

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., Artesia, 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

MEWBOURNE OIL COMPANY

Operator

Address

Northeast Avalon Hills 36 State Com #1 0-Sec 30, T20S-R27E

Eddy

Lease

Well No.

Unit Ltr. Sec. Twp. Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14744 Property Code 23648 API NO. 30-0-15-30390 Federal ☐ State ☒ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Burton Flat West (Strawn) - 73440		Burton Flat Morrow #73280
2. Top and Bottom of Pay Section (Perforations)	10,013' - 10,021'		11,029' - 11,212' OA
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure	a. (Current) 3300#	a.	a. 2750#
Oil Zones - Artificial Lift: Estimated Current	b. (Original) 3800#	b.	b. 4650#
Gas & Oil - Flowing: Measured Current			
All Gas Zones: Estimated Or Measured Original			
6. Oil Gravity (° API) or Gas BTU Content			1,078 BTU
7. Producing or Shut-In?	SHUT IN		Producing
Production Marginal? (yes or no)	Unknown		No
* If Shut-In, give date and oil/gas/ water rates of last production	Date: Rates:	Date: Rates:	Date: Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Date: 110 MCF/D est Rates: 1.7 BOP/D est 0 BWP/D est	Date: Rates:	Date: 8/10/99 Rates: 520 MCF/D 1.5 BWP/D, 0 BO
* If Producing, give date and oil/gas/ water rates of recent test (within 60 days)			
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: %	Oil: % Gas: %	Oil: % Gas: %

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 N/A

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 communized 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).

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 8/20/99

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

Attachments
Mewbourne Oil Company
Northeast Avalon Hills 36 State Com #1 (36 #1)
Unit O, Section 30, T20S, R27E
Eddy Co., New Mexico

New Zone

1) Production Estimates:

100 MCF/D, 1.7 BO/D, no water. The Fasken - El Paso Federal #3 is a southwest offset in the Strawn Formation. The attached decline curve is labeled as Exhibit I.

2) Allocation Formula:

The Strawn formation which will produce from the 36 #1 (see Exhibit II) is expected to perform in much the same way as the El Paso Federal #3 (see Exhibit III) at this stage of depletion. The attached log sections from the two wells have a high similarity as to reservoir quality. Current producing characteristics should also be similar.

Gas:	Strawn	17%
	Morrow	83%
Condensate:	Strawn	100%
	Morrow	9%

Attachments

- 1) Original C-102 dated 8/27/99. C-102 showing spacing units for Burton Flat (Morrow) and Burton Flat, West (Strawn).
- 2) Production curve for 36 #1 for initial delivery (1-15-99) to date.
- 3) Estimated production: See New Zone item 1.
- 4) Allocation Formula: See New Zone item 1 and 2.
- 5) Offset Operators - Not applicable.
- 6) No uncommon interest.
- 7) The addition of the Strawn as a commingled zone will prevent drainage that would not otherwise be possible. The well is completed with 5 ½" od casing. In order to dually complete the well to ultimately recover all economic reserves the use of small diameter special clearance tubing would be required. Performing a dual completion as described could not be economically justified for a zone with limited deliverability.

EXHIBIT I

GAS-MCF 0-0-0
Ref= 11/97
Cum= 873.232
OIL-BBL X-X-X
Ref= 11/97
Cum= 21.050

LEASE : EL PASO FEDERAL #3
FIELD : BURTON FLAT WEST
RESERVOIR : STRAWN (PENN)
COUNTY : EDDY
OPERATOR : FASKEN OIL AND RANCH LTD
LOCATION : 1-21S-26E H

