

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

**IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:**

**Nomenclature  
CASE NO. 11746  
ORDER NO. R-10818**

**APPLICATION OF SDX RESOURCES, INC. TO ABOLISH BOTH THE EAST MILLMAN-SEVEN RIVERS POOL AND THE PALMILLO-SEVEN RIVERS POOL AND TO EXTEND THE VERTICAL AND HORIZONTAL LIMITS OF THE EAST MILLMAN QUEEN-GRAYBURG-SAN ANDRES POOL, EDDY COUNTY, NEW MEXICO, AND TO REDESIGNATE SAID POOL AS THE EAST MILLMAN YATES-SEVEN RIVERS-QUEEN-GRAYBURG-SAN ANDRES POOL.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on March 20, 1997, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 5th day of June, 1997, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

**FINDS THAT:**

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, SDX Resources, Inc., seeks to abolish both the East Millman-Seven Rivers Pool and the Palmillo-Seven Rivers Pool, which currently comprise the following described acreage in Eddy County, New Mexico:

**EAST MILLMAN-SEVEN RIVERS POOL**

**TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM**

Section 21: All

Section 22: N/2, W/2 SW/4

Section 23: NW/4

Section 28: N/2

Section 29: NE/4, SE/4 NW/4, NE/4 SW/4

**PALMILLO-SEVEN RIVERS POOL**

**TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM**

Section 18: NW/4

(3) The applicant further seeks to concomitantly expand the boundaries of the East Millman Queen-Grayburg-San Andres Pool to include those portions of the East Millman-Seven Rivers Pool not currently encompassed by the aforesaid East Millman Queen-Grayburg-San Andres Pool, all described as follows, and to expand the vertical limits of the East Millman Queen-Grayburg-San Andres Pool to include the Yates and Seven Rivers formations:

***CURRENT POOL BOUNDARY***

**EAST MILLMAN QUEEN-GRAYBURG-SAN ANDRES POOL**

**TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM**

Section 1: E/2

Section 11: S/2, S/2 NE/4

Section 12: S/2, SW/4 NW/4, NE/4

Section 13: All

Section 14: All

Section 15: E/2, E/2 SW/4

Section 21: E/2 SE/4

Section 22: N/2, SW/4, W/2 SE/4

Section 23: NW/4, N/2 NE/4

Section 24: NW/4, NW/4 NE/4

Section 27: NE/4 NW/4, NW/4 NE/4

**TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM**

Section 6: W/2

Section 7: W/2, NE/4

Section 17: SW/4

Section 18: All

***PROPOSED EXPANDED AREA***

**EAST MILLMAN QUEEN-GRAYBURG-SAN ANDRES POOL**

**TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM**

Section 21: N/2, SW/4, W/2 SE/4

Section 28: N/2

Section 29: NE/4, SE/4 NW/4, NE/4 SW/4

(4) Division records indicate that the East Millman-Queen Pool was created by Division Order No. R-1221 on July 21, 1958. By Order No. R-1324 dated January 21, 1959, the vertical limits of the East Millman-Queen Pool were extended to include the Grayburg formation and the pool was redesignated the East Millman Queen-Grayburg Pool. By Order No. R-7829 dated February 15, 1985, the vertical limits of the East Millman Queen-Grayburg Pool were extended to include the San Andres formation and the pool was redesignated the East Millman Queen-Grayburg-San Andres Pool.

(5) Division records further indicate that the East Millman-Seven Rivers Pool and Palmillo-Seven Rivers Pool were created, respectively, by Division Order No. R-1559 dated December 18, 1959, and Division Order No. R-2187 dated February 21, 1962.

(6) According to the January-June, 1997 Oil Conservation Division Oil Proration Schedule, Volume II, well and operator distribution among the three subject pools are as follows:

<u>POOL</u>	<u>NUMBER OF WELLS</u>	<u>NUMBER OF OPERATORS</u>
East Millman Queen-Grayburg-San Andres Pool	123	10
East Millman-Seven Rivers Pool	26	4
Palmillo-Seven Rivers Pool	0	0

(7) Within the East Millman Queen-Grayburg-San Andres Pool, the applicant currently operates approximately eighty-four (84) wells. Within the East Millman-Seven Rivers Pool, the applicant currently operates approximately three (3) wells.

(8) The applicant seeks to combine the three subject pools both vertically and horizontally for the following reasons:

- a) the Yates-Seven Rivers formation in this area does not contain sufficient reserves to economically justify drilling stand-alone wells to recover such reserves;

- b) there are numerous wells within the East Millman Queen-Grayburg-San Andres Pool which are marginal producers nearing their economic limit which have the potential for Yates-Seven Rivers production. The proposed pool consolidation will allow the applicant, and other operators in the pools, to complete the Yates-Seven Rivers formation within these wellbores, thereby allowing the recovery of oil and gas reserves from the Yates-Seven Rivers formation which may otherwise not be recovered, thereby preventing waste;
- c) applicant estimates that completing the Yates-Seven Rivers formation within certain existing East Millman Queen-Grayburg-San Andres producing wells may result in the ultimate recovery of an additional 10,000 barrels of oil per well from the Yates-Seven Rivers interval;
- d) absent the proposed pool consolidation, the applicant and other operators in the subject pools will be required to file administrative applications for downhole commingling (Division Form C-107-A) to accomplish the proposed recompletions, which applicant believes is unnecessary and burdensome.

