STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

RECEIVED BY
APR 7 1986
O. C. D.
ARTESIA, OFFICE

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: Yates Petroleum Corporation

Address: 207 South 4th St., Artesia, New Mexico 88210

Contact party: Eddie Mahfood Phone: (505) 746-3558

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: Eddie M. Mahfood Title Senior Engineer

Signature: Eddie M. Mahfood Date: March 26, 1986

* 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. Note: NMOCC Order R-3406 dated 4-29-68 permitted injection of (produced) water into the San Andres (pay) in Sun-NM Federal X-#5 (Unit G-10-8S-33E)

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

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;

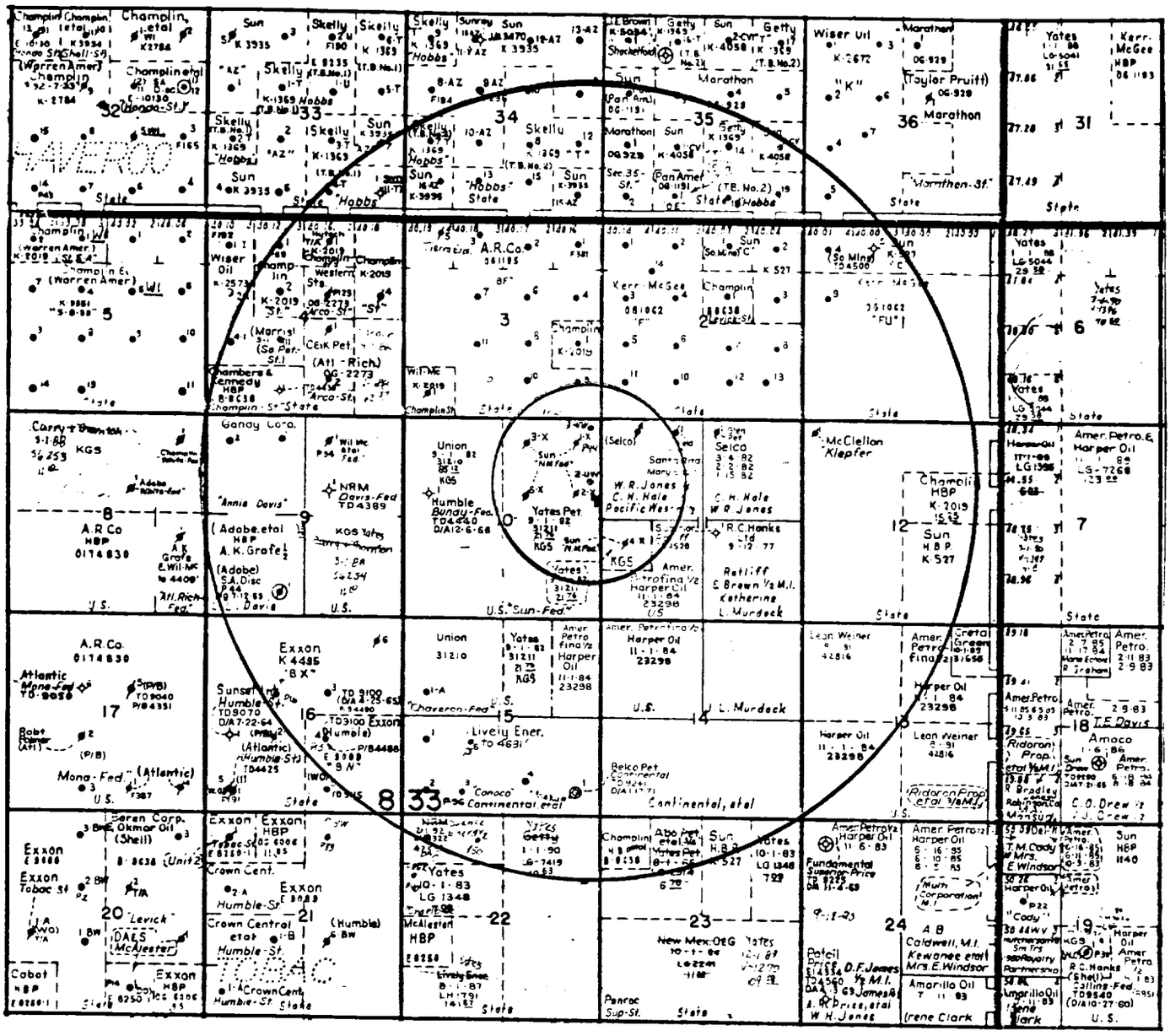
(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

(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.



