

DATE IN 3/27/98	SUSPENSE 4/16/98	ENGINEER MS	LOGGED BY RW	TYPE NSL
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVER SHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

MAR 27 1998

[1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**

- [A] Location - Spacing Unit - Directional Drilling
☒ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] and [C]

- [B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[2] **NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☒ Does Not Apply**

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

*Met w/ Carr
4-9-98
Wife rules vary in area
and NSL for the
Upper Penn
also.*

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding**

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

William F. Carr
Print or Type Name

William F. Carr
Signature

Attorney
Title

3/27/98
Date

*Easy enough to
So - Yates to
reply for other
zones
needed.*

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

MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN
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E-MAIL: ccbspa@ix.netcom.com

March 27, 1998

HAND-DELIVERED

Lori Wrotenbery, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
2040 South Pacheco Street
Santa Fe, New Mexico 87505

RECEIVED
MAR 27 1998
Oil Conservation Division

*This application to
be limited to the
Morrow and
Upper Penn
Pool*

Re: *Application of Yates Petroleum Corporation for Administrative Approval of
an Unorthodox Well Location for its Roden GD Federal Com. Well No. 7 to
be drilled 1550 feet from the South line and 660 feet from the East Line of
Section 26, Township 19 South, Range 24 East, NMPM, Eddy County, New
Mexico*

Dear Ms. Wrotenbery:

Yates Petroleum Corporation hereby seeks administrative approval pursuant to the provisions of Division Rule 104 F (2) adopted on January 18, 1996, of an unorthodox well location for all formations developed on 320-acre spacing or proration units for its Roden GD Federal Com. Well No. 7 to be located 1550 feet from the South line and 660 feet from the East line of Section 26, Township 19 South, Range 24 East, NMPM, Eddy County, New Mexico. The S/2 of Section 26 will be dedicated to the well. See attached Form C-102 attached hereto as Exhibit A. There will be only one producing well in any 320-acre spaced gas zone on this spacing unit since the proposed Roden GD Federal Com. Well No. 7 will be completed in the Morrow formation and the Eng TX Well No. 2, which previously produced from this Morrow unit, has been recompleted in the North Dagger Draw-Upper Pennsylvanian Pool.

This location is unorthodox because it is governed by the Division's statewide rules which provide for wells on 320-spacing units to be located no closer than 660 feet to the nearest side boundary of the dedicated tract nor closer than 1650 feet to the nearest end boundary.
Lori Wrotenbery, Director

Lori Wrotenbery, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources

March 27, 1998

Page 2

This unorthodox location is required by geological conditions in the Morrow formation. Attached hereto as Exhibit B is a Structure Map on the Top of the Morrow formation which shows the reservoir dip to the southeast. The well locations with data are Morrow penetrations and well locations without data are generally Upper Penn penetrations. The proposed locations are downdip of past Morrow production, but updip of other Morrow penetrations that were of poor reservoir quality. The problem in this localized area has been the lack of reservoir quality, not structure.

Exhibit C is a Sand Isolith Map which represents sands of the Morrow Formation and shows the limits of sand deposition. The isolith map is a "clean sand" map with gamma ray cutoff of 50 API units or less. This map shows two sand channels trending north-south, the sand thick on the east side of the map is the target for the proposed locations. The sand thicks should allow for better porosity and permeability, since the represents the area of highest energy within channel systems.

The proposed location is unorthodox to optimize sand thickness and increase the possibilities of encountering commercial quantities of hydrocarbons. Exhibit D is a geological explanation which demonstrates that the proposed location is the optimum location for a Morrow well in this spacing unit.

Attached hereto as Exhibit E is a plat as required by Rule 104.F (3) showing the subject spacing unit, the proposed unorthodox well location, the offsetting wells and the diagonal and adjoining spacing units. Yates Petroleum Corporation is the designated operator of all the immediately adjoining and diagonal spacing units in all 320-acre spaced gas formations offsetting the proposed unorthodox well location. These spacing units are shaded in yellow on this plat. Accordingly, there are no affected parties to whom notification of the application should be provided.

Lori Wrotenbery, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
March 27, 1998
Page 3

Your attention to this matter is appreciated.

Very truly yours,

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

WILLIAM F. CARR
Attorney for Yates Petroleum Corporation

Enclosures

cc: Ms. Kathy H. Porter
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88201

District I
 PO Box 1988, Hobbs, NM 88241-1988
 District II
 PO Drawer 80, Aramark, NM 88211-8719
 District III
 1000 Rio Grande Rd., Alamogordo, NM 87410
 District IV
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 PO Box 2088
 Santa Fe, NM 87504-2088

Form C-102
 Revised February 10, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APL Number		Pool Code	Pool Name MORROW
Property Code	Property Name RODEN GD FEDERAL COM		Well Number 7
OGRIID No. 025575	Operator Name YATES PETROLEUM CORPORATION		Elevation 3625.

10 Surface Location

TL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	26	19-S	24-E		1550	SOUTH	660	EAST	EDDY

