

BEFORE THE  
OIL CONSERVATION COMMISSION  
NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER CALLED BY THE OIL  
CONSERVATION DIVISION ON ITS OWN  
MOTION TO AMEND THE SPECIAL POOL RULES  
FOR THE WEST LINDRITH GALLUP-DAKOTA OIL  
POOL IN RIO ARriba AND  
SANDOVAL COUNTIES, NEW MEXICO.

RECEIVED  
OCT 14 1987  
OIL CONSERVATION DIVISION  
CASE NO. 9226

ENTRY OF APPEARANCE

COMES NOW CAMPBELL & BLACK, P.A., and hereby enters its  
appearance in the above-referenced case on behalf of Reading &  
Bates Petroleum Company.

Respectfully submitted,

CAMPBELL & BLACK, P.A.

By: 

J. SCOTT HALL  
Post Office Box 2208  
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(505) 988-4421

ATTORNEYS FOR READING & BATES  
PETROLEUM COMPANY

# MONTGOMERY & ANDREWS

OF COUNSEL  
William R. Federici

PROFESSIONAL ASSOCIATION  
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Frank Andrews (1914-1981)

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Robert P. Worcester	James C. Murphy
James C. Compton	James R. Jurgens
John B. Draper	Ann M. Maloney
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Janet McL. McKay	Roger L. Prucino
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REPLY TO SANTA FE OFFICE

Mr. David Catanach  
Hearing Examiner  
Oil Conservation Division  
Post Office Box 2088  
Santa Fe, New Mexico 87504-2088

Re: OCD Cases 9226, 9227 and 9228

Dear David:

Please enter the appearance of Mobil Exploration and Producing, U.S. for Mobil Producing Texas-New Mexico, Inc. in the above-referenced cases. Although Mobil does not expect to participate in these hearings, I would appreciate it if you would make this entry of appearance a matter of official record at that hearing.

Thank you for your assistance with this matter.

Sincerely,

  
W. Perry Pearce

WPP:mp:73



STATE OF NEW MEXICO  
**ENERGY AND MINERALS DEPARTMENT**  
OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE

GARREY CARRUTHERS  
GOVERNOR

1000 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-6178

December 3, 1987

Mr. Bill LeMay  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504-2088

Re: Commission Cases - 9226 & 9227

Dear Bill:

Upon attending the commission hearing of cases 9226 & 9227, I have concluded the following:

1. There is no evidence that drainage of Gavilan by West Lindrith operators is taking place, in fact because of the low pressures in Gavilan the opposite would more likely be happening although there is no evidence of that either.
2. Sun and Dugan feel that since there is no evidence, they are more concerned that West Lindrith type allowable may tend to expand the pool into the Gavilan and abolish part of the Gavilan. Sun and Dugan are fighting against the allowable adjustment on the basis of correlative rights and not waste considerations, which is alright.
3. The preponderance of testimony was in opposition to a buffer zone, but we still have a need to curtail the drilling of unnecessary wells.
4. The question as to whether or not the current boundary or Western Township line of 25N-2W is also the geologic boundary is still unanswered, however, the low production rates of the Reading & Bates, Greenlee Federal well in Sec. 24-25N-3W either indicates a tight block where the fracture was missed or the absence of typical fractured Mancos production. What will future wells show, and can predictions be made? The boundary as it now stands seems to serve it's purpose albeit an administrative convenience.

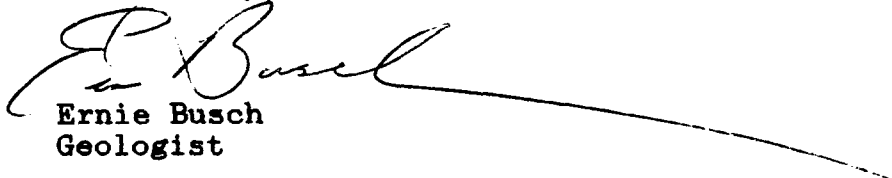
Mr. Bill LeMay  
December 3, 1987  
Page 2

5. The statement was made by Al Kendrick "If it ain't broke don't fix it." Though that may sound reasonable, it does not fit the situation and caution should be exercised by the state into thinking it will never be "broke."

Recommendations:

1. At the very least, the Commission should require a 790' set back in the eastern halves of the row of sections in Township 25N-3W that border Township 25N-2W.
2. Some thought should also be given to requiring testing of zones for wells drilled into that area.
3. If no set back is required, Gavilan operators should have the option of drilling wells with the exact setback distance from the West Lindrith boundary as those wells that offset Gavilan.

Yours truly,



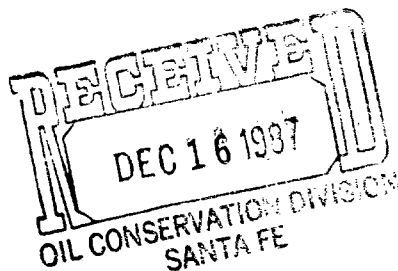
Ernie Busch  
Geologist

EB/dj

xc: E. Busch  
File  
Frank Chavez

(505) 326-3359

Office  
3005 Northridge Dr., Suite G



Mr. William J. LeMay, Chairman  
N.M. Oil Conservation Commission  
P.O. Box 2088  
Santa Fe, NM 87504-2088

Dear Mr. LeMay:

Sincerely,

Robert C. Stoddard

Robert G. Stovall

copy to Counsel of Record

wall for southward  
expansion in  
the fall 1960  
and the present  
'bearing up'  
that I wish  
to see we faced.

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 ON ITS MOTION TO AMEND  
THE SPECIAL POOL RULES FOR THE  
WEST LINDRITH GALLUP-DAKOTA OIL  
POOL, RIO ARRIBA AND SANDOVAL  
COUNTIES, NEW MEXICO;

CASE: 9226  
ORDER: R-

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION ON ITS MOTION TO AMEND  
THE SPECIAL POOL RULES FOR THE  
GAVILAN-MANCOS OIL POOL, RIO  
ARRIBA AND SANDOVAL COUNTIES,  
NEW MEXICO

CASE: 9227  
ORDER: R-

ORDER OF THE COMMISSION

BY THE COMMISSION:

These consolidated cases came on for hearing at 9:00 A.M. on November 19, 1987, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this \_\_\_\_\_ day of December, 1987, 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 THAT:

(1) Public Notice having been given, the Commission has jurisdiction of these causes, the parties, and the subject matter thereof.