(9) Applicant's evidence and testimony and Division records indicate that there are currently three secondary recovery projects within the East Millman Queen-Grayburg-San Andres Pool, described as follows:

- a) the East Millman Unit, operated by SDX Resources, Inc., currently comprises portions of Sections 1, 14, 15, 21, 22 and 23, Township 19 South, Range 28 East;
- b) the Sun East Millman Grayburg Waterflood Project, operated by Stephens & Johnson Operating Company, currently comprises portions of Sections 12 and 13, Township 19 South, Range 28 East; and,
- c) the Conoco "7" Waterflood Project, operated by SDX Resources, Inc., currently comprises all of Section 7, Township 19 South, Range 28 East.

(10) Applicant testified that with regards to its acreage within the subject pools, including its acreage contained within its two waterflood projects, all interests are common within the Yates-Seven Rivers and Queen-Grayburg-San Andres intervals.

(11) Applicant further verified that all interests are common within the Yates-Seven Rivers and Queen-Grayburg-San Andres intervals within the Stephens & Johnson Operating Company Sun East Millman Grayburg Waterflood Project.

(12) The applicant's evidence and testimony, however, does not conclusively demonstrate that all interests within the subject area in the Yates-Seven Rivers and Queen-Grayburg-San Andres intervals is common.

(13) The applicant notified all operators in the subject pools and all operators within a mile of the outer boundary of the pools. No offset operator and/or interest owner appeared at the hearing in opposition to the application.

(14) Approval of the subject application will allow the operators in the subject pools the opportunity to recover additional oil and gas reserves from the Yates-Seven Rivers formation, thereby preventing waste, and will not violate correlative rights provided that all interest is common within the Yates-Seven Rivers and Queen-Grayburg-San Andres intervals.

(15) In order to assure the protection of correlative rights in those situations where interest ownership between the Yates-Seven Rivers and Queen-Grayburg-San Andres intervals is not common within a well proposed to be completed in both intervals, the operator should be required to obtain a Division order approving downhole commingling, which order specifies the method by which the production is allocated between the Yates-Seven Rivers and Queen-Grayburg-San Andres intervals.

**IT IS THEREFORE ORDERED THAT:**

(1) Pursuant to the application of SDX Resources, Inc., the East Millman-Seven Rivers Pool and the Palmillo-Seven Rivers Pool, described in Finding No. (2) above, Eddy County, New Mexico, are hereby abolished.

(2) The vertical limits of the East Millman Queen-Grayburg-San Andres Pool are hereby extended to include the Yates and Seven Rivers formations, said pool to be redesignated the East Millman Yates-Seven Rivers-Queen-Grayburg-San Andres Pool.

(3) The horizontal limits of the East Millman Yates-Seven Rivers-Queen-Grayburg-San Andres Pool are hereby extended to include therein the following described acreage:

**TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM**

Section 21: N/2, SW/4, W/2 SE/4

Section 28: N/2

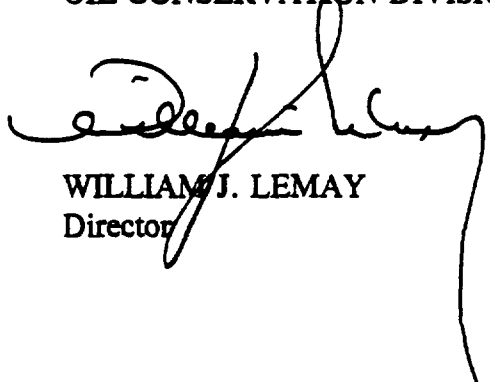
Section 29: NE/4, SE/4 NW/4, NE/4 SW/4

(4) In the event the interest ownership between the Yates-Seven Rivers and Queen-Grayburg-San Andres intervals is not common in a wellbore proposed to be completed in both intervals, the operator of the well shall be required to obtain a Division order approving downhole commingling, which order specifies the method by which the production is allocated between the Yates-Seven Rivers and Queen-Grayburg-San Andres intervals.

(5) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

S E A L

CMD :  
OG5SECTONGARD  
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OGOMES -TP0E  
PAGE NO: 1

Sec : 21 Twp : 19S Rng : 28E Section Type : NORMAL

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E 40.00 TPB LG3744 0002 MARBOB ENERGY COR 09/01/86	F 40.00 TPB B09189 0018 SOUTHLAND ROYALTY 06/10/51 A A	G 40.00 TPB E07815 0007 MARBOB ENERGY COR 02/16/64 A	H 40.00 TPB X00648 0145 LOUIS DREYFUS GAS 11/14/32 P

PF01 HELP  
PF07 BKWDPF02  
PF08 FWDPF03 EXIT  
PF09 PRINTPF04 GoTo  
PF10 SDIVPF05  
PF11PF06  
PF12

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OGOMES -TP0E  
PAGE NO: 2

Sec : 21 Twp : 19S Rng : 28E Section Type : NORMAL

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M 40.00 TPB X00648 0145 LOUIS DREYFUS GAS 11/14/32	N 40.00 TPB X00648 0145 LOUIS DREYFUS GAS 11/14/32 A	O 40.00 TPB LG3744 0002 MARBOB ENERGY COR 09/01/86 A	P 40.00 TPB E07815 0007 MARBOB ENERGY COR 02/16/64 A A