YATES PETROLEUM CORP.

Application for Salt Water Disposal Well

Sun "UW" Fed. #2

Sec. 10-8S-33E

1650' FNL & 330' FEL

Chaves County, NM

Scale: 1" : 4000'

YATES PETF :UM CORPORATION - SUN UW FEDERA '2
Application for Salt Water Disposal - C-108 attachment

VI. Data on wells in Review Area:

YPC - Sun UW Fed. #3, 330/N 330/E, Sec. 10-8S-33E; spud 1-29-84, compl 3-12-85; TD 4440, PBTD 4335; Elev - 4374 GL; 10-3/4" 40.5# J-55 csg @347, cmtd w/250 sx Cl "C", circ; 4½" 9.5# J-55 csg @4440 cmtd w/240 sx Cl "C", top of cmt at 3325. A pumping oil well.

Sun - N.M. Fed. X #1, 660/N 660/E, Sec. 10-8S-33E; spud 1-10-67; compl 3-28-67; TD 4461, PBTD 4397; Elev 4386 GL = 4396 KB; 8-5/8" 24# J-55 csg @365 cmtd w/250 sx, circ; 4½" 9.5# J-55 csg @4459 cmtd w/200 sx, est. top of cmt at 3630' P&A 9-27-73: prod. pfs 4241-4366 covered w/ 25 sx plug at 4397-4096; shot at 2681, 2517, 2418, cmtd w/50 sx 2750-2200, 4½" cut and pulled at 1691 w/cmt plugs at 1750-1443 and 420-320. This hole re-entered by YPC as Sun UW Fed. #1 on 8-20-82, apparently did not get into 4½" stub @1691, set 35 sx plug @1691-1590, 35 sx plug @ 450-350 and 10 sx plug at surface. Marker erected 8-24-82.

Sun N.M. Fed. X #2, 1980/N 660/E, SEc. 10-8S-33E; spud 4-11-67, compl 4-26-67; TD 4460, PBTD 4375; Elev 4382 DF; 8-5/8" 24# J-55 csg @340 cmtd w/200 sx, circ; 4½" 9.5# J-55 csg @4454, cmtd w/200 sx, est top of cmt @3750; P&A 9-21-73; prod. pfs 4240-4357 covered w/15 sx cmt at 4400-4220; shot at 2688 and 2426, cmtd w/50 sx; shot at 1708, cmtd w/50 sx; cut and pulled 4½" at 1021, cmt plug at 1070-880; 35 sx plug at 400-300 and 30 sx plug at surface.

Sun N.M. Fed. X #3, 660/N 1980/E, Sec. 10-8S-33E; spud 5-20-67, compl 6-9-67; TD 4450, PBTD 4397; Elev 4405 DF; 8-5/8" 24# J-55 csg at 354 cmtd w/250 sx, circ; 4½" 9.5# J-55 csg @4449 cmtd w/200 sx, est. top of cmt @3750; P&A 10-3-73: prod. pfs 4243-4356 covered w/25 sx cmt at 4397-4090; shot @2410, cmtd w/60 sx; shot @ 1665, cmtd w/60 sx; cut and pulled 4½" at 1179, cmt plug at 1179-979; 35 sx cmt plug at 420-320; 6 sx plug at surface.

Sun N.M. Fed. X #5, 1980/N 1980/E, Sec. 10-8S-33E; spud 7-19-67, compl 11-7-67; TD 4448, PBTD 4426; Elev 4390 GL = 4401 KB; 8-5/8" 24# J-55 csg @347 cmtd w/200 sx, circ; 4½" 9.5# J-55 csg @4447 cmtd w/ 200 sx, est top of cmt @3740; P&A 10-12-73; prod. pfs 4271-4358 covered w/CIBP @4248; 4½" shot @2396, cmtd w/50 sx; shot @1639, cmtd w/50 sx; cut and pulled 4½" at 1246, cmt plug at 1300-1150; 35 sx plug at 400-300; 6 sx plug at surface. This well was a SWDW under OCD order R-3406.