11 Bottom Hole Location If Different From Surface

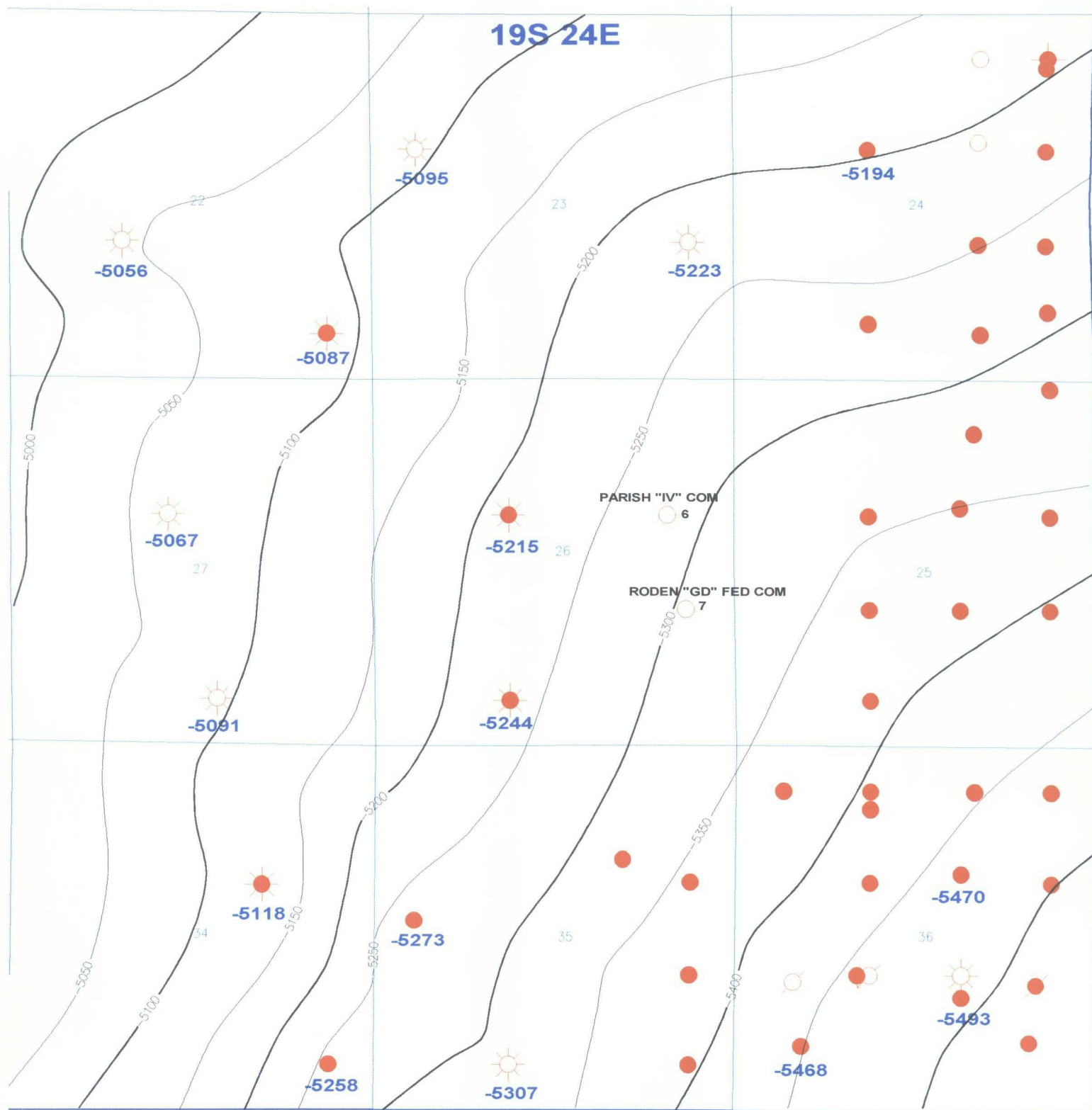
TL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
120									

12 Dedicated Acres 320	13 Joint or In/In	14 Consolidation Code	15 Order No.
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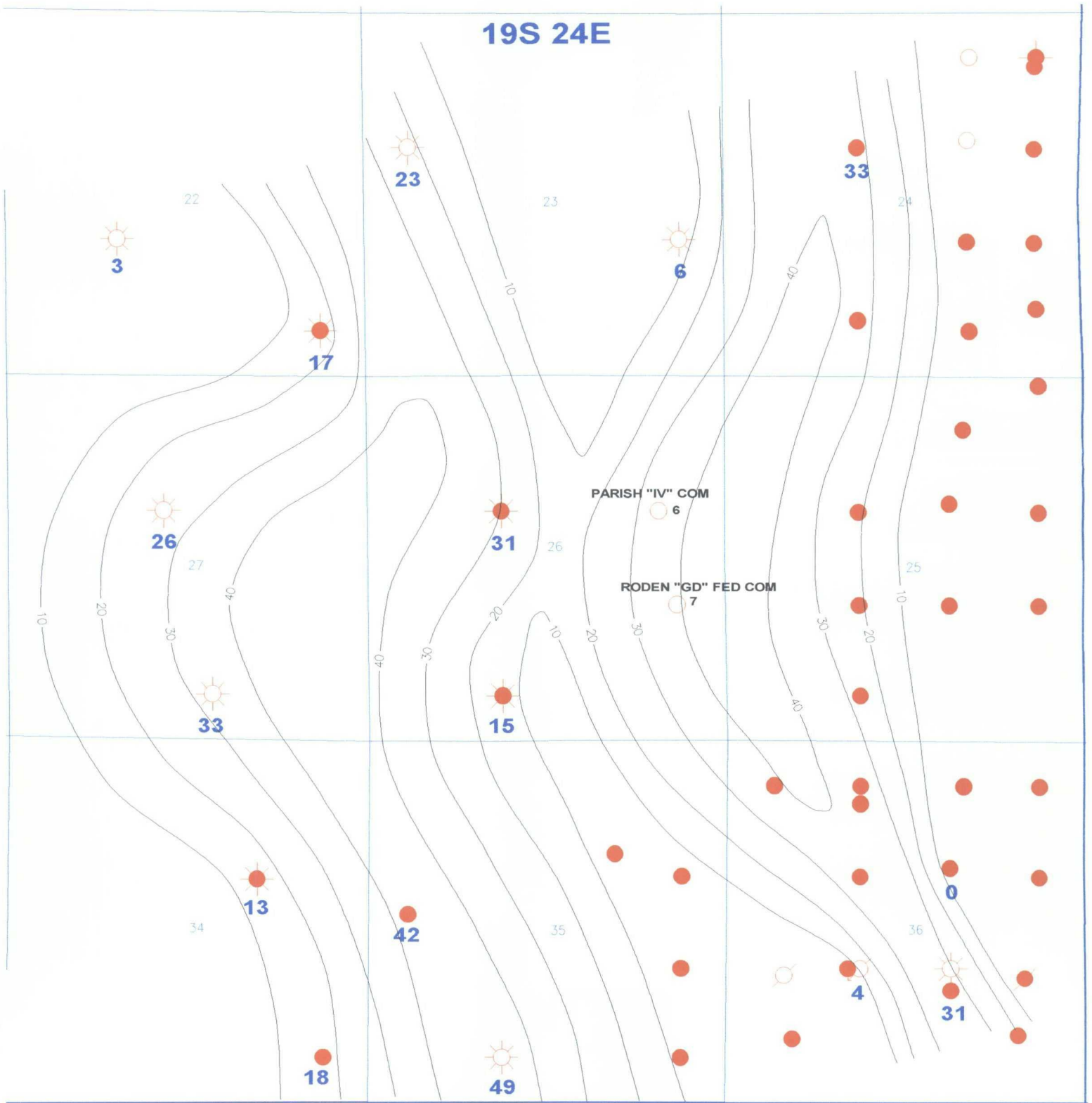
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16		1550 1320 230	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature: <i>Ken Beardemphl</i> Printed Name: Ken Beardemphl Title: Landman Date: January 29, 1998
			18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey: JANUARY 18, 1998 Signature: <i>R. REDD</i> Registered Professional Engineer State of New Mexico Certificate Number: 5412