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12



CMD :  
OG6IWCM

ONGARD  
INQUIRE WELL COMPLETIONS

03/28/00 14:09:16  
OGOMES -TP0E

API Well No : 30 15 24252    Eff Date : 01-01-1995    WC Status : A  
Pool Idn : 46580 MILLMAN;S-RVERS, EAST (DO NOT USE)  
OGRID Idn : 3322 C F M OIL CO  
Prop Idn : 16486 MONSANTO STATE

Well No : 001  
GL Elevation: 3398

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/A)
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B.H. Locn	: O	21	19S	28E	FTG 986 F S	FTG 1650 F E	A

Lot Identifier:  
Dedicated Acre: 40.00  
Lease Type : S  
Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :

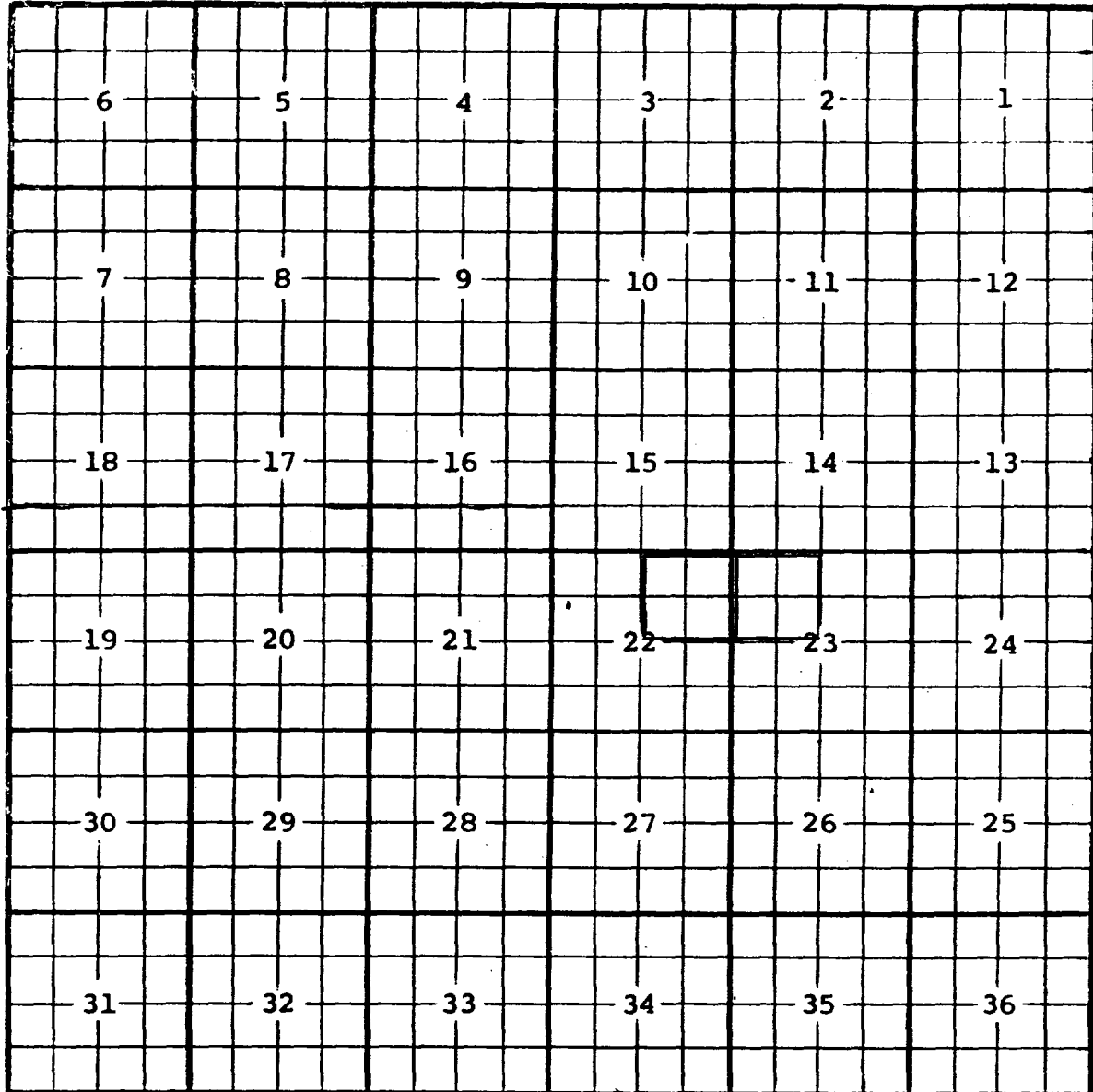
M0025: Enter PF keys to scroll

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06  
PF07           PF08              PF09           PF10 NEXT-WC   PF11 HISTORY   PF12 NXTREC

