

DHC 9/13/99

1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First St., Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
2040 S. Pacheco
Santa Fe, New Mexico 87505-6429
APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A
Revised March 17, 1999
APPROVAL PROCESS:
___ Administrative ___ Hearing
EXISTING WELLBORE
☒ YES ___ NO

Operator Mewbourne Oil Company Address P.O. Box 7698, Tyler, Texas 75711

Lease Avalon "31" State Well No. 1 Unit Ltr. - Sec. - Twp. - Rge H-31-T31S-R26E County Eddy

Spacing Unit Lease Types: (check 1 or more)
OGRID NO. 14744 Property Code 24594 API NO. 30-015-30650 Federal ___ State ☒ (and/or) Fee ___

The following facts are submitted in support of downhole commingling: 1. Pool Name and Pool Code	Upper Zone Hackberry Hills Canyon - 77920	Intermediate Zone	Lower Zone Hackberry Hills Atoka - 96239
2. Top and Bottom of Pay Section (Perforations)	9528' - 9536' 9544' - 9554'		10,277'-10,283' 10,244'-10,252'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 4000 psig (est) b. (Original) 4558 psig (calc)	a. b.	a. 4500 psig (est) b. 5237 psig (calc)
6. Oil Gravity (°API) or Gas BTU Content	1211 BTU/cuft		1085 BTU/cuft
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no) * If Shut-In, give date and oil/gas/water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data * If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Yes Date: 7/20/99 Rates: 3 BO, 10 BW, 342 MCF/D	 Date: Rates:	Yes Date: 7/15/99 Rates: No cond or wtr, 317 MCF/D
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: 100% Gas: 52%	Oil: % Gas: %	Oil: 0% Gas: 48%

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ___ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ___ Yes ___ No
Have all offset operators been given written notice of the proposed downhole commingling? ___ Yes ___ No

11. Will cross-flow occur? ___ Yes ☒ No ___ If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ___ Yes ___ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ___ No

13. Will the value of production be decreased by commingling? ___ Yes ☒ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ___ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions ORDER NO(S): None

16. ATTACHMENTS:

- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- * Production curve for each zone for at least one year. (If not available, attach explanation.)
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation method or formula.
- * Notification list of all offset operators.
- * Notification list of working, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

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

SIGNATURE K.M. Calvert TITLE Eng. Mgr. DATE 8/17/99

TYPE OR PRINT NAME K.M. Calvert TELEPHONE NO. (903) 561-2900

Attachments
Mewbourne Oil Company
Avalon "31" State No. 1
Unit H, Section 31, T21S, R 26E
Eddy Co., New Mexico

- 1) Original C-102 dated 5-7-99. C-102 showing spacing units for Hackberry (Canyon) and Hackberry (Atoka).
- 2) There is no production curve for either zone due to perforating the Canyon four days after perforating the Atoka. The production data for the Atoka is based on flow tests performed directly after perforating the zones of interest. Production data for the Canyon is determined from the overall rate increase incurred by the addition of the Canyon zone.

Atoka

<u>Time</u>	<u>FTP</u>	<u>Choke</u>
11:30 pm to 2:00 pm	440# to 210#	20/64"
2:00 pm to 5:00 pm	240#	20/64"

At 5:00 pm on 7/14/99, the Atoka was flowing on 32/64" choke, FTP 340# @ 312 MCFPD.

Canyon

After perforating the Canyon, the combined Atoka and Canyon zone's rate was 654 MCFPD. Therefore, the rate of production from the Canyon is 342 MCFPD.

- 3) Estimated production rates and supporting data:
Gas rates since initial deliveries to pipeline on 7/16/99:

<u>Date</u>	<u>MCF/D</u>	<u>FTP</u>
7/16/99	654	340
7/23/99	530	350
7/30/99	319	420
8/6/99	278	390
8/11/99	261	350
8/17/99	434	80*

* A compressor was installed to reduce back pressure. Production rates are expected to be back to approximately 250 MCF/D in one month and continue to decline from that point. This is an extremely poor producer due to the low permeability of the reservoir. Production of the remaining reserves is a salvage operation.