Sun N.M. Fed. X #4, 1980/S 660/W, Sec. 11-8S-33E; spud 7-27-67, compl 9-2-67; TD 4450, PBTD 4380; Elev 4390 KB; 8-5/8" 24# J-55 csg @365 cmtd w/200 sx, circ; 4½" 9.5# J-55 csg @4450 cmtd w/200 sx, est. top of cmt at 3750; P&A 10-5-73: prod pfs 4331-4422 covered w/25 sx cmt at 4380-4080; 4½" shot at 2393, cmtd w/50 sx; shot at 1648, cmtd w/50 sx; cut and pulled @1175, cmtd w/50 sx at 1238-1038; 35 sx cmt plug at 400-300; 6 sx plug at surface.

Santa Rita - Mary Ella #1, 330/N 990/W, Sec. 11-8S-33E; spud 1-23-81, compl 7-19-81; TD 4460, PBTD 4425; Elev 4372 Gl; 8-5/8" 24# J-55 csg @390 cmtd w/200 sx, circ; 4½" 9.5# J-55 csg @4460 cmtd w/1050 sx, est top of cmt at 200; P&A 4-15-85: prod pfs 4191-4276 covered w/CIBP @3989 w/30' cmt on top; 25 sx cmt plug at 1520-1250, 20 sx cmt plug at 458-218, 30 sx surface plug.

Enfield Hale #1, 330/N 1980/W, Sec. 11-8S-33E; spud 4-2-67, compl 5-15-67; TD 4365, PBTD 4353; Elev 4385 KB; 8-5/8" 24# J-55 csg @411 cmtd w/225 sx circ; 4½" 9.5# J-55 csg @365 cmtd w/350 sx, est top of cmt @3230; P&A 4-15-75: prod pfs 4242-4348 covered w/CIBP @4200 w/3 sx cmt on top; cut 4½" @987 and pulled, set 35 sx cmt plug at 987-887; 35 sx cmt plug at 457-357; 10 sx cmt plug at surface.

ARCO State BF #9, 990/S 660/E, Sec. 3-8S-33E; spud 11-19-66, compl 12-16-66; TD 4482, PBTD 4447; Elev 4394 KB; 8-5/8" 24# J-55 csg @377 cmtd w/250 sx, circ; 4½" 9.5# J-55 csg @4482 cmtd w/300 sx, est top of cmt @3250; prod pfs 4253-4351. This pumping well is actually 20 feet outside of the Review Area

Cont'd - Yates Petroleum Corporation - Sun UW Federal #2
Application for Salt Water Disposal - C-108 attachment

VII. Data on proposed operation.

1. The average daily injection rate will be 200 BWPD and maximum will be 600 BWPD.
2. The system will be closed.
3. The anticipated average injection pressure is 600 psi and the maximum would be about 1150 psi.
4. The injection fluid will be produced water primarily from other San Andres oil producers on this lease.
5. This injection system is for disposal of San Andres salt water produced from an oil zone of approximately similar age as the injection interval, but which is no longer capable of commercial oil production in the injection well. This is not a pressure maintenance system. A similar SWD system was permitted in May 1968 by NMOCC Order R-3406.

VIII. The injection zone is in the San Andres formation with perforations at 4058-4308, a fractured intercrystalline dolomite with an anhydrite cap. The underground source of drinking water in this area is the Ogallala Sands usually 3 to 6 feet thick and occurring at 250-300 feet from the surface.

IX. The injection interval in this well has already been acidized and sand fraced. No additional stimulation is planned.

X. Subject well has been a producer; well logs and test data were previously submitted to the NMOCD. Copy of log showing perforations is attached.

XI. There is only one fresh water well known to be within a mile radius of the proposed injector, and this well is located approximately 500 feet SSE of subject well. However, the well is not producing and is believed to have dried up.

XII. The applicant has examined all available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any under ground source of drinking water.

GEO Vann

Engineered Oil and Gas Well Completions

Gamma-Ray Neutron Log

FILING NO.

