

2/18/97 - 3/10/97 - ms - NW - NSL

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

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]

[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] or [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

Oil Conservation Division

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FEB 18 1997

[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


[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 further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

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

Robert G. Shelton

Print or Type Name

  
Signature

Land Manager

Title

2-13-97

Date

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN\*

\*NEW MEXICO BOARD OF LEGAL SPECIALIZATION  
RECOGNIZED SPECIALIST IN THE AREA OF  
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

TELEPHONE (505) 982-4285  
TELEFAX (505) 982-2047

February 18, 1997

**HAND DELIVERED**

Mr. Michael E. Stogner  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87501

RECEIVED

FEB 18 1997

RE: **Sandy Crossing "32" Federal Com Well No. 2**  
Administrative Application of  
Nearburg Producing Company for Approval  
of an Unorthodox Gas Well Location,  
Eddy County, New Mexico

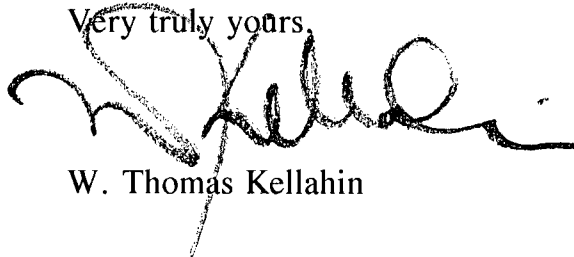
Oil Conservation Division

Dear Mr. Stogner:

On behalf of Nearburg Producing Company, please find enclosed our administrative application for approval of an unorthodox gas well location for its Sandy Crossing "32" Federal Com Well No. 2 to be drilled 990 feet FEL and 1980 feet FSL (Unit I) Section 32, T17S, R27E, Eddy County, New Mexico, in and dedicated to a standard 320-acre gas proration and spacing unit consisting of the S/2 of said Section 32 for gas production from all 320-acre gas pools including but not limited to the Logan Draw-Morrow Gas Pool.

Nearburg Producing Company is the only offsetting operator affected by this application and therefore no notice is required by the NMOCD rules.

Very truly yours,



W. Thomas Kellahin

fx: Nearburg Producing Company  
Attn: Mike Gray

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

RECEIVED  
FEB 18 1997

Oil Conservation Division

**IN THE MATTER OF THE ADMINISTRATIVE  
APPLICATION OF NEARBURG PRODUCING COMPANY  
FOR APPROVAL OF AN UNORTHODOX GAS WELL LOCATION,  
EDDY COUNTY, NEW MEXICO**

**ADMINISTRATIVE APPLICATION**

Comes now Nearburg Producing Company, by and through its attorneys, Kellahin and Kellahin, and in accordance with Division General Rule 104.F applies to the New Mexico Oil Conservation Division for administrative approval of an unorthodox gas well location for its Sandy Crossing "32" Federal Com Well No. 2 to be drilled 990 feet from the East line and 1980 feet from the South line (Unit I) Section 32, T17S, R27E, Eddy County, New Mexico and dedicated to a standard 320-acre gas proration and spacing unit consisting of the S/2 of said Section 32 for gas production from all 320-acre gas pools including but not limited to the Logan Draw-Morrow Gas Pool and in support states:

(1) Nearburg Producing Company ("Nearburg") is the proposed operator of the subject well and Nearburg Exploration Company. L.L.C. is the working interest owner in the S/2 of Section 32. **See Exhibit 1.**

(2) Nearburg proposes to drill its Sandy Crossing "32" Federal Com Well No. 1 at an unorthodox gas well location 990 feet from the East line and 1980 feet from the South Line of Section 32, T17S, R27E, NMPM, Roosevelt County, New Mexico. **See Exhibit 2.**

(3) The subject well is to be drilled to test, among other things, the Morrow formation in the Logan Draw-Morrow Gas Pool which is subject to the statewide Rule 104 providing for standard well locations not closer than 1650 feet to the end nor closer than 660 feet to the side boundary of the spacing unit.