(2) In CASE 9226 the Oil Conservation Division on its own motion seeks to amend the Special Pool Rules for the West Lindrith Gallup-Dakota Oil Pool in Rio Arriba and Sandoval Counties, New Mexico, as promulgated by Division Order No. R-4314, to reconsider the well location requirements pool-wide, to restate the allowable in the pool to reflect the daily oil allowable for a 160 acre unit in the depth range of this pool to be 382 BOPD as promulgated by Division General Rule 505, and to

create a buffer zone in those sections that adjoin the Gavilan-Mancos Oil Pool to the east (Sections 1, 12, 13, 24, 25 and 36, Township 25 North, Range 3 West, Rio Arriba) with any additional provisions which may be necessary or advisable to protect correlative rights along the common boundary of the two pools. Said area is situated 10 to 20 miles west-northwest of Lindrith, New Mexico.

(3) In CASE 9227 the Oil Conservation Division seeks on its own motion to amend the Special Pool Rules for the Gavilan-Mancos Oil Pool in Rio Arriba County, New Mexico, as promulgated by Division Order No. R-7407, as amended, to create a buffer zone utilizing those existing those existing proration units in Sections 5, 6, 7, 8, 17, 18, 19, 20, 29, 30, 31 and 32, Township 25 North, Range 2 West, that adjoin the West Lindrith Gallup-Dakota Oil Pool with any additional Provisions which may be necessary or advisable to protect correlative rights along the common boundary of the two pools. Said area is situated 4 to 9 miles northwest of Lindrith, New Mexico.

(4) By Order R-8544, entered on November 19, 1987, the Commission in Case 9228 abolished the Ojito Gallup-Dakota Oil Pool which had been spaced on 40 acre spacing and proration units and extended the West Lindrith Gallup-Dakota Oil Pool which is spaced on 160 acre spacing and proration units.

(5) As a result of entry of Order R-8544, the West Lindrith Gallup-Dakota Oil Pool was expanded so that its eastern boundary became contiguous with part of the western boundary of the Gavilan-Mancos Oil Pool which has temporary special pool rules, including restricted allowables, 640 acre spacing and well locations no closer than 790 feet to the common boundary with the West Lindrith Gallup-Dakota Oil Pool.

(6) On June 27, 1986, by order R-8188-A, the Commission formed the Northeast Ojito Gallup-Dakota Oil Pool out of the Ojito Gallup-Dakota Oil Pool so that the southern boundary of the Northeast Ojito Gallup-Dakota Oil Pool was contiguous with part of the northern boundary of the Ojito Gallup-Dakota Oil Pool.

(7) The 160 acre top gas allowable for West Lindrith Gallup-Dakota Oil Pool is 764 MCF per day and the 640 acre top gas allowable for the Gavilan-Mancos Oil Pool is 480 MCF/D, and the resulting differential in top gas allowables between the two pools is 2576 MCF/D per 640 acre tract.

(8) One of the issues raised by the applications was the creation of a buffer zone within the boundary area of each of the pools and the adoption of a buffer gas allowable for those spacing units in each pool within approximately one-half mile of the common boundary.

(9) Mesa Grande Ltd's geologic witness presented evidence that the Mancos formation in the western portion of the Gavilan-Mancos Oil Pool is likely part of the same common source of supply as the Gallup formation in the eastern portion of the West Lindrith Gallup-Dakota Oil Pool, or at least that there is no clear geologic boundary between the pools, but the quality and intensity of the fracture system which exists in the Gavilan-Mancos Oil Pool is diminished to the west and production in the West Lindrith Gallup-Dakota Oil Pool is less likely to be significantly enhanced by natural fracturing.

(10) The expert witness for Curtis J. Little Oil and Gas, et al, testified that the geological evidence presented by Mesa Grande indicated that there could be a significant geological structural change in the area of the boundaries between the West Lindrith Gallup-Dakota Oil Pool and the Gavilan-Mancos Oil Pool due to what appeared to be a compound bending of the formation in that area, that the producing characteristics of the two pools are substantially different, that the pools were properly operated under different special pools rules, that the conditions which necessitate the restricted allowables in the Gavilan-Mancos Oil Pool are not present in the West Lindrith Gallup-Dakota Oil Pool and that the established boundary is a logical location for the boundary between the two pools.

(11) The engineering evidence presented by Dugan Production Corp.'s and Sun Exploration and Production Company's respective expert engineers demonstrated that there exists sufficiently different producing characteristics between the typical well in each pool so that the differences in the top gas allowable for each producing well in the respective pools will not cause a violation of correlative rights along the common boundary.

(12) There is presently no evidence of any drainage across the common boundary of the two pools, nor is there any data from which to determine if wells in the West Lindrith Gallup-Dakota Oil Pool boundary area would be capable of draining any portion of the Gavilan-Mancos Oil Pool should the current differential in allowables between the pools remain in effect.

(13) There was testimony which indicated that the current reservoir pressure in West Lindrith Gallup-Dakota Oil Pool is likely to be substantially higher than that in the Gavilan-Mancos Oil Pool and that a typical Gavilan-Mancos Oil Pool well has a much higher initial producing rate than a typical well in the West Lindrith Gallup-Dakota Oil Pool, and therefore is more probable that oil and gas will migrate, even with current allowable differential, from West Lindrith to Gavilan, and any proposed increase in the Gavilan-Mancos Oil Pool allowable could substantially impair the correlative rights of operators within the West Lindrith Gallup-Dakota Oil Pool boundary area.



(14) The evidence presented indicated that there are no wells currently producing in the West Lindrith Gallup-Dakota Oil Pool boundary area that are capable of producing a 160 acre top gas allowable.

(15) Neither the West Lindrith Gallup-Dakota Oil Pool nor the Gavilan-Mancos Oil Pool is producing at or near its top allowable, and an average well in neither pool can produce its top allowable.

(16) The average well in Gavilan-Mancos Oil Pool has a higher productivity than an average well in West Lindrith Gallup-Dakota Oil Pool.

(17) Because there is at least one well in the proposed Gavilan-Mancos Oil Pool buffer zone area that is capable of producing in excess of the current top allowable rate for that pool, any increase in top allowable in the boundary area can reasonably be expected to result in a violation of correlative rights within the Gavilan-Mancos Oil Pool.

(18) Mesa Grande Ltd. proposed a buffer allowable based upon equal increment volume adjustments across the proposed buffer zone. The evidence presented indicated that the only well that would benefit from this increased allowable would be the Mesa Grande Brown # 1 well located in Section 17, T25N, R2W. This would cause a violation of correlative rights within the Gavilan-Mancos Oil Pool, and it constitutes a collateral attack on the restricted allowable within Gavilan-Mancos Oil Pool, which Mesa Grande has consistently opposed.