COMPANY: YATES PETROLEUM CORPORATION

WELL: SUN "UW" FEDERAL #2

FIELD: SAN ANDRES

COUNTY: CHAVES STATE: NEW MEXICO

LOCATION: 330' FEL & 1650' FNL

SEC 10 TWP 8-S RGE 33-E

OTHER SERVICES: GR-CBL(D. Curve)

PERMANENT DATUM: G L ELEV. 4367.6'

LOG MEASURED FROM: K B 8 FT ABOVE PERM DATUM

DRILLING MEASURED FROM: K B

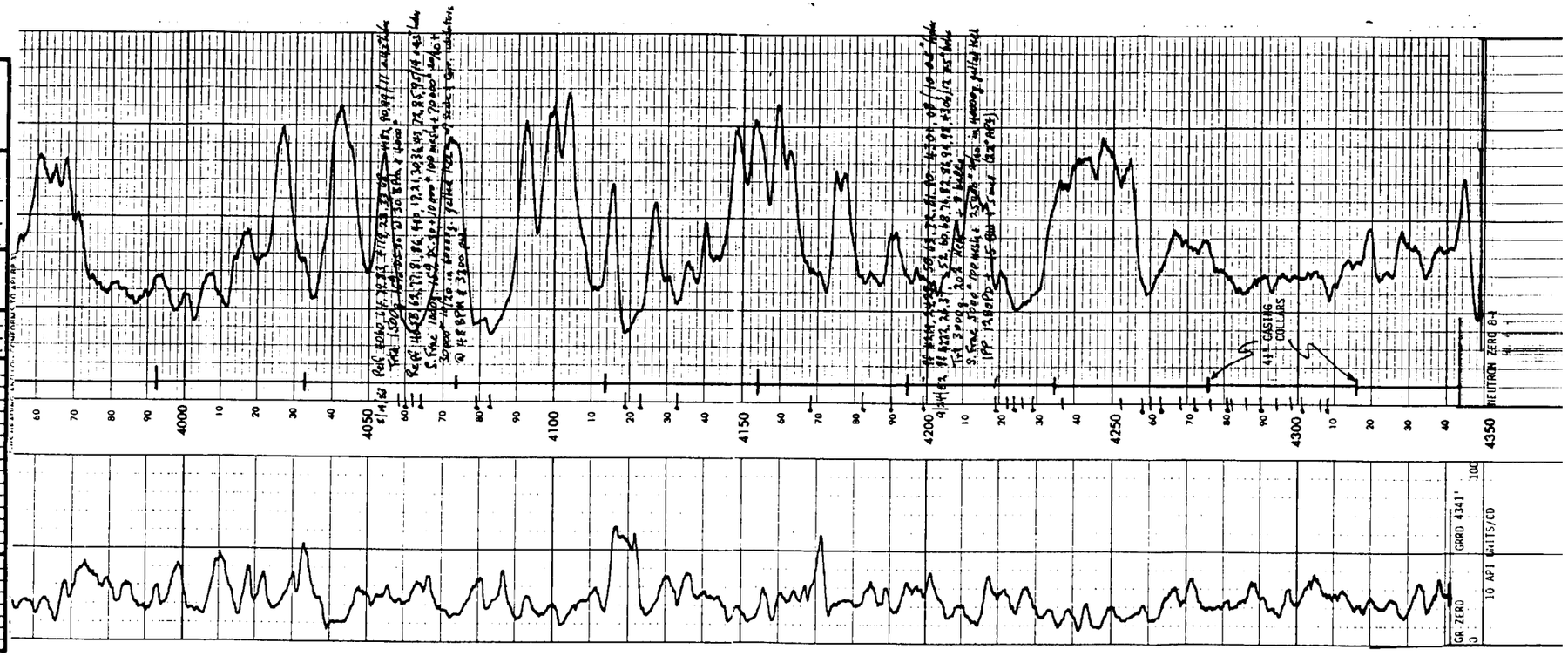
ELEV.: K B 4375.6'

D F -

G L 4367.6'

DATE	9/13/82		
RUN NO	ONE		
TYPE LOG	GAMMA RAY NEUTRON-CALIBRATED(IN CASING)		
DEPTH-DRILLER	4400'		
DEPTH-LOGGER	4350'		
BOTTOM LOGGED INTERVAL	4349'		
TOP LOGGED INTERVAL	2900'		
TYPE FLUID IN HOLE	WATER		
SALINITY, PPM CL	-		
DENSITY	-		
LEVEL	FULL		
MAX. REC. TEMP. DEG. F	-		
OPERATING RIG TIME	1 HOUR		
RECORDED BY	V. GALLOWAY		
WITNESSED BY	MR. MA-FOOD		

