surface Casing

Size 13 " Cemented with 250 sx.
TOC Surface feet determined by Circulated
Hole size 16 "

Intermediate Casing

Size 8 5/8 " Cemented with 20 sx.
TOC 1600 feet determined by Estimated
Hole size 12 "

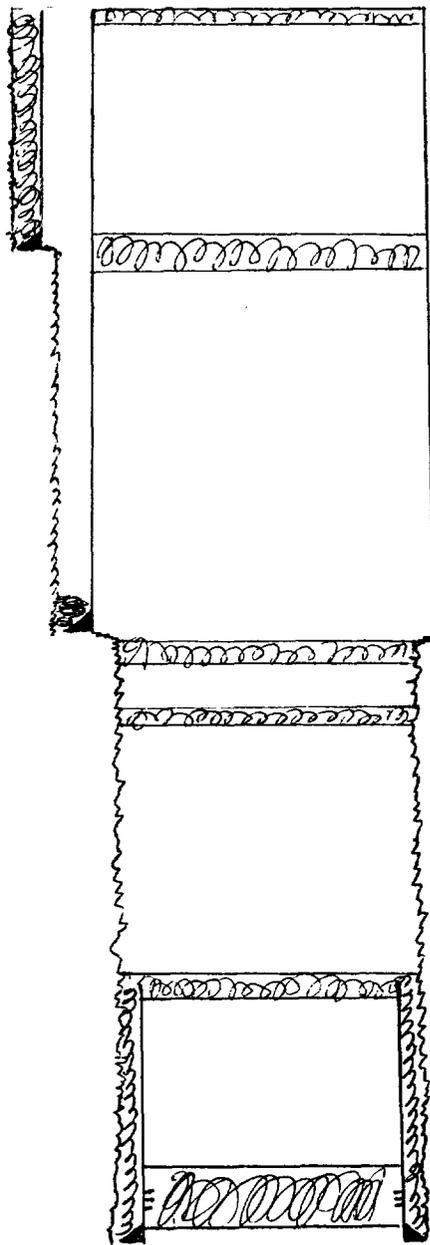
Long string

Size 5 1/2 " Cemented with 150 sx.
TOC 3300 ' feet determined by Free point
Hole size 7 7/8 "

Total depth 4311

Injection interval

4183 feet to 4201 feet
(perforated or open hole, indicate which)



Tubing size _____ lined with _____ set in a
(material)
_____ packer at _____ feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

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

Major Giebel & Forster Gulf State

OPERATOR

LEASE

1
WELL NO.

2310 N 330 E
FOOTAGE LOCATION

15
SECTION

95
TOWNSHIP

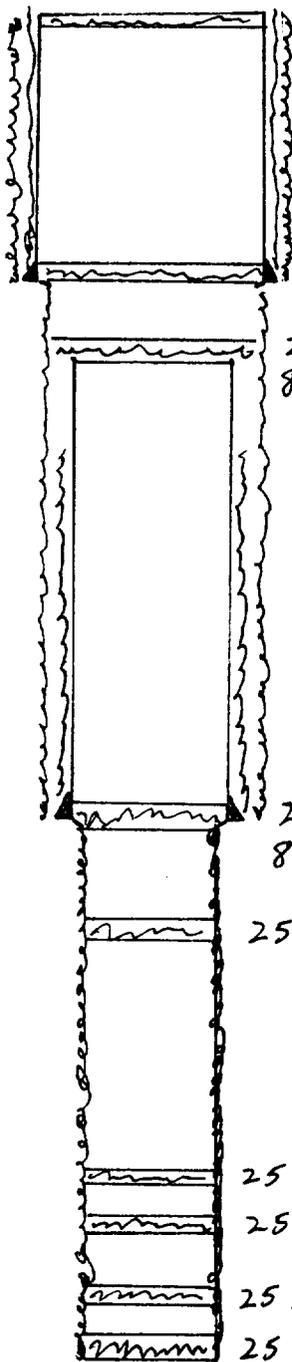
32 E
RANGE

Drilled as dry hole

Drilled in 1970

Schematic

Tabular Data



10 5x5

25 5x5 @ 355'

1 3/4 @ 355'

25 5x5 @ 1160'

8 5/8 pulled from 1159'

25 5x5 @ 3600'

8 5/8 @ 3575'

25 5x5 @ 4878'

25 5x5 @ 7212'

25 5x5 @ 8827'

25 5x5 @ 10,732'

25 5x5 @ 11,490'

Surface Casing

Size 11 3/4 " Cemented with 355 sx.

