

Special Pool Rules  
Medano Area Delaware  
Application Summary

- Pool Type: Oil
- Pool Area: Section 16, S/2 Section 9, N/2 Section 21  
T-23-S, R-31-E, Eddy County
- Formation : Delaware Sand
- Spacing: 40 acre pursuant to Rule 104
- Gas Oil Ratio: 2000:1 pursuant to Rule 506(a)
- Depth Bracket Allowable: Based on deepest Delaware Sand  
perforation rather than shallowest  
pursuant to Rule 505(a)

*Depth -  
187 B.D.  
initial on 80 B.H/s.*

YATES PETROLEUM CORP.  
BEFORE EXAMINER STOGNER  
N.M. O.C.D. CASE NO. 10327  
DATE: 06/13/91  
EXHIBIT NO. 13

Special Pool Rules  
Medano Area Delaware  
Considerations in Granting Application

- No evidence of mechanical or chemical problems producing both zones together.
- No evidence of water coning.
- No evidence of a gas cap.
- Neither productive interval dominates production.
- Prevent economic waste by setting allowable based on the deepest perforation.
- Protect correlative rights by developing both zones simultaneously and by producing at an allowable based on the deepest perforation.
- Prevent mineral waste by fully developing both zones.

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FILED

80

600-800 GOR on both wells

#3 well

70 BOPD

80-85 B

# Wellbore Schematic Medano VA State #1 1947' FSL & 1986' FWL Unit K Sec. 16-23S-31E Eddy Co., New Mexico

50 BOPD  
190 BOPD

extra  
160 BOPD  
→ 5 mo.

Extra 210'

26" hole

17 1/2" hole

20" @ 624' 1060 sx.

Bell Canyon  
4147'

13 3/8" @ 4139' 3400 sx.

4218-26'  
4229-37' Bell Canyon

12 1/4" hole

Plastic coated  
2 7/8" tubing

6019-27'  
6236-6375' Cherry Canyon  
Sqzd. tested to 3000'

Cherry Canyon  
5110'

7004-14'  
7100-85' Cherry Canyon  
Sqzd. tested to 3000'

Brushy Canyon  
6892'

7825-28'  
7838-34'  
7846-56' Brushy Canyon

Bone Spring  
8050'

Injection packer  
with on/off tool  
8000'

8065-68', 70.5', 72.3', 77-79', 81', Bone Spri  
82', 86', 88', 91', 93', 8100.5', 8102'

8252', 54', 97', 8303-09', Bone Spri  
8365-74'  
8511', 12', 14', 16', 38', 8539'  
8608-10', 12', 14', 16', 25', 28',  
31', 34', 57', 8639'

Wolfcamp  
10,904'

CIRP + cmt. 9750'

9991-10,000' Bone Spring

CIRP + 35' cmt.  
11,850'

11,966-73', 79', 82', 83', 87', 88', 90' Wolfcamp

CIRP + 20' cmt.  
12,040'

9 5/8" @ 12,444'  
3500 sx. orig. + 650 sx. re-entry

Strawn  
13,095'

?? Prod. pkr. 12,400'

13,396-408' Atoka

Atoka  
13,266'

8 1/2" hole

13,880-890' Atoka

Morrow  
13,932'

Model "J" Plug 14,045'

Baker CIRP 14,100'  
+ 10 sx. cmt.

14,117-126' Morrow

Baker CIRP 14,140'

7 5/8" 12,257-14,153' 250 sx.

