



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

Date: 7-18-89

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

RECEIVED

JUL 20 1989  
OIL CONSERVATION DIV.  
SANTA FE

Re: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL ~~\_\_\_\_\_~~  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

*NSD*

I have examined the application dated 7-18-89  
for the Northwest Pipeline Corp. Cross Unit # 238  
Operator Lease & Well No.

G-31-31N-5W and my recommendations are as follows:  
Unit, S-T-R

*Approve*  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours truly,

*E. Bruch*  
\_\_\_\_\_

#230

NORTHWEST PIPELINE CORPORATION

PRODUCTION & DRILLING  
P.O. BOX 90  
FARMINGTON, NEW MEXICO 87499  
4320-PD-127-88

Rec. 12/22/88

December 6, 1988

NMOCD  
Attn: Mike Stogner  
310 Old Santa Fe Trail  
Room #206  
Santa Fe, NM 87503

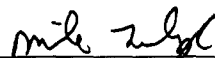
Dear Mr. Stogner:

In reference to the Rosa Unit #231 unorthodox location (SW/4 Sec. 31, T31N, R5W). Northwest Pipeline is the operator of both the San Juan 30-5 and San Juan 31-6 Units, thus no notification of offset operators is needed.

Also enclosed for your review are the "Applications for Non-Standard Proration Units" of the Rosa wells: 209, 210, 218, 219, 220, 221, 223, 225, 226, 227, 228, 230, 231, 233, 236, 237, 238, 239, 240 & 241.

All the offset operators outside the Rosa Unit have been notified where necessary, via certified mail and those letters are also attached.

Sincerely,

  
Mike Turnbaugh  
Senior Engineer

C.C. E. Branch  
11/1/89 ✓

MJT/ch

NORTHWEST PIPELINE CORPORATION

PRODUCTION & DRILLING  
3539 East 30th Street  
Farmington, New Mexico 87401  
4320-PD-139-88

December 7, 1988

NMOCD

Attn: Bill Lemay  
310 Old Santa Fe Trail  
Room #206  
Santa Fe, NM 87503

Re: Application for Non-Standard  
Gas Proration Unit  
Rosa Unit #230  
NE/4 Sec. 31, T31N, R5W  
Dedicated Acreage: ~~232.69~~ (N/2)

Dear Mr. Lemay:

Northwest Pipeline Corporation requests permission to produce the above captioned well as a Non-Standard Gas Unit. The unorthodox size of this unit is necessitated by a variation in the legal subdivision of the U.S. Public Land Survey. The offset operators have been notified where applicable of our intentions by certified mail and they will forward any objections directly to your office. Copies of these letters along with the receipts for certified mail are enclosed.

Sincerely,

Mike Turnbaugh  
Mike Turnbaugh  
Senior Engineer

MJT/ch

**ROSA UNIT**

San Juan and Rio Arriba Counties, New Mexico

Order No. 759, Approving Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, Dated April 22, 1948.

Note: Present Operator of Unit: Pacific Northwest Pipeline (August, 1959.)

*The Application of Stanolind Oil and Gas Company, Petitioner, for an Order of Approval of proposed Rosa Area Unit Agreement, the Unit Area of which embraces 54,209.49 acres, more or less, in Township 31 North, Ranges 4, 5, and 6 West and Township 32 North, Range 6 West, in the Counties of San Juan and Rio Arriba, New Mexico.*

CASE NO. 133

Order No. 759

**ORDER OF THE COMMISSION**

BY THE COMMISSION: This cause came on for hearing at 10:00 o'clock a.m. April 22, 1948, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this the 22nd day of April, 1948, the Commission having before it for consideration the testimony and other evidence adduced at the hearing of said case and the application of petitioner and being fully advised in the premises:

FINDS that the proposed unit plan will in principle tend to promote the conservation of oil and gas and the prevention of waste, and that such plan is fair to the royalty owners and other interest owners;

**IT IS THEREFORE ORDERED:**

That the order herein shall be known as the:

**"ROSA UNIT AGREEMENT ORDER"**

SECTION 1. (a) That the project herein shall be known as the Rosa Unit Agreement and shall hereinafter be referred to as the Project.

(b) That the plan by which the Project shall be operated shall be embraced in the form of unit agreement for the development and operation of the Rosa Unit Area referred to in the petitioner's application and as finally submitted to the Commission in definitive revised form as a part of the testimony adduced at said hearing of April 22, 1948; and such plan shall be known as the Rosa Unit Agreement Plan.

SECTION 2. That the Rosa Agreement Plan shall be and is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said Unit Agreement, this approval of said agreement shall not be considered as waiving or relinquishing in any manner any rights, duties or obligations which are now

or may hereafter be vested in the New Mexico Oil Conservation Commission by law relative to the supervision and control of operations for exploration and development of any lands committed to said Rosa Unit Agreement or relative to the production of oil and gas therefrom.

SECTION 3. (a) That the Unit area shall consist of: NEW MEXICO PRINCIPAL MERIDIAN, NEW MEXICO, (San Juan and Rio Arriba Counties)

**TOWNSHIP 31 NORTH, RANGE 4 WEST**

Sections 1, 2, 3, 4, 5, 6, 7, 8,  
9, 10, 11, 12, 13, 14,  
15, 16, 17, 18, 19, 20,  
21, 22, 23, 24, 25, 26,  
27, 28, 29, 30, 31: All

**TOWNSHIP 31 NORTH, RANGE 5 WEST**

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

**TOWNSHIP 31 NORTH, RANGE 6 WEST**

Sections 1, 2, 3, 4, 5, 8, 9, 10,  
11, 12, 13, 14, 15, 16,  
17, 21, 22, 23, 24, 25,  
26: All

**TOWNSHIP 32 NORTH, RANGE 6 WEST**

Sections 32, 33, 34, 35, 36: All  
total unit area 54,209.49 acres more or less.

(b) That the Unit area may be enlarged or diminished as provided in said plan.

SECTION 4. That the unit operator shall file with the Commission an executed original, or executed counterparts thereof, of the Rosa Unit Agreement not later than 30 days after the effective date thereof.

SECTION 5. That any party owning rights in the unitized substances who does not commit such rights to said Unit Agreement before the effective date thereof may thereafter become a party thereto by subscribing to such Agreement or a counterpart thereof in the manner and with the effect therein expressly provided. The unit operator shall file with the Commission within 30 days thereafter an original of any such counterpart.