- 4) Allocation formula based upon initial rates. See item 2 above.
- 5) Offset operator notification not required.
- 6) No uncommon interest owners.
- 7) As evidenced by daily production rates shown in Item 3 above, this well is an extremely poor producer. A compressor has been required to maintain production as long as possible. Were this well required to be multiply completed, the economics of doing so could not justify the work. Commingling of these two zones will allow the salvaging of reserves that could not otherwise be recovered.

DISTRICT I
P.O. Box 1280, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name <u>SW AVALON HILLS 31 STATE</u>	Well Number <u>1</u>
OGRID No. <u>14744</u>	Operator Name <u>MEWBOURNE OIL CO.</u>	Elevation <u>3308</u>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<u>H</u>	<u>31</u>	<u>21 S</u>	<u>26 E</u>		<u>1980</u>	<u>NORTH</u>	<u>990</u>	<u>EAST</u>	<u>EDDY</u>

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres <u>320</u>	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <u>Steve Matthews</u> Signature <u>Steve Matthews</u> Printed Name <u>Dr./g. Supt</u> Title <u>5-12-99</u> Date
	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MAY 5, 1999 Date Surveyed Signature & Seal of Professional Surveyor <u>Ronald E. Edson</u> Professional Surveyor NEW MEXICO 89-11-0384 5-07-99
	Certificate No. <u>RONALD E. EDSON</u> 3239 <u>GARY EDSON</u> 12641 <u>NAGOM McDONALD</u> 12185

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OGRID No. <u>14744</u>	Operator Name <u>MEWBOURNE OIL CO.</u>	Elevation <u>3308</u>

Surface Location

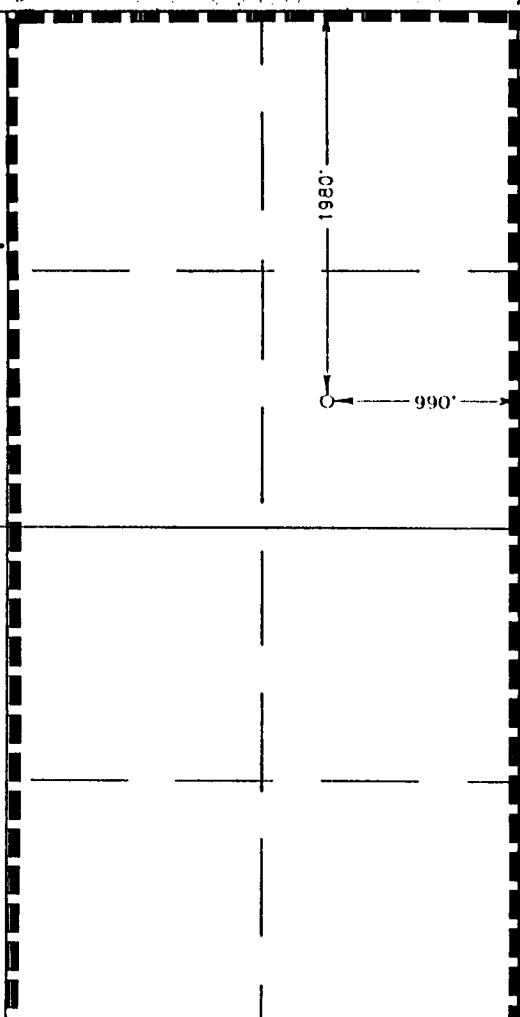
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OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>NOTE: Hackberry Hills (Canyon) and Hackberry Hills (Atoka) are spaced and commingled on 320 ac., E/2 Sec. 21.</p>		<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Steve Matthews</u> Signature <u>Steve Matthews</u> Printed Name <u>Dr./g. Supt.</u> Title <u>5-12-99</u> Date</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p><u>MAY 5, 1999</u> Date Surveyed DMCC</p> <p><u>RONALD L. EDSON</u> Signature & Seal of Professional Surveyor <u>5-07-99</u> Date</p> <p>Certificate No. <u>RONALD L. EDSON</u> 3239 <u>GARY EDSON</u> 12641 <u>MAGNUS McDONALD</u> 12185</p>
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