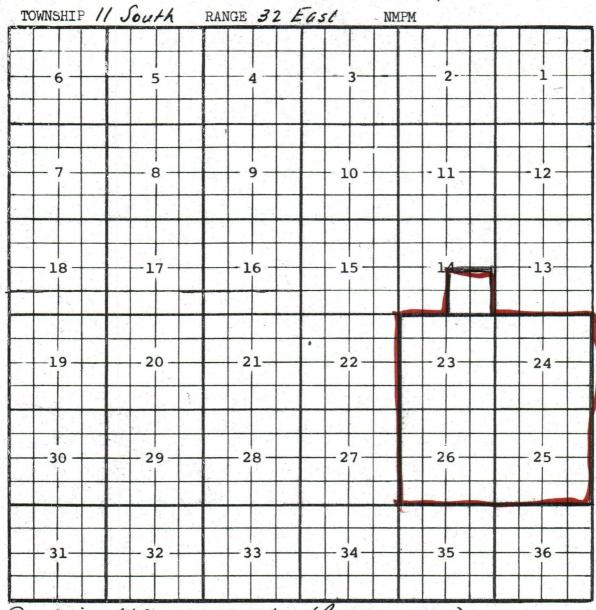
Sec : 35 Twp : 11S Rng : 32E Section Type : NORMAL

| P 40.00 CS VA3037 0000 DOUG J. SCHUTZ 09 | | | |
|---|------------------------------|----------------------------|-------------------------------------|
| P 40.00 CS VA3037 0000 | • | • | 01/01/09 |
| P 40.00 | VA3037 0000 | VA3025 0000 | CS VA3025 0000 DOUG J. SCHUTZ |
| | 0 40.00 | N 40.00 | M 40.00 |
| | | | |
| 09 | DOUG J. SCHUTZ 01/01/09 | DOUG J. SCHUTZ 01/01/09 | DOUG J. SCHUTZ 01/01/09 |
| VA3037 0000 | VA3037 0000 | VA3025 0000 | VA3025 0000 |
| 40.00 | 40.00 | 40.00 | 40.00 |
| H | J | X | L |
| | | | |
| 09 | DOUG J. SCHUTZ 01/01/09 | • ' | • |
| VA3037 0000 | CS VA3037 0000 | VA3025 0000 | CS VA3025 0000 |
| H 40.00 | 40.00 | F 40.00 | E 40.00 |
| | | | |
| 09 DOUG J. SCHUTZ | 01/01/09 | 01/01/09 | 01/01/09 |
| VA3037 0 | 37 0 | 25 0 | 0 |
| 40.00 CS | 40.00 CS | 40.00 CS | 40.00 CS |
| A | Б | C | D |



Description: All Secs. 23, 24, 25, \$26 (R-219, 12-4-52)

Vertical limits redefined: Top pool-Shale break @ 8297', bottom pool@

9974' (Top Miss.) Type log:- Amerada Petr. Corp. State MA *1 M-24-11-32/R-33551-1-68)

Vertical limits redefined:- Top pool- Top WC @ 8042', bottom pool:- Top of

Miss. @ 9974! Type log:- as above (R-3455, 8-1-68) EVT: 55/4 SEC 14 (R-8668, 6/10/82)

Data prepared by:

Bernard Lewis

Field Name: Moore (Pennsylvanian)

Affiliation:

Shell Oil Company

location: T. 11 S., R. 32 E.

Date:

7-1-56

County & State: Lea County, New Mexico

DISCOVERY WELL: Texas, State BN #1-L

COMPLETION DATE:

8-18-52

PAY ZONE: Atoka series of the Pennsylvanian system. The pay is in the upper Atoka which consists of gray, micaceous, fissile shale: medium grained, sub-rounded to sub-angular sandstone; and fine crystalline limestone. The production comes from the thin interbedded sandstones. Micrologs indicate an average net and gross pay of eight feet and 80 feet. Initial potentials range from 24 to 156 BOPD. Drilling depth to pay is 9,650 to 9,800 feet.