TOC Surface feet determined by Circulated

Hole size 15

Intermediate Casing

Size 8 5/8 " Cemented with 400 sx.

TOC 1845 feet determined by Calculated

Hole size 11

Long string

Size _____ " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Total depth 11,490'

Injection interval

_____ feet to _____ feet
(perforated or open-hole, indicate which)

Tubing size _____ lined with _____ set in a

(material)

_____ packer at _____ feet

(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation _____

2. Name of Field or Pool (if applicable) _____

Amerada Petroleum Corporation State SR "B"

OPERATOR

LEASE

2
WELL NO.

1980S 1980E
FOOTAGE LOCATION

15
SECTION

9S
TOWNSHIP

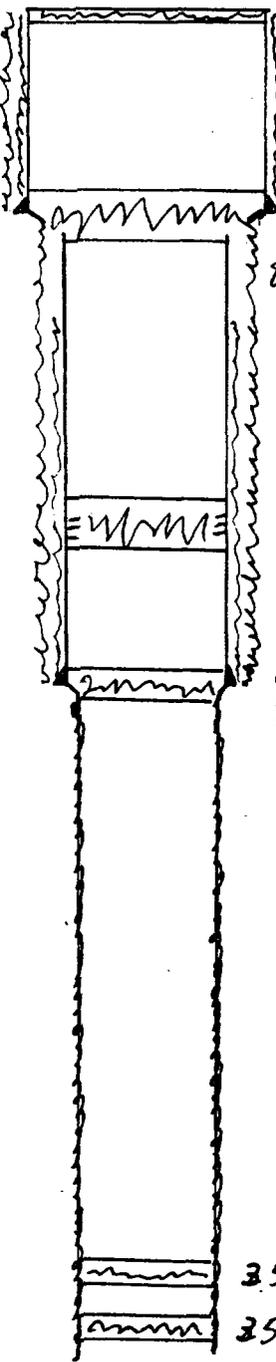
32E
RANGE

Drilled as a dry hole

Drilled in 1956

Schematic

Tabular Data



10 SXS

13 3/8 @ 338'

70 SXS @ 316

8 5/8 pulled from 402'

50 SXS @ 2250'

35 SXS @ 3490'

8 5/8 @ 3535'

35 SXS @ 10,287'

35 SXS @ 11,181'

Surface Casing

Size 13 3/8" Cemented with 275 sx.

TOC Surface feet determined by Circulated

Hole size 17 1/2

Intermediate Casing

Size 8 5/8" Cemented with 1500 sx.

TOC 810' feet determined by Temp. Survey

Hole size 11

Long string

Size _____ Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size 7 7/8

Total depth 11,360

Injection interval

2272 feet to 2365 feet
(perforated or open-hole, indicate which)

Tested for salt water disposal!

Perforated Yates 2272-2365

Pumped 4320 BWPD @ 1000 #

Tubing size _____ lined with _____ (material) set in a

_____ packer at _____ feet

(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation _____

2. Name of Field or Pool (if applicable) _____

Amerada Petroleum Corp. State SR "B"