EXHIBIT A



Yates Petroleum Corporation		
Parish - Roden Area Structure Map Top of Morrow		
Geol: B. May	C.I. = 50'	3/2/98
1924STR.gpf	Scale 1:24000	T. Fuentes



Yates Petroleum Corporation		
Parish - Roden Area Sand Isolith Morrow Formation		
Geol. B. May	GR ≤ 50 API	3/2/98
1924ISO.gpf	Scale 1:24000.	T. Fuentes

EXHIBIT C

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

GEOLOGICAL EXPLANATION OF THE PARISH "IV" COM #6 AND THE RODEN "GD" FEDERAL COM #7

Yates Petroleum seeks approval of the Parish "IV" Com #6 and the Roden "GD" Federal Com #7, both unorthodox locations in the E/2 of Section 26 of Township 19 South - Range 24 East. Yates proposes to drill both locations to the Morrow Formation at a projected total depth of 9300 feet. The primary objective of the two proposed wells is the Morrow and Upper Penn Formations (the Upper Penn would be orthodox for both). Currently, there is no Morrow production in Section 26.

The structure map, with the top of the Morrow as a datum, shows a dip to the southeast. Well locations with data are Morrow penetrations, well locations without data are generally Upper Penn penetrations. The proposed locations are downdip of past Morrow production, but updip of other Morrow penetrations that were of poor reservoir quality. The problem in the localized area has been the lack of reservoir quality, not structure.

The isolith map represents sands of the Morrow Formation and shows the limits of sand deposition. The isolith map is a "clean sand" map with a gamma ray cutoff of 50 API units or less. This map shows two sand channels trending north-south, the sand thick on the east side of the map is the target for the proposed locations. The sand thicks should allow for better porosity and permeability, since this represents the area of highest energy within channel systems.

Both proposed locations have been placed in unorthodox positions to optimize sand thickness and increase the possibilities of encountering commercial quantities of hydrocarbons.

This figure is a highly detailed and complex map of the United States, divided into numerous small rectangular sections, each containing text and symbols. The map is labeled with various names, dates, and locations, suggesting a historical or administrative record. The text is dense and difficult to read in many places, but some larger labels like "HOAG TANK", "DAGGER DRAW", "CANYON", and "V RIVERS" are visible. The map also includes a grid system with numbers and letters.

The map is divided into sections by a grid of numbers and letters. The sections are labeled with various names, dates, and locations, suggesting a historical or administrative record. The text is dense and difficult to read in many places, but some larger labels like "HOAG TANK", "DAGGER DRAW", "CANYON", and "V RIVERS" are visible. The map also includes a grid system with numbers and letters.

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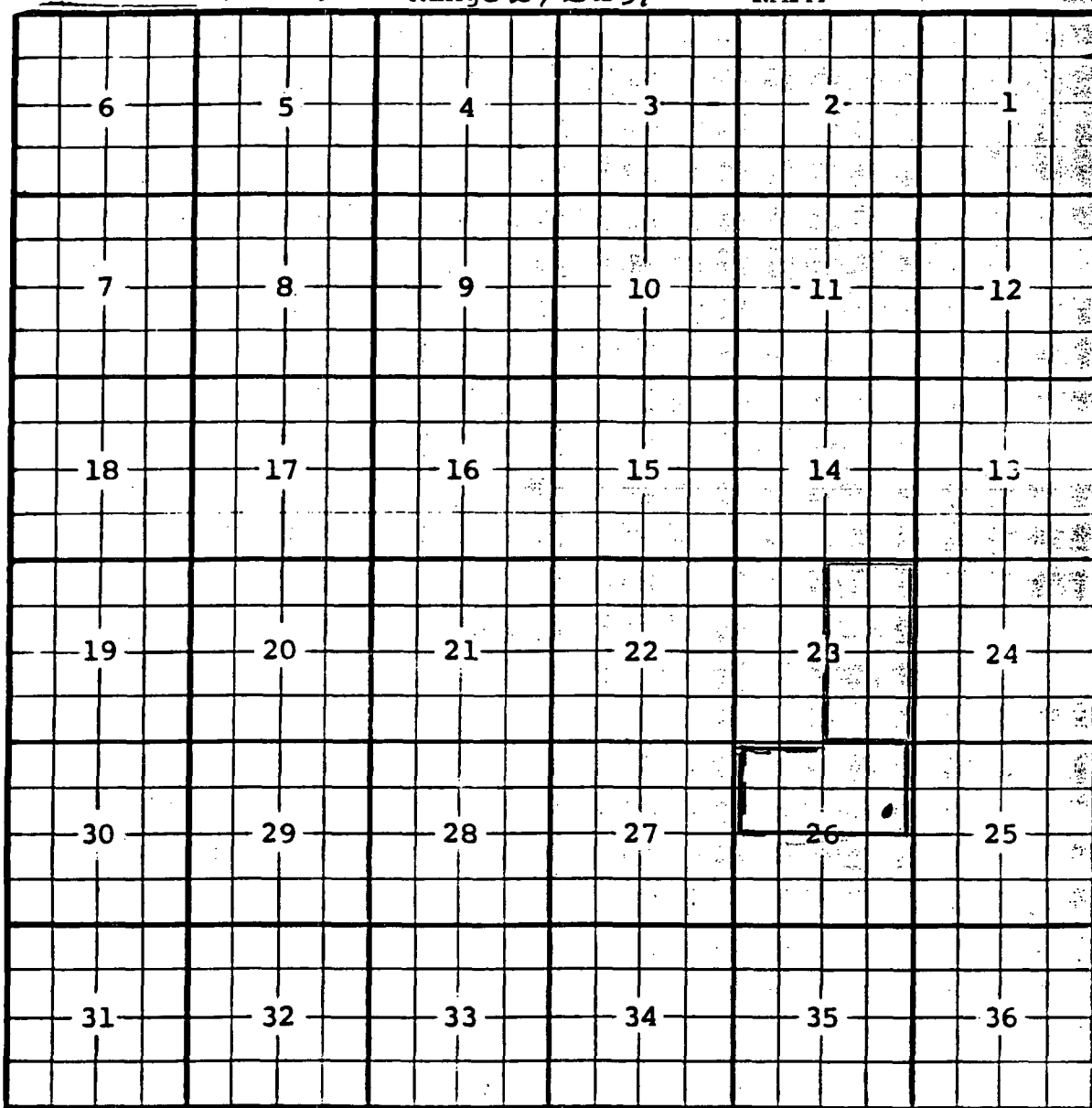
County Eddy