SECTION 6. That the order herein shall become effective as of the first day of the calendar month next following the approval of said Unit Agreement by the Commissioner of Public Lands and the Secretary of the Interior of the United States, and it shall terminate ipso facto upon the termination of said Unit Agreement. The last unit operator shall immediately notify the Commission in writing of any such termination.



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS  
GOVERNOR

January 11, 1989

*Coby sent to  
E. Busch  
5/1/89*

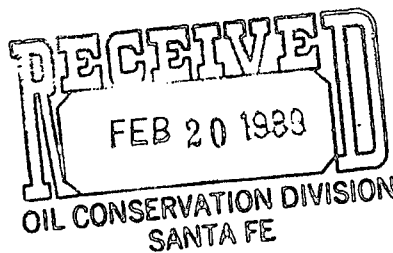
POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

*Northwest Pipeline Corporation  
P.O. Box 90  
Farmington, NM 87499  
Attn: Mike Turnbaugh  
Senior Engineer*

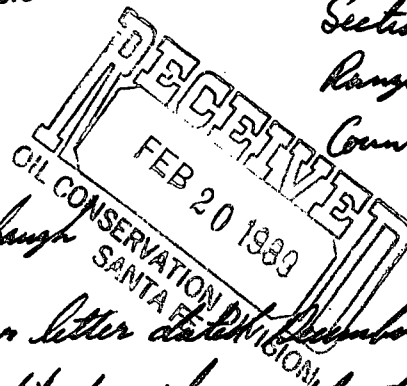
NORTHWEST PIPELINE  
CORPORATION

FEB 8 1989

PRODUCTION AND DRILLING



*Re: Application for a non-standard  
Gas Production Unit  
Rosa Unit Well No. 230  
Lots 1 and 2 and the NE 1/4 of  
Section 31, Township 31 North,  
Range 5 West, NMPM, Rio Arriba  
County, New Mexico.*



*Dear Mr. Turnbaugh*

*Per your letter dated December 7, 1988, you referred to copies of letters and certified mail records to the offset operators, however these were not attached to the filing, if you could submit another copy of same to supplement this filing, I should be able to approve it within the 30 day time period. Also please submit a plat showing the acreage to be dedicated, all off-set operators, and the location of your proposed well. If available please include any SPD's or forms to the*

NORTHWEST PIPELINE CORPORATION

PRODUCTION & DRILLING  
3539 East 30th Street  
Farmington, New Mexico 87401  
4320-PD-034-89

February 9, 1989

NMOCC  
Michael Stogner  
310 Old Santa Fe Trail  
Room #206  
Santa Fe, NM 87503

Re: Non-Standard Proration Unit  
Rosa Unit #230

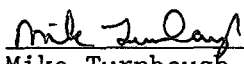
Dear Mr. Stogner:

I have reviewed the subject well again and since Northwest Pipeline operates the entire Rosa Unit as well as both the San Juan 30-5 Unit to the south and the 31-6 Unit to the west and southwest, I don't believe any offset operators exist that might need notification.

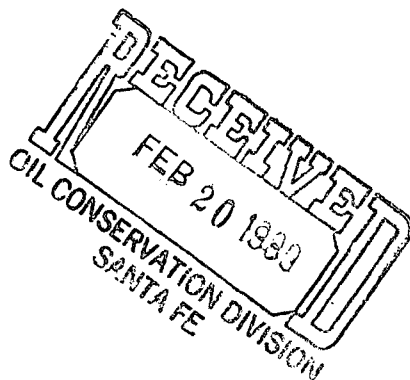
If your records indicate something other than this please let me know and I will be able to notify them.

As you can see, there is a considerable amount of paper in a Federal APD package. Please discard those forms, etc. which are of no use to you.