OPERATOR

LEASE

1
WELL NO.

6605 660E
FOOTAGE LOCATION

15
SECTION

95
TOWNSHIP

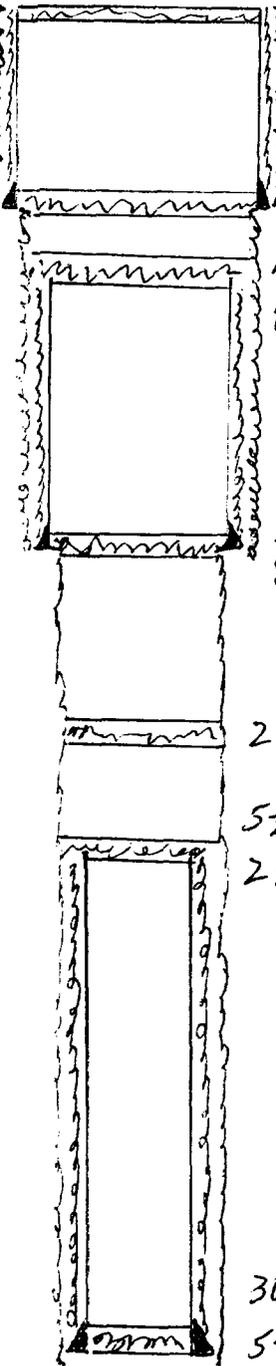
32E
RANGE

Drilled as a Devonian producer - Now P&A

Schematic

Drilled in 1956

Tabular Data



10 5/8s.

13 3/8 @ 338'

40 5/8 @ 313'

40 5/8 @ 525'

8 5/8 pulled from 600'

25 5/8 @ 3505'

8 5/8 @ 3550'

25 5/8 @ 4802'

5 1/2 pulled from 6600'

25 5/8 @ 6542'

30 5/8 @ 10,965'

5 1/2 @ 11,085'

Surface Casing

Size 13 3/8 " Cemented with 275 sx.

TOC Surface feet determined by Circulated

Hole size 17 1/2

Intermediate Casing

Size 8 5/8 " Cemented with 1500 sx.

TOC 644 feet determined by Temp Survey

Hole size 11

Long string

Size 5 1/2 " Cemented with 900 sx.

TOC 7315 feet determined by Temp. Survey

Hole size 7 3/4

Total depth 11,125

Injection interval

11,085 feet to 11,125 feet
(perforated or open-hole, indicate which)

Tubing size _____ lined with _____ set in a _____

(material)

packer at _____ feet

(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation _____

2. Name of Field or Pool (if applicable) _____

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

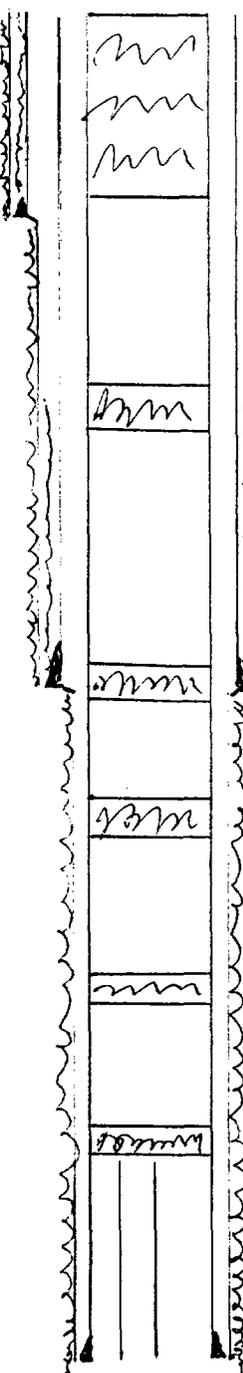
OPERATOR Dwight A. Tipton LEASE State 15

WELL NO. 1 FOOTAGE LOCATION 990 S 330 E SECTION 15 TOWNSHIP 9S RANGE 32E

Drilled as Devonian producer - New PTA

Schematic

Drilled in 1976 Tabular Data



Surface plug
0-350'

1 1/4 @ 361'

50 SXS @ 2200'

35 SXS @ 3550'

8 5/8 @ 3552'

50 SXS @ 5950'

25 SXS @ 8150

30 SXS @ 9748'

Tubing pulled from 10,200'

4 1/2 @ 11,056

Surface Casing

Size 12 3/4 " Cemented with 415 sx.
TOC Surface feet determined by Circulated
Hole size 15

Intermediate Casing

Size 8 5/8 " Cemented with 400 sx.
TOC 1479' feet determined by Calculated
Hole size 11 3/4

Long string

Size 4 1/2 " Cemented with 350 sx.
TOC 9103 feet determined by Calculated
Hole size 7 7/8

Total depth 11,087

Injection interval

11,056 feet to 11,087 feet
(~~perforated~~ or open-hole, indicate which)