(4) The subject well is offset by spacing units operated by Nearburg. **See Exhibit 3.**

**Administrative Application of  
Nearburg Producing Company  
Page 2**

(5) For geologic reasons, the subject well is to be drilled at an unorthodox well location so that it is located at the point of greatest potential net thickness of clean Lower Morrow sand with reservoir characteristics not available at the closest standard location:

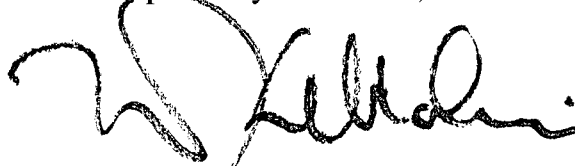
- (a) Geologic narrative, Exhibit 4-a
- (b) geologic isopach, Exhibit 4-b
- (c) geologic structure map Exhibit 4-c
- (d) geologic cross section, Exhibit 4-d

(7) Nearburg's geologic conclusion is that a well drilled at the closest standard location would place the well in an unfavorable position in the Morrow formation which will substantially increase the risk of a non-commercial well while the proposed unorthodox well location has the best opportunity of encountering a productive reservoir.

(8) This application involves federal surface and an APD has been filed with the BLM. The proposed surface location has been inspected by the BLM and Nearburg believes its location will be approved by the BLM. **See Exhibit 5.**

WHEREFORE, Nearburg Producing Company requests that this matter be approved administratively by the Division.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'W. Thomas Kellahin', written over a horizontal line.

W. Thomas Kellahin  
Kellahin and Kellahin  
P.O. Box 2265  
Santa Fe, New Mexico 87504-2265  
(505) 982-4285  
Attorneys for Applicant

**NEARBURG PRODUCING COMPANY  
UNIT OWNERSHIP MAP  
Sandy Crossing "32" State Com. No. 1  
1980' FSL & 990' FEL  
Section 32, T-17-S, R- 27-E  
Eddy County, New Mexico**

32			
Nearburg Exploration Co. LLC SL B-6869	Nearburg Exploration Co. LLC SL VA-787	Nearburg Exploration Co. LLC SL B-8318	Nearburg Exploration Co. LLC SL B- 8814
Nearburg Exploration Co. LLC SL B-9391	Nearburg Exploration Co. LLC SL B-6869	Nearburg Exploration Co. LLC SL VA -787	