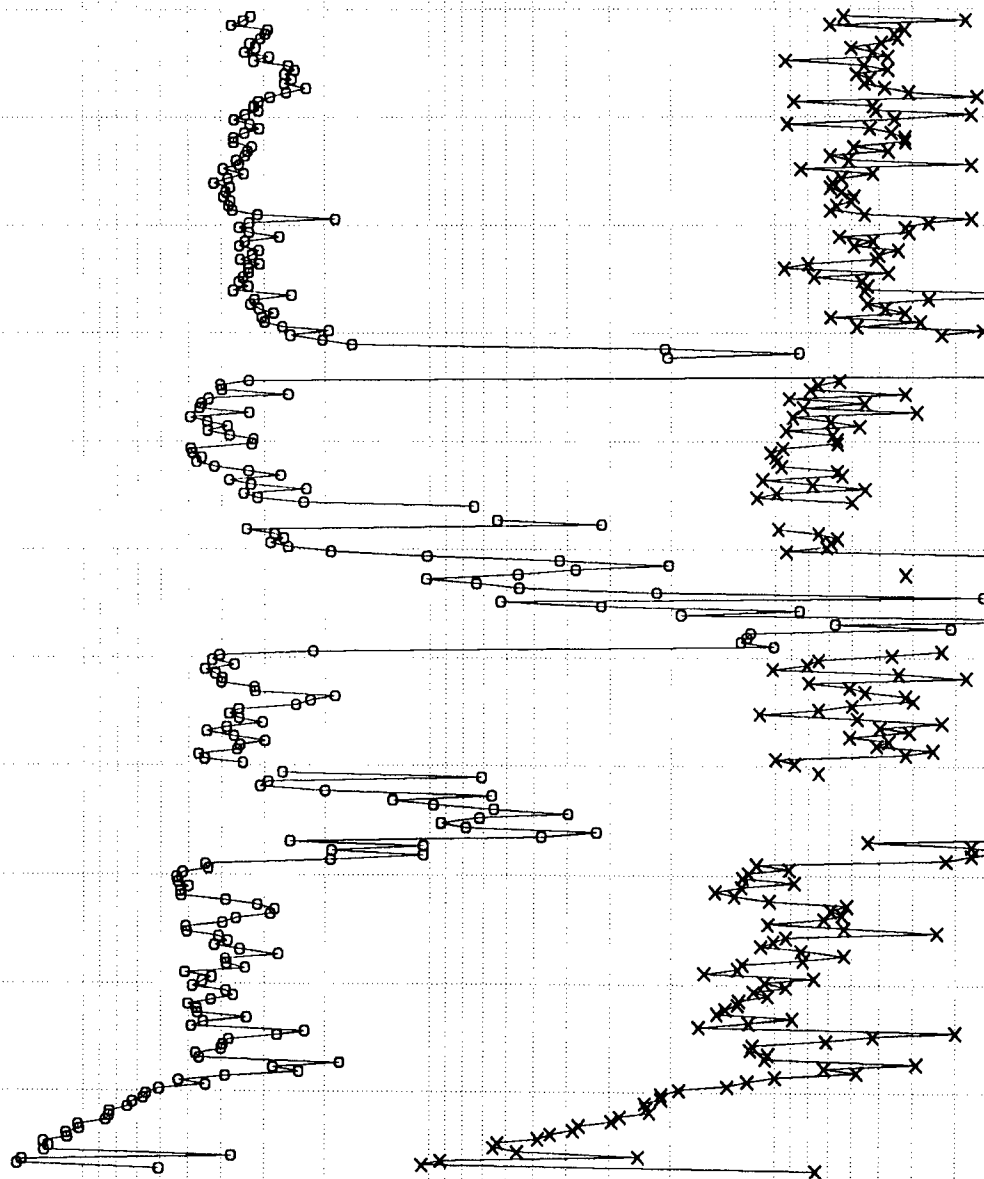
OIL-BBL
GAS-MCF

10000
100000

1000
10000

100
1000

10
100



DATE

06

04

02

00

98

96

94

92

90

88

86

84

82

80

78

76

Schlumberger
COMPENSATED NEUTRON FORMATION DENSITY

COMPANY DAVID FASKEN

WELL EL PASO FEDERAL #3

FIELD WILDCAT

COUNTY EDDY STATE NEW MEXICO

LOCATION 1664' FNL & 660' FEL

API SERIAL NO. 1 SEC 21-S RANGE 26-E

Permanent Datum: G.L. Elev. 3236 Elev. K.B. 3252
Log Measured From: K.B. 16 ft. Above Perm. Datum D.F. 3251
Drilling Measured From: K.B. G.L. 3236