DST 9172-9241
Flowed 260 MCF/Day
Recovered 282' GCM
1722 GCSW

DST 10,220-10,440
Recovered 530' VSGCDF

Tubing size _____ lined with _____ set in a _____
(material)
_____ packer at _____ feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation _____
- Name of Field or Pool (if applicable) _____
- Is this a new well drilled for injection? Yes No

Amerado Petroleum Corporation Federal E

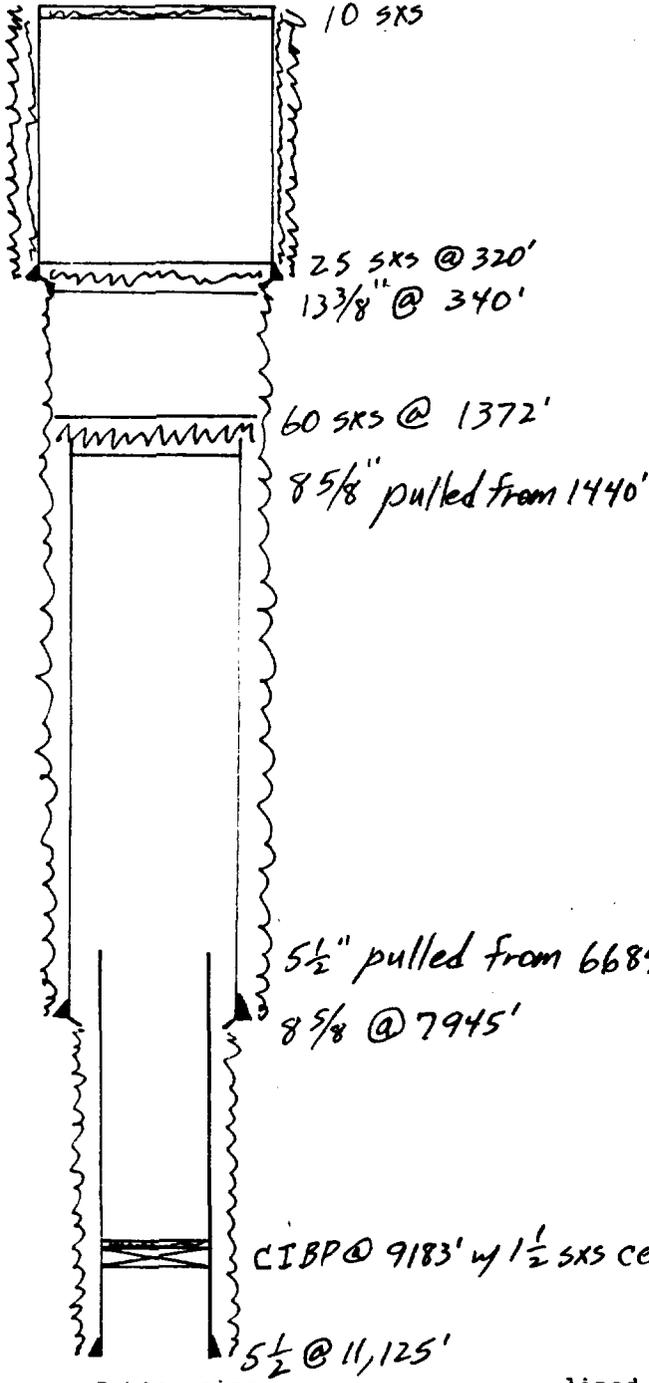
OPERATOR LEASE
1 660 N 660 E 22 95 32E
WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE

Drilled as a dry hole in Devonian - Produced from Pennsylvanian

Drilled in 1955

Schematic

Tabular Data



Surface Casing
 Size 13 3/8 " Cemented with _____ sx.
 TOC Surface feet determined by _____
 Hole size _____

Intermediate Casing
 Size 8 5/8 " Cemented with _____ sx.
 TOC Not available* feet determined by _____
 Hole size _____

Long string
 Size 5 1/2 " Cemented with _____ sx.
 TOC Not available* feet determined by _____
 Hole size _____

Total depth TD 11,125

Injection interval _____ feet to _____ feet
 (perforated or open-hole, indicate which)

Well file incomplete - Information on file with BLM is indicated here.