**EXHIBIT**

**1**

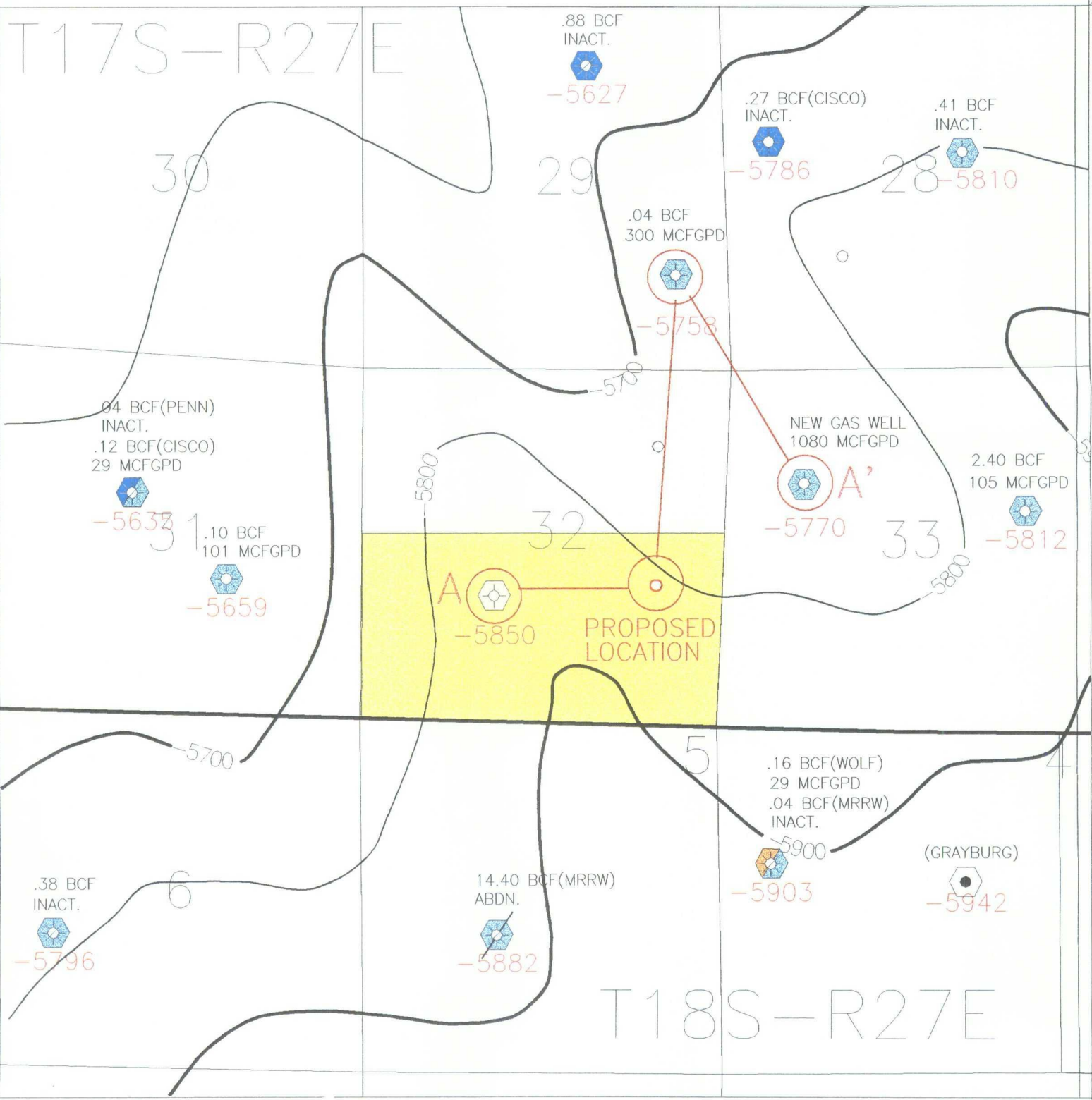
2

## Eddy County, New Mexico



3

T17S-R27E



4-C



Scale 1:24000.



### LEGEND

- WOLFCAMP
- CISCO
- MORROW
- SPACING UNIT ACREAGE

**Nearburg Producing Company**  
Exploration and Production  
Midland, Texas

**SANDY CROSSING "32" STATE COM. #1**  
EDDY COUNTY, NEW MEXICO  
TOP LOWER MORROW  
STRUCTURE MAP

**PRODUCTION MAP**  
(CUM. TO 8-96)

C. I. = 100'

GEOLOGIST	DATE	DRAWN BY	FILE NO.
J.B. ELGER	1/97	LCG/NKM	sd32.GPF



District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
811 South 1st St, Artesia, NM 88210

District III  
1000 Rio Brazos Rd, Aztec, 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-101  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator name and Address Nearburg Producing Company P. O. Box 823085 Dallas, TX 75382-308		2. OGRID Number 15742
		3. API Number
4. Property Code	5. Property Name Sandy Crossing 32 State Com	6. Well Number #1

7. Surface Location

UI or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South Line	Feet from the	East/West Line	County
I	32	17S	27E		1,980	South	990	East	Eddy

8. Proposed Bottom Hole Location If Different From Surface

UI or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South Line	Feet from the	East/West Line	County

9. Proposed Pool 1

10. Proposed Pool 2

11. Work Type Code N	12. Well Type Code G	13. Cable/Rotary Rotary	14. Lease Type Code S	15. Ground Level Elevation 3,475'
16. Multiple N	17. Proposed Depth 9,600'	18. Formation Morrow	19. Contractor Peterson	20. Spud Date 04/01/97

21. Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	8-5/8"	24# & 32#	1,100'	600 sacks	Surface
7-7/8"	5-1/2"	17# & 20#	9,600'	1,000 sacks	Surface

22. Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheet if necessary.