Date 9-15-74

Run No. ONE

Depth-Driller 11450

Depth-Logger 11445

Emt. Log Interval 11445

Top Log Interval 0

Casing-Driller 8 5/8 @ 4662

Casing-Logger 4659

Bit Size 7 7/8

Type Fluid in Hole DRISPAK

Dens. Visc. 9.8 35

pH Fluid Loss 6.5 3.4 ml

Source of Sample FLOWLINE

Rm @ Meas. Temp. .035 @ 68

Rm @ Meas. Temp. .032 @ 68

Rm @ Meas. Temp. .016 @ 171

Source: Rm1 Rm2 M

Rm @ BHT .016 @ 171

Log Circulation Stopped 1100

Logger on Bottom 1600

Max. Rec. Temp. 171

Equip. Location 7646 HOBBS

Recorded By CREEK, MYERS

Witnessed By CLAIBORNE

TRND WLL
TONE -
SC. 1H.

CUM. =
826 MU +
20,223 BO
AC. W/2500 GA.

TUP = 1.6

PLF

Schlumberger
DUAL LATEROLOG

COMPANY DAVID FASKEN

WELL EL PASO FEDERAL #3

FIELD WILDCAT

COUNTY EDDY STATE NEW MEXICO

LOCATION 1664' FNL & 660' FEL

API SERIAL NO. 1 SEC 21-S RANGE 26-E

Permanent Datum: G.L. Elev. 3236 Elev. K.B. 3252
Log Measured From: K.B. 16 ft. Above Perm. Datum D.F. 3251
Drilling Measured From: K.B. G.L. 3236

Date 9-15-74

Run No. ONE

Depth-Driller 11450

Depth-Logger (Schl.) 11445

Emt. Log Interval 11431

Top Log Interval 4659

Casing-Driller 8 5/8 @ 4665

Casing-Logger 4659

Bit Size 7 7/8

Type Fluid in Hole DRISPAK

Dens. Visc. 9.8 35

pH Fluid Loss 6.5 3.4 ml

Source of Sample FLOWLINE

Rm @ Meas. Temp. .035 @ 68

Rm @ Meas. Temp. .032 @ 68

Rm @ Meas. Temp. .016 @ 171

Source: Rm1 Rm2 M

Rm @ BHT .016 @ 171

Log Circulation Stopped 10 HOURS

Logger on Bottom

Max. Rec. Temp. 171

Equip. Location 7646 HOBBS

Recorded By MYERS, CREEK

Witnessed By CLAIBORNE

Reproduced By
Electrical Log Services
MILWAUKEE, TEXAS 79701



262768

REFERENCE W 9916N



3) COMPLETION RECORD

SPUD DATE

COMP DATE

DST RECORD

API NO.

