

APPLICATION FOR AUTHORIZATION TO INJECT

Case 11161

- 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, New Mexico 88210
Contact party: Pinson McWhorter 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 _____.
- 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
- * X. Attach appropriate data with the Division
- * XI. Attach a check of available and location of
- XII. Applicants must be examined and approved or any other source of data
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification

**BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico**

1 logs have been filed

sh water wells (if
disposal well showing

it that they have
evidence of open faults
and any underground

Submitted by: Yates Petroleum Corporation

Hearing Date: December 15, 1994

Name: Pinson McWhorter Title Reservoir Engineer

Signature: *Pinson McWhorter* Date: November 18, 1994

- * 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.

C-108

**Application for Authorization To Inject
Yates Petroleum Corporation
Eddy County, New Mexico**

current producing well

**Hillview AHE Fed Com #2
G 23-20S-24E**

**Hillview AHE Fed Com #6
B 23-20S-24E**

**Saguaro AGS Fed Com #8
O 14-20S-24E**

- I. The purpose of these wells will be to reinject produced Canyon waters into the Canyon formation as part of a pressure maintenance project in Dagger Draw South (Upper Penn)
- II. Operator: Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Pinson McWhorter
(505) 748-1471
- III. Well Data: See Attachment A
- IV. This is not an expansion of an existing project.
- V. See attached map, Attachment B.
- VI. Area of Review Well Data: See Attachment C
- VII. 1. The proposed average daily injection volume will be approximately 12000 BWPD.
This would be approximately 4000 BWPD per injection well.

The maximum daily injection volume is estimated to be 15000 BWPD.
This would be 5000 BWPD per injection well.

2. The system will be a closed system.
3. The proposed average injection pressure is estimated to be 1000 psi.

The proposed maximum injection pressure is estimated to be 1600 psi.
4. The source of injection water will be the produced Canyon water from Dagger Draw South (Upper Penn).

- VIII. 1. The Canyon Upper Penn is a fine to coarse crystalline dolomite with vugular and intercrystalline porosity. The log depth of this dolomite is approximately 7560' and has an average thickness of 250'.
2. The known fresh water zone is the San Andres aquifer located from the surface to 900 feet below the surface.

There are no underlying fresh water aquifers.

- IX. The proposed injection interval may be acidized with 20,000 gallons of 20% HCL acid.
- X. Well logs have been previously submitted to the NMOCD. Please note that the Hillview AHE Fed Com #2 was originally named the Penny Federal Com #2 and was operated by Conoco, Inc.
- XI. One fresh water well was located within one mile by the proposed injection wells. A chemical analysis of the fresh water is given in Attachment D. The location of the well and sampling date is also shown on the attachment.
- XII. Yates Petroleum has examined available geologic and engineering data and has found no evidence of open faults or other hydrologic connection between the injection zone and any underground source of drinking water.
- XIII. Proof of Notice

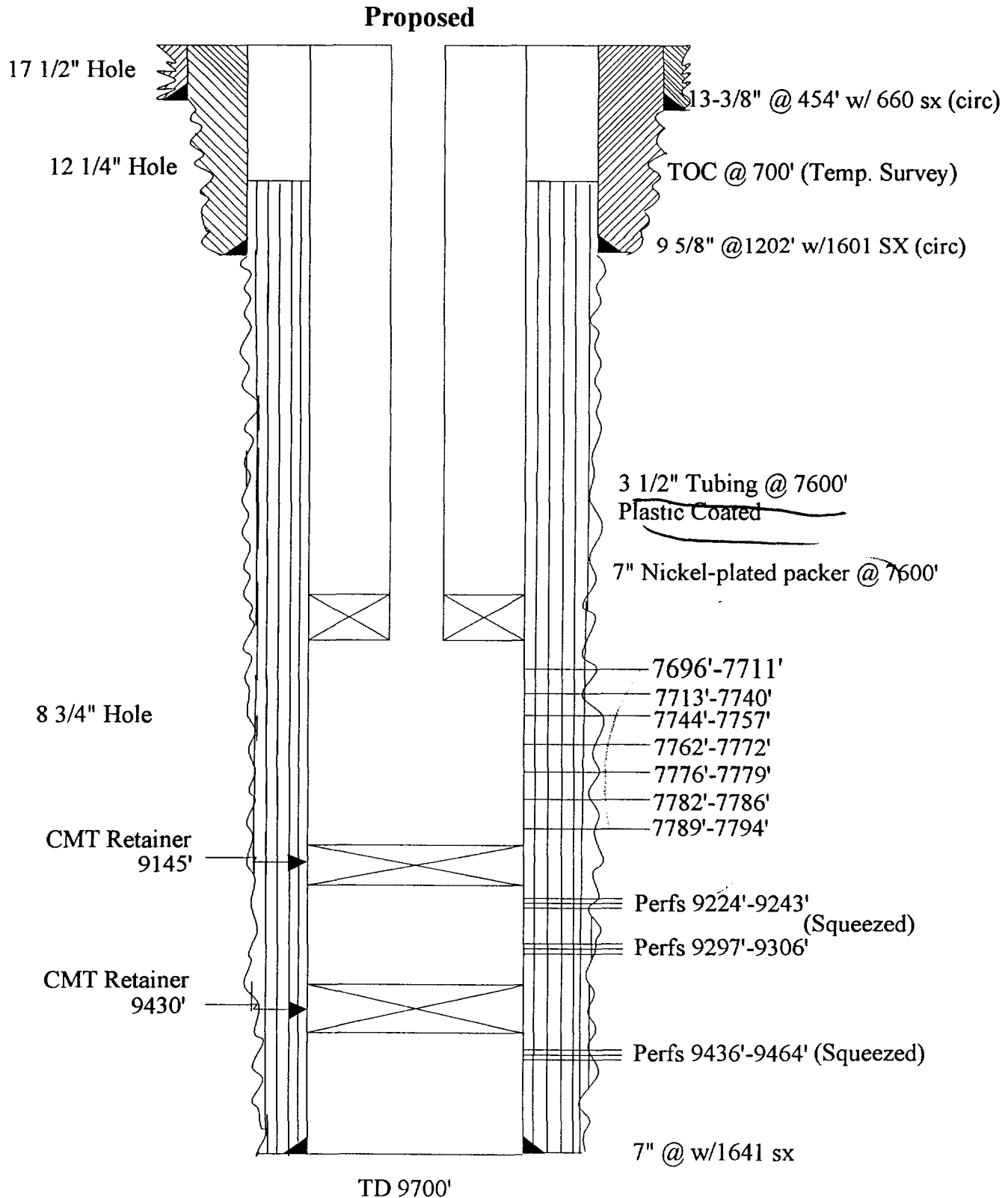
Certified letters sent to the surface owners and offset operators are attached (Attachment E).