Propose to drill the well to sufficient depth to evaluate the Morrow formation. After reaching TD, logs will be run and casing set if the evaluation is positive. Perforate, test and stimulate as needed to establish production.

23. I hereby certify that information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:

E. Scott Kimbrough

Title:

Manager of Drilling and Production

Date:

01/23/97

Phone:

915/686-8235

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐

EXHIBIT

5

**NEARBURG PRODUCING COMPANY**  
**Sandy Crossing "32" State Com. #1**  
1980' FSL & 990' FEL Section 32 T-17-S, R-27-E  
Eddy County, New Mexico

Nearburg Producing Company proposes the drilling of it's *Sandy Crossing "32" State Com. #1* at an unorthodox location (1980' FSL & 990' FEL) in the S/2 of section 32 T-17-S, R-27-E. This test is a development location in the **Logan Draw Morrow** gas pool. Projected total depth should be 9600'. Three geological exhibits have been prepared to explain why Nearburg is seeking an unorthodox location within this 320 acre unit.

**GEOLOGICAL EXHIBIT 1**

Geological exhibit 1 is a combined structure map of the top of the Lower Morrow and production map identifying current /former gas producers including the cumulative production and current daily rates for each. By far the most significant production locally has been from the Pennsylvanian Morrow Formation. Nearburg Producing Company has recently drilled two Morrow tests in the immediate area (SE/4 section 29 and NW/4 section 33). Of these two wells, the most significant is the Nearburg Exxon "33" Fed. Com. #1 drilled in section 33. Based on it's current performance, this well is expected to recover a commercial quantity of natural gas. The sand pay encountered by this well forms the basis for Nearburg's application for an unorthodox drillsite in the SE/4 section 32, and is described/displayed on the accompanying geological exhibits.

**GEOLOGICAL EXHIBIT 2**

Geological exhibit 2 is a Morrow stratigraphic cross-section incorporating the three closest Morrow penetrations. The two closest Morrow producers have both been drilled and operated by Nearburg as previously described. This cross-section is hung on a datum which has been identified as the Top of the Lower Morrow. The Nearburg Trigg "29" Fed. Com. #1 is currently completed from two sands in the Morrow clastics. This well is considered to be a poor to marginal producer based on it's current daily gas rate (see geological exhibit 1). The Nearburg Exxon "33" Fed. Com. #1 is completed in a sand equivalent to the lowermost sand perforated and producing in the Trigg well. This sand was drillstem tested during drilling operations and subsequently completed from sands as shown on this exhibit (perforations = dark red shading in depth column). As previously noted, the Exxon "33" is expected to be a significant commercial well.

**GEOLOGICAL EXHIBIT 3**

Geological exhibit 3 is a combined gross/net sand isopach map of the Lower Morrow sand which has been identified on geological exhibit 2 as the main commercial producing sand developed within the Morrow Formation in the immediate area. Again, this is the main sand which is developed in the NPC Exxon "33" well. The map legend explains which wells are productive from this particular sand. The dark brown shaded area of this map represents that area in which 20' or greater of net porous sand (8% or greater porosity) is expected to be present. This map was constructed utilizing subsurface well control only. Of importance is the Humble Oil Chalk Bluff Draw #2 well drilled in the SW/4 section 32. This well encountered a very thin, poorly developed sand in the Lower Morrow equivalent to the main pay in the Exxon "33" (this relationship is displayed on geological exhibit 2). In fact, all of the Morrow sands are very poorly developed at this location and although Humble ran pipe and attempted to complete this well from the Morrow, it was unsuccessful, and the well was abandoned.