TYPICAL CORE ANALYSIS OF A PAY INTERVAL IN THIS FIELD:

None available

| Perm. in r | nillidarcys | % Porosity | Liquid Saturation (% | of pore space) |
|------------|-------------|------------|----------------------|----------------|
| Horizontal | Vertical | | Water | Oil |
| | , | | | |

OTHER SHOWS ENCOUNTERED IN THIS FIELD:

See Moore - Devonian

TRAP TYPE: Anticline, with up dip porosity pinchout.

NATURE OF OIL:

Gravity 48° A.P.I.

NATURE OF GAS:

| N | ATUR | E OF PRODUCING | ZONE V | VATER: N | o info. | availab | le Resi | stivity: | ol | ım-meters | @ | °F |
|---|------|----------------|--------|----------|---------|---------|---------|----------|-----------------|-----------|----|-----|
| | | Total Solids | Na≠K | Ca | Mg | Fe | SO 4 | , C1 | CO ₂ | HCO₃ | OH | H2S |
| F | ppm | | | | | | | | | | | |

INITIAL FIELD PRESSURE:

3,411 psi.

TYPE OF DRIVE:

Depletion

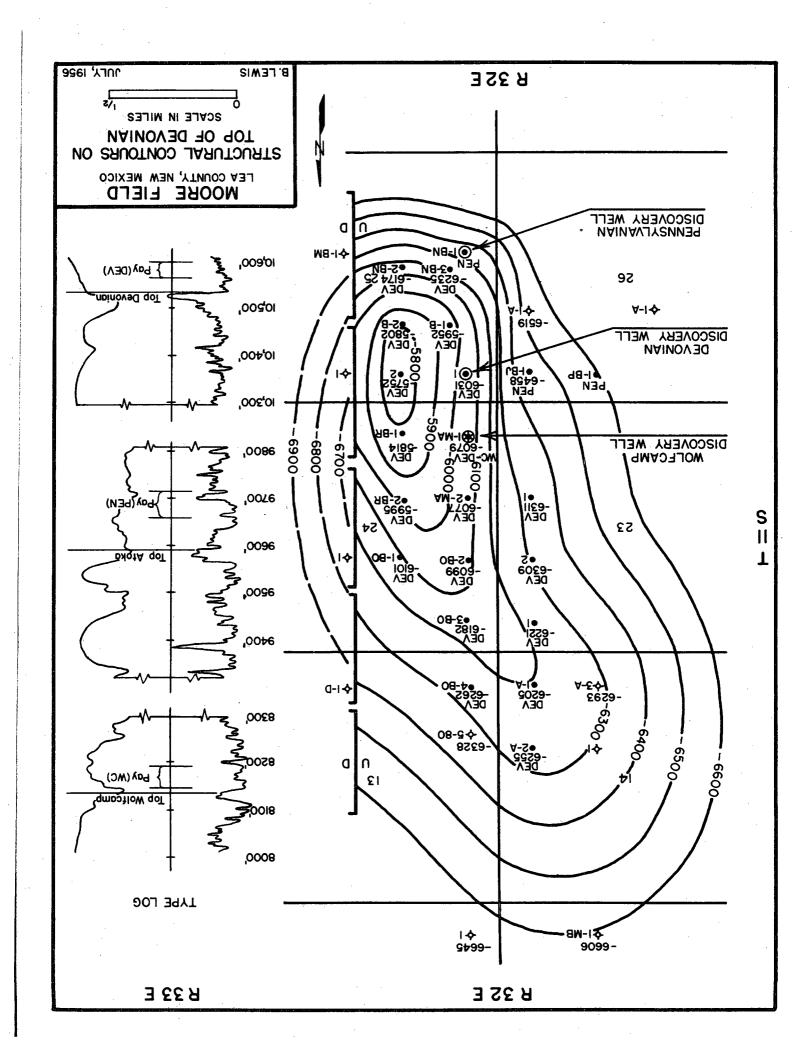
NORMAL COMPLETION PRACTICES: Set casing below pay after running electrical and radioactive logs, perforate, and complete flowing.