7550
157 0.0

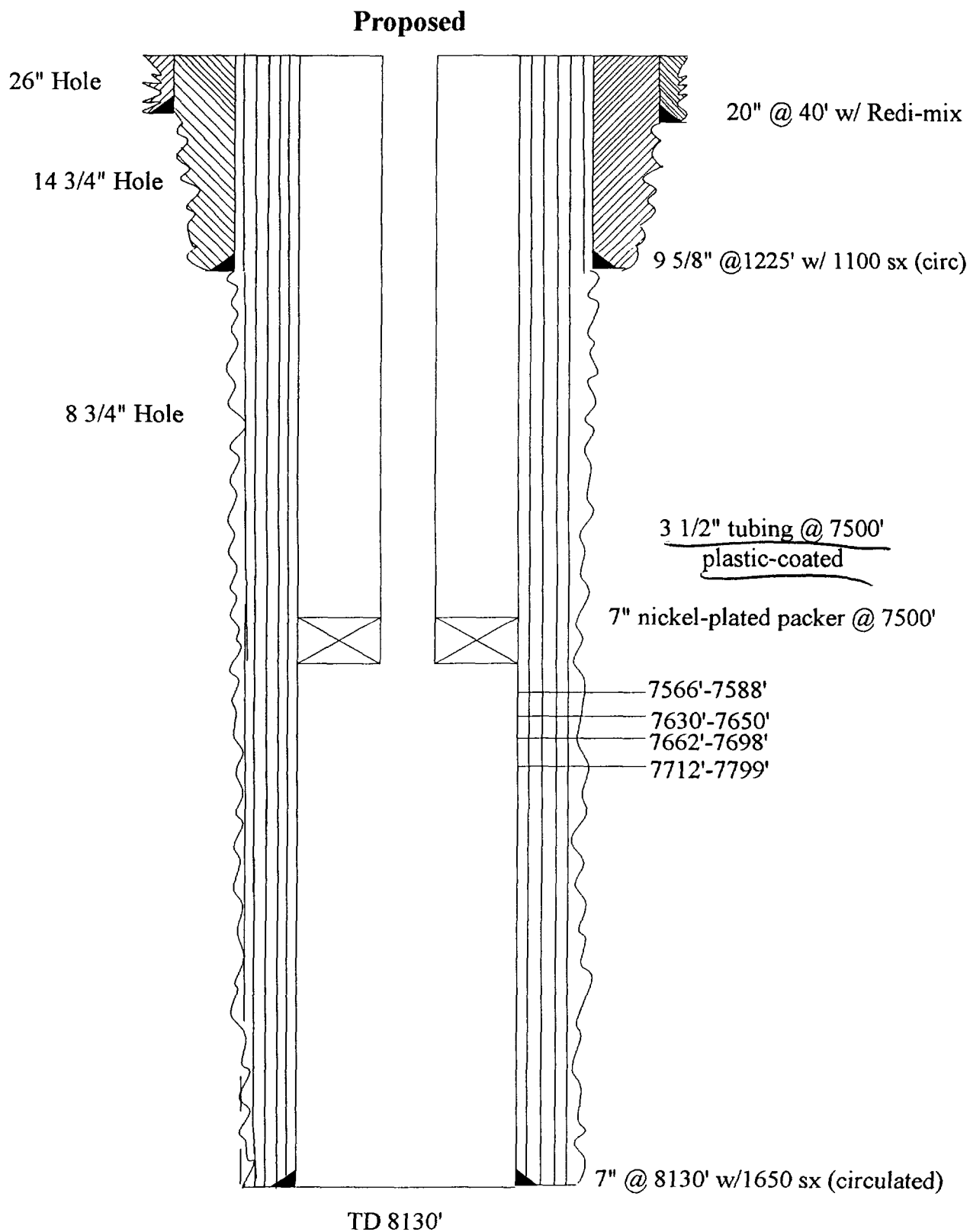
ATTACHMENT A

DAGGER DRAW SOUTH - PRESSURE MAINTENANCE PILOT Form C-106 Well Data						
LEASE NAME & LOCATION	CASING, TUBING & PACKER DATA	INJECTION FORMATION	INJECTION INTERVAL PERFORATIONS	1 - NEXT HIGHER OIL/GAS ZONE 2 - NEXT LOWER OIL/GAS ZONE		OTHER PERFORATED INTERVALS
Hill View AHE Federal Com #2 Unit G Sec 23-20S-24E 1650' FNL & 1780' FEL (Originally Morrow Gas Test)	13-3/8" @ 454' w/660 sx (circulated) 17-1/2" hole 9-5/8" @ 1202' w/1601 sx (circulated) 12-1/4" hole 7" @ 9700' w/1641 sx TOC @ 700' (Temp survey) 8-3/4" hole 3-1/2" tubing @ 7600' (plastic coated) 7" Nickel-plated packer @ 7600'	Canyon Dagger Draw South (Upper Penn)	7696' - 7711' 7713' - 7740' 7744' - 7751' 7762' - 7772' 7776' - 7779' 7782' - 7786' 7789' - 7794'	1 - Wolfcamp 2 - Strawn		9224' - 9243' squeezed w/60 sx 9297' - 9306' Class H Cement Cement Retainer @ 9145' 9436' - 9464' squeezed w/50 sx Class H Cement Cement Retainer @ 9430'
Hill View AHE Federal Com #6 Unit B Sec 23-20S-24E 660' FNL & 1980' FEL (Originally Oil Well)	20" @ 40' w/Redimix 26" hole 9-5/8" @ 1225' w/1100 sx (circulated) 14-3/4" hole 7" @ 8130' w/1650 sx (circulated) 8-3/4" hole 3-1/2" tubing @ 7500' (plastic coated) 7" Nickel-plated packer @ 7500'	Canyon Dagger Draw South (Upper Penn)	7566' - 7588' 7630' - 7650' 7662' - 7698' 7712' - 7799'	1 - Wolfcamp 2 - Strawn		None
Saguaro AGS Federal Com #8 Unit O Sec 14-20S-24E 660' FSL & 1980' FEL (Originally Oil Well)	20" @ 40' w/Redimix 26" hole 9-5/8" @ 1088' w/1100 sx (circulated) 14-3/4" hole 7" @ 8120' w/2130 sx (circulated) 8-3/4" hole 3-1/2" tubing @ 7590' (plastic coated) 7" Nickel-plated packer @ 7590'	Canyon Dagger Draw South (Upper Penn)	7624' - 7650' 7672' - 7696' 7704' - 7722' 7740' - 7748'	1 - Wolfcamp 2 - Strawn		None

Hillview AHE Fed Com #2
G 23-20S-24E
1650' FNL & 1780' FEL

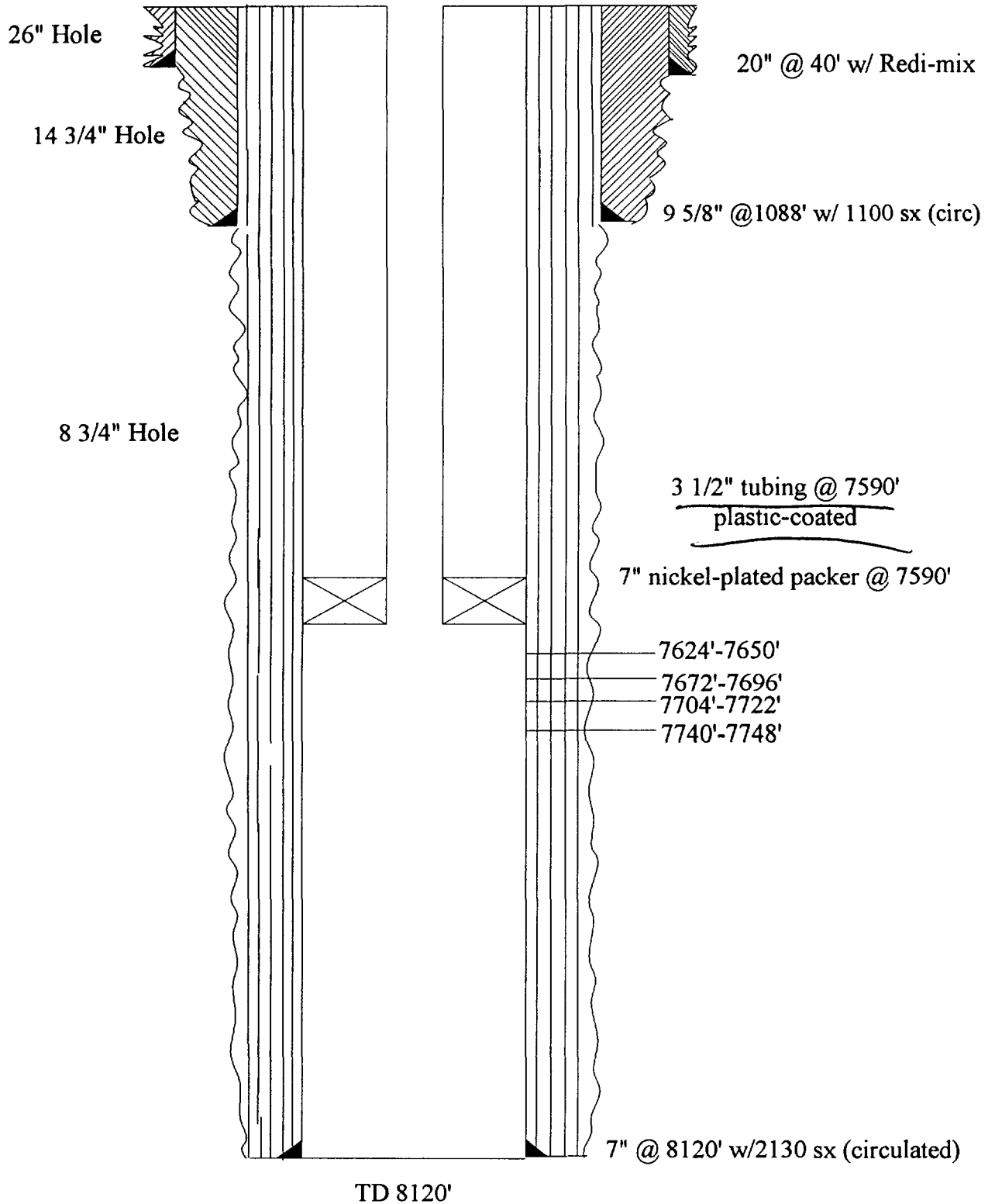


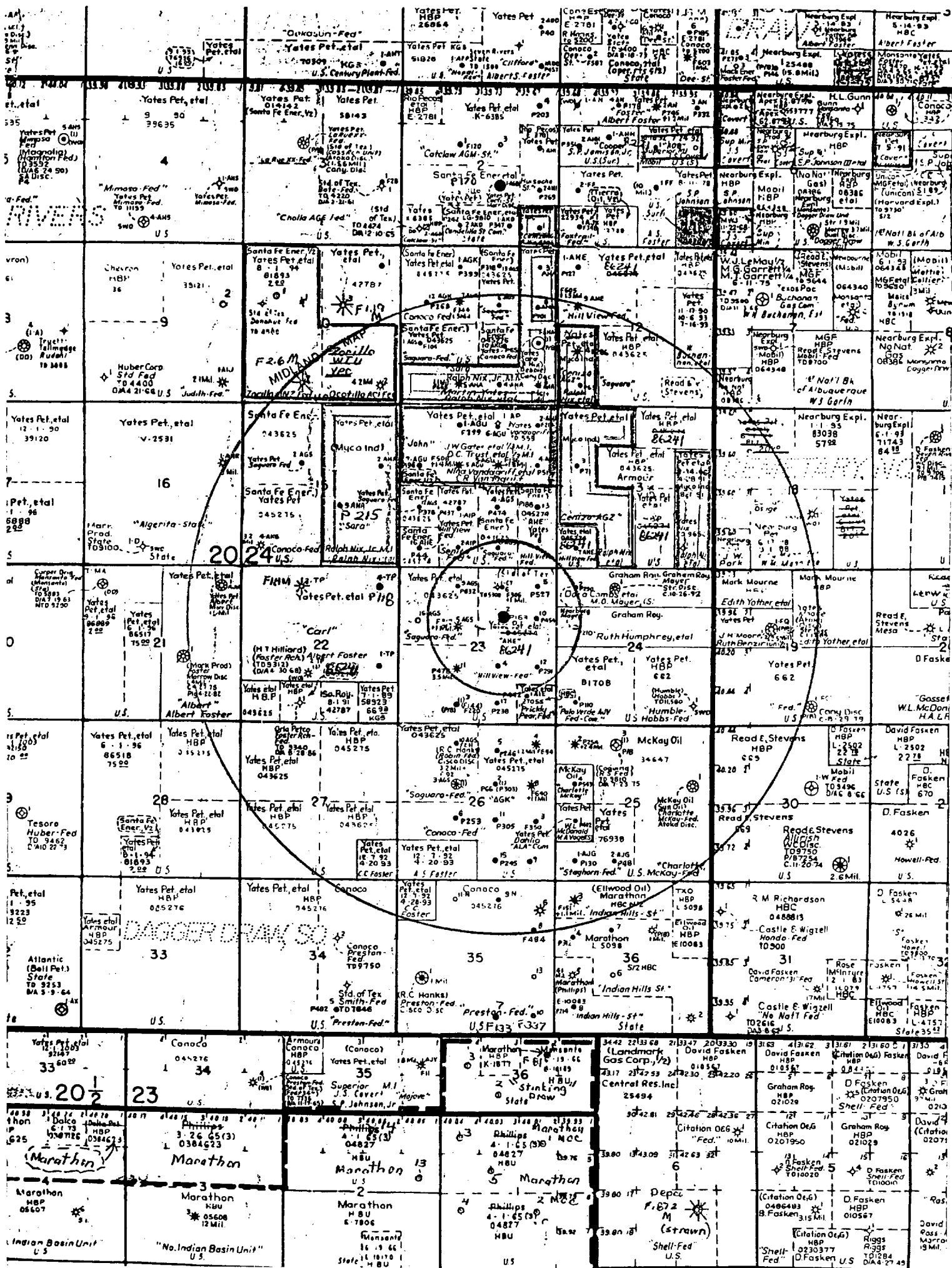
Hillview AHE Fed Com #6
B 23-20S-24E
660' FNL & 1980' FEL