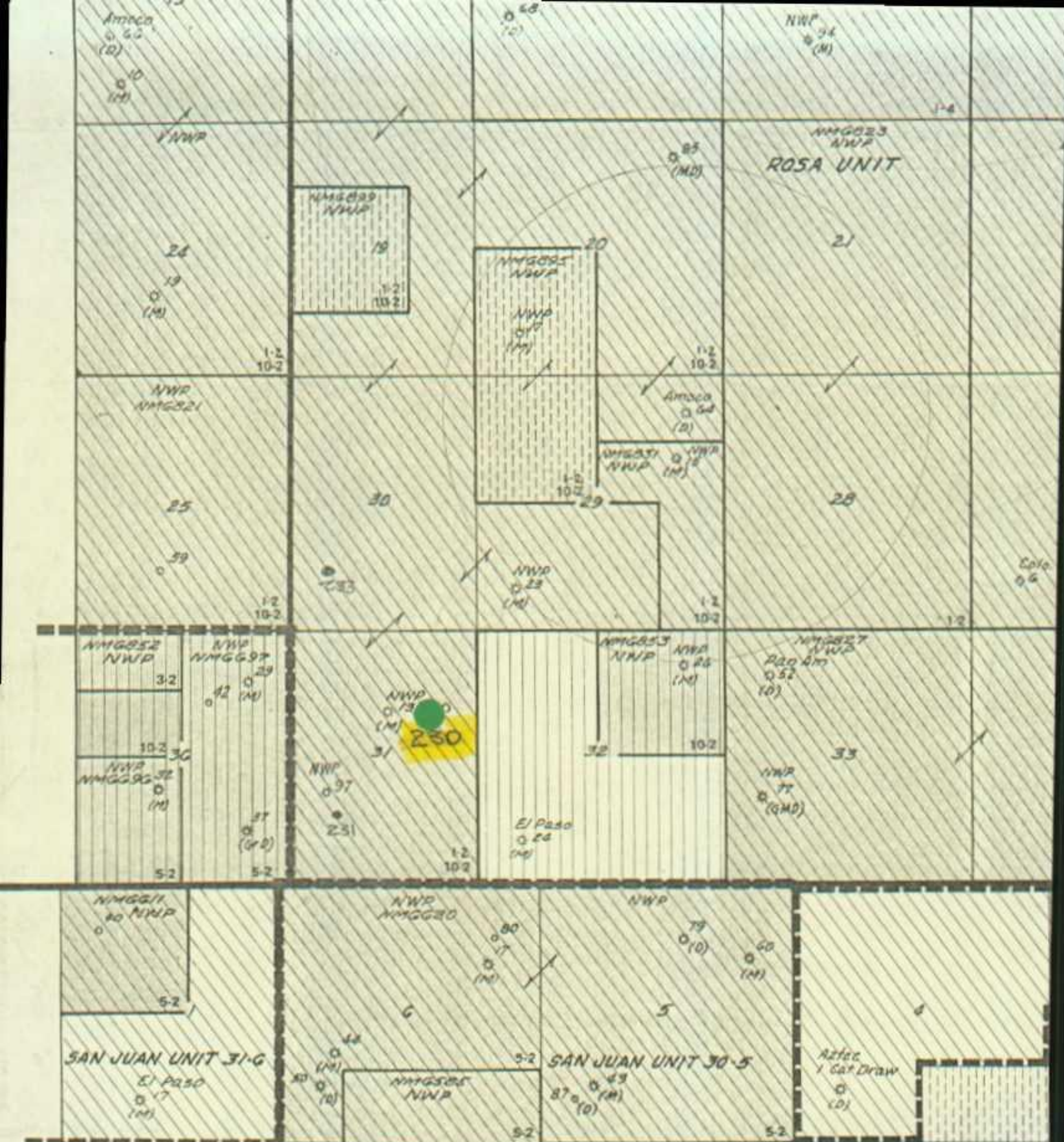
Sincerely,

  
Mike Turnbaugh  
Senior Engineer

MJT/ch







UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

*Mike*

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Northwest Pipeline Corporation

3. ADDRESS OF OPERATOR

3539 East 30th Street - Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface 1410' FNL & 1365' FEL SW/4 NE/4

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

Approximately 20 miles to Gobernador

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

1365'

16. NO. OF ACRES IN LEASE

N/A

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

232.89

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

+ 10,000'

19. PROPOSED DEPTH

3323'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6509' GR

22. APPROX. DATE WORK WILL START\*

3-1-89

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	32.3#	200'	125 cu. ft.
8-3/4"	7"	20#	3164'	145 cu. ft.
6-1/4"	5-1/2"	23#	3323'	Open hole completion

The N/2 of Section 31 is dedicated to this well.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

*Mike Turnbaugh*  
Mike Turnbaugh

TITLE

Sr. Engineer

DATE

11-8-88

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ch-1

\*See Instructions On Reverse Side



NORTHWEST PIPELINE CORPORATION  
OPERATIONS PLAN

Well Name: Rosa Unit #230

Date: November 7, 1988

I. Location: 1410' FNL & 1365' FEL  
Sec. 31, T31N, R5W  
Rio Arriba County, NM

Elevation: 6509' GR  
6521' KB

Field: Basin Fruitland Pool

Surface: BLM  
Minerals: Fed SF-078764

II. Geology: Surface formation - San Jose

<u>Formation Tops</u>	<u>Depth</u>
Ojo Alamo	2604'
Kirtland	2734'
Fruitland Sand	3123'
Fruitland Coal	3179'
Pictured Cliffs	3324'
Intermediate TD	3164'
Final TD	3323'

B. Logging Program:

C. Natural Gauges: Gauge any noticeable increases in gas flow. Record all gauges on daily drilling and morning reports.

III. Drilling:

A. Contractor:

B. Mud Program: Mud, water & gas will be furnished by Northwest Pipeline Corporation from surface to total depth.

a) From surface to total casing depth to be drilled with mud.

C. While drill pipe is in use the pipe rams will be tested not less than once each day. The blind rams will be tested once each trip. All tests will be reported in the Northwest Pipeline Tour Reports as to time and date.

IV. Materials:

A. Casing Program:

<u>Hole Size</u>	<u>Depth O.H.</u>	<u>Casing Size</u>	<u>Wt. &amp; Grade</u>
12-1/4	200'	9-5/8"	32.3# H-40
8-3/4"	3164'	7"	20# K-55
6-1/4	3323'	5-1/2"	23# P110

B. Float Equipment:


- a) Surface Casing: 9-5/8" - B&W Regular Pattern Shoe.
- b) Intermediate Casing: 7" - Dowell guide shoe (Code #50101-070) and self fill insert float collar (Code #53003-070). Five (5) centralizers (Code #56011-070) spaced every other joint above the shoe. Place float one joint above shoe.
- c) Liner: 5-1/2" - Perforated liner w/ notched collar on bottom. Liner hanger with neoprene pack off.

C. Tubing Program: 3273' of 2-7/8" 6.4#, EUE, J-55 tubing w/ seating nipple on top of bottom joint. Expendable check valve on bottom.

D. Wellhead Equipment: Rector well head drawing 88-0203 or equivalent. Wellhead company representative to set slips and make cut off.

V. Cementing

- A. Surface Casing: 9-5/8" - Use 105 sx (125 cu.ft.) of Cl "B" w/ 1/4# gel flake/sx and 3% CaCl<sub>2</sub> (Yield=1.19) (100% excess to circulate). WOC 12 hrs. Test surface casing to 600 psi for 30 min.
- B. Intermediate Casing: 7" - Cement w/ 78 sx Cl "B" w/ 6% gel and 6-1/4# gils/sx (Yield=1.87) (145 cu.ft.) 70% excess to cover Ojo Alamo. WOC 12 hrs. Test casing to 1200 psi for 30 min. Run temperature survey in 8 hrs.
- C. Production Liner: 5-1/2" - Perforated liner will be run without cement (open hole completion).