(19) Sun Exploration and Production Company opposed the creation of a buffer gas allowable, but proposed as an alternative a buffer gas allowable base upon an equal percentage adjustment across the proposed buffer zone. This alternative placed a greater burden on wells within the West Lindrith Gallup-Dakota Oil Pool, and could further impair the correlative rights of operators within that pool.

(20) During the time that the Northeast Ojito Gallup-Dakota Oil Pool shared a common boundary with the Ojito Gallup-Dakota Oil Pool, the Commission adopted a restricted allowable and well location restrictions for wells within the Northeast Ojito Gallup-Dakota Oil Pool, but this was with the voluntary agreement of the only operator who had wells on the southern boundary of the Northeast Ojito Gallup-Dakota Oil Pool.

(21) The current differential between the top gas allowables for the Gavilan-Mancos Oil Pool and the West Lindrith Gallup-Dakota Oil Pool has does not have an actual impact on the correlative rights of operators within the Gavilan-Mancos Oil Pool, because of the pressure differential between the pools and

because there are no wells within the West Lindrith Gallup-Dakota Oil Pool that are capable of producing at these top allowable rates.

(22) Because there is very little data due to the limited development in the boundary area of the West Lindrith Gallup-Dakota Oil Pool, the adoption of a "buffer gas allowable" for the boundary areas of each of these pools is not supported by the evidence.

(23) The establishment of different allowables for wells producing within the same pool causes a substantial threat to the correlative rights of the owners within that pool, and therefore such allowable differentials should be avoided unless there is most compelling evidence of a need for such.

(24) The special pool rules for West Lindrith Gallup-Dakota Oil Pool require that wells be drilled no closer than 330 feet to the outer boundary of the proration unit or to any governmental quarter-quarter. The special pool rules for the Gavilan-Mancos Oil Pool and for the Northeast Ojito Gallup-Dakota Oil Pool require a setback of 790 feet. There was some testimony that this setback differential could impair the correlative rights of owners within the Gavilan-Mancos Oil Pool and Northeast Ojito Gallup-Dakota Oil Pool.

(25) There was additional testimony that requiring wells in the West Lindrith Gallup-Dakota Oil Pool boundary area to be setback 790 feet from the common boundaries with the Gavilan-Mancos Oil Pool and Northeast Ojito Gallup-Dakota Oil Pool could result in waste because oil outside the drainage radius's of the wells would remain in the ground. Existing wells drilled at locations selected by the respective operators within the Gavilan-Mancos Oil Pool and Northeast Ojito Gallup-Dakota Oil Pool are at setbacks of 790 feet or greater and there may in fact be waste if wells within the West Lindrith Gallup-Dakota Oil Pool are required to be drilled at an increased setback.

(26) Because the prevention of waste is the primary charge of the Commission, and because there has been no clear showing that any owner's correlative rights will be significantly impaired under the existing rules, no change in the setback requirements is necessary at this time.

(27) The applications in Cases 9226 and 9227 should be denied.

IT IS THEREFORE ORDERED THAT:

(1) The application in case 9226 is hereby denied.

(2) The application in Case 9227 is hereby denied.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

## STATEMENT ON BEHALF OF MALLON OIL COMPANY

May it please the Commission, my name is Frank Douglass with the Austin-Houston law firm of Scott, Douglass & Luton. I appear on behalf of Mallon Oil Company. Mallon operates seven wells in the Gavilan-Mancos Oil Pool. As you are aware, there has been a series of hearings involving production rates and consolidation issues for the Gavilan-Mancos Pool and the West Puerto Chiquito Mancos Pool, with another hearing scheduled for May of 1988 in this regard.

Mallon has no objection to the proposal by Mesa Grande with reference to a buffer zone between the West Lindreth and the Gavilan. However, by not objecting to these proceedings, Mallon in no way waives its rights to request that any future hearing involving the consolidation and production rates of the Gavilan-Mancos Pool with the West Puerto Chiquito Pool also consider the West Lindreth Pool and the corresponding producing rates. As Mesa Grande will show, the gas limits in the West Lindreth are substantially greater than the current Gavilan gas limits. Mallon has been participating in the production tests and pressure surveys being conducted in the Gavilan and the West Puerto Chiquito. However, the reason for agreeing to and the need for restricted production rates for the Gavilan insofar as the test periods are concerned will end in January 1988. There is substantially more evidence for consideration of consolidation between the West Lindreth and the Gavilan than there is between Gavilan and West Puerto Chiquito. As it will stand now, Gavilan

would have its gas production severely curtailed versus the West Lindreth area and versus the statewide allowables. We want the Commission to be aware of this inequitable condition. Mallon wishes to reserve the right to (1) request an advancement of the May, 1988 hearing, (2) the immediate reinstatement of statewide allowables in Gavilan pending a decision in that advanced hearing, and (3) whether the advanced hearing should consider the inclusion of the West Lindreth and other areas, if Gavilan is going to be consolidated with West Puerto Chiquito or if restricted allowables are imposed in Gavilan for any reason.

Let me add, I have always had great respect for the New Mexico conservation laws and this Commission. Texas has had the pleasure of copying several of your statutes and regulations in their effort to update its conservation actions. Guy Buell of our Austin office has had the pleasure of practicing before this Commission for many years, and he sends his regards. Thank you.

R 2 W





R 3 W | R 2 W



County Rio Arriba Pool West Lindrith Gallup-Dakota Oil

TOWNSHIP 22 North Range 2 West NMPM

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7	8	9	10	11	12	
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18	17	16	15	14	13	
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19	20	21	22	23	24	
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30	29	28	27	26	25	
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31	32	33	34	35	36	
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Ext: <sup>SW</sup>/<sub>4</sub> Sec. 7 (A-7495, 4-5-84) Ext: <sup>NW</sup>/<sub>4</sub> Sec. 6 (A-8412, 3-24-87)