COUNTY *Eddy* POOL *North Winchester-Wolfcamp*

40

TOWNSHIP *19 South* RANGE *28 East* NMFM



Description: *NW 1/4 Sec 23 (R-5252, 9-1-76)*

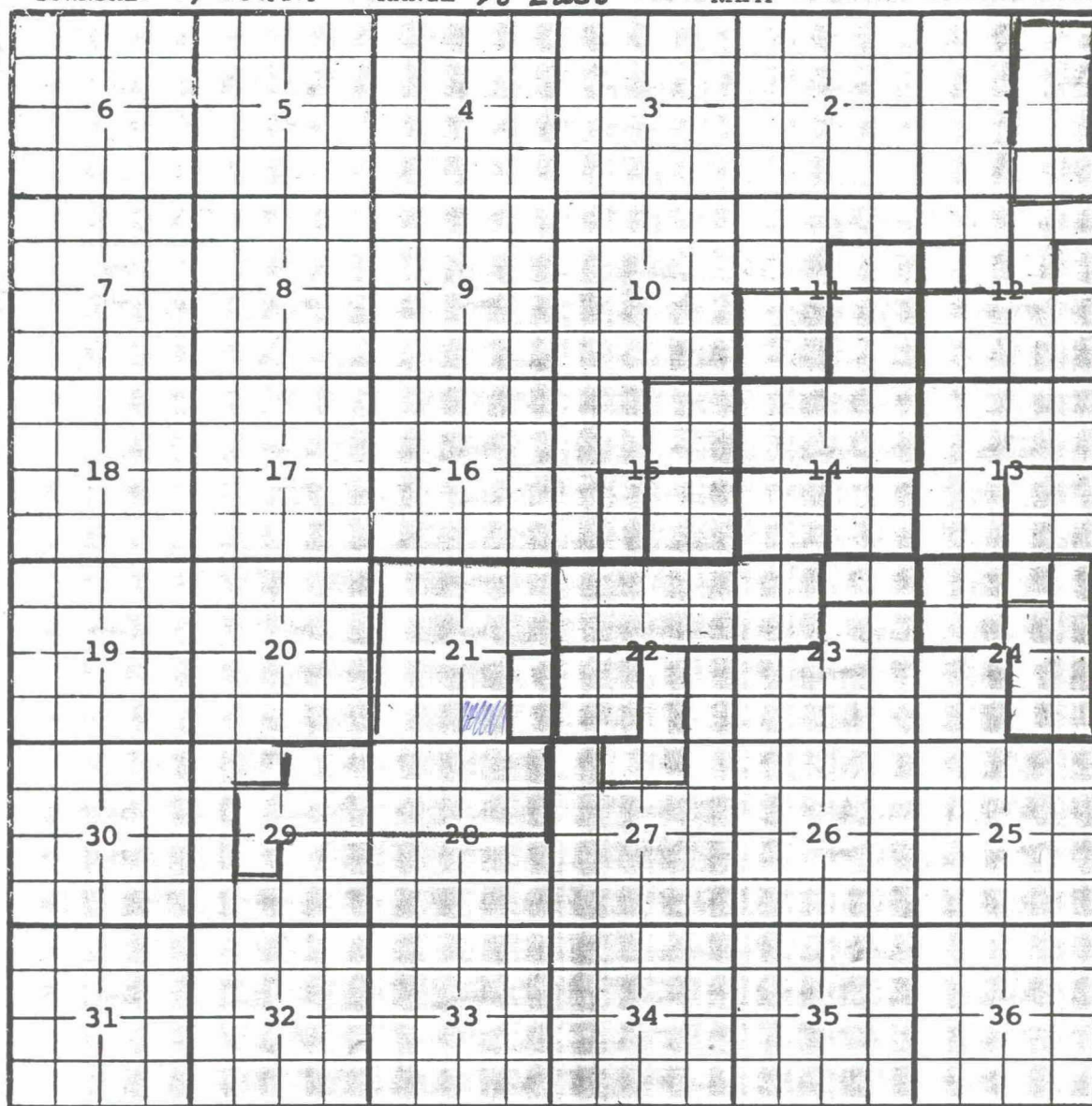
Ext: *NE 1/4 Sec. 22 (R-7334, 8-19-83)*

COUNTY Eddy

POOL

East Millman, Queen-Grayburg-San AndreTOWNSHIP 19 SouthRANGE 28 East

NMFM

Description:  $\frac{SE}{4}$  Sec. 14 (R-124, 8-1-58)Ext:  $\frac{SW}{4}$  Sec. 14 (R-1248, 10-1-58) -  $\frac{N}{2}$   $\frac{SE}{4}$  Sec. 13;  $\frac{N}{2}$  Sec. 22; $\frac{NW}{4}$  Sec. 23 (R-1374, 2-1-59) -  $\frac{N}{2}$  Sec. 14 (R-1355, 4-1-59) -  $\frac{S}{2}$  Sec. 12 (R-1397, 6-1-59)-  $\frac{SE}{4}$  Sec. 11;  $\frac{SE}{4}$  Sec. 15 (R-1466, 9-1-59) -  $\frac{SW}{4}$  Sec. 11 (R-1572, 2-1-60)-  $\frac{SE}{4}$  Sec. 13;  $\frac{NE}{4}$  Sec. 15 (R-1633, 4-1-60) -  $\frac{E}{2}$   $\frac{SW}{4}$  Sec. 15 (R-2047, 9-1-61)-  $\frac{SW}{4}$   $\frac{NW}{4}$  Sec. 12 (R-2139, 1-1-62) -  $\frac{SW}{4}$  Sec. 22 (R-2410, 2-1-63)-  $\frac{NW}{4}$  Sec. 24 (R-2507, 7-1-63) -  $\frac{E}{2}$   $\frac{SE}{4}$  Sec. 21 (R-2578, 11-1-63) -  $\frac{SE}{4}$   $\frac{NE}{4}$  Sec. 12; $\frac{N}{2}$   $\frac{NE}{4}$  Sec. 23 (R-2726, 7-1-64) -  $\frac{S}{2}$   $\frac{NE}{4}$  Sec. 11 (R-3237, 6-1-67)Ext.  $\frac{NW}{4}$   $\frac{NE}{4}$  Sec. 24 (R-6576, 2-10-81)