Saguaro AGS Fed Com #8
O 14-20S-24E
660' FSL & 1980' FEL

Proposed

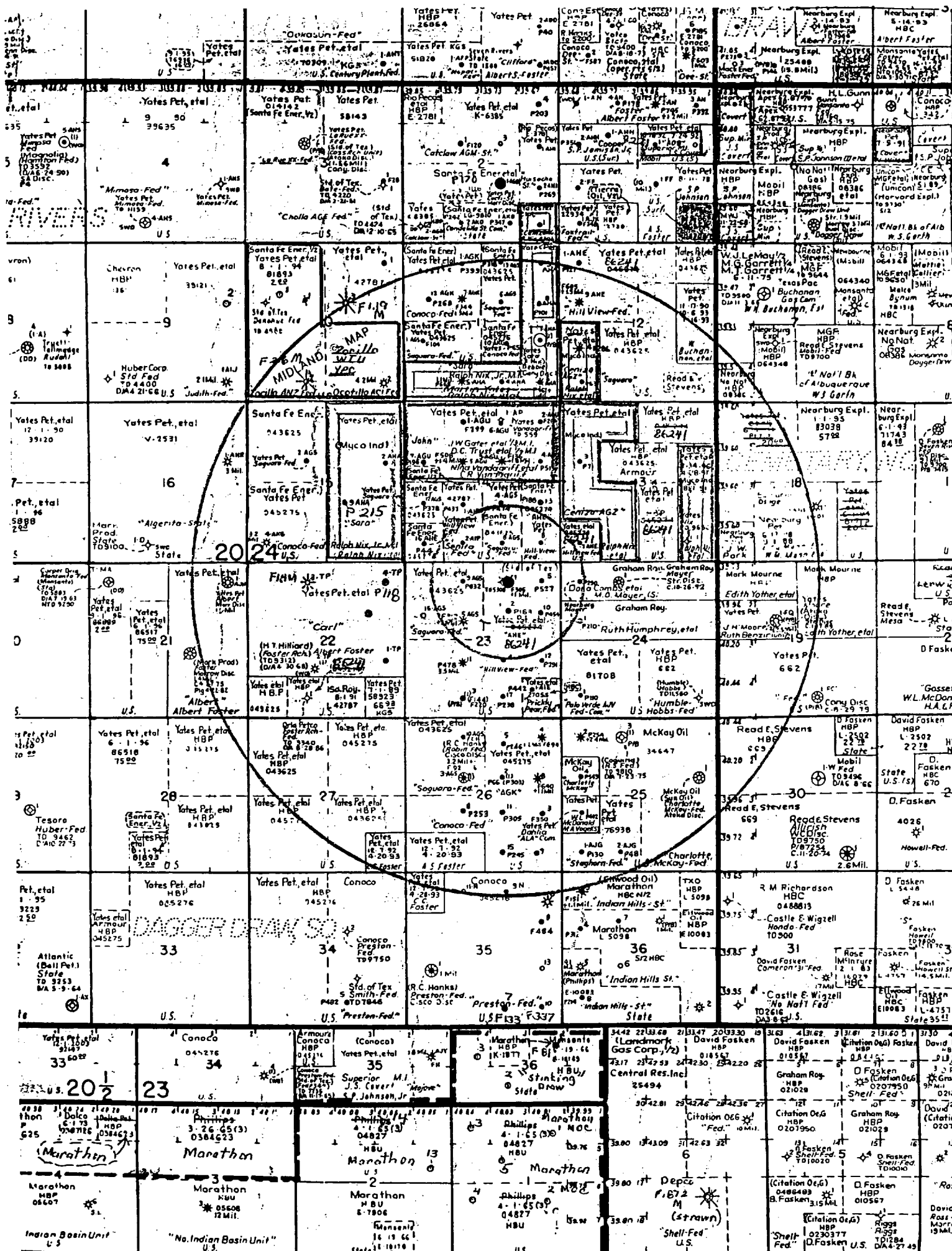




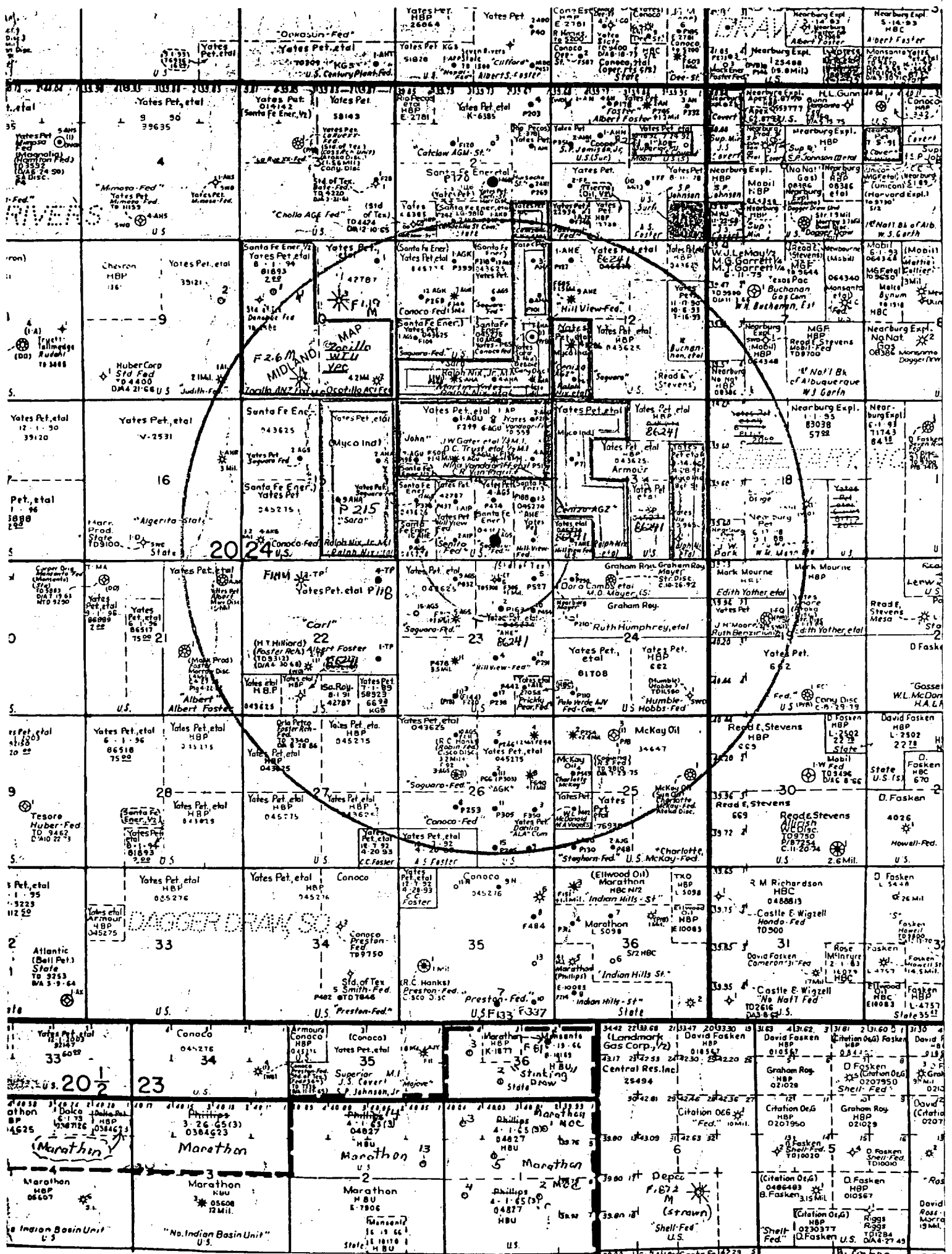
Yates Petroleum Corporation
Proposed Injection Well
Hillview AHE Fed. Com. #2
G Sec.23 T20S-R24E
1650' FNL & 1780' FEL
Eddy County, New Mexico

ATTACHMENT B

Page 1



Yates Petroleum Corporation
Proposed Injection Well
Hillview AHE Fed. Com. #6
B Sec.23 T20S-R24E
660' FNL & 1980' FEL
Eddy County, New Mexico



Yates Petroleum Corporation
Proposed Injection Well
Saguaro AGS Fed. Com. #8
O Sec.14 T20S-R24E
660' FSL & 1980' FEL
Eddy County, New Mexico