* See attached sheet
 Re-entry attempted by Ernest A. Hanson, Reach a TD of 1485' + P+A.
 60 SXS @ 1372'
 35 SXS @ 320'
 10 SXS Surface

Tubing size 5 1/2 @ 11,125' lined with _____ set in a _____ (material)

_____ packer at _____ feet (brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation _____
- Name of Field or Pool (if applicable) _____

AMERADA FEDERAL E

BASED ON AMERADA'S CEMENTING PRACTICES IN THE AREA, THE FOLLOWING CAN BE ASSUMED:

TOP OF CEMENT BEHIND 5 1/2" CASING IS NEAR THE CUT-OFF POINT OF 6684 FEET

TOP OF CEMENT BEHIND 8 5/8 CASING IS AROUND 4000 FEET ASSUMING 1500 SXS, CEMENT USED

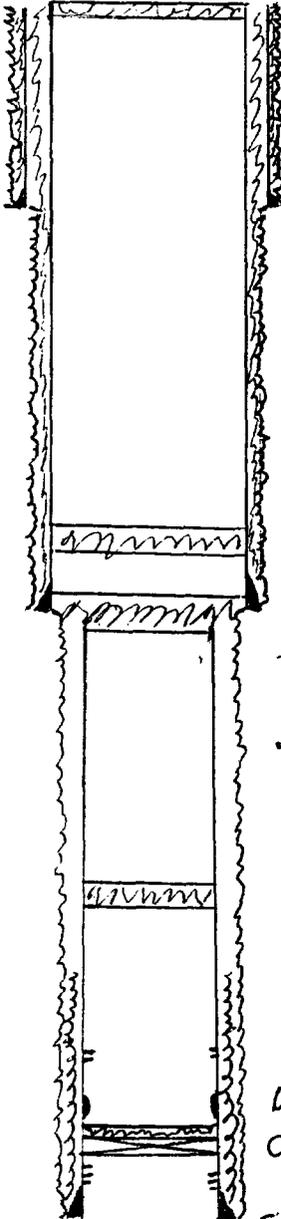
Spence Energy Company State 14
 OPERATOR LEASE
 1 330 S 330 W 14 95 32E
 WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE

Drilled as a dry hole - Tested Devonian and Atoka - Recovered water from both.

Drilled in 1985

Schematic

Tabular Data



10 5/8
 13 3/8 @ 400'
 35 SKS @ 3377'
 8 5/8 @ 3800'
 50 SKS @ 3827'
 5 1/2 pulled from 3827'
 50 SKS @ 7100'
 DV Tool @ 10,493'
 CIBP @ 11,000 capped with 40' cement
 5 1/2 @ 11,115'

Surface Casing

Size 13 3/8 " Cemented with 425 sx.
 TOC Surface feet determined by Circulated
 Hole size 17 1/2

Intermediate Casing

Size 8 5/8 " Cemented with 1100 sx.
 TOC Surface feet determined by Circulated
 Hole size 11

Long string

Size 5 1/2 " Cemented with 410 sx.
 TOC 8600 feet determined by Calculated
 Hole size 7 7/8
 Total depth 11,115

Injection interval

10,030 feet to 10,036 feet
11,055 feet to 11,068 feet
 (perforated or ~~open hole~~, indicate which)

Tubing size _____ lined with _____ set in a
 (material)
 _____ packer at _____ feet
 (brand and model)
 (or describe any other casing-tubing seal).

Other Data

- Name of the injection formation _____
- Name of Field or Pool (if applicable) _____
- Is this a new well drilled for injection? Yes No