RUN NO.	BIT	BORE-HOLE RECORD FROM	TO	CASING RECORD SIZE	WGT	FROM	TO
				11"	9.5#	SURF.	PBTD

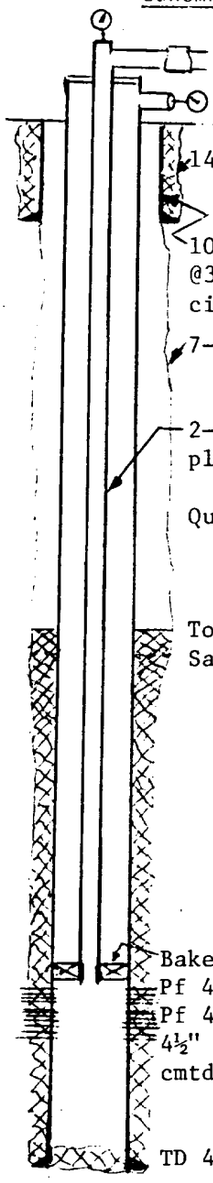


INJECTION WELL DATA SHEET

OPERATOR	LEASE			
Yates Petroleum Corporation	Sun "UW" Federal			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
2	1650 FNL & 330 FEL	10	8S	33E

Chaves County, New Mexico

Schematic



Tabular Data

Surface Casing

Size 10.75" Cemented with 300 sx.

TOC surface feet determined by cmt circulated

Hole size 14-3/4" to 385'

Intermediate Casing

Size _____" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 4½" Cemented with 225 sx.

TOC 3425 feet determined by CBL

Hole size 7-7/8"

Total depth 4397 - PBTD 4350

Injection interval

4058 feet to 4308 feet

(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with plasticoat (material) set in a

Baker Model AD-1 (or equiv.) Tension (brand and model) packer at ±4010 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres (Slaughter)

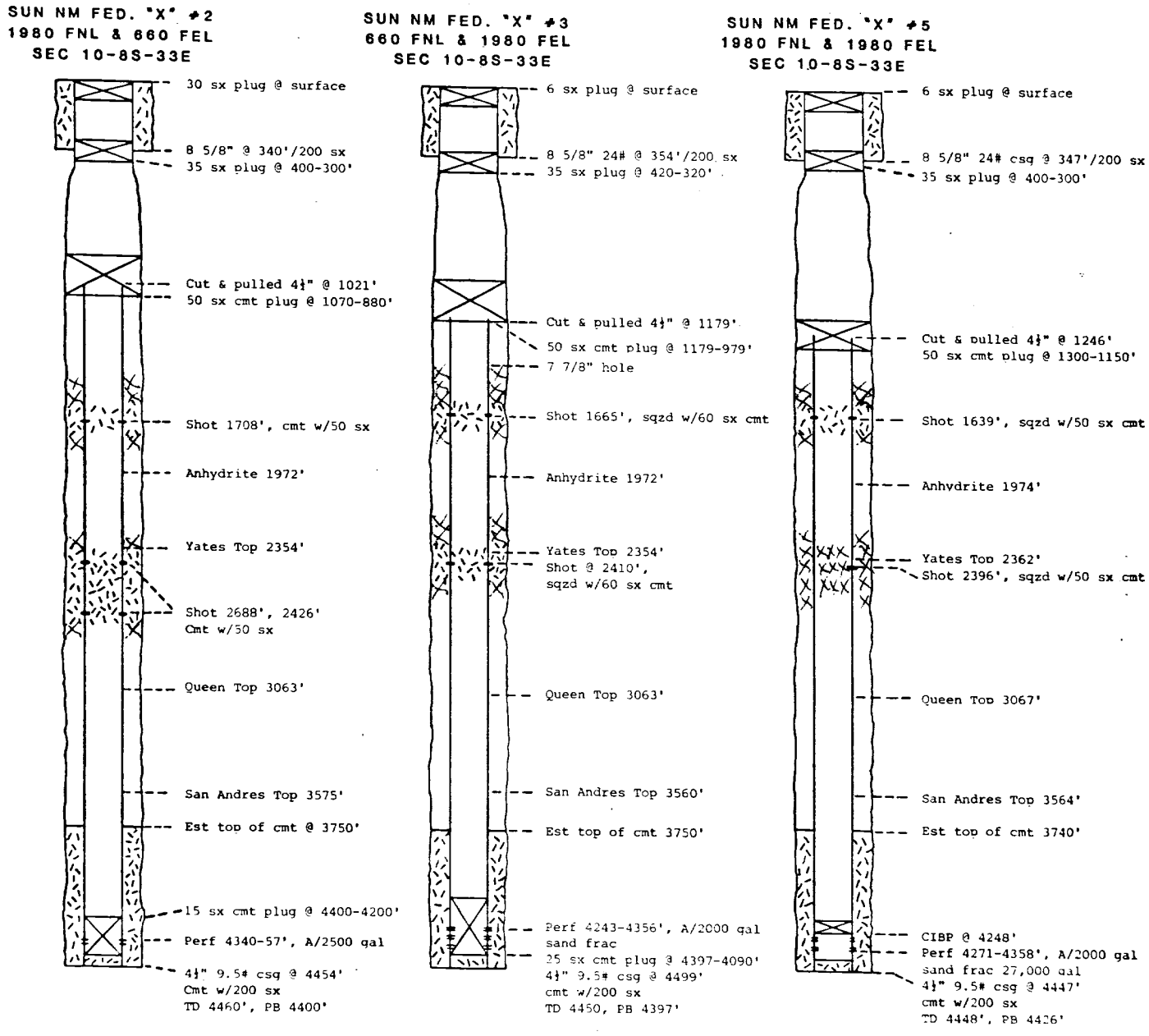
2. Name of Field or Pool (if applicable) Chaveroo S.A.