Pool Hoag Tank - Strawn Gas

TOWNSHIP 19 South

Range 24 East

NMPM

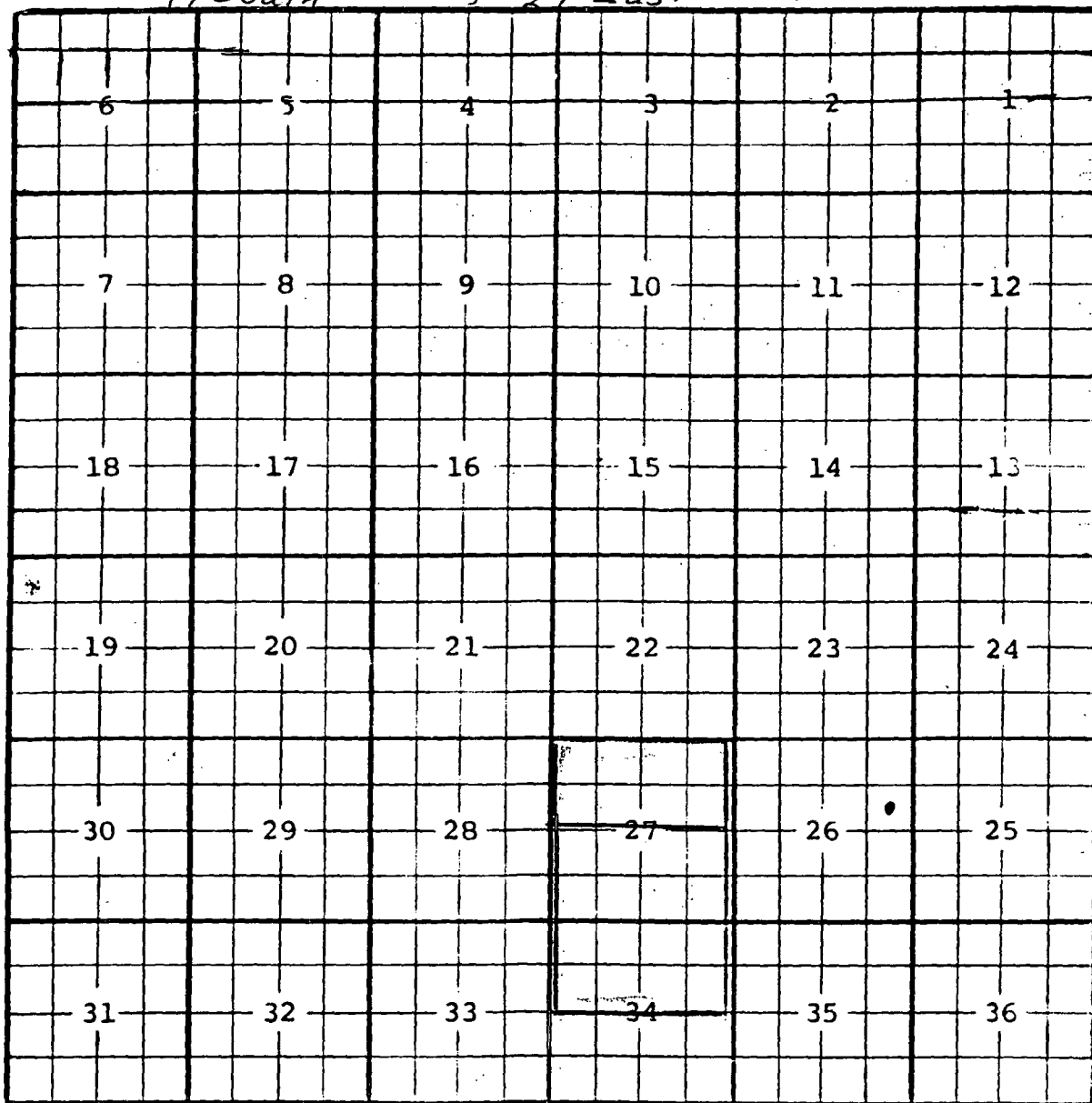


Description: E/2 Sec 23 (R-5609, 1-1-78)