Leroy Sumruld

South Roberts SWD

OPERATOR

LEASE

2
WELL NO.

660 S 660 W
FOOTAGE LOCATION

14
SECTION

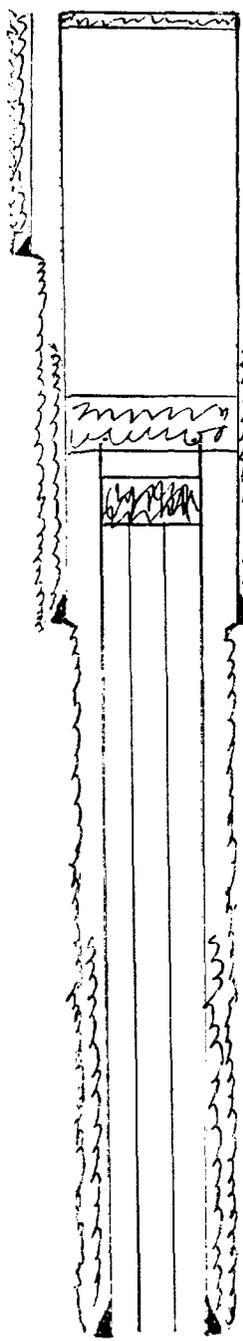
95
TOWNSHIP

32E
RANGE

Schematic

Drilled in 1955

Tabular Data



10 5XS

13 3/8 @ 340'

200 5XS @ 1546'

5 1/2 pulled from 1490'

100 5XS @ 1982'

8 5/8 @ 3533'

2 7/8 tubing top @ 1982'

5 1/2 @ 11,177'

Surface Casing

Size 13 3/8 "

TOC Surface feet determined by _____

Hole size 17 1/2

Intermediate Casing

Size 8 5/8 " Cemented with 1500 sx.

TOC 684' feet determined by Temp Survey

Hole size 12 1/4

Long string

Size 5 1/2 " Cemented with 900 sx.

TOC 7927 feet determined by Temp. Survey

Hole size 7 7/8

Total depth 11,177

Injection interval

11,103 feet to 11,130 feet
(perforated or open hole, indicate which)

Pumped 10 5XS into the 17 1/2 x 13 3/8 annulus Cemented with 250 sx.

Well drilled by Amerada as a Devonian producer. Converted to SWD as per Order No. R-1709.

Ownership changed to Sumruld with intent to test the Bough C 9100-9200'. Attempted to pull tubing & tubing parted. Milled & fished for around 60 days & could get no deeper than 1982'. P+A

Tubing size _____ lined with _____ (material) set in a _____ packer at _____ feet (brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation _____
2. Name of Field or Pool (if applicable) _____