4-A

### **SECONDARY OBJECTIVES**

Several wells in the vicinity of the prospect acreage have produced natural gas and associated liquids from formations other than the Morrow, specifically, from the Wolfcamp and Cisco. Production from these reservoirs represents a viable secondary objective at the proposed drillsite, however, as geological figure 1 shows, these formations contain reserves which are considered non-commercial as primary objectives.

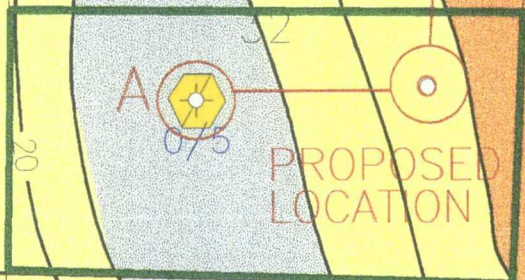
### **CONCLUSION**

The proposed unorthodox location has been situated such that it has a reasonable opportunity to encounter this Lower Morrow sand with reservoir characteristics consistent with commercial production. The risk of not encountering porous and permeable sands within the Lower Morrow associated with a drillsite located at an orthodox location (1650' from the east line) would preclude Nearburg from developing the natural gas reserves underlying the S/2 section 32. Granting of Nearburg's request for an unorthodox location, based on the geological evidence presented in the attached exhibits, would prevent waste and protect Nearburg's correlative rights.



T17S-R27E

T18S R27E



PROPOSED  
LOCATION






4-B



Scale 1:24000

1000 0 1000 2000 3000 4000 5000 feet

LEGEND

- 18/21 NET SAND GROSS SAND
-  SS PRODUCTIVE
-  SS LOW POROSITY
-  SS ABSENT/SHALE
-  NET SAND  $\geq 20'$
-  SPACING UNIT ACREAGE