ATTACHMENT B

DAGGER DRAW SOUTH - PRESSURE MAINTENANCE PILOT

Form C-108
Tabulation of Data on Wells Within Area of Review

WELL NAME	OPERATOR	TYPE	SPUD	COMPLETED	TOTAL DEPTH	PRODUCING ZONE	PERFORATIONS	CASING & CEMENTING INFORMATION
Hill View AHE Federal #10 1730' FNL & 660' FEL Unit H Sec 23-20S-24E	Yates Petroleum Corporation	Oil	06/17/91	07/30/91	8160'	Canyon	7628-7779'	20" @ 40' w/Redi-Mix 9-5/8" @ 1217' w/1350 sx (circulated) 7" @ 8160' w/1875 sx (circulated)
Hill View AHE Federal Com #5 660' FNL & 660' FEL Unit A Sec 23-20S-24E	Yates Petroleum Corporation	Oil	03/03/91	04/23/91	8200'	Canyon	7582-7798'	20" @ 40' w/Redi-Mix 9-5/8" @ 1210' w/1100 sx (circulated) 7" @ 8200' w/1675 sx (circulated)
Hill View AHE Federal Com #4 1980' FSL & 1980' FEL Unit J Sec 23-20S-24E	Yates Petroleum Corporation	Oil	05/30/90	08/31/90	8120'	Canyon	7635-7763'	20" @ 40' w/Redi-Mix 9-5/8" @ 1220' w/1100sx (circulated) 7" @ 8120' w/1550 sx (circulated)
Hill View AHE Federal #11 1830' FSL & 1980' FWL Unit K Sec 23-20S-24E	Yates Petroleum Corporation	Oil	08/26/91	09/26/91	8100'	Canyon	7658-7770'	20" @ 40' w/Redi-Mix 9-5/8" @ 1220' w/1100 sx (circulated) 7" @ 8100' w/1300 sx (circulated)
Hill View AHE Federal Com #17 710' FSL & 1980' FEL Unit O Sec 23-20S-24E	Yates Petroleum Corporation	Oil	03/08/93	05/29/93	8120'	Canyon	7657-7798'	20" @ 40' w/cement to surface 9-5/8" @ 1120' w/1600 sx (circulated) 7" @ 8120' w/1510 sx (circulated)
Prickly Pear AIE Federal Com #1 990' FSL & 990' FEL Unit P Sec 23-20S-24E	Yates Petroleum Corporation	Oil	07/22/91	09/11/91	8130'	Canyon	7591-7773'	20" @ 40' w/Redi-Mix 13-3/8" @ 292' w/775 sx (circulated) 9-5/8" @ 1218' w/900 sx (circulated) 7" @ 8130' w/1600 sx (circulated)

DAGGER DRAW SOUTH - PRESSURE MAINTENANCE PILOT Form C-108 Tabulation of Data on Wells Within Area of Review							
WELL NAME	OPERATOR	TYPE	SPUD	COMPLETED	TOTAL DEPTH	PRODUCING ZONE	PERFORATIONS
Hill View AHE Federal #8 660' FSL & 660' FEL Unit P Sec 14-20S-24E	Yates Petroleum Corporation	Oil	01/06/91	02/15/91	8105'	Canyon	20" @ 40' w/Redi-Mix 9-5/8" @ 1206' w/1100 sx (circulated) 7" @ 8105' w/1750 sx (circulated)
Saguaro AGS Federal Com #5 1980' FNL & 1980' FWL Unit F Sec 23-20S-24E	Yates Petroleum Corporation	Oil	09/17/90	10/30/90	8075'	Canyon	20" @ 40' w/Redi-Mix 9-5/8" @ 1225' w/1300 sx (circulated) 7" @ 8075' w/2000 sx (circulated)
Saguaro AGS Federal Com #9 660' FNL & 1980' FWL Unit C Sec 23-20S-24E	Yates Petroleum Corporation	Oil	06/24/91	07/30/91	8090'	Canyon	20" @ 40' w/Redi-Mix 9-5/8" @ 1220' w/1100 sx (circulated) 7" @ 8090' w/1950 sx (circulated)
Senita AIP Federal Com #2 660' FSL & 1980' FWL Unit N Sec 14-20S-24E	Yates Petroleum Corporation	Oil	10/27/92	12/04/92	8090'	Canyon	20" @ 40' w/Redi-Mix 9-5/8" @ 1071' w/1350 sx (circulated) 7" @ 8090' w/1425 sx (circulated)
Mayer 24 Federal #1 1980' FNL & 660' FWL Unit E Sec 24-20S-24E	Nearburg	Oil	09/30/91	11/26/91	8040'	Canyon	9-5/8" @ 1320' w/925 sx Pacesetter Lite & 200 sx Class C Neat (circulated) 7" @ 8040' w/775 sx PSL Class H & 200 sx Class H, 100 sx Class C Neat (circulated)
Mayer 24 #2 660' FNL & 660' FWL Unit D Sec 24-20S-24E	Nearburg	Oil	12/14/91	01/25/92	8080'	Canyon	9-5/8" @ 1075' w/1300 sx (circulated) 7" @ 8080' w/1200 sx (circulated)

DAGGER DRAW SOUTH - PRESSURE MAINTENANCE PILOT

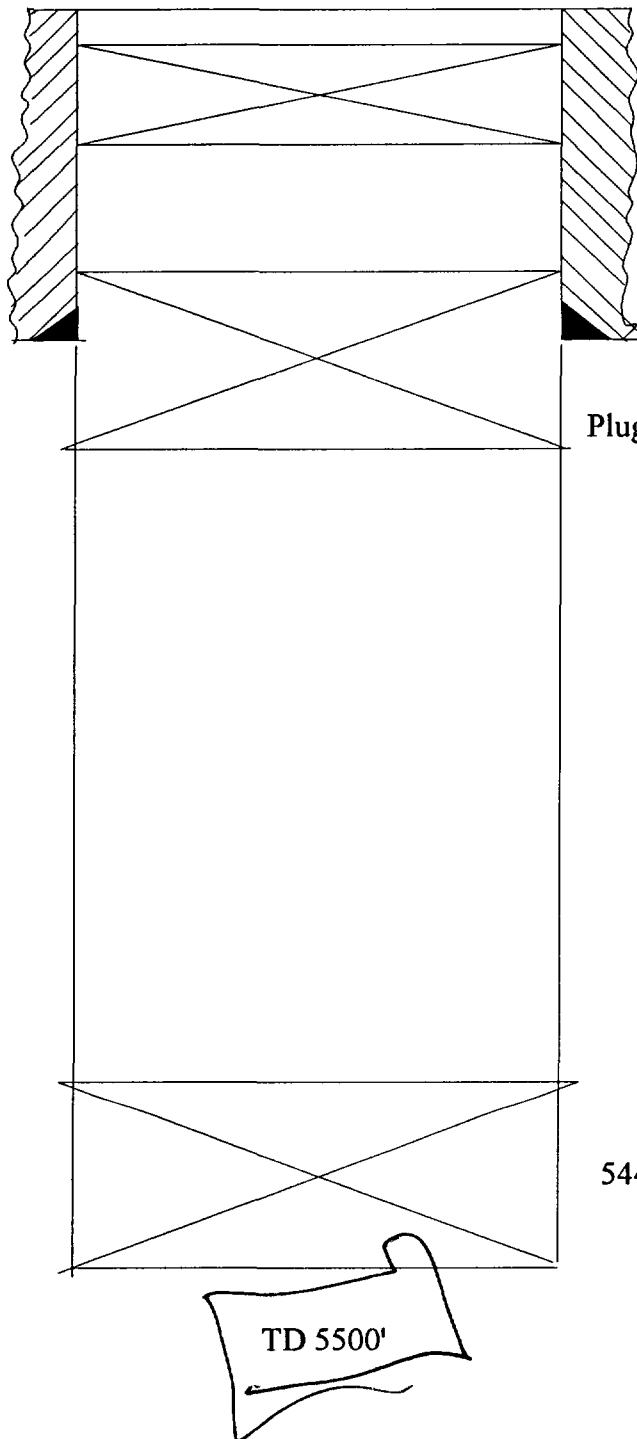
Form C-108

Tabulation of Data on Wells Within Area of Review

WELL NAME	OPERATOR	TYPE	SPUD	COMPLETED	TOTAL DEPTH	PRODUCING ZONE	PERFORATIONS	CASING & CEMENTING INFORMATION
Hill View AHE Federal Com #7 660' FSL & 660' FWL Unit M Sec 13-20S-24E	Yates Petroleum Corporation	Oil	03/12/91	04/17/91	8260'	Canyon	7763-7803'	20" @ 40' w/Redi Mix 9-5/8" @ 1215' w/1524 sx (circulated) 7" @ 8260' w/1975 sx (circulated)
Hill View AHE Federal Com #13 1980' FSL & 660' FEL Unit I Sec 14-20S-24E	Yates Petroleum Corporation	Oil	10/09/92	11/11/92	8220'	Canyon	7677-7806'	20" @ 40' w/Redi Mix 9-5/8" @ 1088' w/1100 sx (circulated) 7" @ 8220' 8-3/4" w/1550 sx (circulated)
Hill View AHE Federal Com #16 660' FSL & 660' FWL Unit M Sec 14-20S-24E	Yates Petroleum Corporation	Oil	12/12/92	01/25/93	8100'	Canyon	7716-7758'	20" @ 40' w/Redi Mix 9-5/8" @ 1070' w/1300 sx (circulated) 7" @ 8100' w/1700 sx (circulated)
Saguaro AGS Federal #4 1980' FSL & 1980' FEL Unit J Sec 14-20S-24E	Yates Petroleum Corporation	Oil	08/10/90	10/24/90	9648'	Canyon	7656-7774'	26" @ 40' w/Redi Mix 14-3/4" @ 1213' w/1100 sx (circulated) 8-3/4" @ 9645' w/2650 sx (circulated)
Senita AIP Federal #1 1925' FSL & 1980' FWL Unit K Sec 14-20S-24E	Yates Petroleum Corporation	Oil	09/06/91	10/09/91	8100'	Canyon	7630-7776'	20" @ 40' w/Redi Mix 9-5/8" @ 1088' w/1000 sx (circulated) 7" @ 8100' w/1675 sx (circulated)
John AGU #3 1980' FNL & 1980' FEL Unit G Sec 14-20S-24E	Yates Petroleum Corporation	Oil	12/17/90	02/01/91	8140'	Canyon	7604-7747'	20" @ 40' w/Redi Mix 9-5/8" @ 1213' w/1250 sx (circulated) 7" @ 8140' w/1825 sx (circulated)

