

MARTIN YATES, III
1912 - 1985
FRANK W. YATES
1936 - 1986



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

5.8.95
672
S. P. YATES
CHAIRMAN OF THE BOARD
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EXECUTIVE VICE PRESIDENT
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DENNIS G. KINSEY
TREASURER

April 11, 1995

CERTIFIED RETURN RECEIPT

New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87501

Gentlemen:

Enclosed please find two copies of form C-108 (Application for Authority to Inject) for the following Yates Petroleum wells in Lea County, New Mexico:

Sanmal Queen Unit #2	L 1-17S-33E	1500'FSL & 990'FWL
Sanmal Queen Unit #3	K 1-17S-33E	1900'FSL & 2310'FWL

These wells are part of the approved Sanmal Queen Unit and will be converted as additional injectors.

Should you have any questions, please feel free to contact me at (505) 748-1471.

Sincerely,

Theresa Sloan
Petroleum Engineer

TS/cvg

Enclosures

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: 105 South 4th Street Artesia, NM 88210
Contact party: Theresa Sloan Phone: (505) 748-1471
- 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-9961
- 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: Theresa Sloan Title Petroleum Engineer
Signature: Theresa Sloan Date: 4/20/95
- * 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. July 14, 1993 C-108 Attached

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.

C-108
Application for Authorization to Inject
Yates Petroleum Corporation
Lea County, New Mexico

- I The purpose of this application is to request administrative approval to inject Queen produced water and Ogallala fresh water into the Queen formation into the following wells within the approved Sanmal Queen Unit as additional injectors.

Sanmal Queen Unit #2
L 1-17S-33E
1500' FSL & 990' FWL

Sanmal Queen Unit #3
K 1-17S-33E
1900' FSL & 2310' FWL

- II Operator: Yates Petroleum Corporation
105 South 4th Street
Artesia, New Mexico 88210
Theresa Sloan (505) 748-1471
- III Well Data: (See Attachment A)
- IV This is an expansion of the existing Sanmal Queen Unit Waterflood. Two producing wells will be converted to injection. The Sanmal Queen Unit waterflood was approved on September 10, 1993 by Division Order No. R-9961. - Case No. 10794.
- V See attached maps, Attachment B.
- VI All well information on wells within area of review of both proposed injectors has been previously submitted on the C-108 for the original project as approved in Division Order No. R-9961, Case No. 10794. A copy of the original C-108 (07/14/93) is attached. One additional well is in the area of review as shown on Attachment C.
- VII All data listed in attached original C-108.
- VIII
1. The proposed injection interval is the Queen formation at approximately 3745' - 3764'. These sands were deposited in a supratidal environment.
 2. Fresh water in the Ogallala overlies the Queen to depths of approximately 450'.
- IX See original C-108 attached.
- X See Original C-108 attached.
- XI See original C-108 attached.
- XII Not applicable.

C-108

*Application for Aughorization to Inject
Sanmal Queen Unit #2, and #3*

XIII Proof of Notice

- A. Certified letters sent to the surface owner and offset operators are attached.
(Attachment D)
- B. Copy of legal advertisement. (Attachment E).

XIV Certification is signed.

Yates Petroleum Corporation
Attachment A (Page 1) (C-108)
Sanmal Queen Unit
Injection Well Data
Sanmal Queen Field

Lease Name	Casing Strings, Tubing, Packer, Well Work			Injection Formation	Injection Interval (Perfs)	1 - Next higher (shallower) oil/g 2 - Next lower (deeper) oil/gas z
Location	Present	Proposed				
Sanmal Queen Unit #2 L 1-17S-33E 1500' FSL & 990' FWL	8-5/8" 24# J-55 @ 1520' w/775 sx (circ)	2-7/8" plastic coated tubing	Queen	3752 - 3764	1 - Seven Rivers	
	5-1/2" 15.5# J-55 @ 4750' w/700 sx (TOC - 2700' CBL)	5-1/2" nickel plated packer			2 - Grayburg	
	2-7/8" tubing					
	TD - 4750' PBTD - 4692' Drilled as Development Oil Well					
Sanmal Queen Unit #3 K 1-17S-33E 1900' FSL & 2310' FWL	8-5/8" 24# J-55 @ 1515' w/775 sx (circ)	2-7/8" plastic coated tubing	Queen	3745 - 3762	1 - Seven Rivers	
	5-1/2" 15.5# J-55 @ 3900' w/325 sx (TOC - 1800' CBL)	5-1/2" nickel plated packer			2 - Grayburg	
	2-7/8" tubing					
	TD - 3900' PBTD - 3840' Drilled as Development Oil Well					