Ext: N/2 Sec. 26 (R-10787, 4-9-97)

County Eddy Pool Hoag Tank-Atoka Gas

TOWNSHIP 19 South Range 24 East NMPM



Description: N $\frac{1}{2}$ Sec. 27 (A-9668, 5-6-92)

Ext: S $\frac{1}{2}$ Sec. 27, N $\frac{1}{2}$ Sec. 34 (A-9937, 1-27-93)

County Eddy Pool North Cemetery - Atoka Gas
TOWNSHIP 19 South Range 24 East NMPM

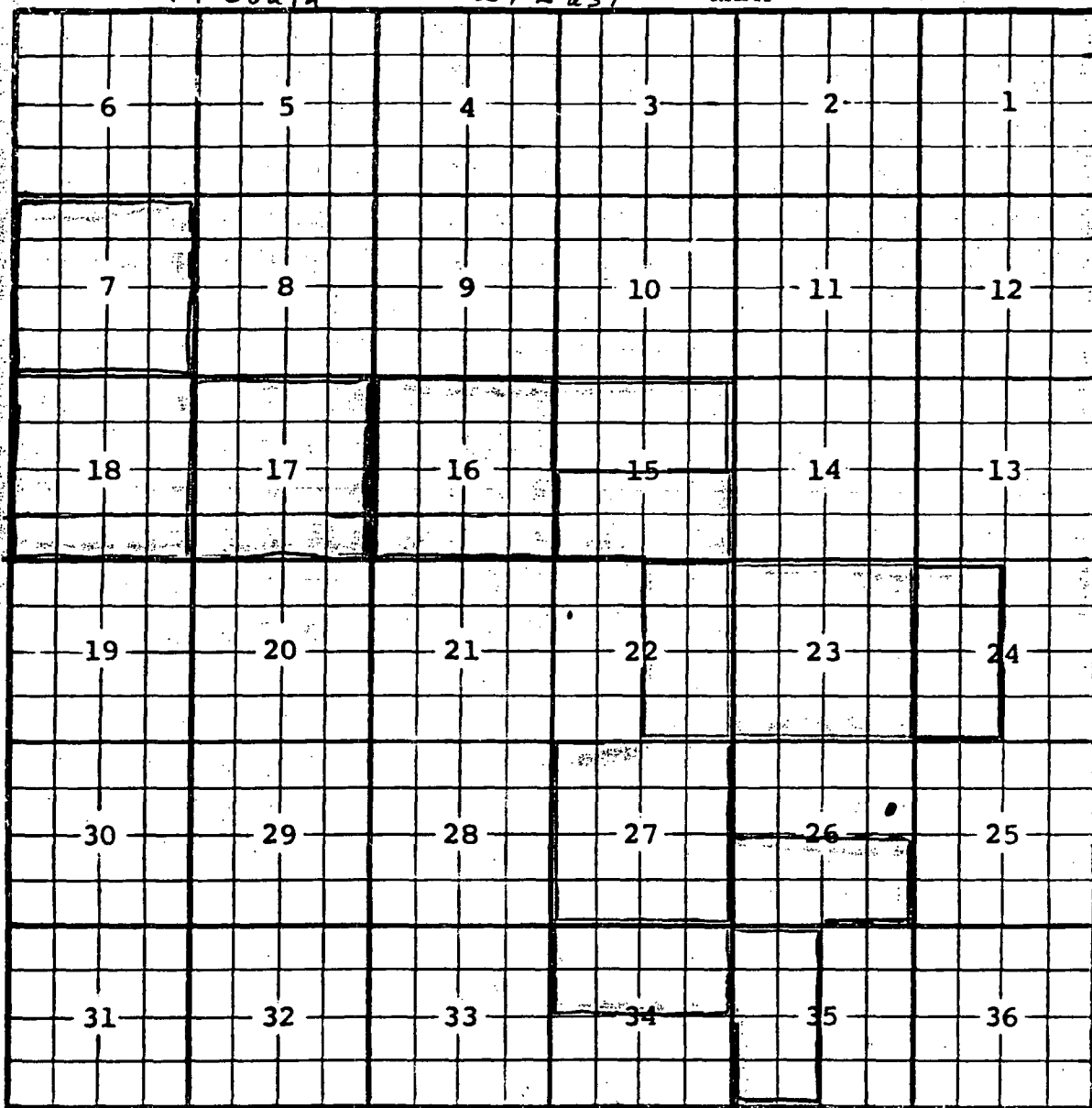
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Ext: N/2 Sec 36 (A-5988, 5-1-79)

POOL Hoag Tank - Morrow Gas

RANGE 24 East

NMPPM



Description: $\frac{E}{2}$ Sec 22 (R-5015, 6-1-75)

Ext: All Sec 23 (R-5309, 11-1-76) Ext: 5/2 Sec 15 (R-5781, 9-1-78)

Ext: All Sec 27 (R-6576, 2-10-81): Ext: All Sec 16 (R-6652, 4-20-81)

EXT: $\frac{1}{2}$ sec 34 (R-7009, 6-19-82) EXT: $\frac{1}{2}$ sec. 15 (A-7131, 11-30-82)