THE SUBSURFACE LIBRARY

Reproduced By
Electrical Log Services
MILWAUKEE, TEXAS 79701



262767

REFERENCE W 9916P



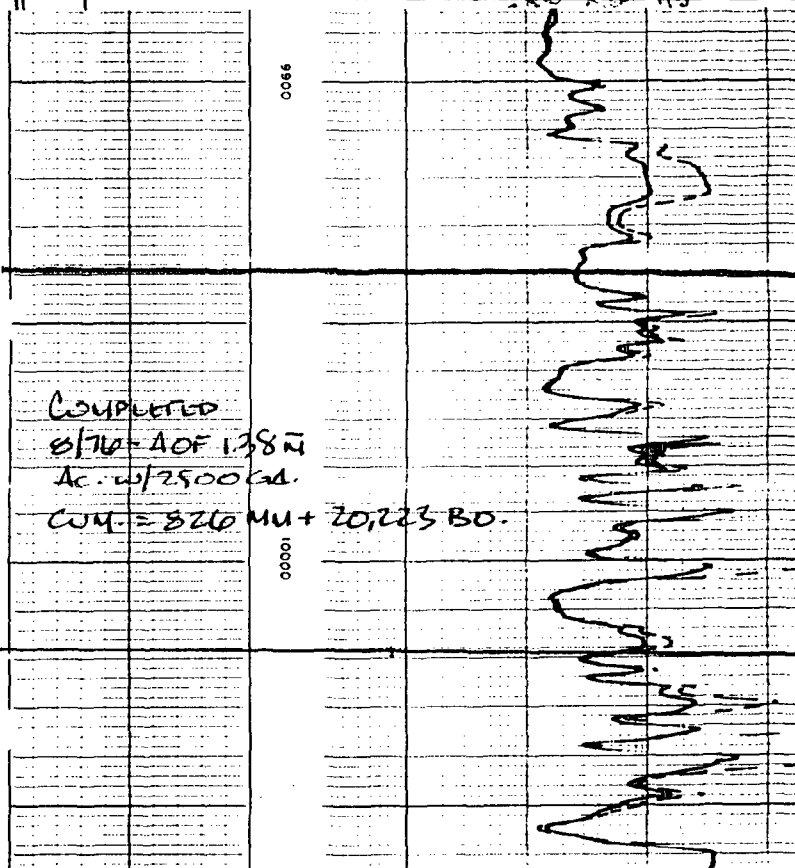
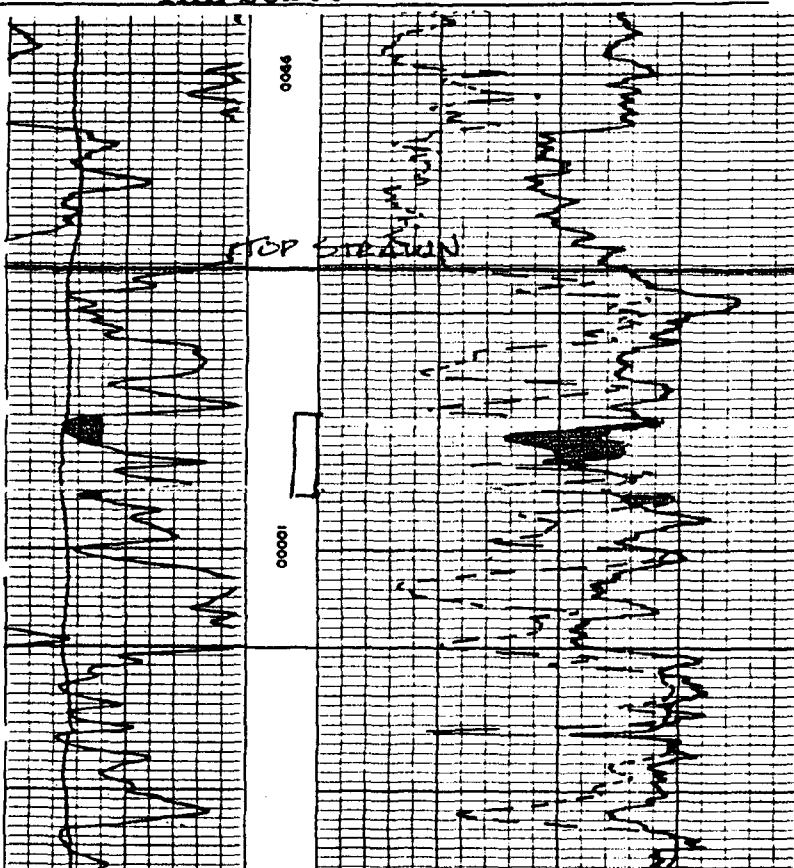
23 COMPLETION RECORD

SPUD DATE

COMP DATE

DST RECORD

API NO.



COMPLETED
8/10 - AOF 1,387
AC. W/2500 GA.
CUM. = 826 MU + 20,223 BO.