PROPOSED INJECTION WELLS

SANMAL QUEEN UNIT #2

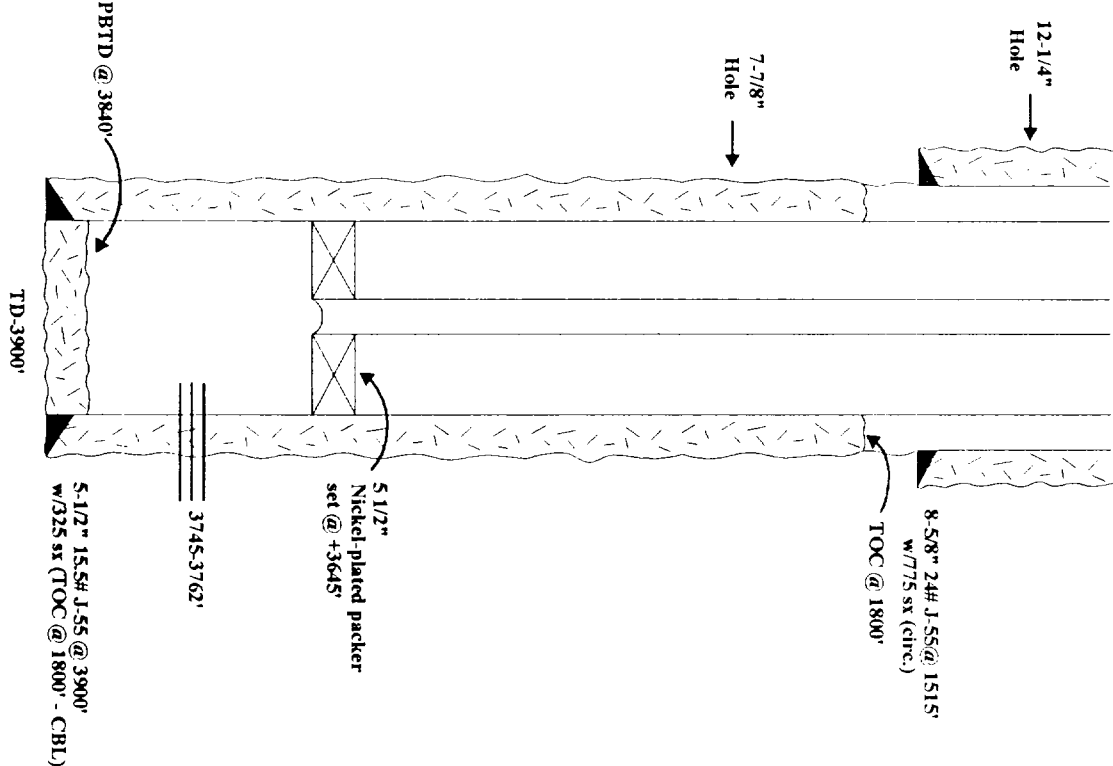