  
M.J. Turnbaugh  
Sr. Engineer

MJT/ch

Original: Well file

cc: Regular distribution

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

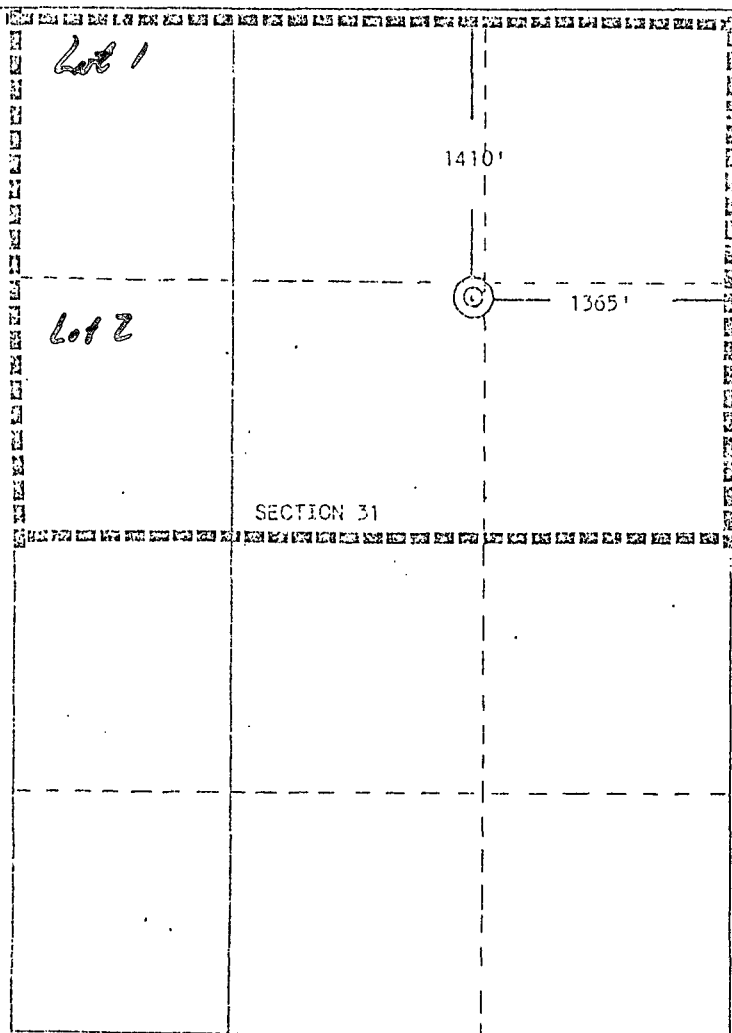
Operator Northwest Pipeline Corporation			Lease Rosa Unit		Well No. 230
Unit Letter G	Section 31	Township 31 North	Range 5 West	County Rio Arriba	
Actual Footage Location of Well: 1410 feet from the North line and 1365 feet from the East line					
Ground Level Elev. 6509	Producing Formation Fruitland		Pool Basin Fruitland Pool		Dedicated Acreage: 232.89 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation unitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Mike Turnbaugh*

Name

Mike Turnbaugh

Position

Senior Engineer

Company

Northwest Pipeline Corp.

Date

10-21-88

I hereby certify that the information shown on this plat was prepared in field notes of actual survey made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

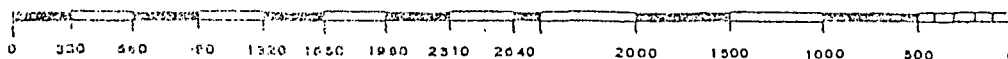
September 21, 1988

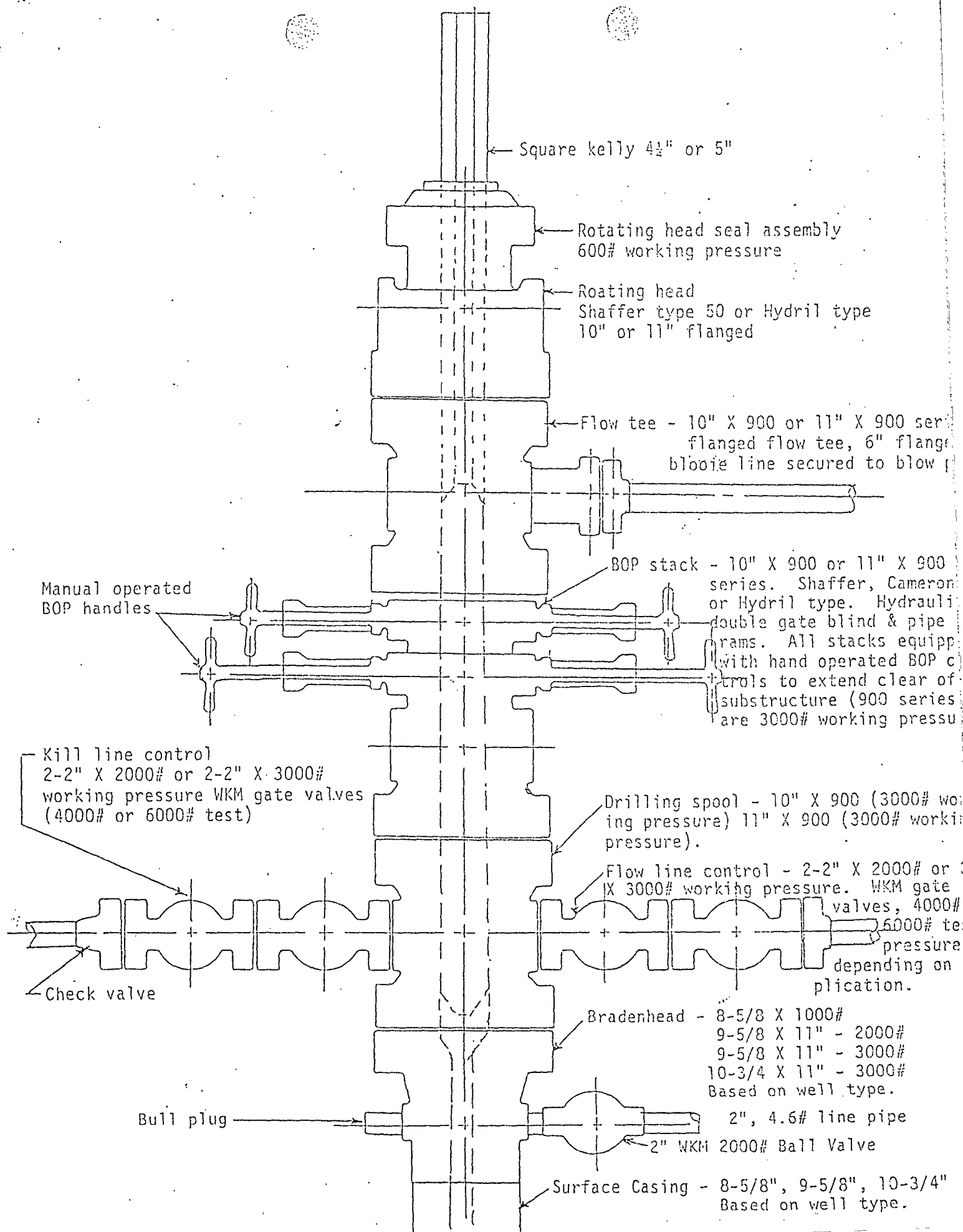
Registered Professional Engineer and/or Land Surveyor

*Edgar L. Risenhoover*

Certificate No. 5979

Edgar L. Risenhoover, L.S.