PRODUCTION DATA:

| No | . of | wells | @ yr. end | Pı | oduction | No | . of | wells | @ yr. end | Proc | luction |
|------|------|-------|------------|--------|-----------------------|------|------|-------|------------------|-------------------------------|------------|
| Year | Type | Prod. | Shut in or | | in barrels in MMCF | Year | Туре | Prod. | Shut in or Abnd. | Oil in barrels Gas in MMCF | |
| ٨ | 1 | ٩ | Abnd. | Annual | Cumulative | > | 1 | | | Annual | Cumulative |
| | oil | | | | | | oil | | | | |
| 1941 | gas | | | | | 1949 | gas | | | | |
| | oil | | | | | | oil | | | | |
| 1942 | gas | | | | | 1950 | gas | | | | |
| 1 | oil | | | | | | oil | | | | |
| 1943 | gas | | | | | 1951 | gas | | | | |
| [| oil | | | | | | oil | 3 | 0 | 7,064 | 7,064 |
| 1944 | gas | | | | | 1952 | gas | | | | |
| | oil | | | | | | oil | 1 | 2 | 8,458 | 15,522 |
| 1945 | gas | | | | | 1953 | gas | | | • | |
| | oil | | | | | | oil | 1 | 2 | 3,584 | 19,139 |
| 1946 | gas | | | | • | 1954 | gas | | | | |
| [| oil | | | | | | oil | 1 | 2 | 1,326 | 20,465 |
| 1947 | gas | | | | | 1955 | gas | | | | |
| | oil | | | | | | oil | 1 | 2 | 257 | 20,722 |
| 1948 | gas | | | | | 1956 | gas | | | | |

^{* 1956} Figure is production to 5-1-56.

NOTE: Refer to map of Moore (Devonian) for nature of Pennsylvanian structure.



BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 438 ORDER No. R-219

THE APPLICATION OF THE OIL CONSERVATION COMMISSION UPON ITS OWN MOTION FOR AN ORDER FOR THE EXTENSION OF EXISTING POOLS, OR THE CREATION OF NEW POOLS IN LEA AND EDDY COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m., November 20, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 4th day of December, 1952, the Commission, a quorum being present, having considered the testimony adduced and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

- (1) That due notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That a new pool should be created, classified as an oil pool, and designated as the Moore-Pennsylvanian Pool, described as:

Township 11 South, Range 32 East, NMPM Sections 23, 24, 25 and 26, all.

(3) That a new pool should be created, classified as an oil pool, and designated as the Lazy J Pool, described as:

Township 13 South, Range 33 East, NMPM Section 27, all.

(4) That a new pool should be created, classified as an oil pool, and designated as the Dark Canyon Pool, described as:



Case No. 438 Order No. R-219

Township 23 South, Range 26 East, NMPM Section 22, S/2.

(5) That the West Dollarhide-Devonian Pool, Lea County, New Mexico, as heretofore classified and described, should be extended to include:

Township 24 South, Range 38 East, NMPM Section 30, SE/4.
Section 31, E/2.

Township 25 South, Range 38 East, NMPM Section 6, NE/4.

IT IS THEREFORE ORDERED:

That the application of the Oil Conservation Commission, be, and the same hereby is approved, as follows:

(1) That a new pool, be, and the same hereby is created, designated for oil production, denominated the Moore-Pennsylvanian Pool, and described as follows:

Township 11 South, Range 32 East, NMPM Sections 23, 24, 25 and 26, all.

(2) That a new pool, be, and the same hereby is created, designated for oil production, denominated the Lazy J Pool, and described as follows:

Township 13 South, Range 33 East, NMPM Section 27, all.

(3) That a new pool, be, and the same hereby is created, designated for oil production, denominated the Dark Canyon Pool, and described as follows:

Township 23 South, Range 26 East, NMPM Section 22, S/2.

(4) That the boundaries of the West Dollarhide-Devonian Pool, Lea County, New Mexico, be, and the same hereby are extended to include:

Township 24 South, Range 38 East, NMPM Section 30, SE/4.
Section 31, E/2.