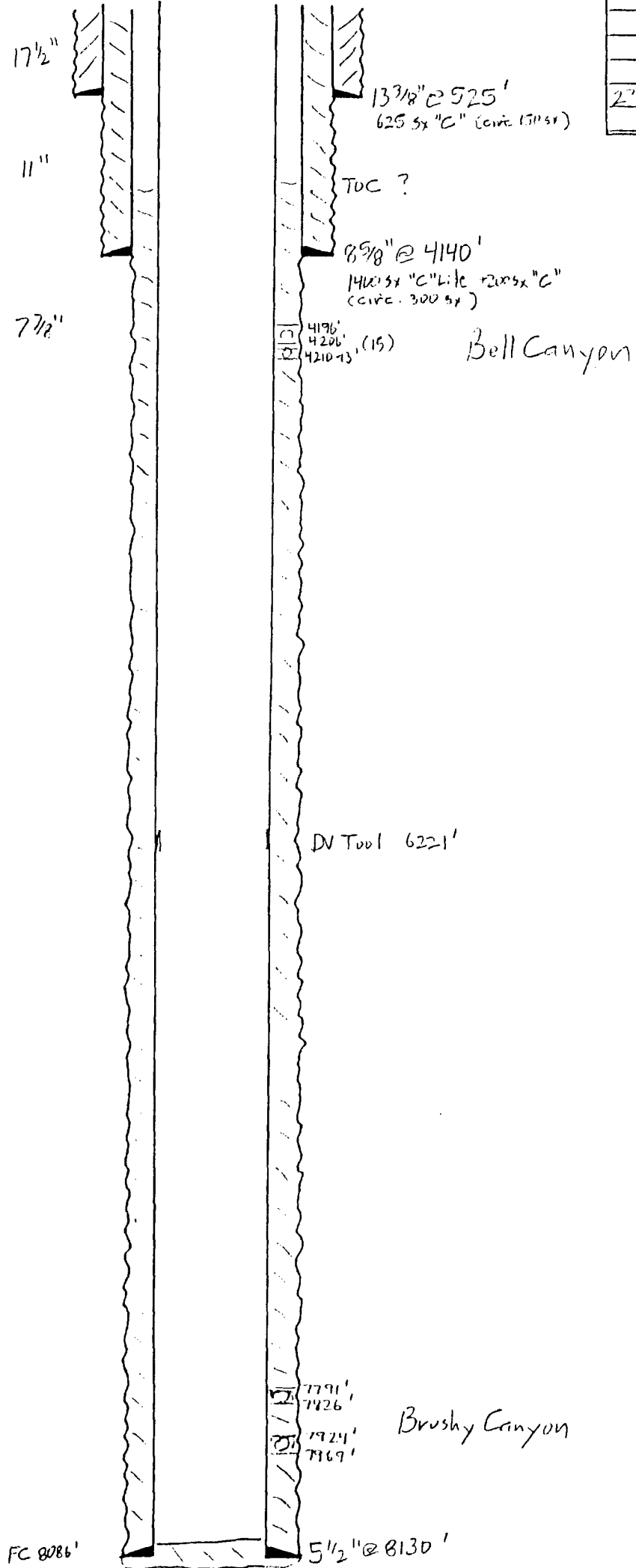
6 1/2" hole

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EXHIBIT NO. 15

WELL NAME: Modano VA Site # 3 FIELD AREA: Sand Dunes West  
LOCATION: 2310' FNL, 1650' FNL F-16-235-31e Eddy N.M.  
GL: 3349' ZERO: 14' AGL: -'  
KB: 3363' ORIG. DRLG./COMPL. DATE: 1/71  
COMMENTS: \_\_\_\_\_

CASING PROGRAM:

SIZE/WT./GR./CONN.	DEPTH SET
13 3/8 54.5 J55 5K	525'
8 5/8 32 J55 5K	4140'
5 1/2 11 J55	517'
15.5 J55	6124'
11 J55	8130'
2 3/4 6.5 J55 EUE	



YATES PETROLEUM CORP.  
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EXHIBIT NO. 16

REVISED: Brian Collins 1/71

- SKETCH NOT TO SCALE -  
1 1/2" 575 5x 10" x 2000 5x 10"  
2nd 4500 5x 10" x 2000 5x 10"

Special Pool Rules  
Medano Area Delaware  
Economic Waste

<u>Case</u>	<u>Scenario</u>	<u>Discounted Net Present Value</u>	<u>Incremental Disc. Net Present Value Relative to Case 2</u>
1	One well, both zones 187 BOPD allowable	\$412,000	+\$ 81,000
2	One well, both zones 80 BOPD allowable	\$331,000	0
3	One well, one zone at a time	\$185,000	-\$146,000
4	One well to Bell Canyon Second well to Brushy Canyon	\$ 53,000	-\$278,000

-Each scenario has the same oil reserves.