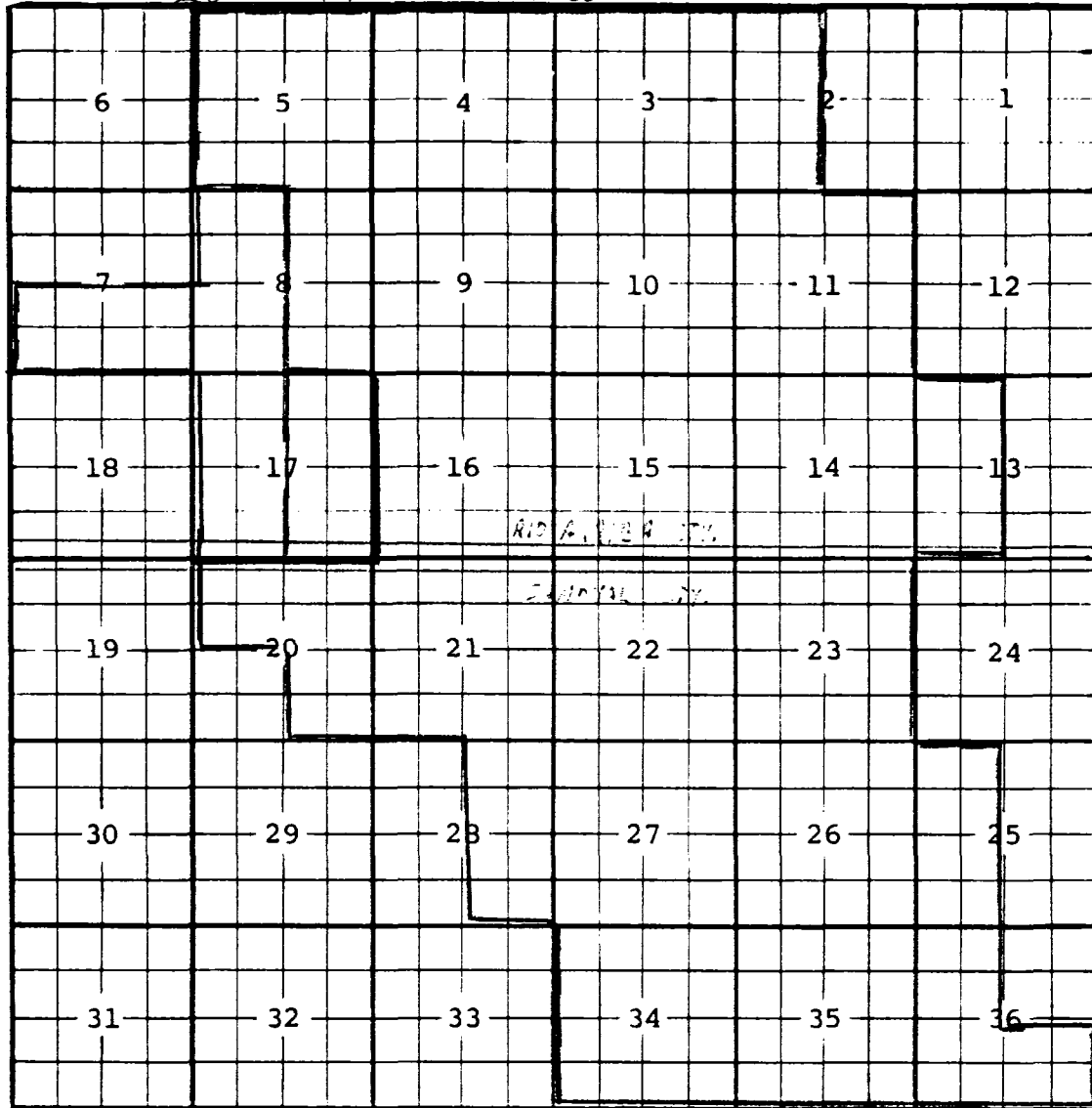
County <sup>Sandoz</sup> ~~Rio Arriba~~ Pool West Lindri<sup>th</sup> Gallup-Dakota Oil

TOWNSHIP ~~22~~ North Range ~~3~~ West 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: All Secs. 1 through 3, All Secs. 10 through 12 (R-7495, 4-5-84)