DAGGER DRAW SOUTH - PRESSURE MAINTENANCE PILOT Form C-108 Tabulation of Data on Wells Within Area of Review							
WELL NAME	OPERATOR	TYPE	SPUD	COMPLETED	TOTAL DEPTH	PRODUCING ZONE	PERFORATIONS
Hill View AHE Federal #12 1980' FNL & 660' FEL Unit I 23-20S-24E	Yates Petroleum Corporation	Oil	05/15/92	06/23/92	8160'	Canyon	7588-7743'
							20" @ 40' w/Redi Mix 9-5/8" @ 1058' w/1000 sx (circulated) 7" @ 8160' w/1750 sx (circulated)
#23-1 Marjorie Roe 1880' FSL & 1980' FWL Unit K Sec 23-20S-24E	Standard Oil of Texas	Stratigraphic Test	03/07/56	05/27/56	5500'	None	None
							Well Plugged and Abandoned on 5/22/56 7" @ 556'
							Plug @ 5440-5500' w/12 sx Neat Cement
							Plug @ 520-600' w/16 sx Neat Cement Plug @ 10-70' w/12 sx Neat Cement

23-1 Marjorie Roe
K 23-20S-24E
1880' FSL & 1980' FWL
KB-3692'
Plugged & Abandoned



Plug - 12 sks neat cement 10' - 70'

7" csg @ 556'
Plug - 16 sks neat cement 520'-600'

5440' Plug - 12 sks neat cement
5440'-5500'

TD 5500'

Plugged 5/22/56

TRETOLITE DIVISION

Located in Unit J
Sec 22-20S-24E

(505) 746-3588
Fax (505) 746-3580

Reply to:
P.O. Box FF
Artesia, NM
88211-7531

WATER ANALYSIS REPORT

Company : YATES PETROLEUM Date : 11/17/94
Address : ARTESIA, NEW MEXICO Date Sampled : 11/17/94
Lease : FOSTER Analysis No. : 936
Well : FRESH WATER
Sample Pt. : WELLHEAD

ANALYSIS		mg/L		* meq/L
-----		----		-----
1. pH	8.0			
2. H2S	0 PPM			
3. Specific Gravity	1.0			
4. Total Dissolved Solids		3356.8		
5. Suspended Solids		NR		
6. Dissolved Oxygen		NR		
7. Dissolved CO2		NR		
8. Oil In Water		NR		
9. Phenolphthalein Alkalinity (CaCO3)				
10. Methyl Orange Alkalinity (CaCO3)				
11. Bicarbonate	HCO3	244.0	HCO3	4.0
12. Chloride	Cl	1278.0	Cl	36.1
13. Sulfate	SO4	750.0	SO4	15.6
14. Calcium	Ca	880.0	Ca	43.9
15. Magnesium	Mg	73.5	Mg	6.0
16. Sodium (calculated)	Na	131.4	Na	5.7
17. Iron	Fe	NR		
18. Barium	Ba	NR		
19. Strontium	Sr	NR		
20. Total Hardness (CaCO3)		2500.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L

44 *Ca <----- *HCO3 4	Ca(HCO3)2	81.0	4.0 324
/----->	CaSO4	68.1	15.6 1063
6 *Mg -----> *SO4 16	CaCl2	55.5	24.3 1348
<-----/	Mg(HCO3)2	73.2	
6 *Na -----> *Cl 36	MgSO4	60.2	
/----->	MgCl2	47.6	6.0 288
Saturation Values Dist. Water 20 C	NaHCO3	84.0	
CaCO3 13 mg/L	Na2SO4	71.0	
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	5.7 334
BaSO4 2.4 mg/L			

REMARKS:

----- A. MILLER

Petrolite Oilfield Chemicals Group

Respectfully submitted,
ANDY MILLER

Attachment E

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



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

S. P. YATES
CHAIRMAN OF THE BOARD
JOHN A. YATES
PRESIDENT
PEYTON YATES
EXECUTIVE VICE PRESIDENT
RANDY G. PATTERSON
SECRETARY
DENNIS G. KINSEY
TREASURER

November 18, 1994

CERTIFIED RETURN RECEIPT

Bureau of Land Management
P. O. Box 1397
Roswell, New Mexico 88202-1397

Gentlemen:

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

Saguaro AGS Fed Com #8	O 14-20S-24E
Hillview AHE Fed Com #6	B 23-20S-24E
Hillview AHE Fed Com #2	G 23-20S-24E.

Yates plans to initiate a pressure maintenance pilot via these wells.

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

Sincerely,

Pinson McWhorter
Reservoir Engineer

PMW/cvg

Enclosures

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



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

S. P. YATES
CHAIRMAN OF THE BOARD
JOHN A. YATES
PRESIDENT
PEYTON YATES
EXECUTIVE VICE PRESIDENT
RANDY G. PATTERSON
SECRETARY
DENNIS G. KINSEY
TREASURER

November 18, 1994

CERTIFIED RETURN RECEIPT

Nearburg Producing Company
3300 North A Street
Building A Suite 120
Midland, Texas 79705

Gentlemen:

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

Saguaro AGS Fed Com #8	O 14-20S-24E
Hillview AHE Fed Com #6	B 23-20S-24E
Hillview AHE Fed Com #2	G 23-20S-24E.

Yates plans to initiate a pressure maintenance pilot via these wells.

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

Sincerely,

Pinson McWhorter
Reservoir Engineer

PMW/cvg

Enclosures

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20250



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

RECEIVED
FEDERAL BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE
WASHINGTON, D.C. 20535
DATE RECEIVED: 11/18/94
BY: [illegible]

November 18, 1994

CERTIFIED RETURN RECEIPT

Carl C. Foster
1707 Northgate Place
Artesia, New Mexico 88210

Dear Mr. Foster:

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

Saguaro AGS Fed Com #8	O 14-20S-24E
Hillview AHE Fed Com #6	B 23-20S-24E
Hillview AHE Fed Com #2	G 23-20S-24E

Yates plans to initiate a pressure maintenance pilot via these wells.

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

Sincerely,

Pinson McWhorter
Reservoir Engineer

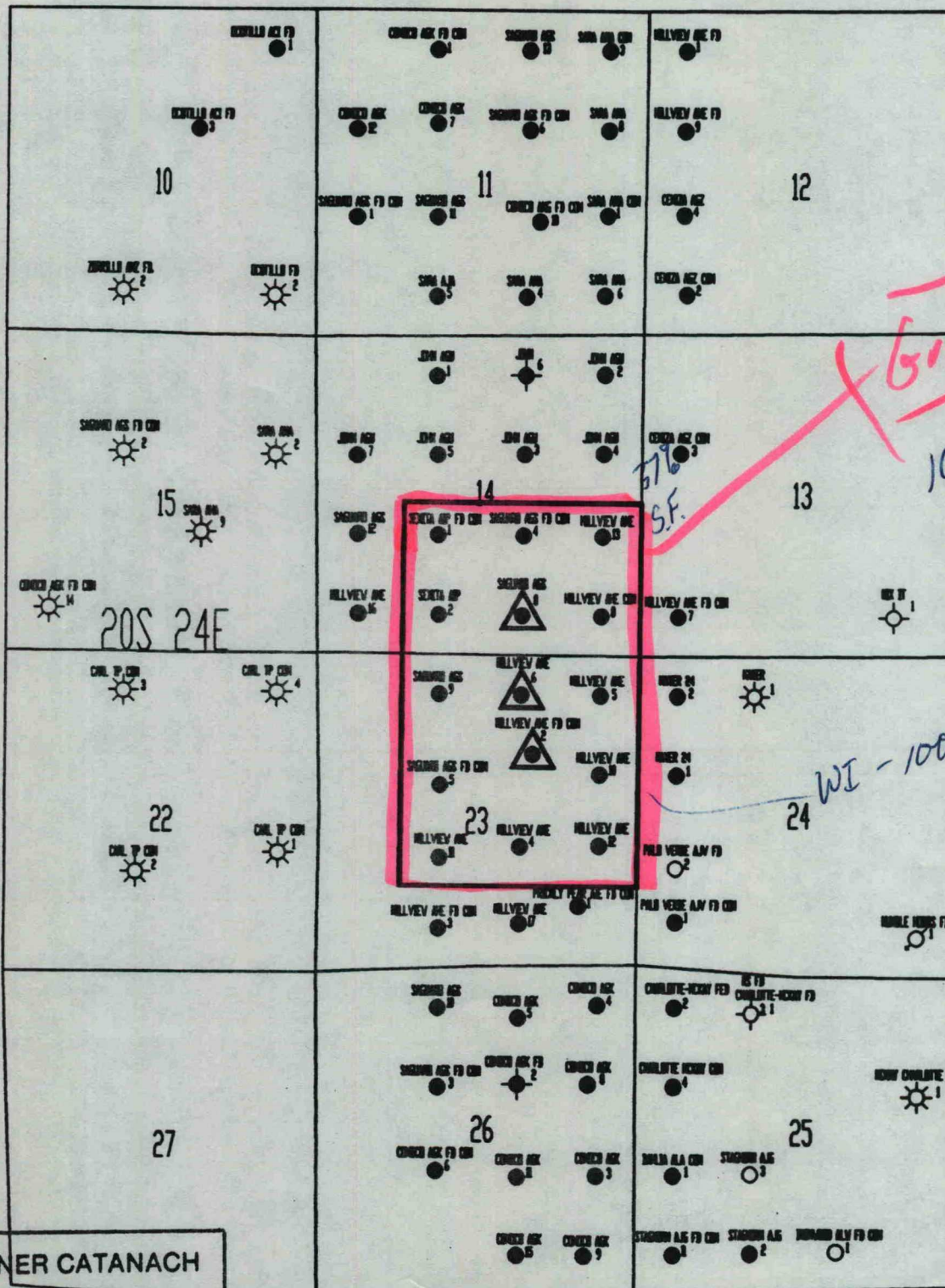
PMW/cvg

Enclosures

Prized Area
62%

Green
100% Federal
Land

WI - 100%



BEFORE EXAMINER CATANACH

OIL CONSERVATION DIVISION

YATES EXHIBIT NO. 3

CASE NO. 11161

PROJECT BOUNDARY

● PRODUCTION WELL

▲ INJECTION WELL



12/94 VM
DRAFT 94025

SOUTH DAGGER DRAW
PRESSURE MAINTENANCE PROJECT
EDDY CO., NEW MEXICO

ENG P. McWHORTER

SCALE: 1"=2000'

BEFORE THE

#4

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES

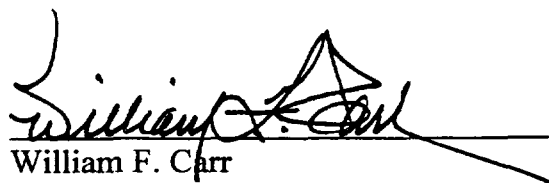
IN THE MATTER OF THE APPLICATION
OF YATES PETROLEUM CORPORATION
FOR A PRESSURE MAINTENANCE PROJECT,
EDDY COUNTY, NEW MEXICO.