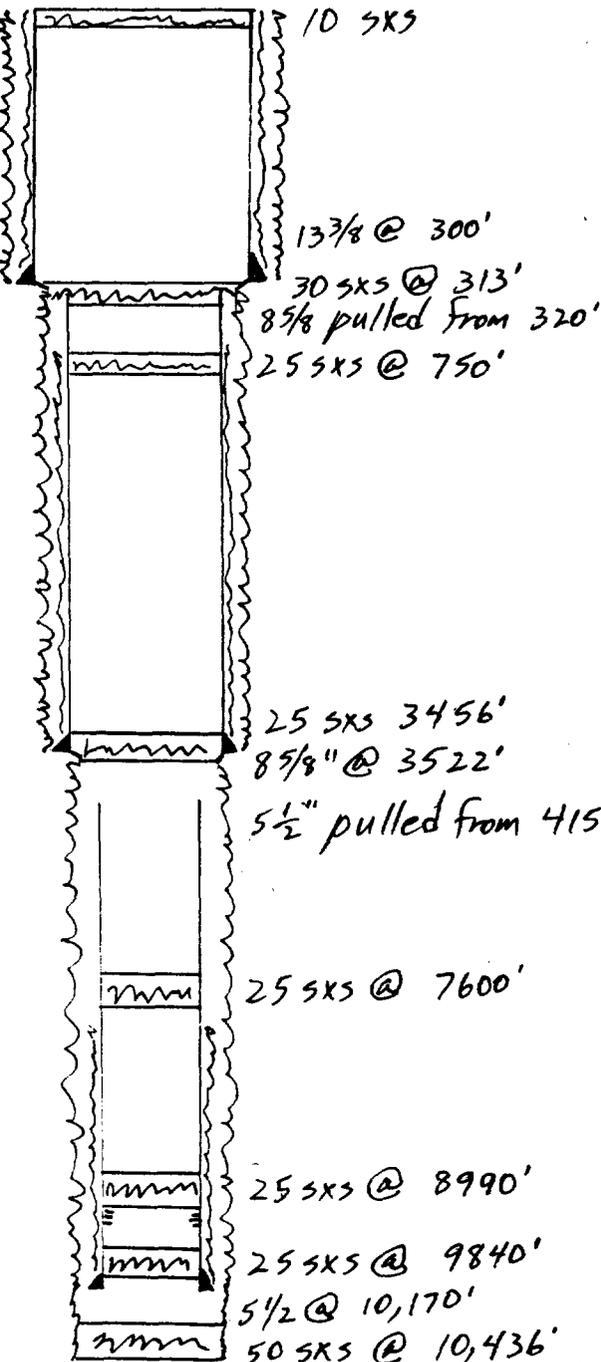
INJECTION WELL DATA SHEET

Amerada Petroleum Corporation F. E. Chartier
 OPERATOR LEASE
2 660N 660W 23 9S 32E
 WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE
Drilled as a Pennsylvanian oil well

Drilled in 1955

Schematic

Tabular Data



Surface Casing

Size 13 3/8 " Cemented with 275 sx.
 TOC Surface feet determined by Circulated
 Hole size 17 1/2

Intermediate Casing

Size 8 5/8 " Cemented with 1500 sx.
 TOC 735 feet determined by Temp. Survey
 Hole size 11

Long string

Size 5 1/2 " Cemented with 600 sx.
 TOC 7516 feet determined by Temp. Survey
 Hole size 7 7/8
 Total depth 10,577

Injection interval

9202 feet to 9214 feet
 (perforated or open-hole, indicate which)

Tubing size _____ lined with _____ set in a
 _____ (material)
 _____ packer at _____ feet
 _____ (brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation _____
2. Name of Field or Pool (if applicable) _____

LEGAL NOTICE

APPLICANT:

DWIGHT A. TIPTON
P. O. 1597
LOVINGTON, NEW MEXICO 88260
[505] 396-2114

REQUESTS THE OIL CONSERVATION DIVISION TO AUTHORIZE A CHANGE IN THE PACKER SETTING DEPTH IN THE STATE 14 SALT WATER DISPOSAL WELL NO.1, LOCATED 1650 FEET FROM THE SOUTH AND 330 FEET FROM THE WEST OF SECTION 14, TOWNSHIP 9 SOUTH, RANGE 32 EAST, NMPM, LEA COUNTY, NEW MEXICO, FROM 10,855 FEET TO A DEPTH OF 4850 FEET. IT IS FURTHER REQUESTED THAT THE INJECTION INTERVAL BE EXTENDED TO INCLUDE THE INTERVAL FROM 5000-9970 FEET AND FROM 11,085-11,102 FEET TO INCLUDE THE FOLLOWING FORMATIONS:

GLORIETA
BLINEBRY
TUBB
ABO
WOLFCAMP
PENNSYLVANIAN
DEVONIAN

THE SUBJECT WELL IS USED TO DISPOSE OF PRODUCED OIL FIELD BRINE WATERS AND THE PRESENT VOLUME DISPOSED OF IS 300 BARRELS PER DAY WITH A MAXIMUM VOLUME OF 400 BARRELS PER DAY. THE PRESENT INJECTION PRESSURE IS ZERO AND THE INJECTION PRESSURE WILL NEVER EXCEED ZERO.

INTERESTED PARTIES MUST FILE OBJECTIONS OR REQUESTS FOR HEARING WITH THE OIL CONSERVATION DIVISION, P. O. BOX 2088, SANTA FE, NEW MEXICO 87504-2088 WITHIN 15 DAYS.

REQUESTS FOR FURTHER INFORMATION SHOULD BE MADE TO :

JOE D. RAMEY
P. O. BOX 6016
HOBBS, NEW MEXICO 88241-6016
[505] 392-6525



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

91 MAY 20 AM 9 38 OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

5-17-91

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 amend (R-5742)
- WFX _____
- PMX _____

Gentlemen:

I have examined the application for the:

<i>Dwight A. Lipton</i>	<i>State 14 #1-L</i>	<i>14-9-32</i>
Operator	Lease & Well No. Unit	S-T-R

and my recommendations are as follows:

*Recommend it only if approved for
as long as water is disposed of without
pressure*

Yours very truly,

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed



COMPENSATED

Densilog

FILE NO.