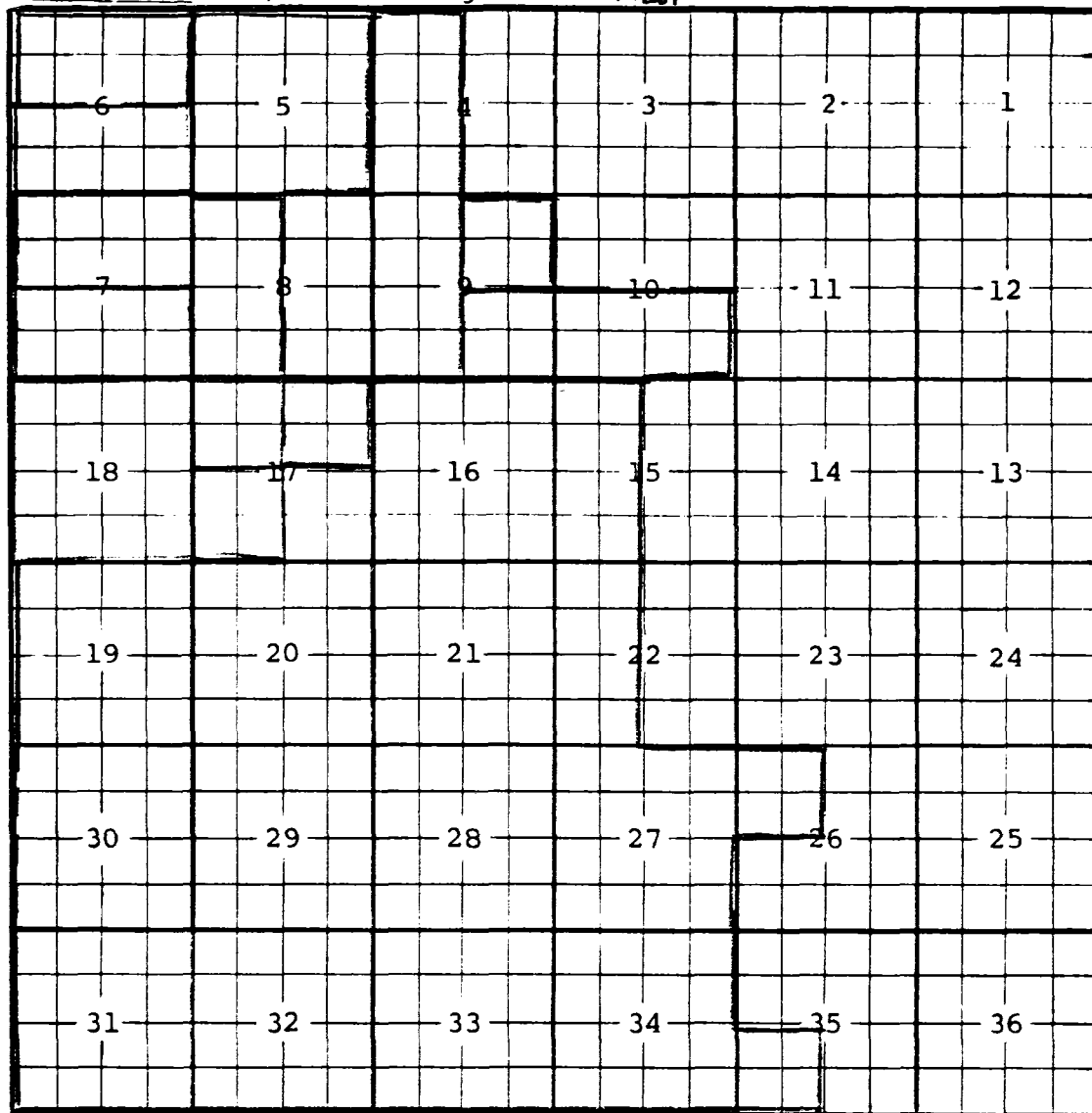
Sandoval T

County Rio Arriba Pool West Lindrith Gallup-Dakota OilTOWNSHIP 23 North Range 3 West NMPM

Ext:  $\frac{W}{2}$  Sec. 2, All Secs. 3 through 5,  $\frac{E}{2}$  Sec. 8, All Secs. 9 through 11,  $\frac{W}{2}$  Sec. 13,  
 All Secs. 14 through 16,  $\frac{N}{2}$  and  $\frac{SE}{4}$  Sec. 20, All Secs. 21 through 23,  
 $\frac{W}{2}$  Sec. 25, All Secs. 26 and 27,  $\frac{E}{2}$  Sec. 28, All Secs. 34 and 35,  $\frac{W}{2}$  and  $\frac{SE}{4}$  Sec. 36  
 (R-7495, 4-5-84) Ext:  $\frac{E}{2}$  Sec. 17 (R-7957, 6-12-85)  
 Ext:  $\frac{S}{2}$  Sec. 7,  $\frac{W}{2}$  Sec. 8,  $\frac{W}{2}$  Sec. 17 (R-8180, 3-14-86)

County Rio Arriba Pool WEST LINDRETH GALLUP - DAKOTA OIL

TOWNSHIP 24 North Range 3 West NMPM



Ext:  $\frac{5}{2}$  Sec. 6, All Sec. 18 (R-6180, 11-1-79)

Ext:  $\frac{NW}{4}$  Sec. 17 (2-1-80, 1-1-81) Ext:  $\frac{SE}{4}$  Sec. 7,  $\frac{SW}{4}$  Sec. 17  
(R-6421, 8-1-80) Ext:  $\frac{NE}{4}$  Sec. 7,  $\frac{W}{2}$  Sec. 8,  $\frac{NE}{4}$  Sec. 17 (R-6886, 1-22-83)

Ext:  $\frac{NE}{4}$  Sec. 6 (R-7246, 8-6-82) Ext: All Sec. 5 (R-7155, 1-13-83)

Ext:  $\frac{W}{2}$  Sec. 15, All Sec. 16,  $\frac{SE}{4}$  Sec. 17, All Secs. 19 through 21,  $\frac{W}{2}$  Sec. 22,  
 $\frac{NW}{4}$  Sec. 26, All Secs. 27 through 34,  $\frac{SW}{4}$  Sec. 35 (R-7495, 4-5-84)

Ext:  $\frac{W}{2}$  Sec. 4,  $\frac{E}{2}$  Sec. 8,  $\frac{W}{2}$  Sec. 9 (R-7764, 1-8-85)

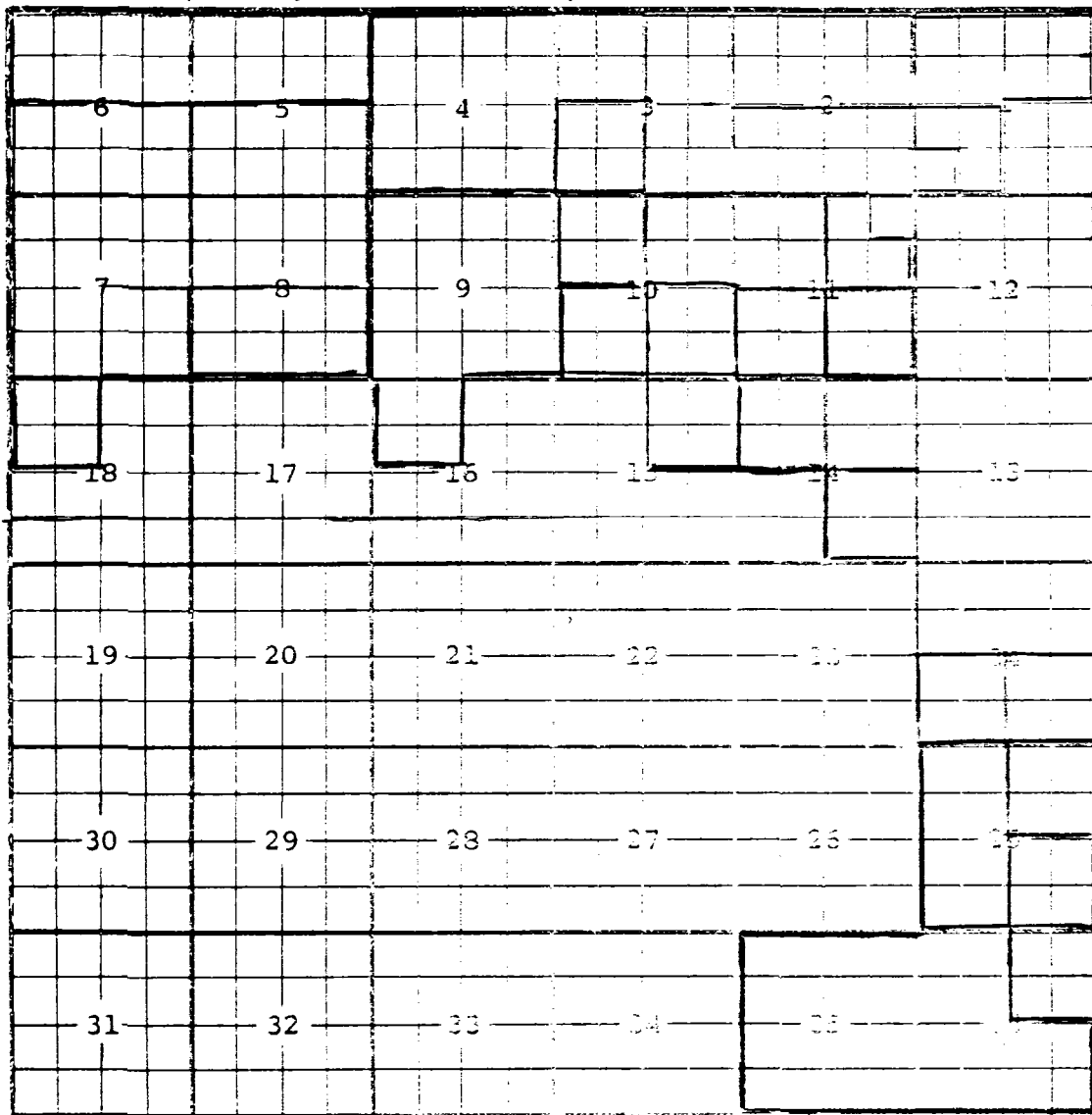
Ext:  $\frac{SE}{4}$  Sec. 9,  $\frac{5}{2}$  Sec. 10 (R-8022, 8-22-85) Ext:  $\frac{NE}{4}$  Sec. 9 (R-8273, 8-6-86)