COUNTY EDDY, NEW MEXICO FIELD WILDCAT (STRAWN)

OPR DAVID FASKEN

LSE EL PASO-FEDERAL WELL NO. 3

LOC Sec 1, T-21-S, R-26-E (II)

1664 FNL & 660 FEL of Sec

FRC-OWN-Orig. David Fasken #3 El Paso-Federal

UNIQUE NO. 30-015-21307

MAPS 9-15-76 CO.ORD 8-1-76

CTR LAKE CLASS ELEV D.F. 3,301'

LOGS 11,445' PROD 10,508' AND LOC. P.A.A.

PAY ZONE PROD. INTERVAL IP BO W HRS CHK 1 ST BASIS

Strawn 9971-9989 C.A.O.F. 1,380,000 C.F.G.P.D.

GOR GTY CP TP BHP DOT DATE TREATMENT

8-20-76 A/2500

CSG 13 3/8 - 350 - 300 4 1/2 - 11,394 - 650

8 5/8 - 4666 - 1600

COUNTY EDDY, NEW MEXICO FIELD WILDCAT (STRAWN)

WELL DAVID FASKEN #3 EL PASO-FEDERAL

DATE RECORD REACHED T. D.

OTD 11,445' OPB 11,226'

Orig. Comp. 10-11-74

Old Morrow Prod. Int. 10,983-990

NEW WORK DONE:

OTD 11,445' PB 10,508'

Perf 36/9971-89

A/2500

Yates (420)

Capitan (250)

Del Sd (2532)

B.S. (4635)

1st. BS Sd (6170)

2nd. BS Sd (6914)

3rd. BS Sd (8229)

WLFc Lm. (8752)

Cisco (9073)

Strawn (9940)

Atoka (10243)

Morr Lm (10601)

(9-15-76)

TEND will
to NE -
Sec. 14.

$C_{um} =$
 $826 \text{ mm} +$
 $20,223 \text{ BC}$
 $\Delta C. \sim 2500 \text{ LA}$