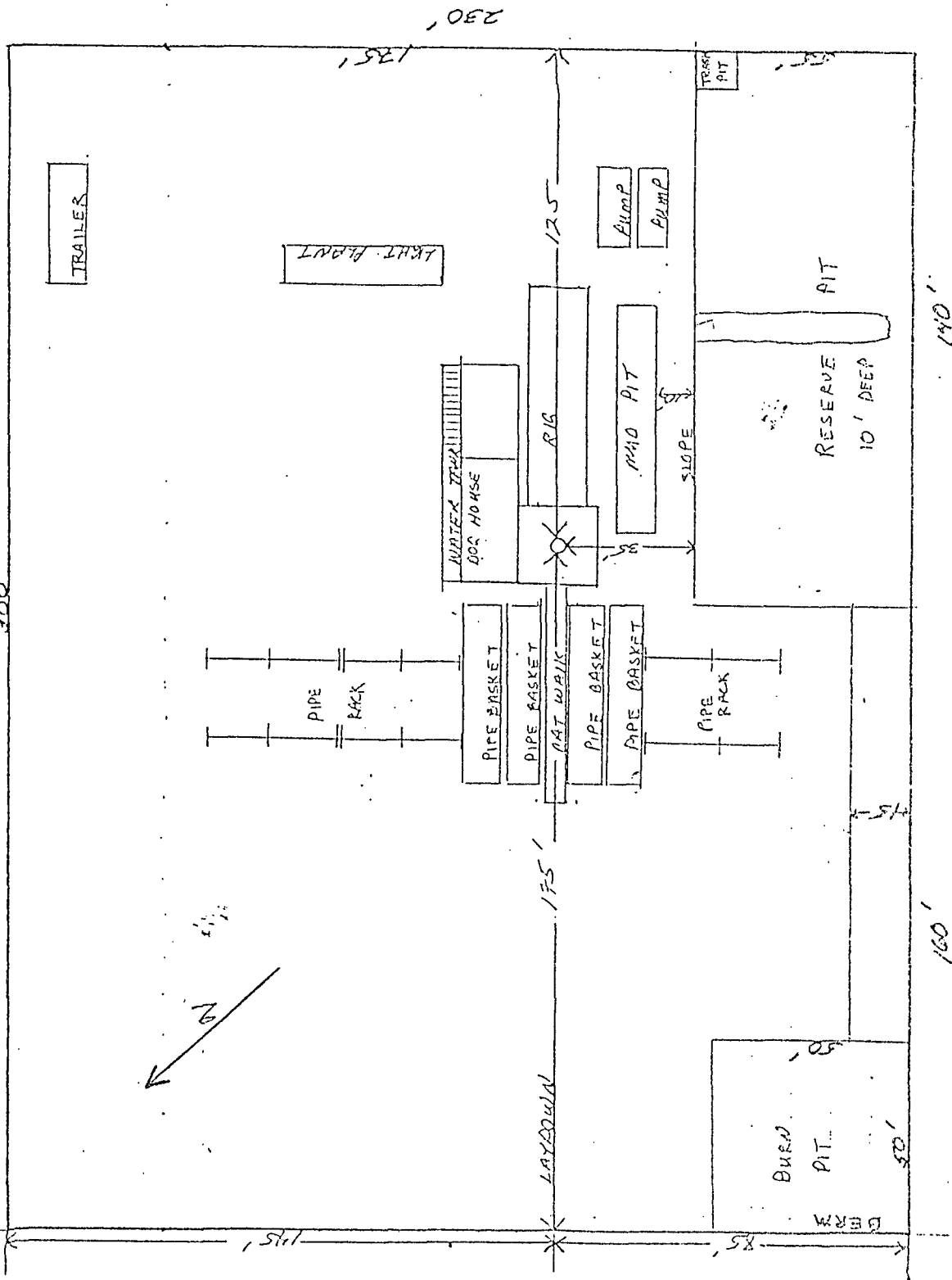


NORTHWEST PIPELINE CONNECTION

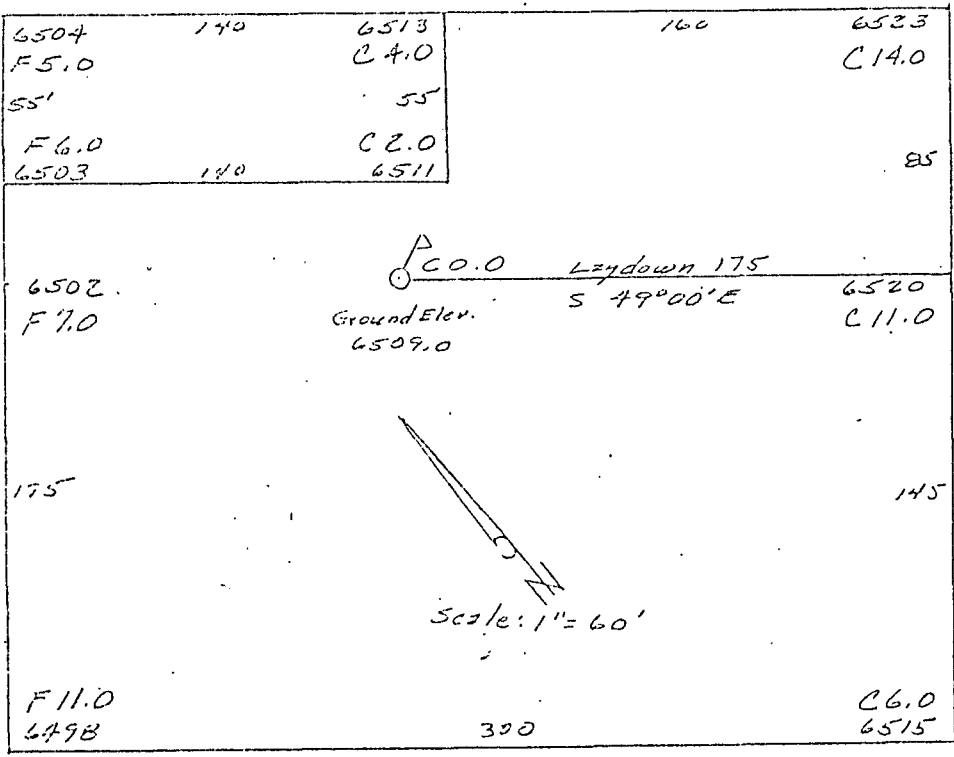
LOCATION LAYOUT

ROSA UNIT 230m

300'



A B C



Northwest Pipeline Corp.  
 OPERATOR

Rosa Unit 230  
 WELL NAME & NO.