Township 25 South, Range 38 East, NMPM Section 6, NE/4.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, CHAIRMAN
GUY SHEPARD, MEMBER
R. R. SPURRIER, SECRETARY

SEAL

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 3808 Order No. R-3455

THE APPLICATION OF THE OIL CONSERVATION COMMISSION UPON ITS OWN MOTION FOR AN ORDER CONTRACTING, ABOLISHING, AND EXTENDING VERTICAL AND HORIZONTAL LIMITS OF CERTAIN POOLS IN EDDY AND LEA COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 17, 1968, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 25th day of July, 1968, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That there is need for the contraction of the Square Lake Grayburg-San Andres Pool in Eddy County, New Mexico, by the deletion of certain acreage in order that all wells in Sunray's Metex Flood may be in the same pool. The deleted acreage is to be placed in the Grayburg-Jackson Pool.
- (3) That there is need for the extension of the vertical limits of the Moore Permo-Pennsylvanian Pool in Lea County, New Mexico, to include the Wolfcamp formation from 8042 feet to 8297 feet. The vertical limits are redefined as being from the top of the Wolfcamp formation at 8042 feet to the top of the

Mississippian formation at 9974 feet as in the Amerada Petroleum Corporation State "MA" Well No. 1, located in Unit M of Section 24, Township ll South, Range 32 East, NMPM.

- (4) That there is need for the abolishment of the Moore-Wolfcamp Gas Pool in Lea County, New Mexico, inasmuch as the pool is within the horizontal limits of the Moore Permo-Pennsylvanian Pool.
- (5) That there is need for certain extensions to the Grayburg-Jackson Pool and the Penasco Draw San Andres-Yeso Pool, both in Eddy County, New Mexico, the Arkansas Junction-San Andres Pool, the North Bagley-Lower Pennsylvanian Pool, the East Brunson-Ellenburger Pool, the East Brunson-Granite Wash Pool, the East Brunson-McKee Pool, the Drinkard Pool, the Sawyer-San Andres Gas Pool, the Simanola-Pennsylvanian Pool, and the Vada-Pennsylvanian Pool, all in Lea County, New Mexico.

IT IS THEREFORE ORDERED:

(a) That the Square Lake Grayburg-San Andres Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby contracted by the deletion of the following-described area:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM Section 11: SE/4 Section 15: NW/4

(b) That the Grayburg-Jackson Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM Section 11: SE/4
Section 15: NW/4 and NW/4 SW/4

(c) That the Arkansas Junction-San Andres Pool in Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 18 SOUTH, RANGE 36 EAST, NMPM Section 12: SW/4

(d) That the North Bagley-Lower Pennsylvanian Pool in Lea County, New Mexico, as heretofore classified, defined, and

described, is hereby extended to include therein:

Section 14: NW/4 Section 32: NE/4

30821 / 6 3 550

PRESENT LAISTENAC

Charles in the second of

(e) That the East Brunson-Ellenburger Pool in Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM Section 24: SW/4

(f) That the East Brunson-Granite Wash Pool in Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM Section 24: S/2

TOWNSHIP 22 SOUTH, RANGE 38 EAST, NMPM Section 19: SW/4

(g) That the East Brunson-McKee Pool in Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

Mind Links M. Herria a

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM Section 23: N/2 SE/4

heretofore classified, defined, and described, is hereby extended and include therein:

TOWNSHIP 23 SOUTH, RANGE 38 EAST, NMPM

(i) That the Penasco Draw San Andres-Yeso Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM Section 36: N/2 NE/4 (j) That the Sawyer-San Andres Gas Pool in Lea County, New Mexico, as heretofore classified, defined, and described is hereby extended to include therein:

TOWNSHIP 9 SOUTH, RANGE 37 EAST, NMPM Section 25: SE/4

(k) That the Simanola-Pennsylvanian Pool in Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 10 SOUTH, RANGE 34 EAST, NMPM Section 20: S/2

(1) That the Vada-Pennsylvanian Pool in Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 9 SOUTH, RANGE 34 EAST, NMPM

Section 12: SW/4

Section 13: NW/4

Section 14: N/2

Section 21: SE/4

Section 22: SW/4

Section 32: E/2

Section 33: SW/4

TOWNSHIP 10 SOUTH, RANGE 34 EAST, NMPM Section 5: SW/4

- (m) That the vertical limits of the Moore Permo-Pennsylvanian Pool in Lea County, New Mexico, are hereby extended to include the Wolfcamp formation from 8042 feet to 8297 feet. The vertical limits are redefined as being from the top of the Wolfcamp formation at 8042 feet to the top of the Mississippian formation at 9974 feet as in the Amerada Petroleum Corporation State "MA" Well No. 1, located in Unit M of Section 24, Township 11 South, Range 32 East, NMPM.
- (n) That the Moore-Wolfcamp Gas Pool in Lea County, New Mexico, consisting of the following-described area:

TOWNSHIP 11 SOUTH, RANGE 32 EAST, NMPM

Section 23: E/2

Section 24: SW/4

Section 25: W/2

-5-CASE No. 3808 Order No. R-3455

IT IS FURTHER ORDERED:

That the effective date of this order and all contractions, abolishments, and extensions of vertical and horizontal limits included herein shall be August 1, 1968.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

A. L. PORTER, Jr., Member & Secretary

SEAL

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 7950 Order No. R-7350

APPLICATION OF ALPHA TWENTY-ONE PRODUCTION COMPANY FOR A SPECIAL GAS-OIL RATIO LIMITATION, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 31, 1983, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 19th day of September, 1983, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Alpha Twenty-One Production Company, seeks, as an exception to Rule 506 of the Division Rules and Regulations, a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil in the Moore-Permo Pennsylvanian Pool, Lea County, New Mexico.
- (3) That the reservoir characteristics of the subject pool justify the establishment of a gas-oil limitation of 10,000 cubic feet of gas per barrel of liquid hydrocarbons.
- (4) That in order to afford to the owners in the Moore-Permo Pennsylvanian Pool the opportunity to economically produce their just and equitable share of the oil and gas in the subject pool and for this purpose to use their just and equitable share of the reservoir energy, a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of liquid hydrocarbons should be established for the pool.

IT IS THEREFORE ORDERED:

- (1) That effective September 1, 1983, the limiting gasoil ratio in the Moore-Permo Pennsylvanian Pool, Lea County, New Mexico, shall be 10,000 cubic feet of gas for each barrel of liquid hydrocarbons produced; that, effective September 1, 1983, each proration unit in the Moore-Permo Pennsylvanian Pool shall produce only that volume of gas equivalent to 10,000 multiplied by the top unit allowable for the pool.
- (2) That 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

JOE D. RAMEY Director

SEAL

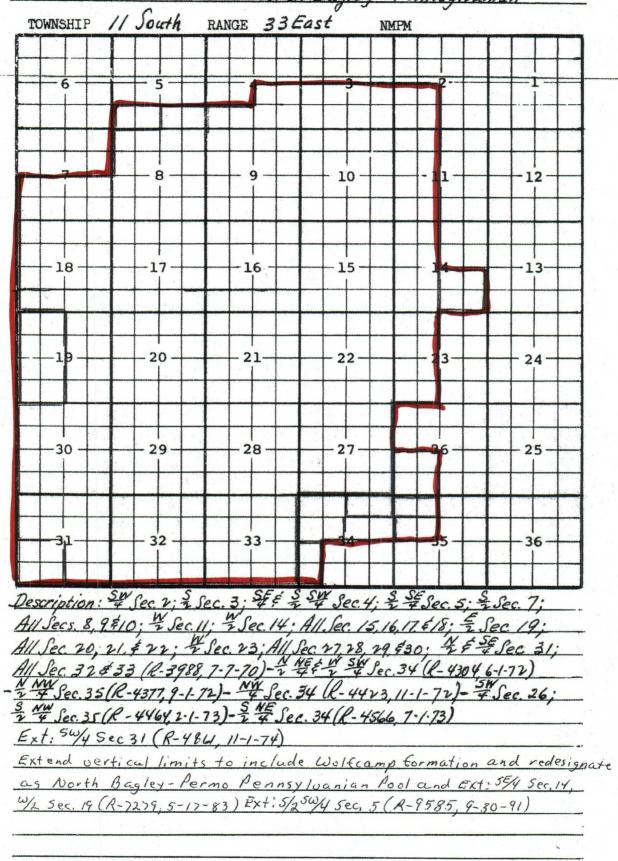
County Lea Pool North Bagley - Pennsylvanian

| TOWNSHIP _// | South | Range 32 | 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 |