$\Gamma_{up} = 1.6$
 Γ_{down}

Requested By
Electrical Log Service
McMURDO, TEXAS 79061

262767

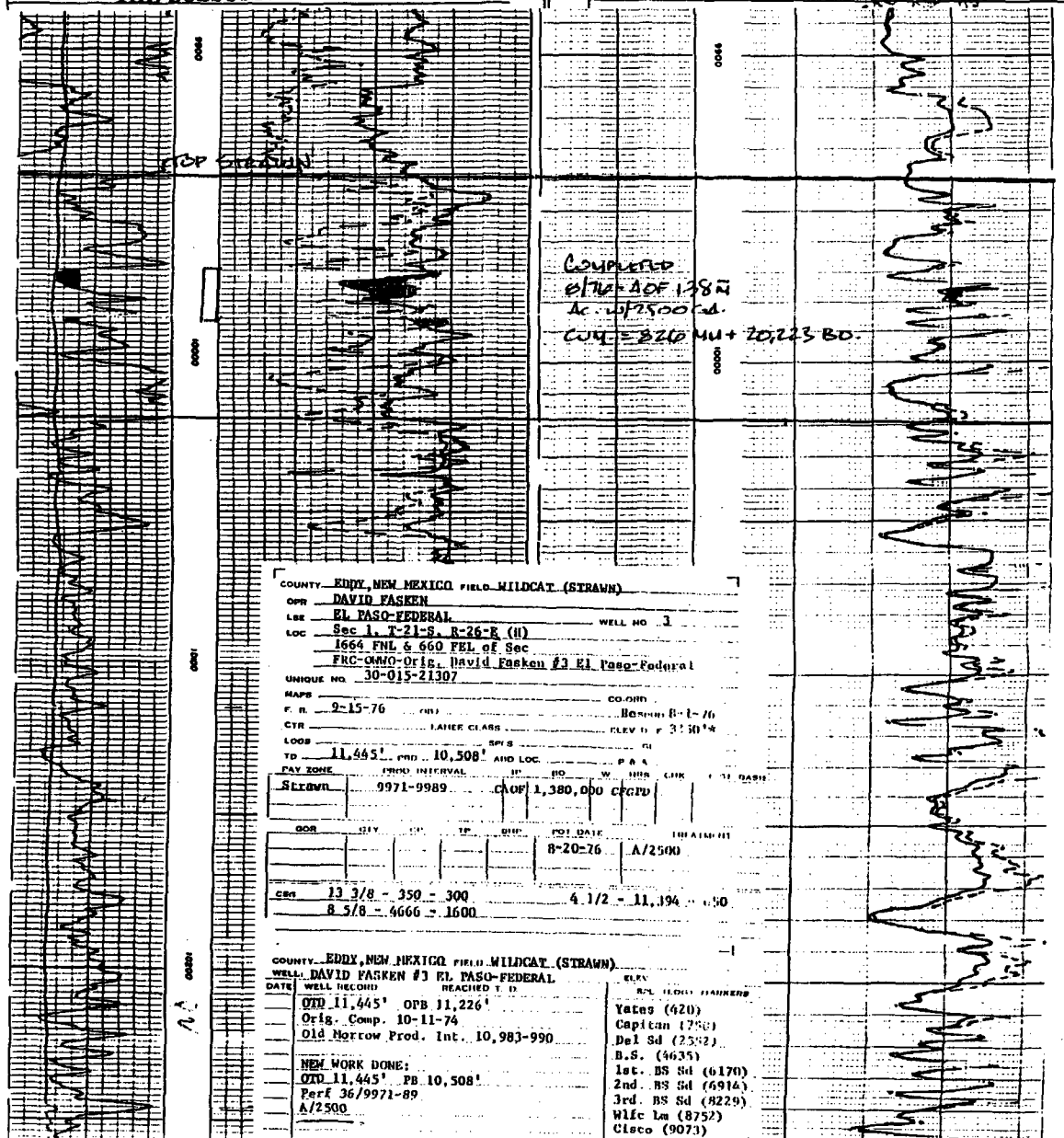
REFERENCE W 3916P
23 COMPLETION RECORD

SPUD DATE _____
COMP DATE _____
DST RECORD _____
API NO. _____

THE SUBSURFACE LIBRARY ®

SPUD DATE _____
COMP DATE _____
DST RECORDED _____
API NO. _____

LIBRARY
12-19701



DISTRICT II
P.O. Drawer 80, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. Box 2080, Santa Fe, N.M. 87504-2080

OIL CONSERVATION DIVISION
P.O. Box 2080
Santa Fe, New Mexico 87504-2080

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name AVALON "36" STATE	Well Number 1
OGRIID No. 14744	Operator Name MEWHOURNE OIL COMPANY	Elevation 3235'