COUNTY Rio Arriba POOL West Lindrith Gallup-Dakota Oil

TOWNSHIP 24 North

RANGE 4 West

NMFM



Ext:  $\frac{SW}{4} \frac{SW}{4}$  Sec 1,  $\frac{3}{4}$  Sec 2,  $\frac{E}{2}$  Sec 3,  $\frac{NE}{4}$   $\frac{NE}{4}$  Sec 11 (R-4292, 5-1-72)

Ext:  $\frac{NW}{4} \frac{SW}{4}$   $\frac{SE}{4} \frac{SW}{4}$  Sec 1,  $\frac{NE}{4}$  Sec 2,  $\frac{NW}{4}$   $\frac{NE}{4}$   $\frac{SE}{4}$   $\frac{NE}{4}$  Sec 11 (R-5127, 1-1-74)

Ext:  $\frac{NW}{4}$  Sec 3 (R-5772, 7-1-78) Ext:  $\frac{N}{2}$  Sec 1 (R-5843, 12-1-78)

Ext:  $\frac{SE}{4}$  Sec 1,  $\frac{NE}{4}$  Sec. 10,  $\frac{NW}{4}$  +  $\frac{SE}{4}$  Sec. 11, All Sec. 12, All Sec. 13,

$\frac{N}{2}$  Sec. 24 (R-6056, 8-1-79) Ext:  $\frac{N}{2}$  Sec. 5,  $\frac{N}{2}$  Sec. 6,  $\frac{SE}{4}$  Sec. 24,

$\frac{NE}{4}$  Sec. 25 (R-6180, 11-1-79) Ext:  $\frac{SW}{4}$  Sec. 3,  $\frac{3}{4}$  Sec. 5,  $\frac{3}{4}$  Sec. 4,

$\frac{N}{2}$  +  $\frac{SW}{4}$  Sec. 7,  $\frac{N}{2}$  Sec. 8,  $\frac{SW}{4}$  Sec. 11,  $\frac{NE}{4}$  Sec. 14,  $\frac{SW}{4}$  Sec. 24

(R-6361, 5-1-80) Ext:  $\frac{SE}{4}$  Sec. 7 (R-6421, 8-1-80) Ext: All Sec 4,

$\frac{3}{4}$  sec 8,  $\frac{NW}{4}$  +  $\frac{SE}{4}$  sec. 10,  $\frac{NW}{4}$  sec. 14,  $\frac{NE}{4}$  sec. 15,  $\frac{SE}{4}$  sec. 25,

(R-6836, 1-22-81) Ext:  $\frac{SW}{4}$  Sec. 10,  $\frac{SE}{4}$  Sec. 10,  $\frac{NE}{4}$  Sec. 25 (R-7024, 8-6-82)

Ext: All Sec. 9,  $\frac{NW}{4}$  Sec. 16 (R-7957, 6-12-85) Ext:  $\frac{W}{2}$  Sec. 25 (R-8273, 8-6-86)

Ext:  $\frac{NW}{4}$  Sec. 18, All Sec. 35,  $\frac{3}{4}$  and  $\frac{NW}{4}$  Sec. 36 (R-8417, 3-24-87)

County Rio Arriba Pool West Lindrith Gallup-Dakota Oil

TOWNSHIP 24 North Range 5 West 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:  $\frac{5}{2}$  Sec. 12 (R-7185, 1-13-83)

Ext:  $\frac{5}{2}$  Sec. 1,  $\frac{5}{2}$  Sec. 2, All Sec. 11,  $\frac{N}{2}$  Sec. 12 (R-7277, 5-5-83)

Ext:  $\frac{W}{2}$ ,  $\frac{SE}{4}$ , and  $\frac{5}{2}$   $\frac{NE}{4}$  Sec. 3,  $\frac{5}{2}$  Sec. 4,  $\frac{N}{2}$  Sec. 9,  $\frac{N}{2}$  Sec. 10 (R-8106, 12-26-85)

Eliminate  $\frac{5}{2}$   $\frac{NE}{4}$  Section 3 (R-8106-A, 1-12-86)

Ext:  $\frac{N}{2}$  Sec. 1,  $\frac{N}{2}$  Sec. 2 (A-8180, 3-14-86)

County Rio Arriba Pool West Lindrith Gallup-Dakota Oil

TOWNSHIP 25 North Range 3 West 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