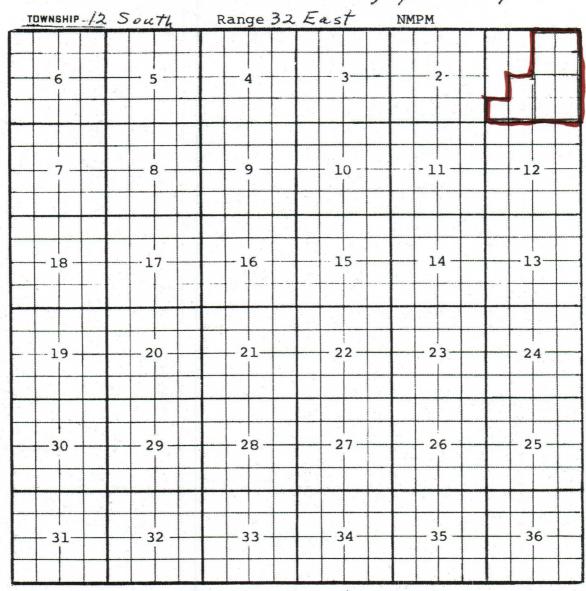
| xt: 554 Sec 36 (R-5102, 10-1-75) | | - |
|--|---|--------|
| xtend vertical limits to include Wolfcamp | formation and rede | Signa |
| 5 North Bagley - Permo Pennsylvanian Pool. | | * |
| | | |
| | ************************************** | |
| | | |
| 1.97 | | • |
| | | ****** |
| | *************************************** | |
| | | |
| | | - |

COUNTY Lea

POOL North Bagley - Pennsylvanian



county Lea Pool North Bagley-Pennsylvanian



| Ext. NE/4 Sec 1 | (R-5215, | 6-1-76)E | t: 5 /4 Sec 1 | (R-5334, | 12-1-76) |
|-----------------|---------------------------------------|-------------------------------|---------------------------------------|---|---|
| Extend vertical | limits to i | nclude W | alt camp for | mationan | dredesign |
| as North Bas | ley-Permo | Pennsylva | nian Pool. | EXT: E/2 50 | U/4, 5W/45 |
| sec/ (R-974 | 1 9-1-89) | ***************************** | | | *************************************** |
| | | * | *. | | |
| | | | · · · · · · · · · · · · · · · · · · · | | - |
| | | | | | |
| | | | | ~ . | |
| | | | | | |
| | | | | | a 2 |
| | | | * * | | |
| | | | | | |
| | · · · · · · · · · · · · · · · · · · · | | | *************************************** | |

POOL North Bagley - Pennsylvanian COUNTY Len TOWNSHIP /2 South RANGE 33 East 2. -11 12 14-- 18 --17 --13-20 21 19 22 23 24 30 -29-28 -27-26-25 -33 31-32 Description: 2 5 Sec. 4: NE Sec. 5: 4 Sec. 9 (R-3988.7-7-70) Ext: NEL Sec. 8: NE Sec. 9(R-4106, 3-1-71) - NW & SEC. 5: N NW Sec. 10(R-4155,7-1-71) - \$\frac{\xi}{\xi} \Sec. 4 (R-4184, 9-1-71) - \frac{\xi}{\xi} \Sec. 9 (R-4732, 1-1-72) - \frac{\xi}{\xi} \Sec. 10: \frac{\xi}{\xi} \Sec. 15 (R-4\chi) \frac{4-1-72}{\xi} \]
- \frac{\xi}{\xi} \Sec. 3 (R-4304, 6-1-72) - \frac{\xi}{\xi} \Sec. 16 (R-4377, 9-1-72) - \frac{\xi}{\xi} \Sec. 10 (R-4464 2-1-73) Ext: NE/4 Sec 6 (R-4821, 8-1-74) Ext: NW/4 Sec 6 (R-4861, 11-1-74) Ext: 5/2 Sec 6 (R-4937, 2-1-75) Ext: W/2 5/4 Sec 10 (R-5081, 9-1-75) Ext: 12+554 Sec 7 (R-5102, 10-1-75) Ext: 5W/4 Sec 5-W/2 \$ 5 = 4 Sec 8 (R-5511, 9-1-77) Extend vertical limits to include Wolfcamp formation and redesignate as North Bayley - Permo Pennsylvanian Pool.