CASE NO. 11161

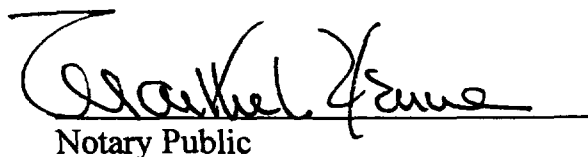
AFFIDAVIT

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

William F. Carr, attorney in fact and authorized representative of Yates Petroleum Corporation, the Applicant herein, being first duly sworn, upon oath, states that in accordance with the notice provisions of Rule 1207 of the New Mexico Oil Conservation Division the Applicant has attempted to find the correct addresses of all interested persons entitled to receive notice of this application and that notice has been given at the addresses shown on Exhibit "A" attached hereto as provided in Rule 1207.


William F. Carr

SUBSCRIBED AND SWORN to before me this 14th day of December, 1994.


Notary Public

My Commission Expires:

August 19, 1995

EXHIBIT A

Nearburg Producing Company
3300 North A Street
Building A Suite 120
Midland, TX 79705

Carl C. Foster
1707 Northgate Place
Artesia, NM 88210

Bureau of Land Management
Post Office Box 1397
Roswell, New Mexico 88202-1397

**BEFORE THE
OIL CONSERVATION DIVISION**
Santa Fe, New Mexico

Case No. 11161 Exhibit No. 4

Submitted by: Yates Petroleum Corporation

Hearing Date: December 15, 1994

CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
LAWYERS

MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN

MICHAEL H. FELDEWERT
TANYA M. TRUJILLO
NANCY A. RATH

JACK M. CAMPBELL
OF COUNSEL

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043

November 21, 1994

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Nearburg Producing Company
3300 North A Street
Building A Suite 120
Midland, TX 79705

Re: Application of Yates Petroleum Corporation for approval of a waterflood project,
Eddy County, New Mexico

Gentlemen:

By letter dated November 18, 1994, Yates Petroleum Corporation provided you a copy of New Mexico Oil Conservation Division Form C-108 which is the application for approval of its Dagger Draw South pressure maintenance project.

The project area will consist of the following acreage:

TOWNSHIP 20 SOUTH, RANGE 24 EAST, N.M.P.M.

Section 14: SE/4, E/2 SW/4

Section 23: NE/4, E/2 NW/4, N/2 SE/4, NE/4 SW/4

This application has been set for hearing before an Examiner of the Oil Conservation Division on December 15, 1994. You do not have to attend this hearing, but as the owner of an interest which may be affected by this application you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

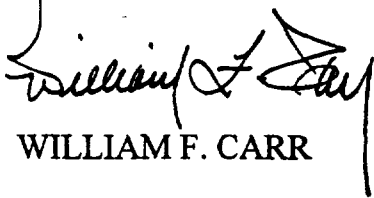
Nearburg Producing Company

November 21, 1994

Page 2

Parties appear in cases have been requested by the Division (Memorandum 2-90) to file a Prehearing Statement substantially in the form prescribed by the Division. Prehearing Statements should be filed by 4:00 o'clock p.m., on the Friday before a scheduled hearing.

Very truly yours,

A handwritten signature in black ink, appearing to read "William F. Carr", with a stylized flourish at the end.

WILLIAM F. CARR

WFC:mlh

P 111 333 055



**Receipt for
Certified Mail**

No Insurance Coverage Provided

Nearburg Producing Company
3300 North A Street
Building A Suite 120
Midland, TX 79705

Postage	\$ 29
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, and Addressee's Address	
TOTAL Postage & Fees	\$ 2.29
Postmark or Date	NOV 21 1994

PS Form 3800, June 1991

Form 3811, Mar. 1988

Article Addressed to:
Nearburg Producing Company
3300 North A Street
Building A Suite 120
Midland, TX 79705

Signature - Address
[Signature]

Signature - Agent
[Signature]

Date of Delivery
[Signature]

Article Number
711 333 055

Type of Service:
☒ Registered
☐ Certified Mail
☐ Express Mail
☐ Insured
☐ COD
☐ Return Receipt for Merchandise

Addresser's Address (ONLY if requested and fee paid)
Nearburg Producing Company
3300 North A Street
Building A Suite 120
Midland, TX 79705

Always obtain signature of addressee or agent and DATE DELIVERED.

DOMESTIC RETURN RECEIPT

CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
LAWYERS

MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN

MICHAEL H. FELDEWERT
TANYA M. TRUJILLO

JACK M. CAMPBELL
OF COUNSEL

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043

November 21, 1994

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Bureau of Land Management
Post Office Box 1397
Roswell, New Mexico 88202-1397

Re: Application of Yates Petroleum Corporation for approval of a waterflood project,
Eddy County, New Mexico

Gentlemen:

By letter dated November 18, 1994, Yates Petroleum Corporation provided you a copy of New Mexico Oil Conservation Division Form C-108 which is the application for approval of its Dagger Draw South pressure maintenance project.

The project area will consist of the following acreage:

TOWNSHIP 20 SOUTH, RANGE 24 EAST, N.M.P.M.

Section 14: SE/4, E/2 SW/4

Section 23: NE/4, E/2 NW/4, N/2 SE/4, NE/4 SW/4

This application has been set for hearing before an Examiner of the Oil Conservation Division on December 15, 1994. You do not have to attend this hearing, but as the owner of an interest which may be affected by this application you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

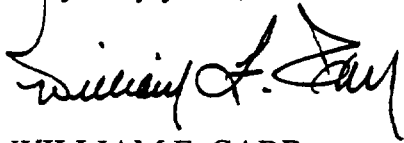
Bureau of Land Management

November 21, 1994

Page 2

Parties appear in cases have been requested by the Division (Memorandum 2-90) to file a Prehearing Statement substantially in the form prescribed by the Division. Prehearing Statements should be filed by 4:00 o'clock p.m., on the Friday before a scheduled hearing.

Very truly yours,

A handwritten signature in black ink, appearing to read "William F. Carr". The signature is stylized with a large initial "W" and a long, sweeping underline.

WILLIAM F. CARR

WFC:mlh

CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
LAWYERS

POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208

CERTIFIED

P 111 333 056

MAIL



FORWARDING
ORDER
EXPIRED

Bureau of Land Management
Post Office Box 1397
Roswell, NM 88202-1397

P 111 333 056



Receipt for
Certified Mail

No Insurance Coverage Provided

Bureau of Land Management
Post Office Box 1397
Roswell, NM 88202-1397

Postage	\$ 29
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, and Addressee's Address	
TOTAL Postage & Fees	\$ 2.29
Postmark or Date	NOV 21 1994

PS Form 3800, June 1991

CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
LAWYERS

MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN

MICHAEL H. FELDEWERT
TANYA M. TRUJILLO

JACK M. CAMPBELL
OF COUNSEL

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 968-4421
TELECOPIER: (505) 963-6043

November 21, 1994

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Carl C. Foster
1707 Northgate Place
Artesia, New Mexico 88210

Re: Application of Yates Petroleum Corporation for approval of a waterflood project, Eddy County, New Mexico

Dear Mr. Foster:

By letter dated November 18, 1994, Yates Petroleum Corporation provided you a copy of New Mexico Oil Conservation Division Form C-108 which is the application for approval of its Dagger Draw South pressure maintenance project.

The project area will consist of the following acreage:

TOWNSHIP 20 SOUTH, RANGE 24 EAST, N.M.P.M.

Section 14: SE/4, E/2 SW/4

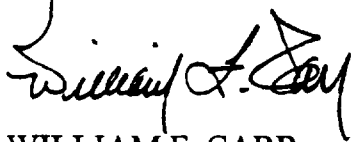
Section 23: NE/4, E/2 NW/4, N/2 SE/4, NE/4 SW/4

This application has been set for hearing before an Examiner of the Oil Conservation Division on December 15, 1994. You do not have to attend this hearing, but as the owner of an interest which may be affected by this application you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Carl C. Foster
November 21, 1994
Page 2

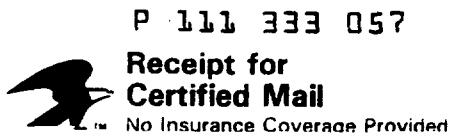
Parties appear in cases have been requested by the Division (Memorandum 2-90) to file a Prehearing Statement substantially in the form prescribed by the Division. Prehearing Statements should be filed by 4:00 o'clock p.m., on the Friday before a scheduled hearing.

Very truly yours,

A handwritten signature in black ink, appearing to read "William F. Carr". The signature is stylized with a large, sweeping initial "W" and a long, trailing flourish at the end.

WILLIAM F. CARR

WFC:mlh



Carl C. Foster
1707 Northgate Place
Artesia, New Mexico 88210

Postage	\$ 29
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, and Addressee's Address	
TOTAL Postage & Fees	\$ 2.29
Postmark or Date NOV 21 1994	

PS Form 3800, June 1991

U.S. Form 3811, Mar. 1988 U.S. G.P.O. 1988-212-965 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional services requested.