**Nearburg Producing Company**  
Exploration and Production  
Midland, Texas

**SANDY CROSSING "32" STATE COM. #1**  
**EDDY COUNTY, NEW MEXICO**

**MORROW UPPER "C" GROSS**  
**AND NET SAND ISOPACH MAP**  
(NET  $\geq 8\%$  CROSSPLOT POROSITY)

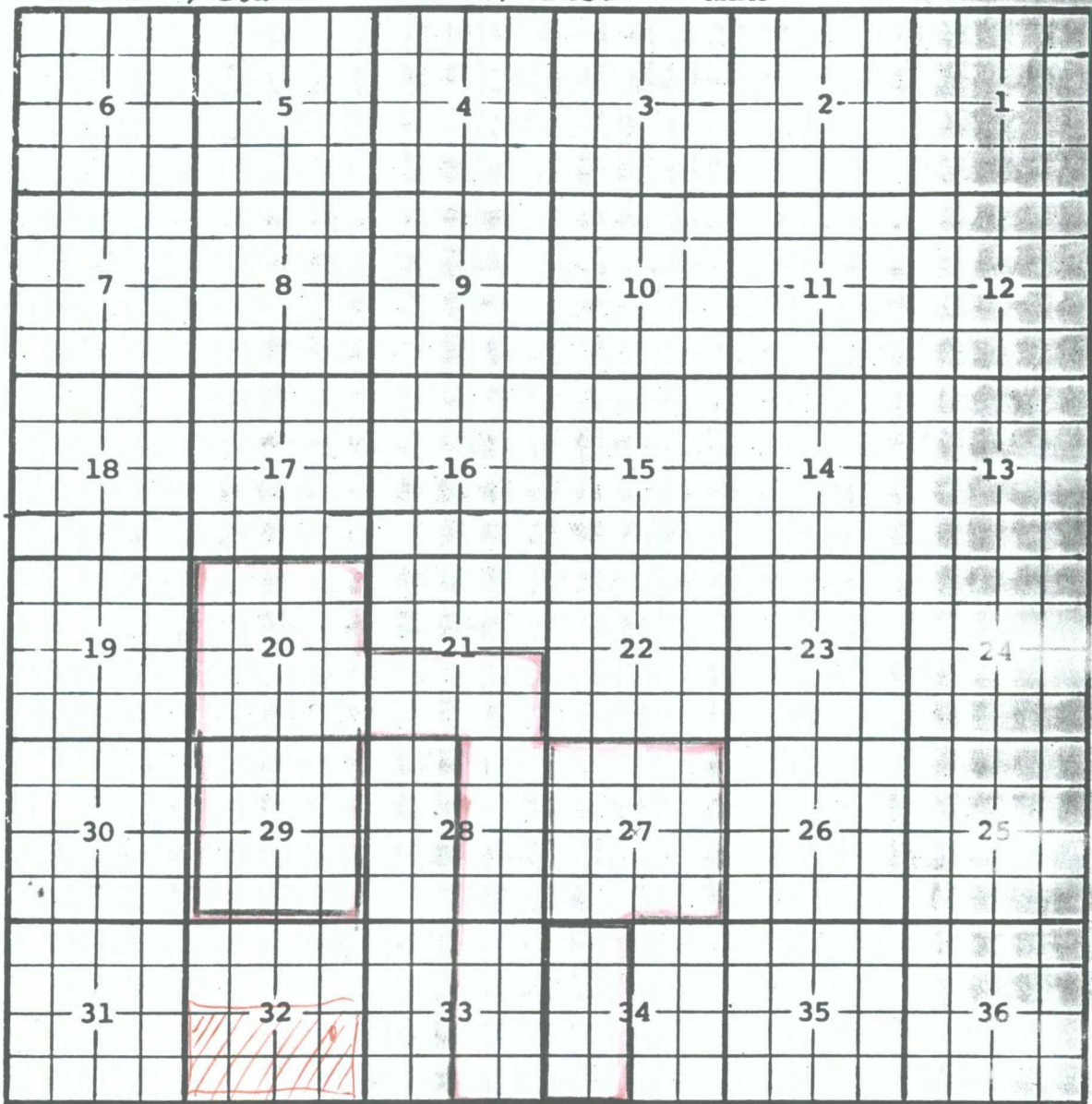
C. I. = 10'

GEOLOGIST	DATE	DRAWN BY	FILE NO.
J.B. ELGER	1/97	LCG/NKM	sd321.GPF



COUNTY EddyPOOL Logan Draw - Morrow GasTOWNSHIP 17 SouthRANGE 27 East

NMPM

Description:  $\frac{1}{2}$  Sec. 34 (R-3758, 6-1-69)Ext: All Sec 27 (R-4734, 3-1-74) Ext: All Sec. 20,  $\frac{1}{2}$  Sec. 21, $\frac{1}{2}$  Sec. 28,  $\frac{1}{2}$  Sec. 33 (R-6328, 5-1-80) Ext: All Sec. 29 (R-10619, 7-2-96)

County Eddy Pool West Logan Draw - Morrow Gas

TOWNSHIP 17 South Range 27 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

Description:  $\frac{E}{2}$  Sec. 31 (A-10124, 5-31-94)