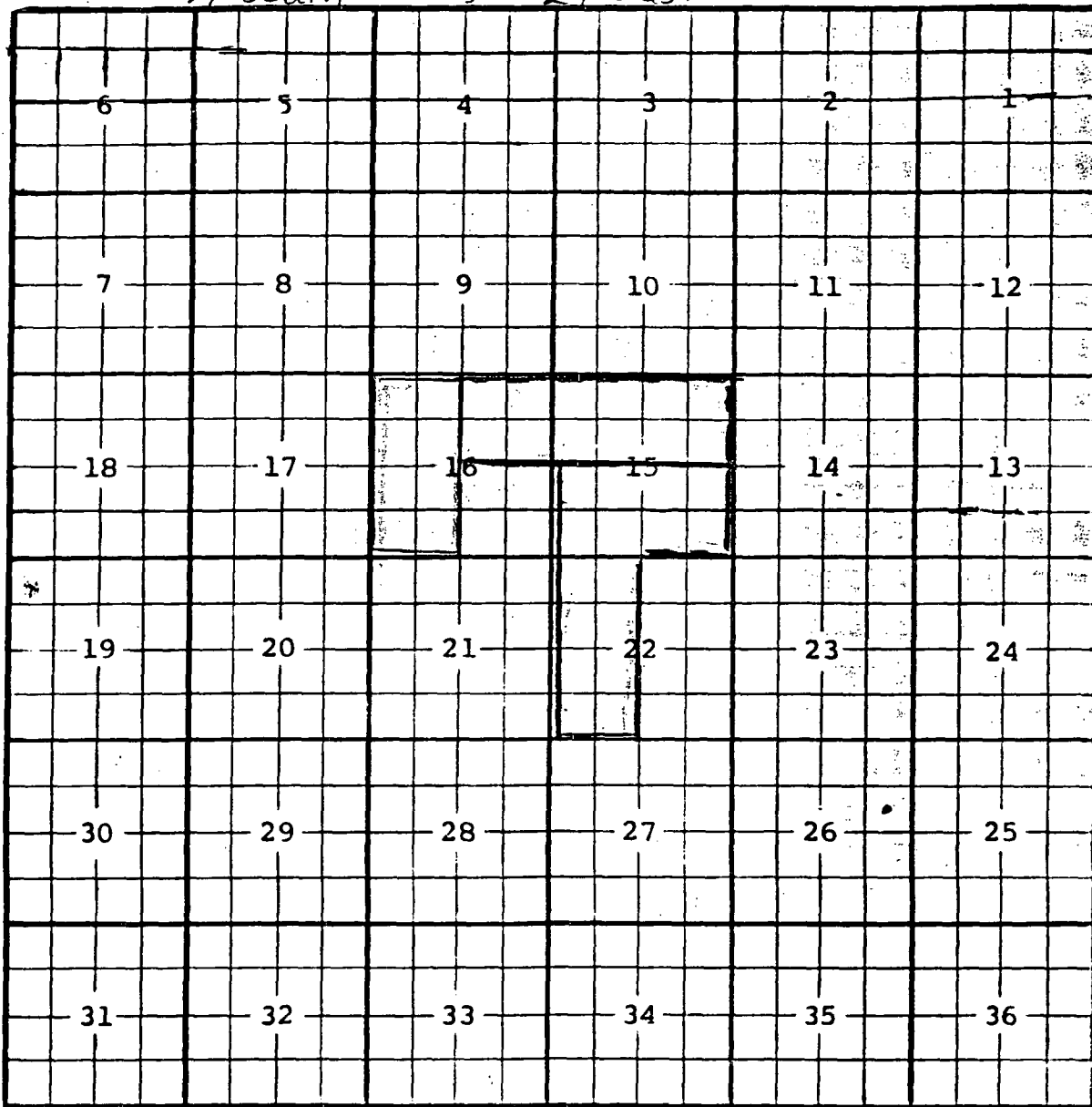
Ext: $\omega/2$ Sec. 35 (A-7158, 12-8-82)

Ext: Sec: 7 all, Sec: 17 + 18 all (R-7222, 2-25-83) ~~Ext: w/2 sec 24~~
(R-9096, 1-1-90) Ext: 5/2 Sec. 26 (A-9241, 7-31-90)

(R-9096, 1-1-90) Ext: 5/2 Sec. 26 (A-9241, 7-31-90)

County Eddy Pool Hoag Tank-Wolfcamp Gas

TOWNSHIP 19 South Range 24 East NMPM



Description: W $\frac{1}{2}$ Sec. 16 (R-7279, 5-12-83)

Ext: N $\frac{1}{2}$ Sec. 15, NE $\frac{1}{4}$ Sec. 16 (R-10680, 10-8-96)

Ext: S $\frac{1}{2}$ Sec. 15, W $\frac{1}{2}$ Sec. 22 (R-10782, 4-9-92)