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

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

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

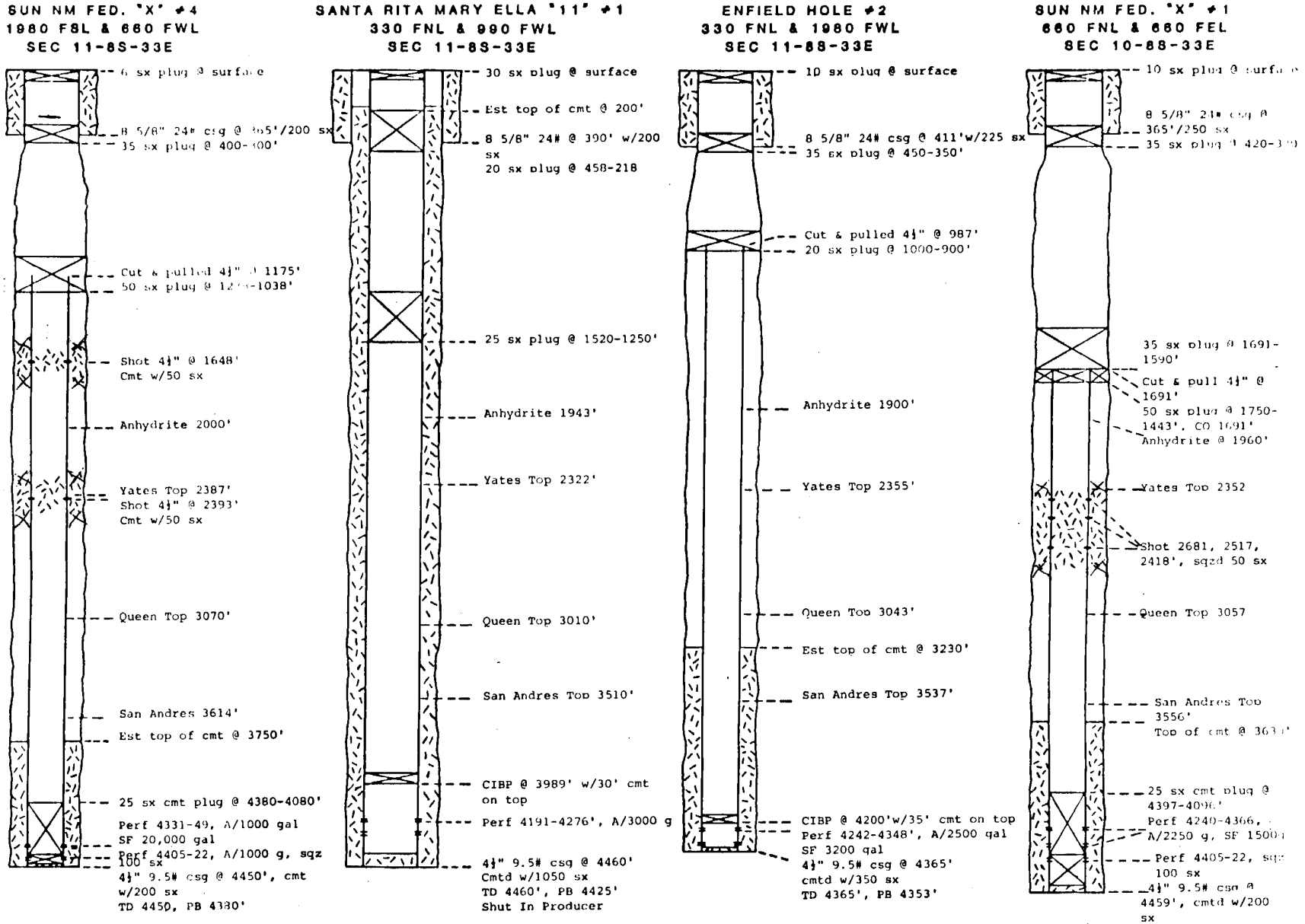
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. No known overlying oil or gas zones. The underlying oil or gas zone would be Tobac Penn at about 8950'.