COUNTY *Eddy*

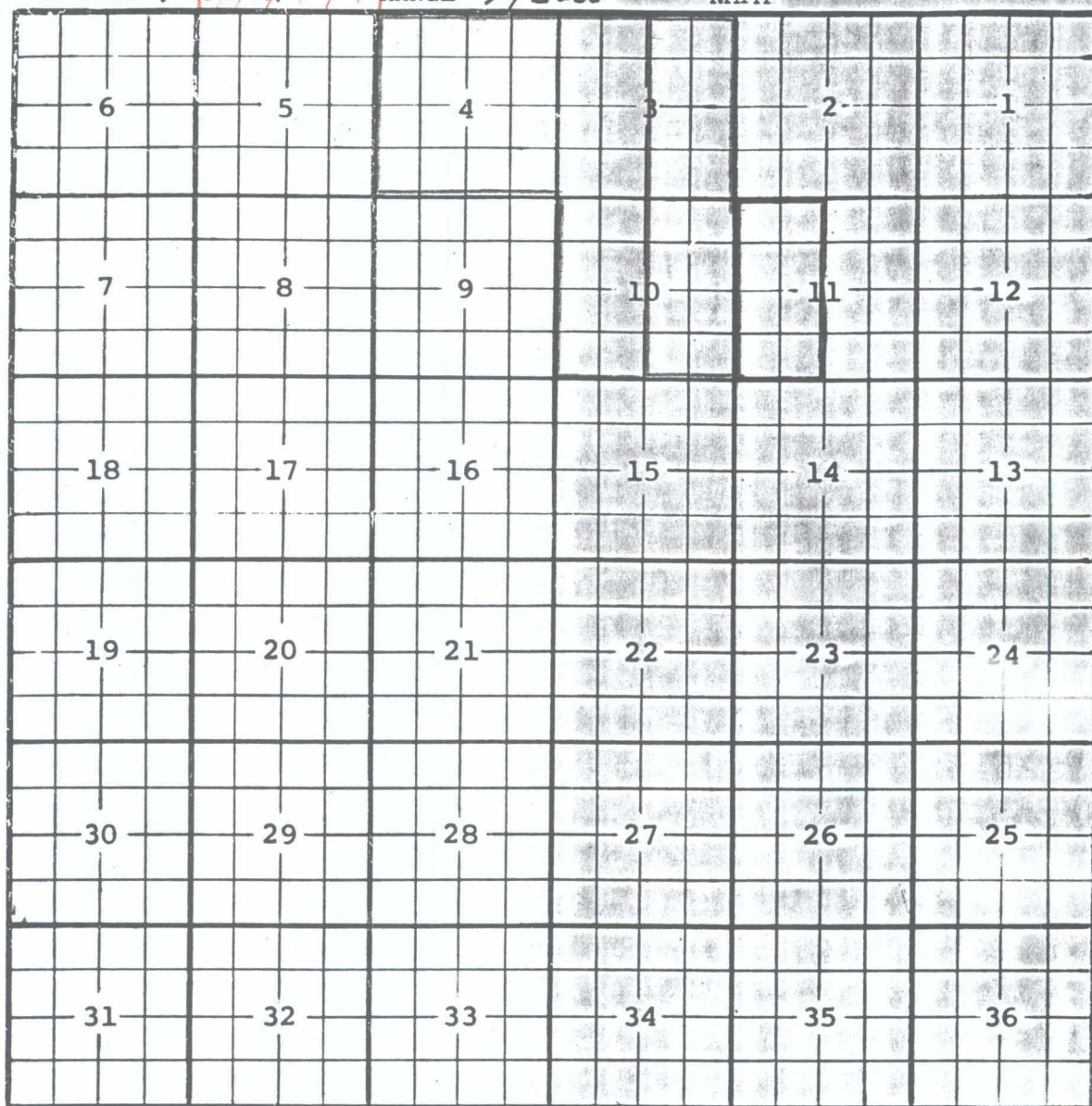
POOL

*Scoggin Draw - Morrow Gas*TOWNSHIP *18 South*

RANGE

*27 East*

NMFM



Description:  $\frac{W}{2}$  Sec. 11 (R-4291, 5-1-72)

Ext:  $\frac{E}{2}$  Sec. 3,  $\frac{E}{2}$  Sec. 10 (R-6328, 5-1-80)

Ext:  $\frac{W}{2}$  Sec 3, All Sec 4,  $\frac{W}{2}$  Sec 10 (R-6657, 4-20-81)