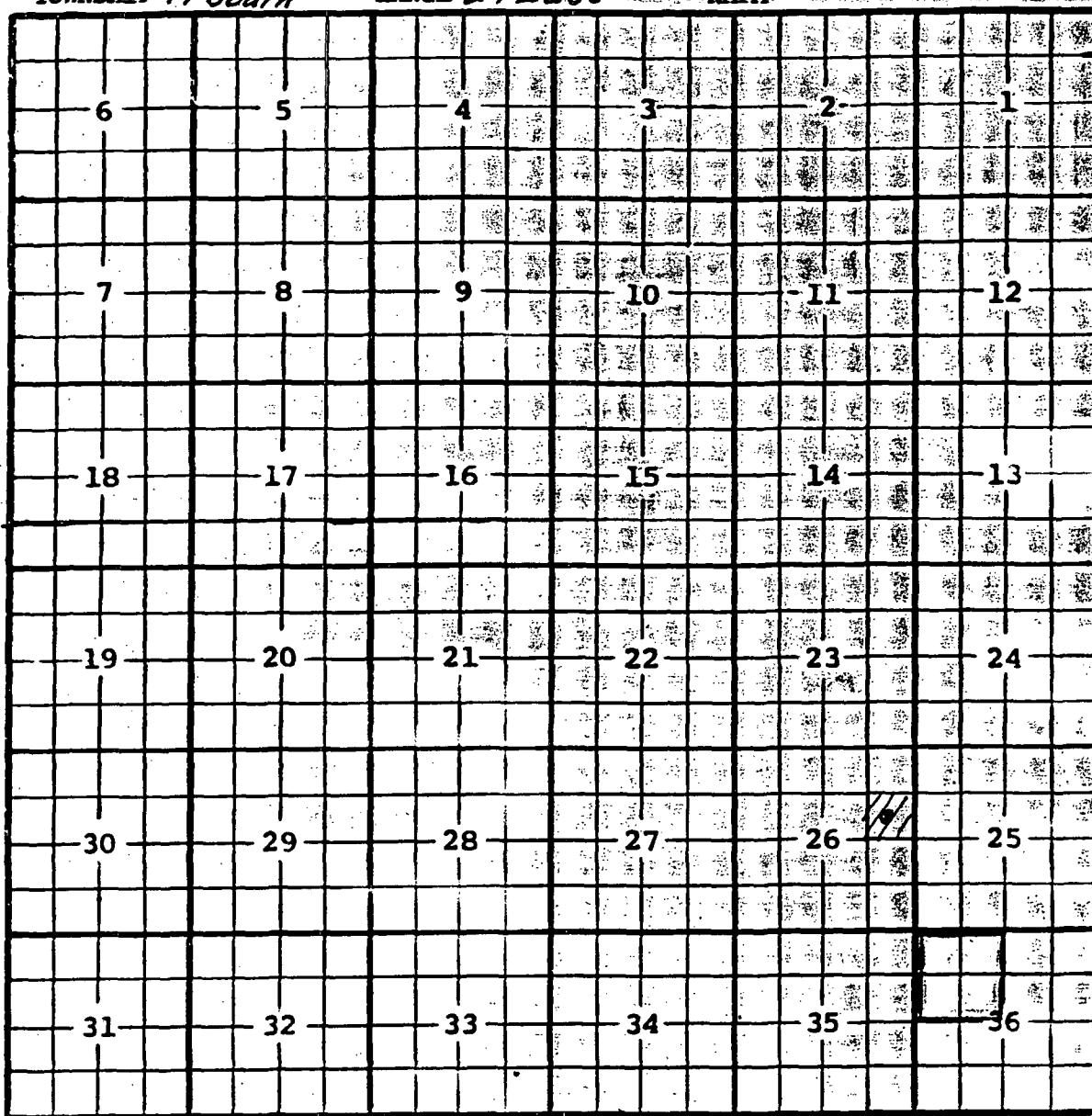
COUNTY *Eddy*

POOL *Canyon-Wolfcamp*

TOWNSHIP *19 South*

RANGE *24 East*

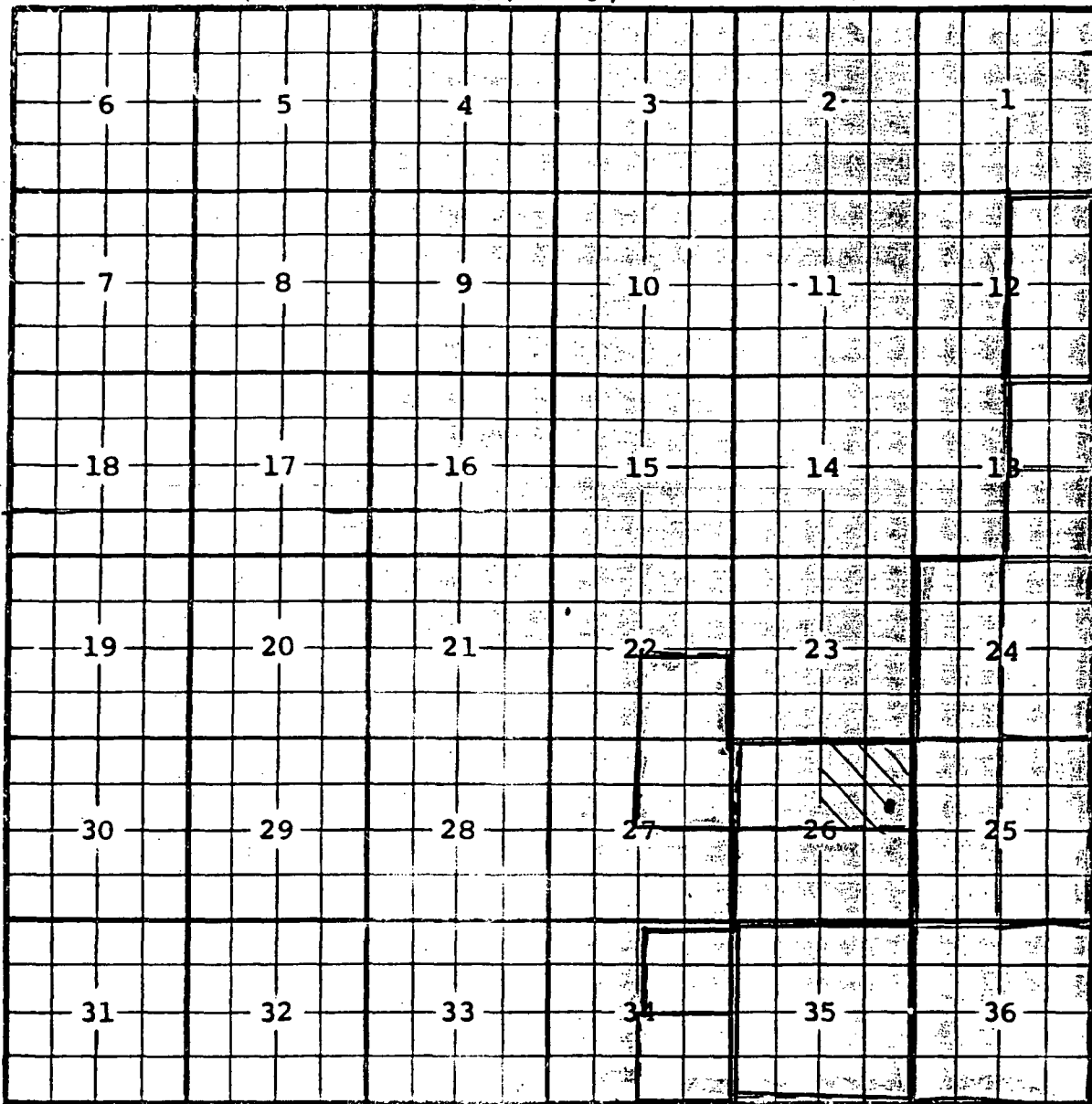
NMPM



Description: *NW 1/4 Sec. 36 (R-1532, 12-1-59)*

COUNTY EddyPOOL North Dagger Draw - Upper PennsylvanianTOWNSHIP 19 SouthRANGE 24 East