1. Show to whom delivered, date, and addressee's address. **2. Restricted Delivery** (Extra charge)

3. Article Addressed to:
Carl C. Foster
1707 Northgate Place
Artesia, New Mexico 88210

4. Article Number: 211-383-057

Type of Service:
☒ Registered
☐ Certified
☐ Express Mail
☐ Insured
☐ COD
☐ Return Receipt for Merchandise

5. Signature - Addressee
Carl C. Foster

6. Signature - Agent
[Signature]

7. Date of Delivery
11-23

8. Addressee's Address (ONLY if requested and fee paid)
[Address]

9. Always obtain signature of addressee or agent and DATE DELIVERED.

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

Investment Estimate

South Dagger Draw

Pressure Maintenance Pilot

Additional

Facilities	\$460,000
Well Conversions (3 wells)	<u>\$142,000</u>
Total Investment	\$602,000

- Additional Recovery of

395,000 B.O.

400,000

Additional Primary set to be recovered

281,000 B.O.

Ultimate a little of 2 ~~600~~ MMBO

SOUTHERN PACIFIC	
ELECTRICITY	
YES	EXHIBIT NO. 9
11161	

Case 11161

There is no Exhibit
#10 For this
Case. See Transcript
in Case 11161 dated
12-15-94.

W. Byrne

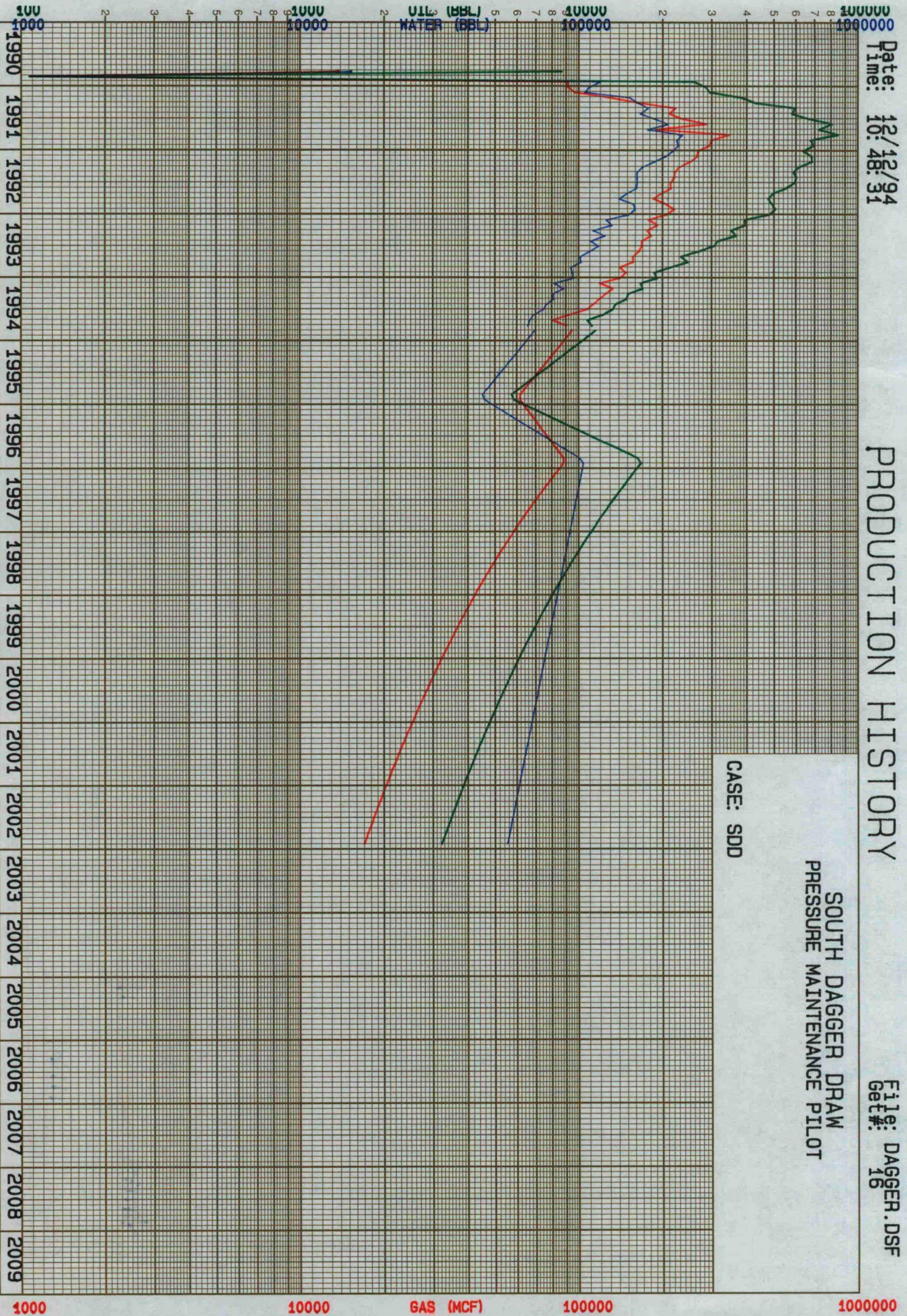
Date: 12/12/94
Time: 10:48:31

File: DAGGER.DSF
Get#: 16

PRODUCTION HISTORY

SOUTH DAGGER DRAW
PRESSURE MAINTENANCE PILOT

CASE: SDD



CUMULATIVE OIL (BBL) = 1810829.

DPC & A

YEARS

SL 20 3 3

CUMULATIVE GAS (MCF) = 7953284.

BEFORE EXAMINER CATANACH

OIL CONSERVATION DIVISION

YATES EXHIBIT NO. 11

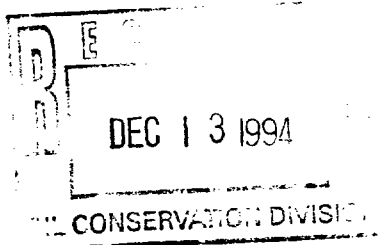
CASE NO. 11161

**CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
LAWYERS**

MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN

MICHAEL H. FELDEWERT
TANYA M. TRUJILLO
NANCY A. RATH

JACK M. CAMPBELL
OF COUNSEL



JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043

December 13, 1994

HAND-DELIVERED

William J. LeMay, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
2040 South Pacheco
Santa Fe, New Mexico 87503

BEFORE EXAMINER CATANACH	
OIL CONSERVATION DIVISION	
<u>YATES</u>	EXHIBIT NO. <u>12</u>
CASE NO. <u>11161</u>	

Re: Application of Yates Petroleum Corporation for Qualification of its South
Dagger Draw Pressure Maintenance Project for the Recovered Oil Tax Rate
Under the "Enhanced Oil Recovery Act", Eddy County, New Mexico

Dear Mr. LeMay:

Enclosed in triplicate is all information required to qualify the above-referenced pressure maintenance project for the incentive tax rate under the Enhanced Oil Recovery Act (Laws 1992, Chapter 38, Sections 1-5).

Also enclosed is a copy of a legal advertisement for this application which Yates Petroleum Corporation requests be included on the docket for the Examiner hearings scheduled on January 5, 1995.

Your attention to this matter is appreciated.

Very truly yours,

WILLIAM F. CARR
AUTHORIZED REPRESENTATIVE OF YATES PETROLEUM CORPORATION
WFC:mlh

Enclosure

cc: Oil Conservation Division, District II (w/enc.)
Pinson McWhorter

a. Operator's name and address:

Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210

REG
DEC 13 1994

b. Description of the project area including:

(1) A plat outlining the project area is attached.

(2) Description of project area:

Township 20 South, Range 24 East, N.M.P.M.

E/2 SW/4 Section 14
SE/4 Section 14

NE/4 Section 23
E/2 NW/4 Section 23
NE/4 SW/4 Section 23
N/2 SE/4 Section 23

(3) Total acres:

600 acres

(4) Name of subject pool and formation:

a. South Dagger Draw-Upper Pennsylvanian Associated Pool

b. Canyon formation.

c. Status of operations in project area:

<u>Lease Name</u>	<u>Lessor</u>	<u>Lessee</u>	<u>Legal Description</u>
NM-42787-A	USA	Santa Fe Energy Oper Yates Petroleum Corp	E/2 SW/4 Sec 14 T20S R24E
NM-86241	USA	ABO Petroleum Corp MYCO Industries Yates Drilling Co Yates Petroleum Corp	NE/4 N/2 SE/4 Sec 23 T20S 24E NE/4 SW/4 Sec 23 T20S R24E

<u>Lease Name</u>	<u>Lessor</u>	<u>Lessee</u>	<u>Legal Description</u>
NM-045274	USA	Santa Fe Energy Oper Yates Petroleum Corp	E/2 SE/4 Sec 14 T20S R24E
NM-043625	USA	ABO Petroleum Corp MYCO Industries Yates Drilling Co Yates Petroleum Corp.	E2 NW/4 Sec 23-T20S R24E W/2 SE/4 Sec 14 T20S R24E

d. Method of recovery to be used:

- (1) Injection Fluids: water
- (2) The application for approval of this project was filed with the Division on Form C-108 on November 21, 1994.

e. Description of project:

- (1) List of producing wells:

Hillview AHE Fed Com #4
1980' FSL & 1980' FEL (Unit J) Section 23;

Hillview AHE Fed Com #5
660' FNL & 660' FEL (Unit A) Section 23;

Hillview AHE Fed Com #8
660' FSL & 660' FEL (Unit P) Section 14;

Hillview AHE Fed Com #10
1730' FNL & 660' FEL (Unit H) Section 23;

Hillview AHE Fed Com #11
1830' FSL & 1980' FWL (Unit K) Section 23;

Hillview AHE Fed Com #12
1980' FNL & 660' FEL (Unit I) Section 23;

Hillview AHE Fed Com #13
1980' FSL & 660' FEL (Unit I) Section 14;

Saguaro AGS Fed Com #4
1980' FSL & 1980' FEL (Unit J) Section 14;

Saguaro AGS Fed Com #5
1980' FNL & 1980' FWL (Unit F) Section 23;

Saguaro AGS Fed Com #9
660' FNL & 1980' FWL (Unit C) Section 23;

Senita AIP Fed Com #1
1925' FSL & 1980' FWL (Unit K) Section 14;

Senita AIP Fed Com #2
660' FSL & 1980' FWL (Unit N) Section 14

(2) List of injection wells:

Hillview AHE Fed Com #2
1650' FNL & 1780' FEL (Unit G) Section 23;

Hillview AHE Fed Com #6
660' FNL & 1980' FEL (Unit B) Section 23;

Saguaro AGS Fed Com #8
660' FSL K& 1980' FEL (Unit O) Section 14;

(3) Capital Cost of additional facilities

Facilities:	\$460,000
Well Work:	\$142,000

(4) Total projects costs: \$602,000

(5) Estimated total value of the additional production that will be recovered as a result of this project: 395,000 barrels over (8) eight years.