Extend vertical limits to include San Andres formation and redesignate as East Millman Queen-Grayburg-San Andres Pool.

Ext:  $\frac{N}{2}$   $\frac{NE}{4}$  and  $\frac{SW}{4}$   $\frac{NE}{4}$  Sec. 12 (A-7829, 2-15-85)Ext:  $\frac{S}{2}$   $\frac{SE}{4}$  Sec. 1,  $\frac{W}{2}$   $\frac{SE}{4}$  Sec. 22,  $\frac{NE}{4}$   $\frac{NW}{4}$  and  $\frac{NW}{4}$   $\frac{NE}{4}$  Sec. 27 (A-7875, 4-16-85)Ext:  $\frac{NE}{4}$  and  $\frac{N}{2}$   $\frac{SE}{4}$  Sec. 1 (R-10787, 4-9-97)Extend vertical limits to include Yates and Seven Rivers formations and redesignate as East Millman-Yates-Seven Rivers-Queen-Grayburg-San Andres Pool; Ext:  $\frac{N}{2}$   $\frac{SW}{4}$  and  $\frac{W}{2}$   $\frac{SE}{4}$  Sec. 21,  $\frac{N}{2}$  Sec. 28,  $\frac{NE}{4}$   $\frac{SE}{4}$   $\frac{NW}{4}$ ,  $\frac{N}{2}$   $\frac{NE}{4}$   $\frac{SW}{4}$  Sec. 29 (R-10818, 6-5-97)