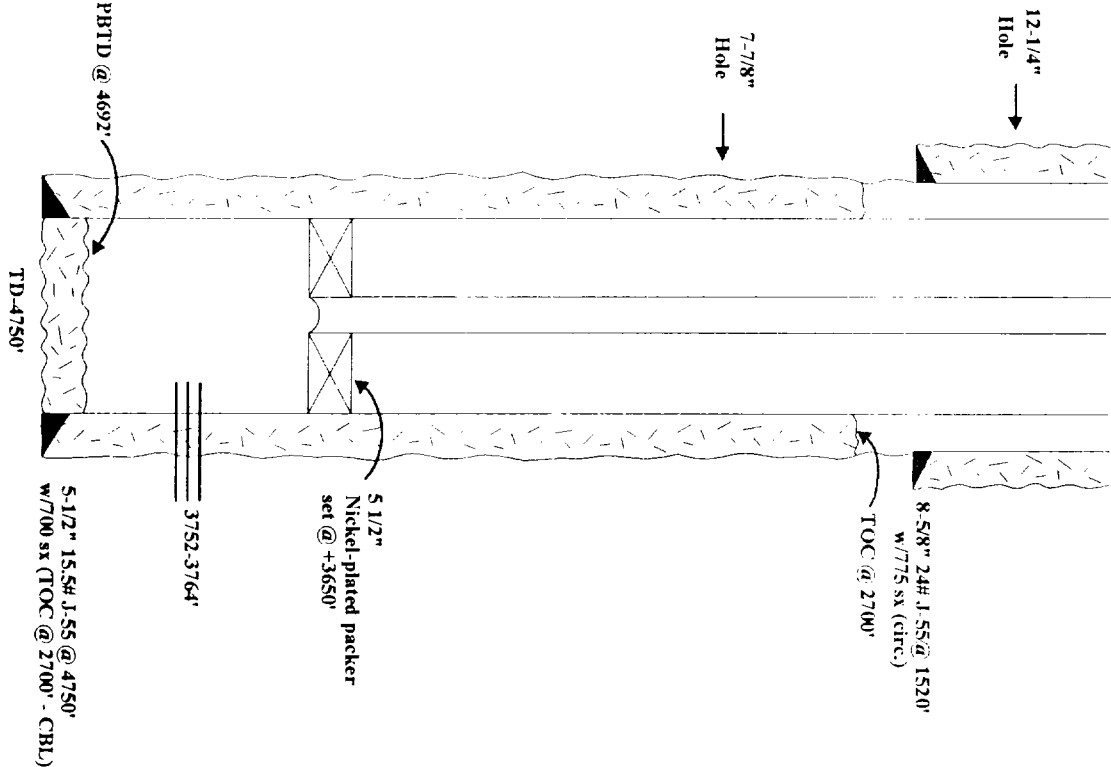
L 1-17S-33E