1410' F/NL 1365' F/EL  
 FOOTAGES

31 31N 5W  
 SEC. TWP. RGE.

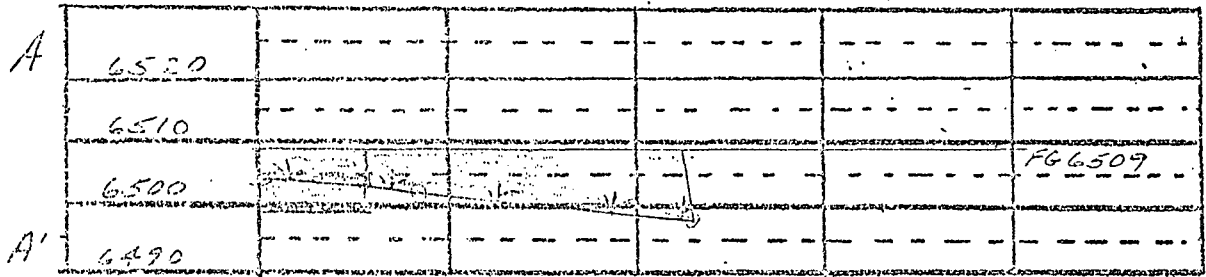
Rio Arriba, NM

COUNTY

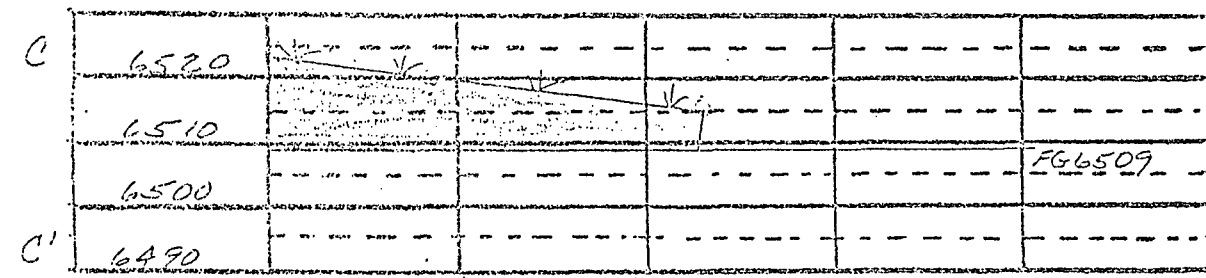
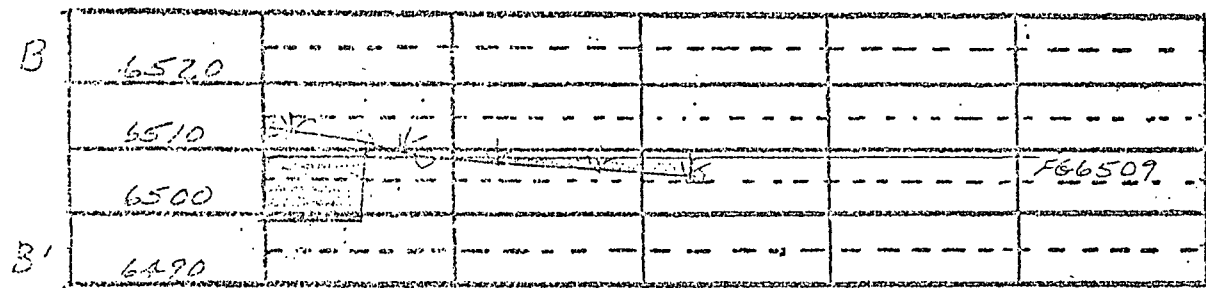
September 21, 1988

DATE

A' B' C'



Horiz. 1" = 100'  
 Vert. 1" = 30'



## Multi-Point Surface Use Plan

### 1. Existing Roads

To reach the proposed location, start from Farmington, New Mexico and go on N.M. 64, approximately 45 miles to Gobernador. Turn north on Sims Highway and travel approximately 5 miles. Turn right on Rosa Road 15 miles to location.

All existing roads used to access the proposed location shall be maintained in the same or better condition than presently found. Access road classified as "Temporary Resource Road".

### 2. Planned Access Roads

The required new access road is shown on the attached map. The proposed route is flagged and approximately 100' feet in length. The road surface will not exceed 20 feet in width. Grade of the road will be consistent with the local terrain with a maximum grade of five percent. Upon completion of the project, the access road shall be adequately drained to control soil erosion. Water bars, culverts or turnouts will be used as necessary. Gates will be installed where the access road crosses an existing fence line as per map. Access road to be classified "Temporary Resource Road".

### 3. Location of Existing Wells

Attached map shows existing wells within a one mile radius of the proposed wells.

### 4. Location of Production Facilities

In the event of production, production facilities will be located on the drill pad. The actual placement of this equipment will be determined when the well's production characteristics can be evaluated after completion.

To protect livestock and wildlife, the reserve pit will be fenced. The condensate tanks will be enclosed by a dyke.

Upon completion of drilling, the location and surrounding area will be cleared of all debris. All trash will be disposed of in the trash pit.

### 5. Water Supply

Water for drilling and completion operations will be hauled by truck from La Jara water hole.



6. Source of Construction Materials

No additional construction materials will be required to build the proposed location.

7. Methods for Handling Waste Disposal

a. The drill cuttings, fluids and completion fluids will be placed in the reserve pit. The reserve pit will be fenced on three sides away from the pad during drilling and the fourth side fenced as soon as the rig moves out. The reserve pit will be allowed to dry, and materials remaining in the reserve pit buried. The reserve pit will be backfilled, leveled and contoured so as to prevent any materials being carried into the watershed. Upon completion, the pad will be leveled, contoured, and reseeded with the appropriate seed mixture.

b. All garbage and trash will be placed in a burn pit (Plat 2). This earthen pit will be four to six feet deep with small mesh wire fencing to prevent the scattering of trash. Upon cleanup, any refuse in the burn pit will be buried at least three feet deep.

c. Portable toilets will be provided and maintained during drilling operations. See Plat 2 for location.

8. Ancillary Facilities

No ancillary facilities are planned.

9. Well Site Layout

A cross-section of the drill pad with approximate cuts, fills and pad orientation is attached. Location of drilling equipment, rig orientation, and access road approach is also attached.

10. Plans for Restoration of Surface

When the well is abandoned, the location and access road will be cleaned and restored to the original topographical contours as much as possible. The area will be reseeded with the appropriate seed mixture.