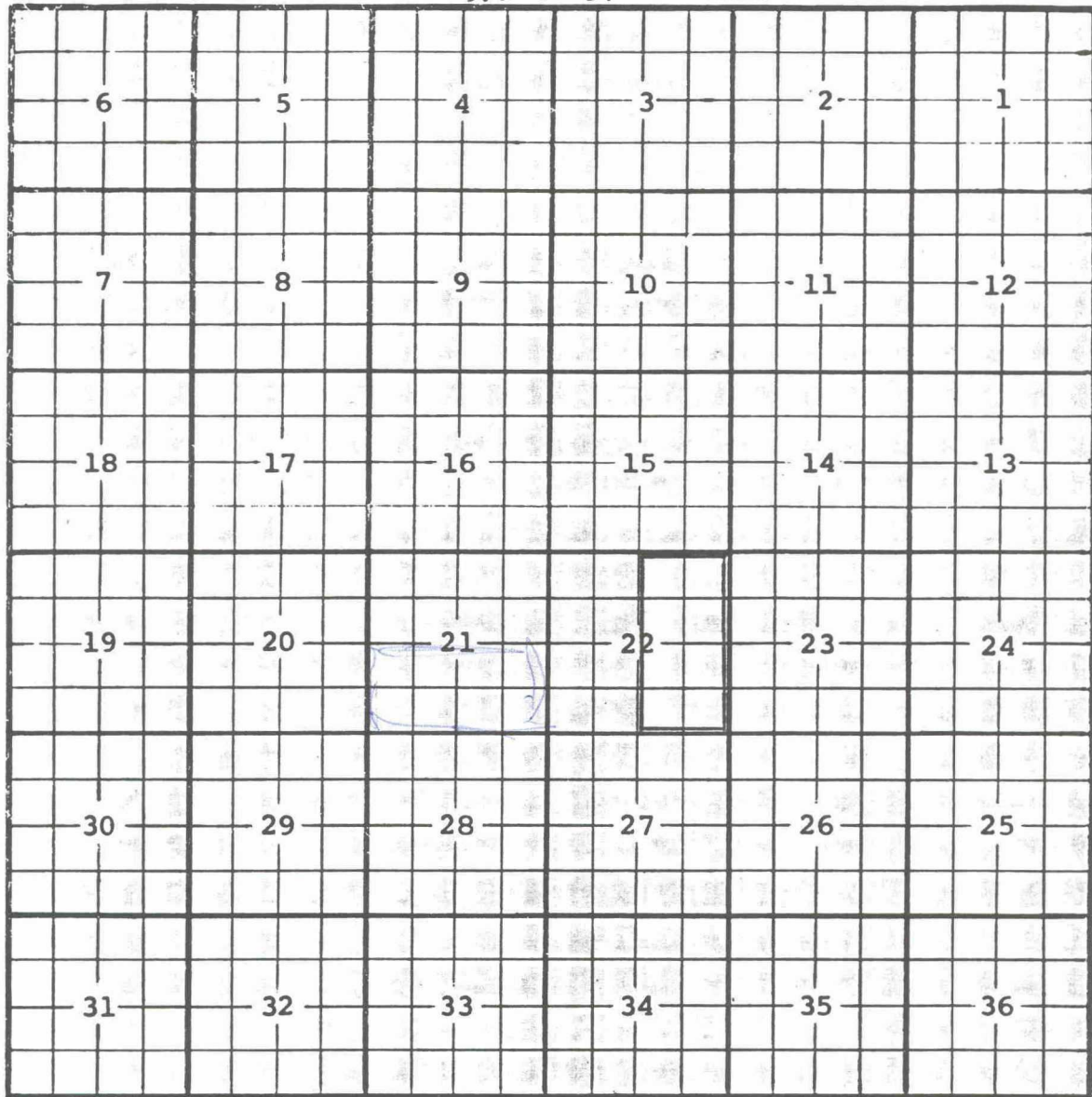
COUNTY *Eddy*

POOL *South Millman - Atoka Gas*

TOWNSHIP *19 South*

RANGE *28 East*

NMPM



Description:  $E\frac{1}{2}$  Sec 22 (R-5911, 2-1-79)

Eddy

## POOL

# Winchester-Atoka Gas

TOWNSHIP

19 South

RANG

28 East

NMPM

6	5	4	3	2	1
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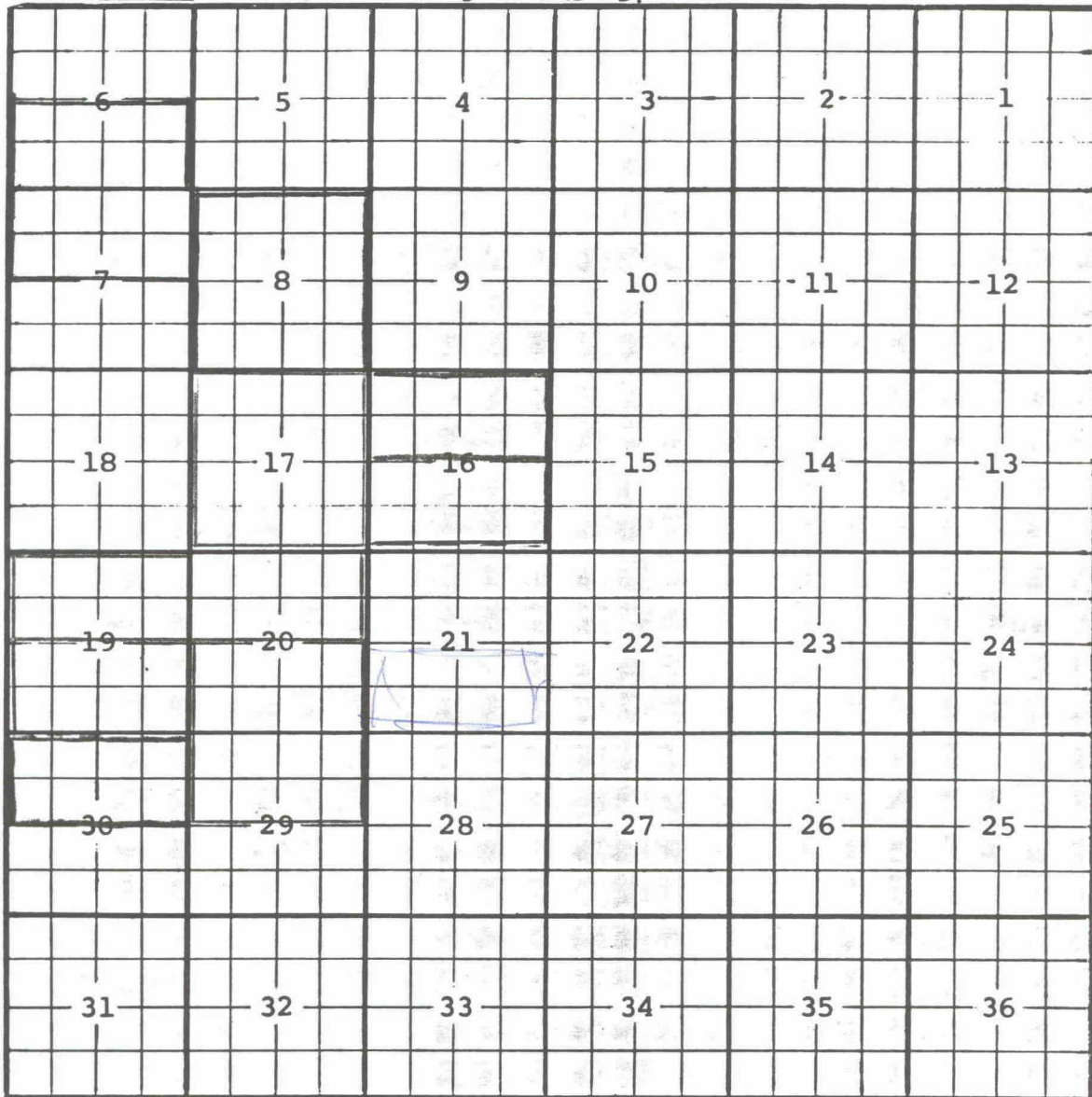
Description: 5/2 Sec 33; 5/2 Sec 34 (R-5988, 5-1-79)