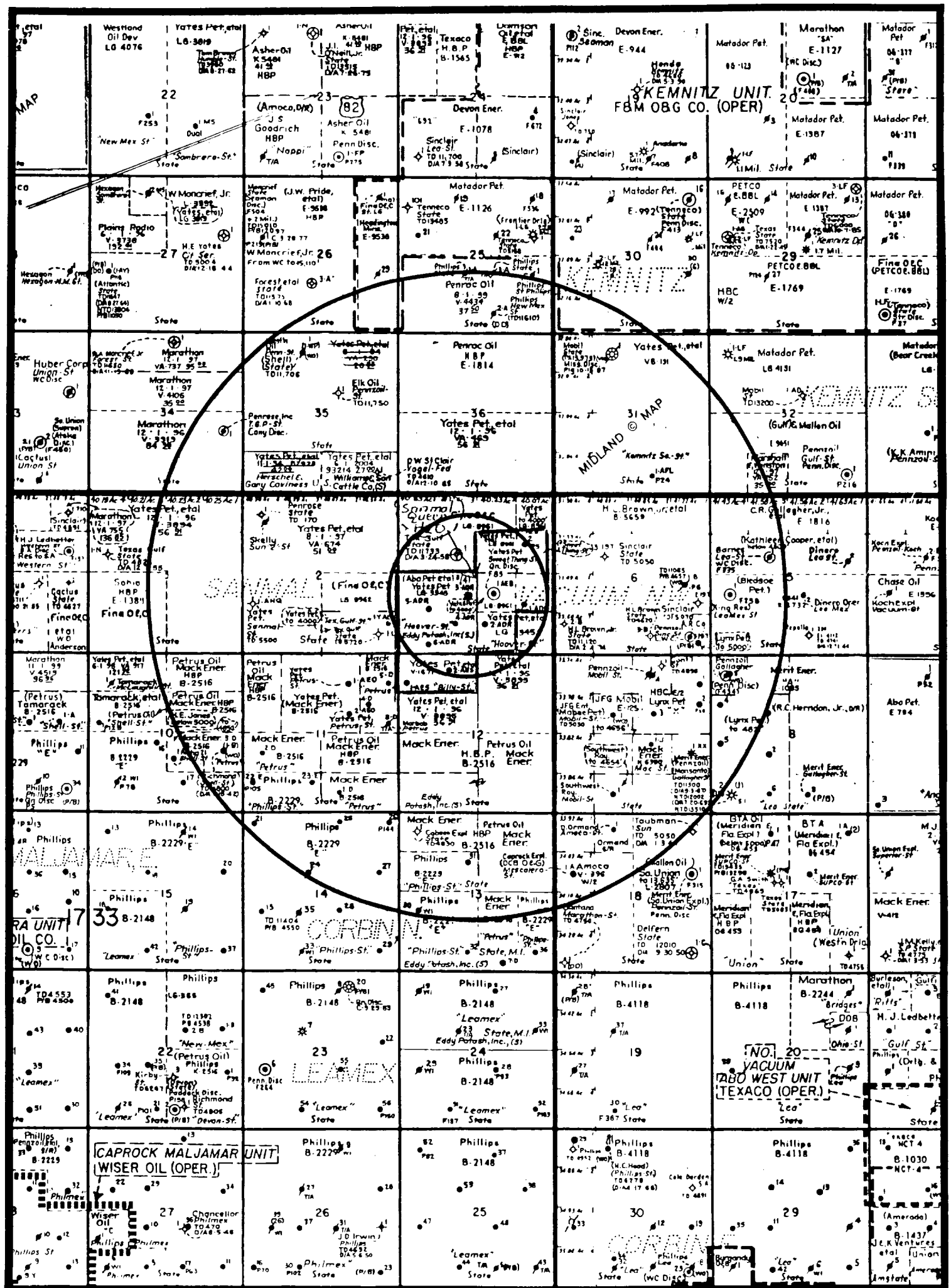
1500' FSL & 990' FWL

SANMAL QUEEN UNIT #3

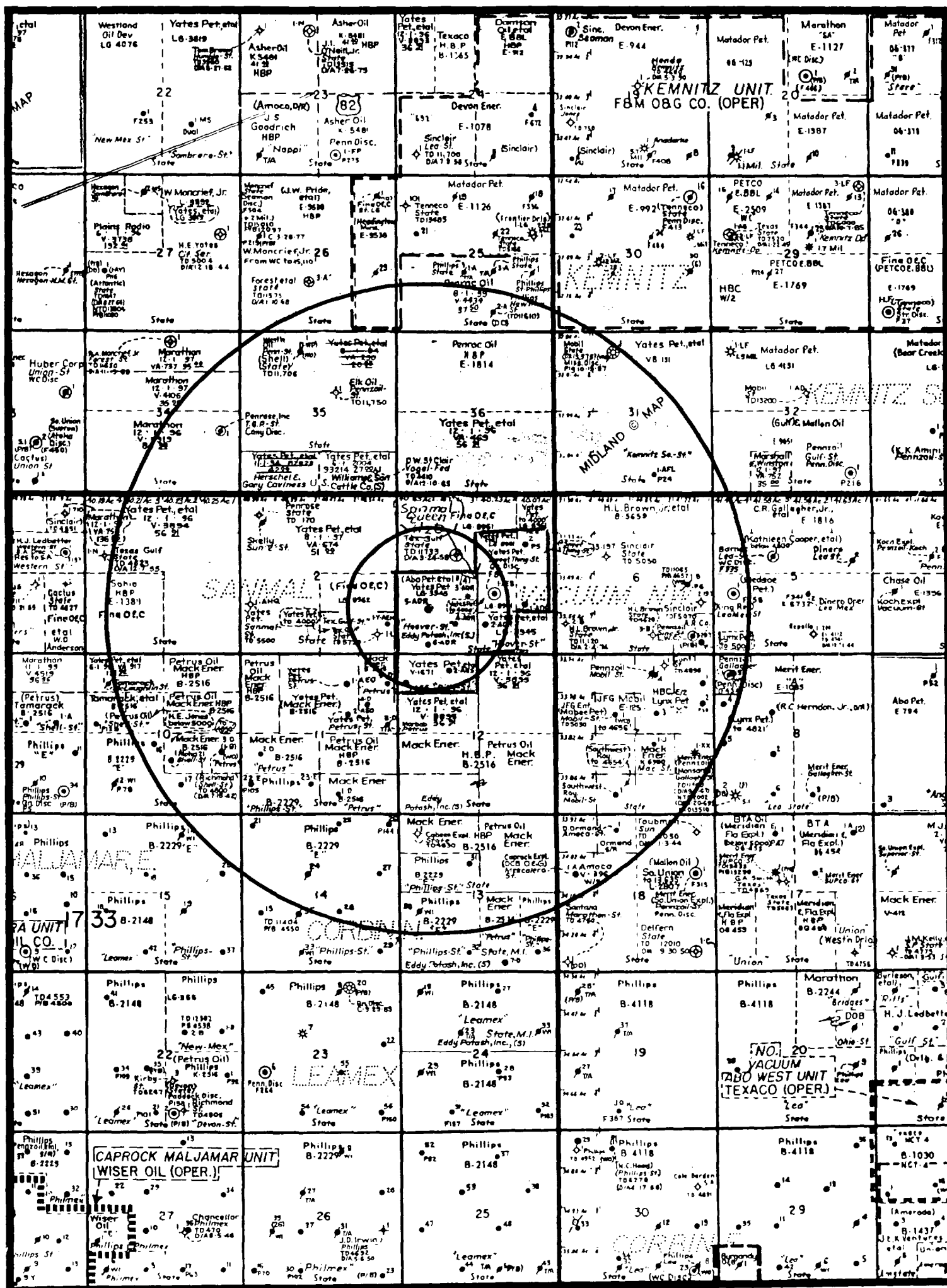
K 1-17S-33E

1900' FSL & 2310' FWL





Yates Petroleum Corporation
Proposed Injection Well
Sanmal Queen Unit #3
(Previously - Hoover ADR State #3)
K 1-17S-33E
1900' FSL & 2310' FWL
Lea County, New Mexico



Yates Petroleum Corporation
 Proposed Injection Well
 Sanmal Queen Unit #2
 (Previously - Hoover ADR State #5)
 L 1-17S-33E
 1500' FSL & 990' FWL
 Lea County, New Mexico

Yates Petroleum Corporation
Attachment C (C-108)
Sanmal Queen Unit
Well Data Information
Sanmal Queen Field

<u>Well Name</u>	<u>Operator</u>	<u>Type</u>	<u>Spud Date</u>	<u>Completion Date</u>	<u>Total Depth</u>	<u>Producing Zone</u>	<u>Perforations</u>	<u>Completion Information</u>
Sanmal Queen Unit #1	YPC	Oil	10/13/86	03/15/87	3900'	Queen	3742' - 3752'	8-5/8" 24# J-55 @ 1552' w/720 sx (circ) 5-1/2" 15.5# J-55 @ 3900' w/600 sx (TOC-2424' CBL)

ATTACHMENT D

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April 11, 1995

CERTIFIED RETURN RECEIPT

Eddy Potash Incorporated
P. O. Box 31
Carlsbad, New Mexico 88220

Gentlemen:

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Sincerely,

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Petroleum Engineer

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Mack Energy Corporation
P. O. Box 960
Artesia, New Mexico 88211-0960

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Fina Oil & Chemical Company
P. O. Box 2990
6 Desta Drive
Suite 4400
Midland, Texas 79702

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Commissioner of Public Lands
State Land Office
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

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