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EXHIBIT NO. 17

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

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

*CASE NO. 10327*  
*ORDER NO. R-9568*

**APPLICATION OF YATES PETROLEUM CORPORATION  
FOR POOL EXTENSION AND THE ASSIGNMENT OF A  
SPECIAL DEPTH BRACKET OIL ALLOWABLE, EDDY  
COUNTY, NEW MEXICO**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 13 and June 27, 1991, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 26th day of August, 1991 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

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

(2) The applicant, Yates Petroleum Corporation, seeks to extend the horizontal limits of the Los Medanos-Delaware Pool to include the S/2 of Section 9, the N/2 and SE/4 of Section 16, and the N/2 of Section 21, all in Township 23 South, Range 31 East, NMPM, Eddy County, New Mexico.

(3) Further, the applicant seeks a special depth bracket allowable, pursuant to Division (General) Rule 505(d), for said pool whereby the allowable would be based on the deepest perforation (rather than the shallowest as provided for in General Rule 505(a)) in its Medano "VA" State Well No. 1.

(4) By Division Order No. R-9473, dated March 28, 1991 and made effective April 1, 1991, the Division created and defined the Los Medanos-Delaware Pool for the production of oil from the Delaware formation, with its horizontal limits comprising the SW/4 of Section 16, Township 23 South, Range 31 East, NMPM, Eddy County, New Mexico. The discovery well for this pool was Yates Petroleum Corporation's Medano "VA" State Well No. 1 located in the NE/4 SW/4 (Unit K) of said Section 16 which was completed in the Delaware formation on October 30, 1990 through the following perforated intervals (shown in feet):

Bell Canyon Interval	Brushy Canyon Interval
4218 - 4226	7825 - 7828
4229 - 4237	7838 - 7844
	7846 - 7856

(5) Pursuant to Division General Rule 505.A. the pool's assigned depth bracket allowable, as requested by the applicant, would be increased from its present 80 barrels of oil per day to 187 barrels of oil per day per 40-acre oil spacing and proration unit.

(6) The applicant has recently completed a second well, its Medano "VA" State Well No. 3 located 2310 feet from the North line and 1650 feet from the West line (Unit F) of said Section 16, in the same corresponding intervals as the discovery well.

(7) Geological and engineering evidence indicate that neither productive interval within the pool dominates the other and at this time there appear to be no adverse effects in producing both zones within the Delaware formation together.

(8) Both wells in said pool are capable of producing in excess of the current 80-barrel depth bracket allowable.

(9) The evidence presently available indicates that an increased rate of production from said pool will not result in damage to the reservoir nor have an adverse effect on the ultimate recovery from the pool but should instead be improved thereby.

(10) No offset operator or interested party appeared at the hearing in opposition to this application.

(11) Approval of the applicant's request for an increased oil allowable should serve to prevent waste and will not violate correlative rights.

(12) Division General Rule 104.A provides that wells drilled within one mile of a designated pool will be subject to the rules governing that pool; therefore, since any wells drilled to the Delaware formation within the area requested for expansion are within one mile of the horizontal limits of said pool, such request is premature and unnecessary. Further, any future expansion should be made under the normal nomenclature process through the Artesia District Office of the Division.

IT IS THEREFORE ORDERED THAT:

(1) Effective September 1, 1991, a special depth bracket allowable of 187 barrels of oil per day is hereby established for the Los Medanos-Delaware Pool, Eddy County, New Mexico.

(2) The Division Director may, at any time it appears that reservoir damage is apparent or other evidence of waste occurring, rescind the provision of the order and cause the top unit allowable for the Los Medanos-Delaware Pool to revert back to 80 barrels of oil per day.

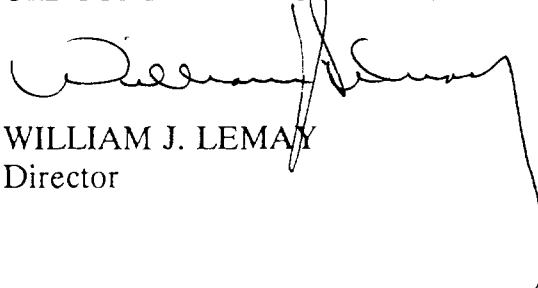
(3) The applicant's request to extend the horizontal limits of said pool to include the S/2 of Section 9, the N/2 and SE/4 of Section 16 and the N/2 of Section 21, all in Township 23 South, Range 31 East, NMPM, Eddy County, New Mexico is hereby denied at this time.

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

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



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director