If the well is productive, areas not used in production will be contoured and seeded with stipulated seed mixture. Production equipment will be painted the color designated by the surface managing agency. A stock pond will be built adjacent to the location as per map.

11. Surface Ownership

a. The surface ownership is Bureau of Land Management, administered by the Bureau of Land Management.

12. Other Information

Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.

13. Lessee's or Operator's Representative

Northwest Pipeline Corporation  
Production & Drilling Department  
3539 East 30th Street  
Farmington, New Mexico 87401  
Phone: 505/327-5351

14. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Northwest Pipeline Corporation, and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

11-8-88  
Date

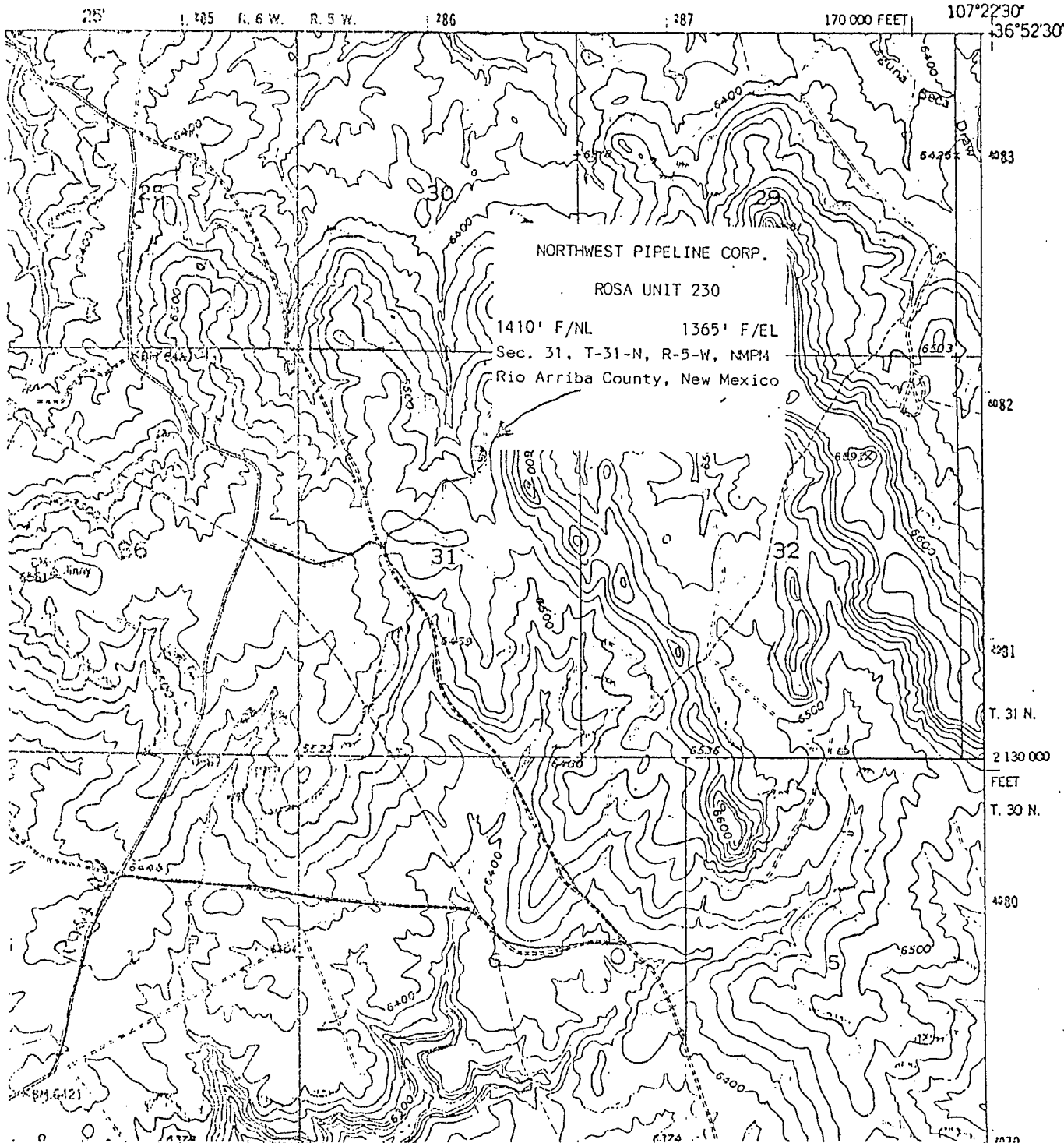
Mike Turnbaugh  
Mike Turnbaugh  
Senior Engineer