COMPANY V.F. Petroleum Inc

WELL State 14 #1

FIELD SRR Devonian

COUNTY Lea STATE New Mexico

LOCATION: 1650' FSL & 330' FWL

Other Services

14 TWP 9S RGE 32E

N/A

Permanent Datum

XGL

Elev. 4331.3

Elevations: KB 4346.3

Log Measured from

KB, 15 Ft. Above Permanent Datum

DF

Drilling Measured from

GL 4331.3

Date	<u>5-31-77</u>					
Run No.	<u>ONE</u>					
Depth—Driller	<u>11,117</u>					
Depth—Logger	<u>11,104</u>					
Bottom Logged Interval	<u>11,102</u>					
Top Logged Interval	<u>Surf</u>					
Casing—Driller	<u>8 5/8 @ 3504</u>	@	@	@		
Casing—Logger	<u>3487</u>					
Bit Size	<u>7 7/8</u>					
Type Fluid in Hole	<u>Salt Gel Starch + Oil</u>					
Density and Viscosity	<u>9.6</u>	<u>60</u>				
pH and Fluid Loss	<u>7.0</u>	<u>6.4</u> cc	cc	cc		
Source of Sample	<u>Pit</u>					
Rm @ Meas. Temp.	<u>.087 @ 75 °F</u>	@	@	@		
Rmf @ Meas. Temp.	<u>.083 @ 75 °F</u>	@	@	@		
Rmc @ Meas. Temp.	<u>- @ - °F</u>	@	@	@		
Source of Rmf and Rmc	<u>m</u>	-				
Rm @ BHT	<u>.032 @ 200 °F</u>	@	@	@		
Time Since Circ.	<u>5 hrs</u>					
Max. Rec. Temp. Deg. F.	<u>200 °F</u>					
Equip. No. and Location	<u>6136 Hobbs</u>					
Recorded By	<u>Duenweke</u>					
Witnessed By	<u>Wambough + Rogers</u>					

Thanks
MARKED



ACOUSTIC CEMENT
BOND LOG

BOND LOG

COMP DWIGHT A. TIPTON WELL STATE 14 NO. 1 SWD FIELD NA COUNTY LEA	COMPANY DWIGHT A. TIPTON						
	WELL STATE 14 NO. 1 SWD						
	FIELD NA						
	COUNTY LEA	STATE NM					
	API NO. NA LOCATION NA	OTHER SERVICES NONE					
SEC. 14 TWP. 9-S RGE. 32-E							
PERMANENT DATUM	GL	ELEV. NA	ELEV.: K.B. NA				
LOG MEASURED FROM	KB	12.0 FT. ABOVE PERM. DATUM	D.F. NA				
DRILLING MEASURED FROM	KB		G.L. NA				
DATE & TIME LOGGED	04/18/91 12:30 PM	TYPE OF FLUID IN HOLE	WATER				
RUN NO.	ONE	DENSITY OF FLUID	NA				
DEPTH - DRILLER	5000 PBD	FLUID LEVEL	FLUID LEVEL FALLING				
DEPTH - LOGGER	4993	CEMENT TOP EST. - LOGGED	NA				
BTM. LOGGED INTERVAL	4983	EQUIPMENT & LOCATION	3416 HOBBS, NM				
TOP LOGGED INTERVAL	SURFACE	RECORDED BY	HAMMOND				
MAX TEMP. DEGREE	NA	WITNESSED BY	PORTER				
CEMENTING DATA	SURFACE STRING	PROTECTION STRING	PRODUCTION STRING	LINER			
DATE/TIME CEMENTED	NA						
PRIMARY/SQUEEZE							
EXPECTED							
COMP. STRENGTH							
CEMENT VOLUME							
CEMENT TYPE/WEIGHT							
FORMULATION							
MUD TYPE/MUD WEIGHT							
RUN NO.	BOREHOLE RECORD			CASING AND TUBING RECORD			
	BIT	FROM	TO	SIZE	WGT.	FROM	TO
NA	NA	NA	NA	5.5	NA	SURFACE	TD