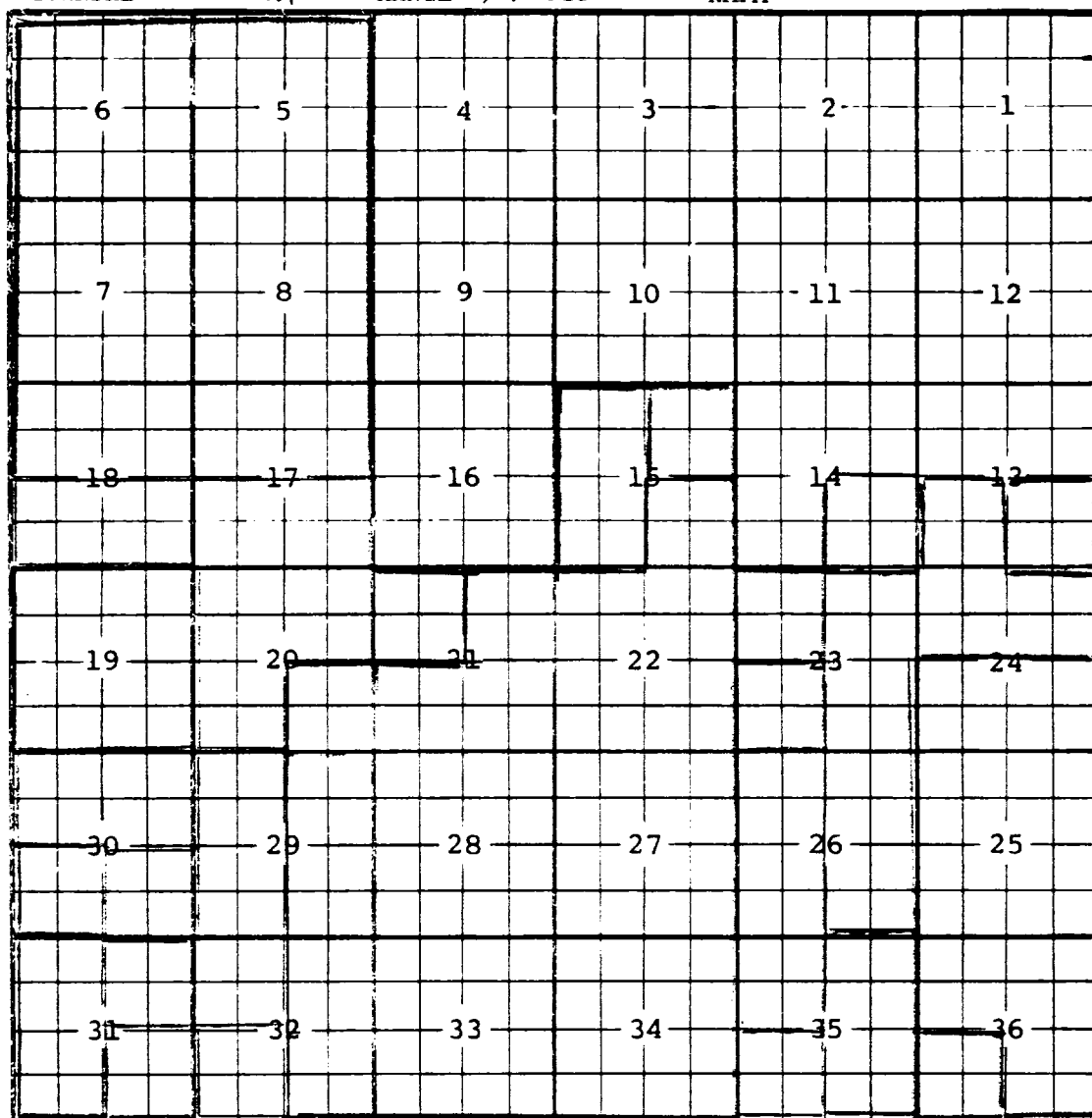
Ext:  $\frac{SW}{4}$  Sec. 32 (R-7185, 1-13-83) Ext:  $\frac{SE}{2}$  Sec. 31 (R-7222, 5-5-83)

Ext:  $\frac{SE}{4}$  Sec. 32 (R-7420, 1-9-84) Ext:  $\frac{NW}{2}$  Sec. 31,  $\frac{NW}{4}$  Sec. 32 (R-7764, 1-8-85)

Ext:  $\frac{NW}{4}$  Sec. 23 (R-8412, 3-24-87)

COUNTY Rio ArribaPOOL West Lindrith Gallup-Dakota OilTOWNSHIP 25 NorthRANGE 4 West

NMPM

Description:  $\frac{SE}{4}$  Sec. 15;  $\frac{SE}{4}$  Sec. 20;  $\frac{S}{2} \& \frac{NE}{4}$  Sec. 21; All Secs. 22, 27 & 28; $\frac{E}{2}$  Sec. 29;  $\frac{E}{2}$  Sec. 32; All Secs. 33 & 34 (R-4260, 3-1-72)Ext:  $\frac{SW}{4}$  Sec. 35 (R-4263, 3-1-75) Ext:  $\frac{E}{2}$  Sec. 17 & 18 (R-4261, 2-1-75)Ext:  $\frac{W}{2}$  Sec. 29,  $\frac{NE}{4}$  Sec. 31,  $\frac{NW}{4}$  Sec. 32 (R-5596, 1-1-78)Ext:  $\frac{SE}{4}$  Sec. 31,  $\frac{E}{2}$  Sec. 32 (R-5597, 2-1-78)Ext: All Sec. 19 (R-6056, 8-1-79) Ext:  $\frac{SW}{4}$  Sec. 23,  $\frac{N}{2}$  Sec. 30 (R-6480, 11-1-79)Ext:  $\frac{NW}{4}$  Sec. 23,  $\frac{SW}{4}$  Sec. 30,  $\frac{SW}{4}$  Sec. 31 (R-6487, 5-1-80)Ext:  $\frac{W}{2}$  Sec. 26,  $\frac{NW}{4}$  Sec. 35 (R-6421, 8-1-80) Ext:  $\frac{SW}{4}$  Sec. 13,  $\frac{NW}{4}$  Sec. 21, $\frac{E}{2}$  Sec. 23,  $\frac{N}{2}$  Sec. 24,  $\frac{E}{2}$  Sec. 26,  $\frac{W}{2}$  Sec. 31 (R-6386, 1-12-81)Ext:  $\frac{SE}{4}$  Sec. 15,  $\frac{NE}{4}$  Sec. 20,  $\frac{E}{2}$  Sec. 29,  $\frac{W}{2}$  Sec. 32 (R-7104, 8-10-82) Ext:  $\frac{W}{2}$  Sec. 15 (R-7185, 1-13-83)Ext:  $\frac{SW}{4}$  Sec. 36 (R-7227, 2-5-83) Ext: All Secs. 5 through 8,  $\frac{N}{2}$  Sec. 12,  $\frac{N}{2}$  Sec. 18, $\frac{E}{2}$  Sec. 24,  $\frac{W}{2}$  Sec. 25,  $\frac{N}{2}$  and  $\frac{SE}{4}$  Sec. 36 (R-7204, 1-5-85)Ext:  $\frac{SE}{4}$  Sec. 13 (R-8022, 8-22-85)





Rio Arriba and  
COUNTY Sandoval POOL West Lindrith Gallup-Dakota Co.