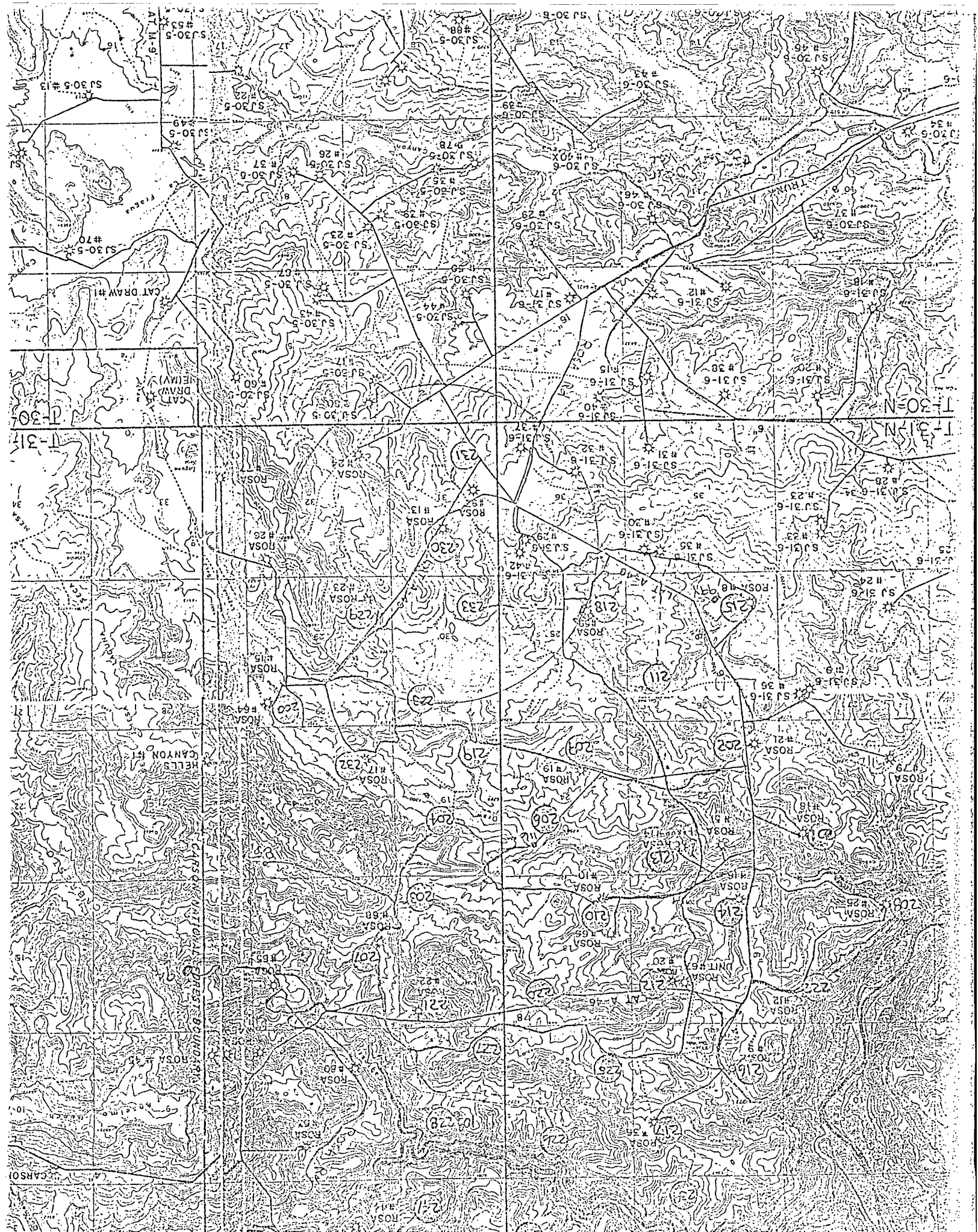
# GOMEZ RANCH QUADRANGLE

NEW MEXICO-RIO ARriba CO.

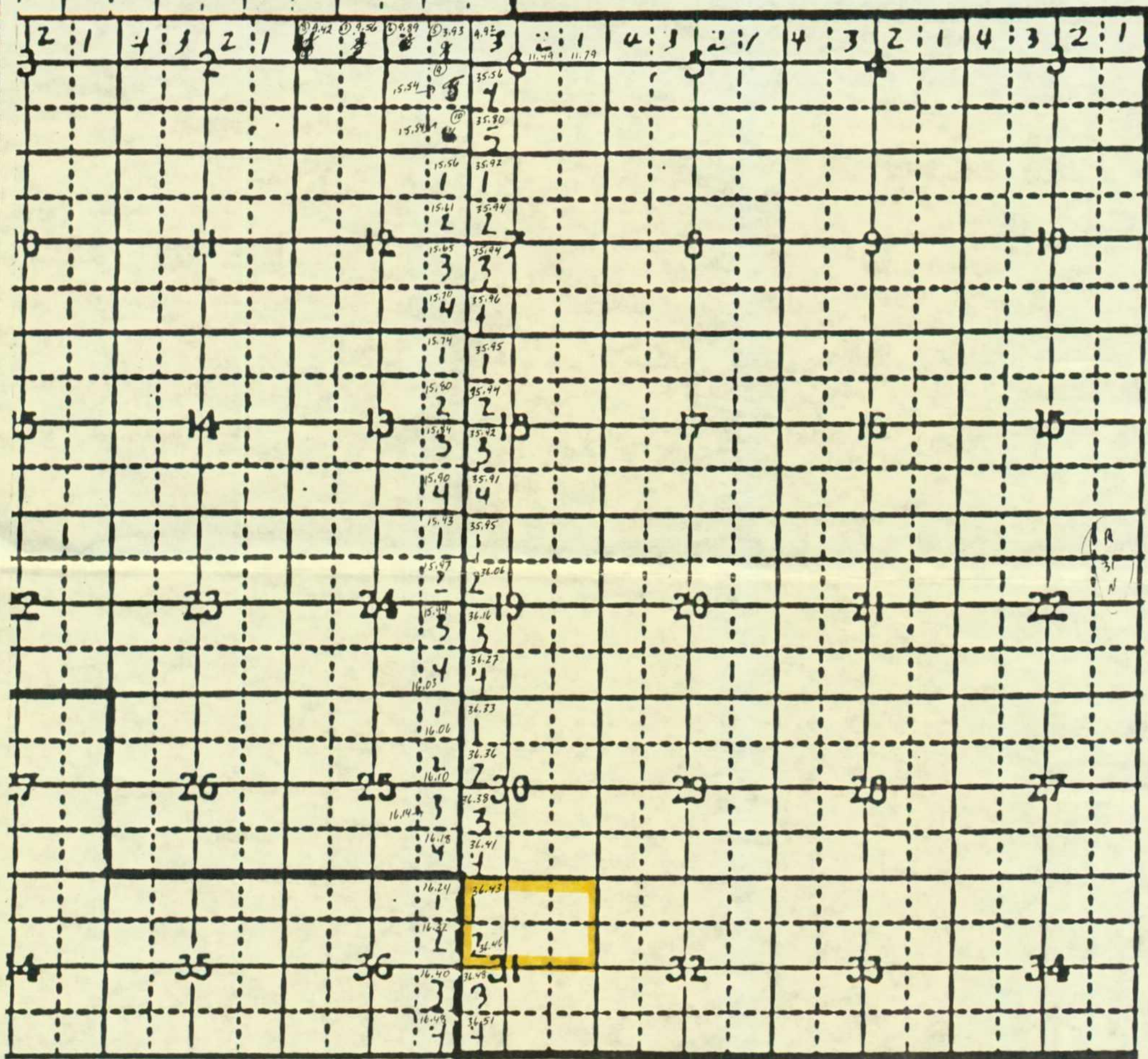
7.5 MINUTE SERIES (TOPOGRAPHIC)

4557 IV NE  
(BANCOS MESA)









T6W

T5W

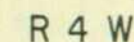
5 W

160.00  
36.43  
36.46  
232.89





DAKOTA-ROSA UNIT



- 
  
 SAN JUAN
   
 GROSS
   
 (4)
   
 Compiled: K.C. Bowman
   
 Drafting: M.B. ...

Commercial Production  
Formation Wells  
and Abandoned