Exr:  $\frac{1}{2}$  Sec. 28,  $\frac{1}{2}$  Sec. 29,  $\frac{1}{2}$  Sec. 33 (R-6169, 11-1-79)



County EddyPool South Millman - Morrow GasTOWNSHIP 19 SouthRange 28 East

NMPM



Description: All Sec 17 (R-5609, 1-1-78)

Ext:  $\frac{N}{2}$  Sec 19,  $\frac{N}{2}$  Sec 20 (R-5729, 6-1-78) Ext:  $\frac{S}{2}$  Sec 20, -  
-  $\frac{N}{2}$  Sec 29 (R-5781, 9-1-78) Ext:  $\frac{S}{2}$  Sec 19 (R-5911, 2-1-79)

Ext: All Sec. 8 (R-6499 11-1-80) Ext:  $\frac{N}{2}$  sec 30 (R-6876, 1-22-82)

Ext:  $\frac{N}{2}$  sec 16 (R-6994, 5-28-82)

Ext:  $\frac{S}{2}$  Sec. 6,  $\frac{N}{2}$  Sec. 7 (R-7708, 10-25-84)

Ext:  $\frac{S}{2}$  Sec. 16 (R-7758, 12-13-84)

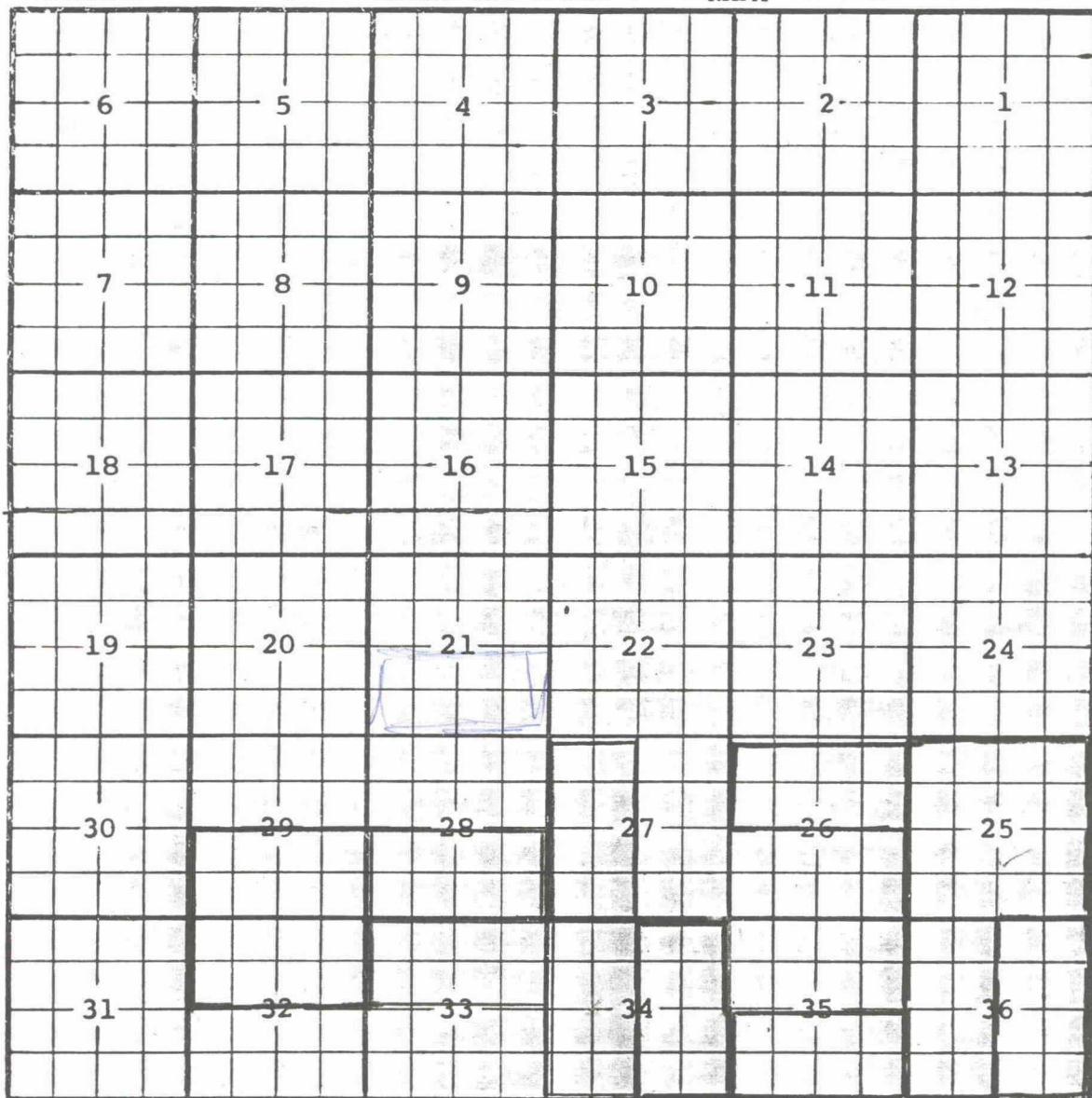
COUNTY Eddy

POOL Winchester - Morrow Gas

TOWNSHIP 19 South

RANGE 28 East

NMPM



Description:  $\frac{S}{2}$  Sec 35 (R-4437, 12-1-72)