TOWNSHIP 26 North RANGE 4 West NMFM

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 1/2 Sec. 29, all secs. 30 through 32 (R-2764, 1-8-95)

All sec. 33 (K-5180, 3-14-96)

*Rio Arriba and*  
 COUNTY *Sandoval* POOL *West Lindrith Gallup-Dakota Oil*

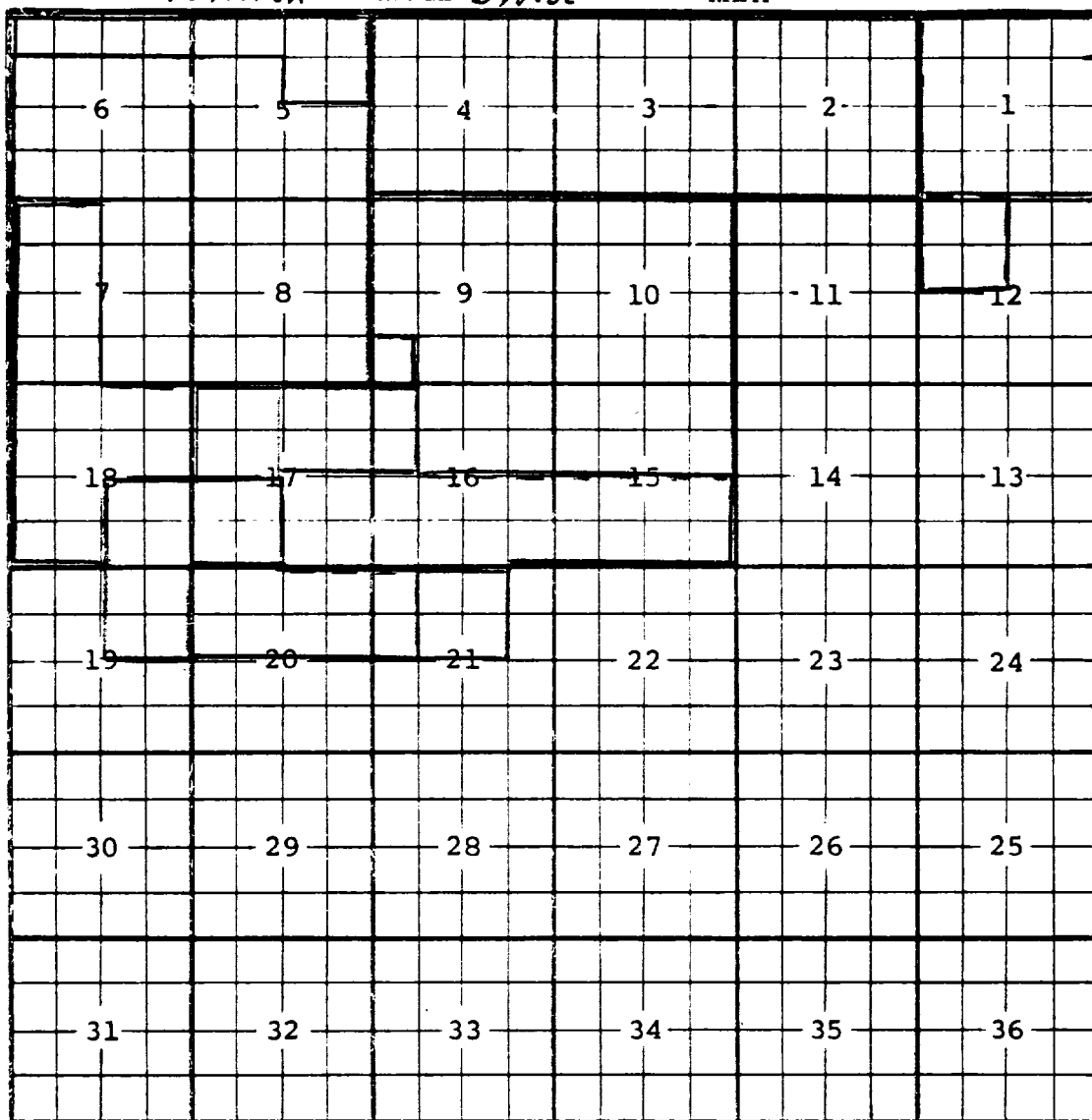
TOWNSHIP *26 North* RANGE *5 West* NMFM

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

*Ex. 1. All Sec. 25 All Sec. 36 (R-7764, 1-8-95)*

COUNTY Rio ArribaPOOL Gallup - Dakota OilTOWNSHIP 25 NorthRANGE 3 West

NMFM



Description: SW 1/4 Sec. 17; SE 1/4 Sec. 18; NE 1/4 Sec. 19 (R-4311, 6-1-72)

Ext. SW 1/4 Sec. 17, NE 1/4 Sec. 18, and NE 1/4 Sec. 19 (R-4311, 6-1-72)

Ext. SW 1/4 Sec. 17, NE 1/4 Sec. 18, and NE 1/4 Sec. 19 (R-4311, 6-1-72)

Ext. SW 1/4 Sec. 17, NE 1/4 Sec. 18, and NE 1/4 Sec. 19 (R-4311, 6-1-72)

Ext. SW 1/4 Sec. 17, NE 1/4 Sec. 18, and NE 1/4 Sec. 19 (R-4311, 6-1-72)

Ext. SW 1/4 Sec. 17, NE 1/4 Sec. 18, and NE 1/4 Sec. 19 (R-4311, 6-1-72)

Ext. SW 1/4 Sec. 17, NE 1/4 Sec. 18, and NE 1/4 Sec. 19 (R-4311, 6-1-72)

Ext. SW 1/4 Sec. 17, NE 1/4 Sec. 18, and NE 1/4 Sec. 19 (R-4311, 6-1-72)

Ext. SW 1/4 Sec. 17, NE 1/4 Sec. 18, and NE 1/4 Sec. 19 (R-4311, 6-1-72)

Ext. SW 1/4 Sec. 17, NE 1/4 Sec. 18, and NE 1/4 Sec. 19 (R-4311, 6-1-72)

Ext. SW 1/4 Sec. 17, NE 1/4 Sec. 18, and NE 1/4 Sec. 19 (R-4311, 6-1-72)

Ext. SW 1/4 Sec. 17, NE 1/4 Sec. 18, and NE 1/4 Sec. 19 (R-4311, 6-1-72)