NMPM



Description: $\frac{E}{2}$ Sec 24, $\frac{E}{2}$ Sec 25, All Sec 36 (R-4691, 1-1-74)

Ext: $\frac{SE}{4}$ Sec 13 (R-5417, 4-1-77) Ext: $\frac{W}{2}$ Sec 25 (R-8665, 6/9/88)

Ext: $\frac{W}{2}$ Sec 24 (R-9171, 6-1-90) Ext: $\frac{NE}{4}$ Sec. 13, $\frac{N}{2}$ Sec. 26 (R-9241,

7-31-90) Ext: $\frac{SE}{4}$ Sec. 22, $\frac{NE}{4}$ Sec. 27, All Sec. 35 (R-9326, 11-2-90)

Ext: $\frac{SE}{4}$ Sec 34 (R-9418, 2-1-91) Ext: $\frac{NE}{4}$ Sec. 34 (R-10324, 3-7-95)

Ext: $\frac{E}{2}$ Sec. 12, $\frac{S}{2}$ Sec. 26 (R-10724, 1-8-92)

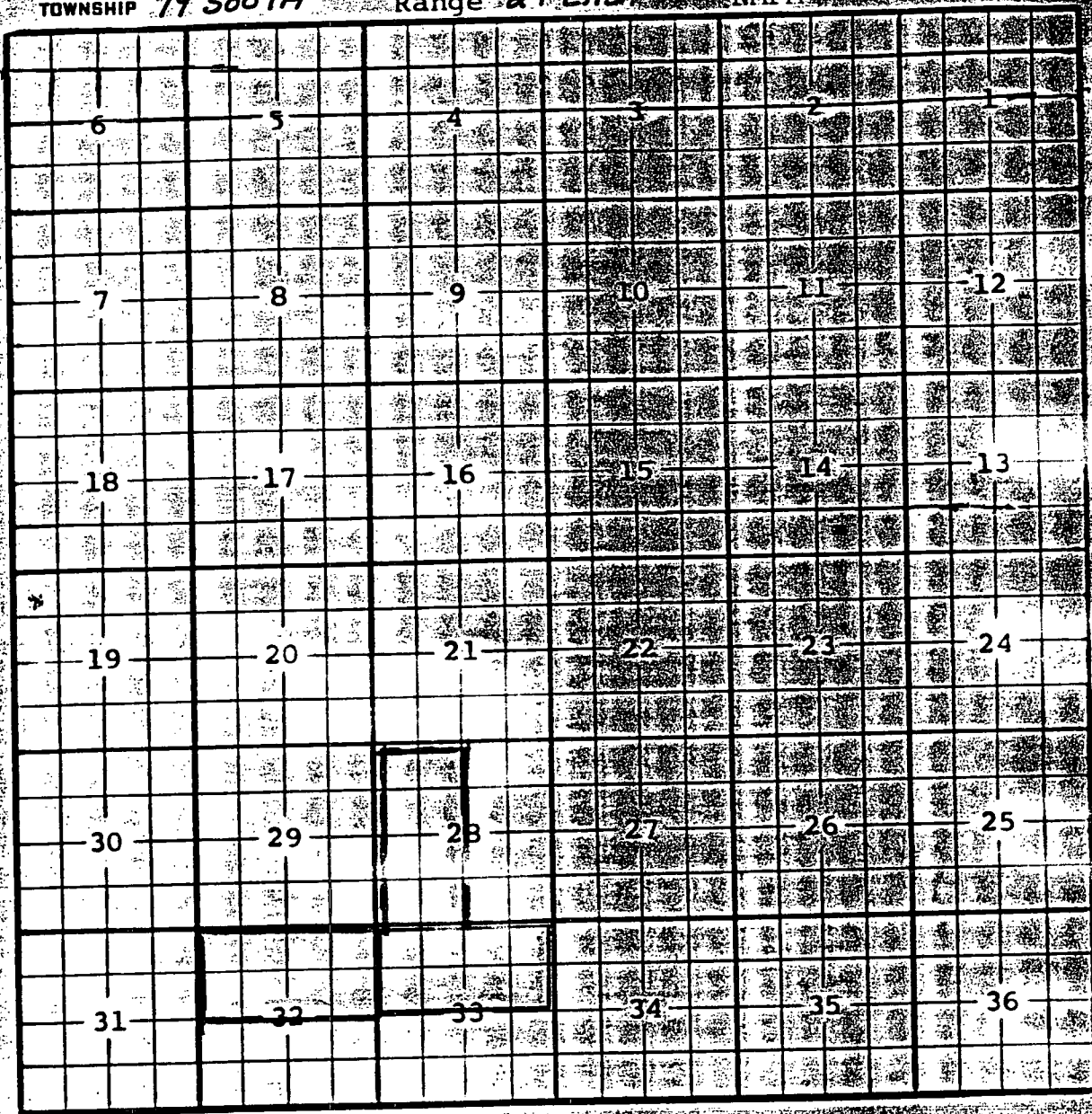
County EDDY

Pool WEST DAGGER DRAW - WOLF CAMP GAS

TOWNSHIP 19 SOUTH

Range 24 EAST

NMPM



DESB: N/2 SEC 33 (R-9473, 4-1-91)

EXT: W/2 SEC. 28, N/2 SEC. 32 (R-10787, 4-9-97)

COUNTY *Eddy*

POOL *Dagger Draw - Wolfcamp Grs.*

TOWNSHIP *20 South*

RANGE *24 East*

NEEP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Description: *NW 1/4 Sec. 1 (R-3438, 7-1-68)*

Ext: *N 1/2 Sec. 7 (R-10376, 5-24-95)*