Ext:  $\frac{E}{2}$  Sec 34 (R-4622, 9-1-73) Ext:  $\frac{W}{2}$  Sec 34 (R-4734, 3-1-74)

Ext:  $\frac{N}{2}$  Sec 33 (R-5361, 3-1-77) Ext:  $\frac{S}{2}$  Sec 28 (R-5729, 6-1-78)

Ext: All Sec 25,  $\frac{S}{2}$  Sec 29,  $\frac{N}{2}$  Sec 32,  $\frac{W}{2}$  Sec 36 (R-5988, 5-1-79)

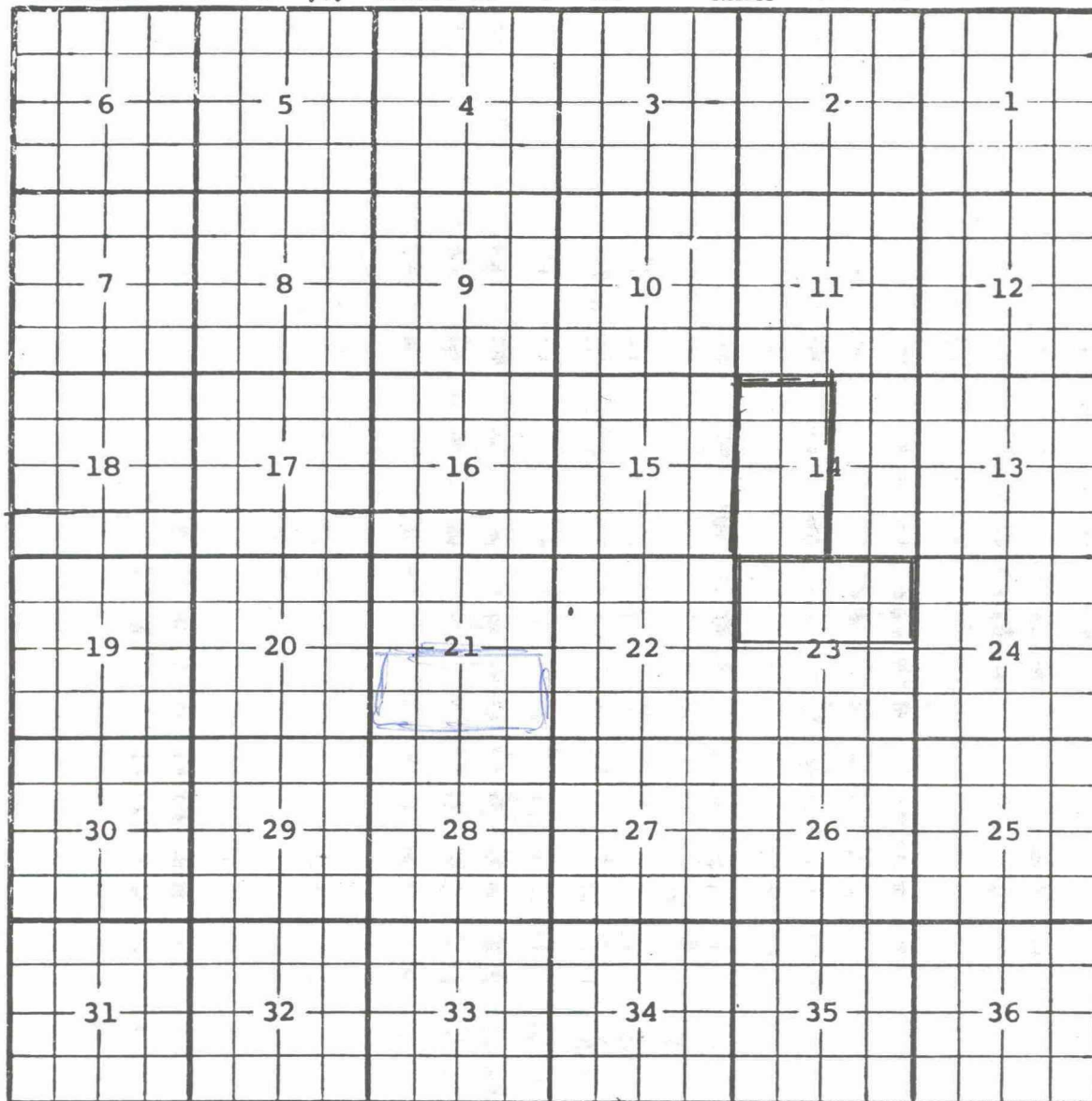
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Ext:  $\frac{N}{2}$  Sec 26 (R-10713, 11-26-96)



COUNTY Eddy POOL North Winchester-Morrow Gas

TOWNSHIP 19 South RANGE 28 East NMPM



Description:  $\frac{N}{2}$  Sec 23 (R-5252, 9-1-76)

Ext:  $\frac{W}{2}$  Sec. 14 (R-10642, 8-19-96)







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