APPLICATION FOR SALT WATER DISPOSAL

YATES PETROLEUM CORP.

SUN "UW" FED. #2



APPLICATION FOR SALT WATER DISPOSAL

YATES PETROLEUM CORP.

SUN "UW" FED. #2

AFFIDAVIT OF PUBLICATION

County of Chaves
State of New Mexico, }

I, R.M. Higginbotham,

manager

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

of one

day weeks

beginning with the issue dated

March 26, 19 86

and ending with the issue dated

March 26, 19 86

R.M. Higginbotham
Manager

Sworn and subscribed to before me

this 26th day of

March, 19 86

Notary Public

My commission expires

, 19

(Seal)

Publish March 26, 1986

LEGAL NOTICE

Pursuant to the New Mexico Oil Conservation Division regulations governing the injection of fluids into a formation, NOTICE is hereby given that YATES PETROLEUM CORPORATION, 207 South 4th Street, Artesia, New Mexico 88210 (505) 748-1331, Eddie Mahfood, contact party, proposed to utilize its Sun UW Federal No. 2 well for the disposal of produced waters into the Slaughter zones of the San Andres formations thru perforations 4058-4308. Subject well is located 1650 FNL and 330 FEL of Section 10, T8S, R33E, in Chaves County, New Mexico. The proposed maximum injection rate is 600 BPD and the proposed maximum injection pressure is 1150 psig.

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.

Published in the Roswell Daily Record, Roswell, New Mexico, the Chaves County publication, March 26, 1986.

YATES PETROLEUM CORPORATION

207 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1331

April 1, 1986

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Bureau of Land Management
ATT: Area Manager
Drawer 1857, Roswell, NM 88201

ARCO - Permian District Office
ATT: Land Manager
P. O. Box 1610, Midland, TX 79702

Union Oil Co.
ATT: Linda Hicks, Landman
P.O. Box 671, Midland, TX 79702

Kerr-McGee Corp
ATT: Land Manager
P.O. Box 25861
Oklahoma City, OK 73125

Mr. Charles E. Seed
Huston Ranch, Lovington Hwy.
Hobbs, NM 88240

J. D. Gilmer
P.O. Box 11402
Midland, TX 79702

Gentlemen:

Yates Petroleum is making application to the Oil Conservation Division for permission to dispose of produced water from its Sun "UW" Federal No. 3 well in the NE/4 of Section 10, T8S, R33E, Chaves County, said water to be returned to the source formation on the same lease in its Sun "UW" Federal No. 2 well. You are advised of this intent as provided for under NMOCD Rule 701b.

As surface owner, or offset operator, you have fifteen (15) days from receipt of this notice to file objections with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501

Yours truly,

YATES PETROLEUM CORPORATION

Eddie M. Mahfood
Senior Engineer

EMM:jg
Encls.