(6) Anticipated date for commencement of injection: March 1, 1995

(7) Type of fluid to be injected and anticipated volumes:

Water will be initially injected at a rate of 5,000 BWPD per injection well for a total initial rate of 15000 BWPD. The estimated total cumulative water to be injected during the life of the project is 16,000,000 barrels.

(8) This is not an application for an expansion of an existing project.

(f). Production data: See attached plots.

Date: 12/12/94
Time: 10:48:31

PRODUCTION HISTORY

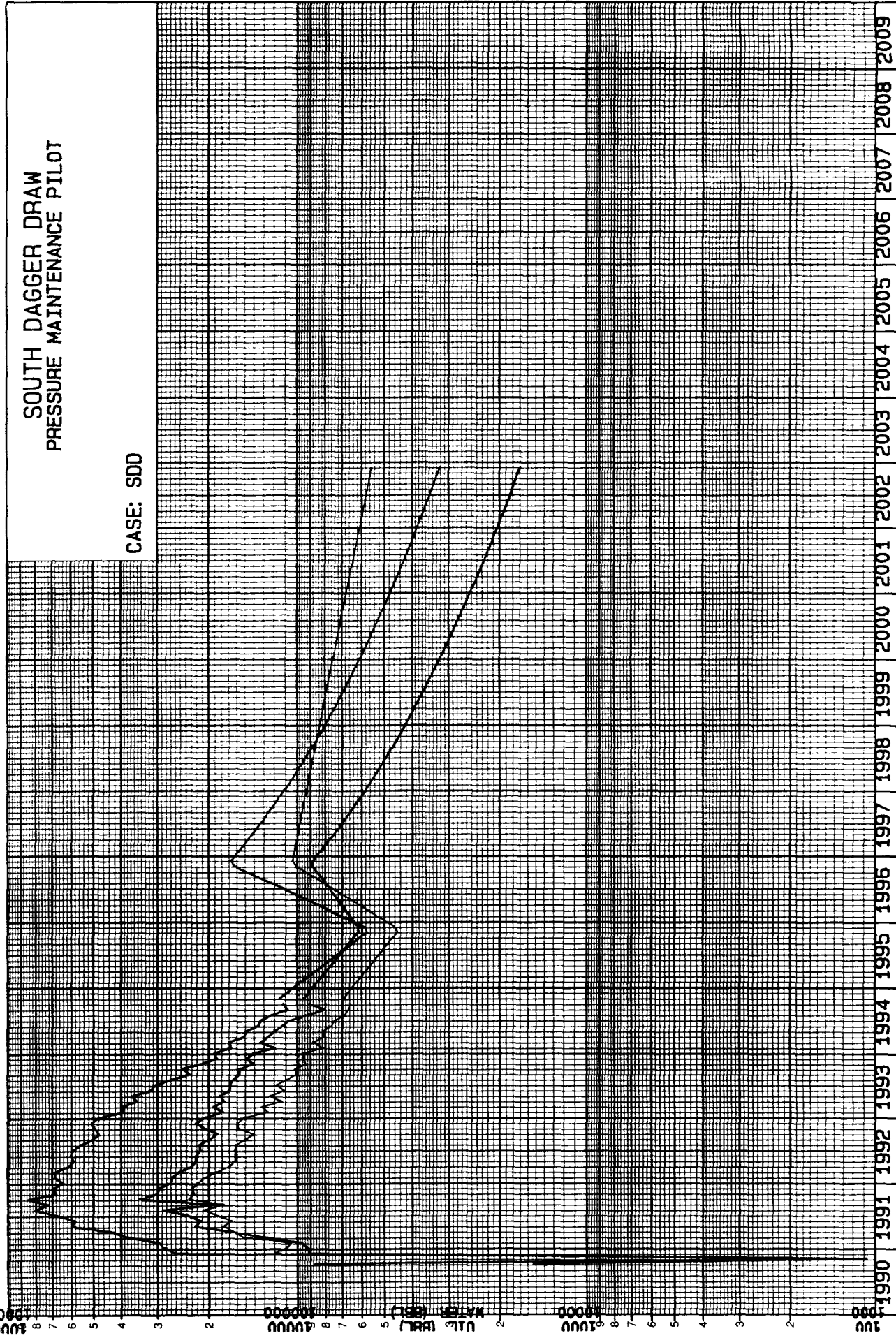
File: DAGGER.DSF
Get#: 16

1000000

1000000

SOUTH DAGGER DRAW
PRESSURE MAINTENANCE PILOT

CASE: SDD



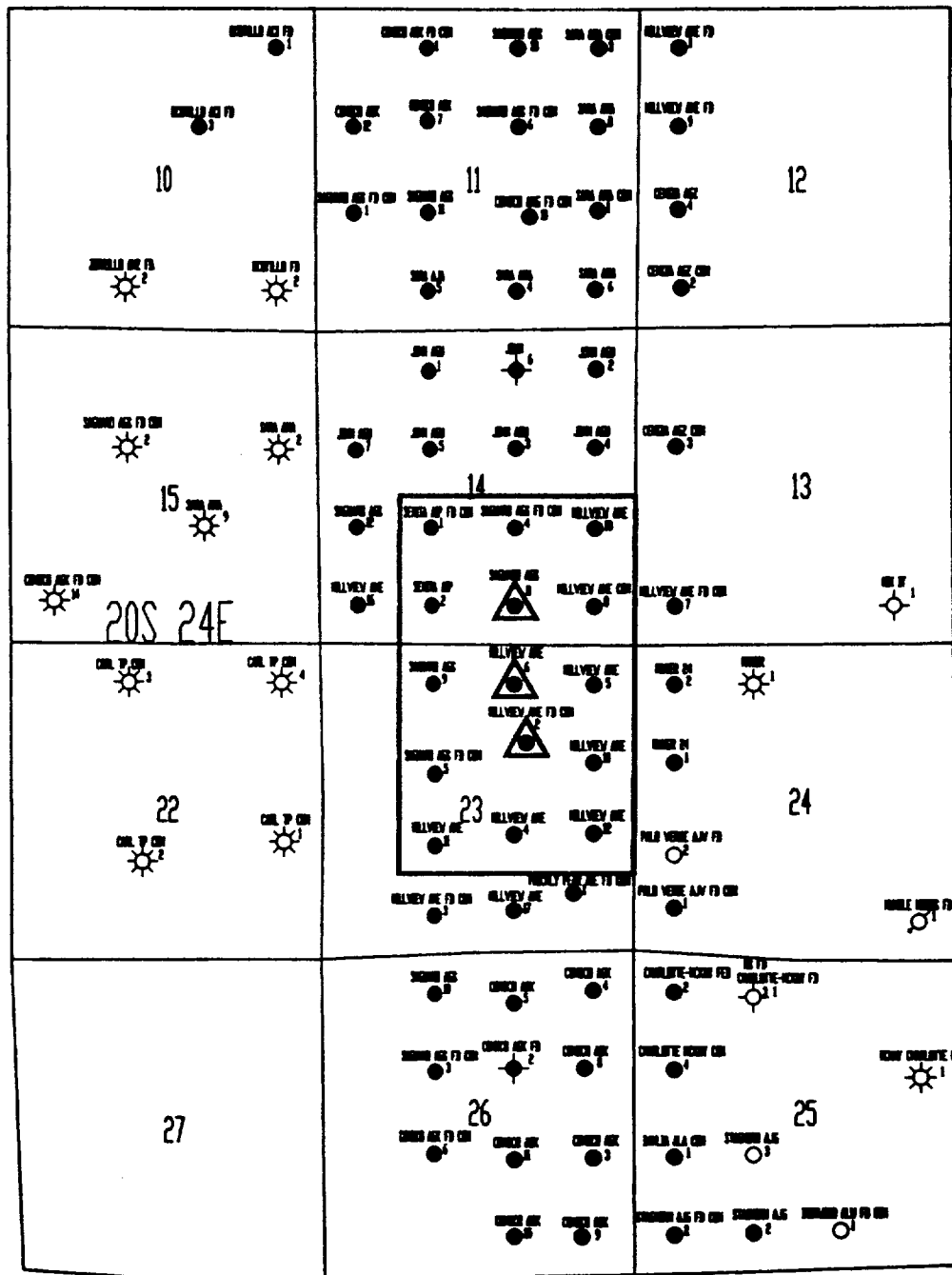
CUMULATIVE OIL (BBL) = 1810829.

DPC & A

YEARS

SL 20 3 3

CUMULATIVE GAS (MCF) = 7953284.



——— PROJECT BOUNDARY
 ● PRODUCTION WELL
 ▲ INJECTION WELL



12/94 VM
 DRAFT 194825

SOUTH DAGGER DRAW
 PRESSURE MAINTENANCE PROJECT
 EDDY CO., NEW MEXICO

ENG. P. McWHORTER

SCALE: 1"=2000'