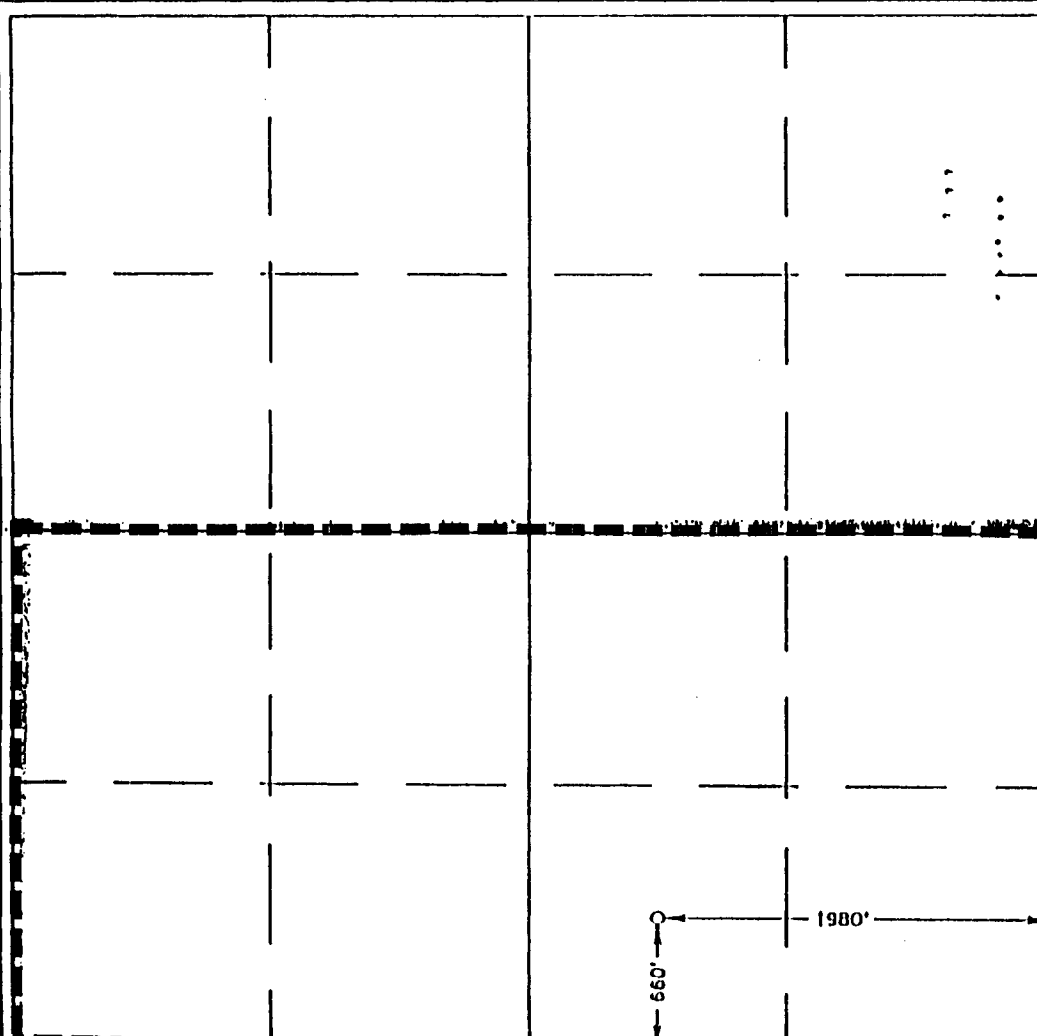
Surface Location

UL or lot No.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
0	36	20 S	27 E		660	SOUTH	1980	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						

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 to true and complete to the best of my knowledge and belief. <i>Steve Matthews</i> Signature Steve Matthews Printed Name Drilling Superintendent Title 9-1-98 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 to true and correct to the best of my belief. AUGUST 27, 1998 Date Surveyed CDG Signature & Seal of Professional Surveyor <i>[Signature]</i> 8/31/98 98-11-1188 Certified to be true and correct to the best of my belief. 3239 12841

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

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

DISTRICT IV
P.O. Box 2000, Santa Fe, N.M. 87601-2000

OIL CONSERVATION DIVISION

P.O. Box 2000

Santa Fe, New Mexico 87504-2000

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

AFI Number	Pool Code	Pool Name
Property Code	Property Name AVALON 36 th STATE	Well Number 1
OGRID No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 3235'

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	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. AUGUST 27, 1998 Date Surveyed Signature & Seal Professional Surveyor 98-11-1188 Certificate No. DAVID J. FOSSON 9239 EXPIRES 8/31/98

OIL-B/MX-X-X
 Ref= 07/99
 Cum= .369
 GAS-M/Mg-0-0
 Ref= 07/99
 Cum= 150.590
 WTR-B/M
 Ref= 07/99
 Cum= .249

LEASE : NE AVALON HILLS 36 ST #1
 LOCATION : 36-20S-27E
 RESERVOIR : LOWER & MIDDLE MORROW
 FIELD : BURTON FLAT
 COUNTY : EDDY
 STATE : NM

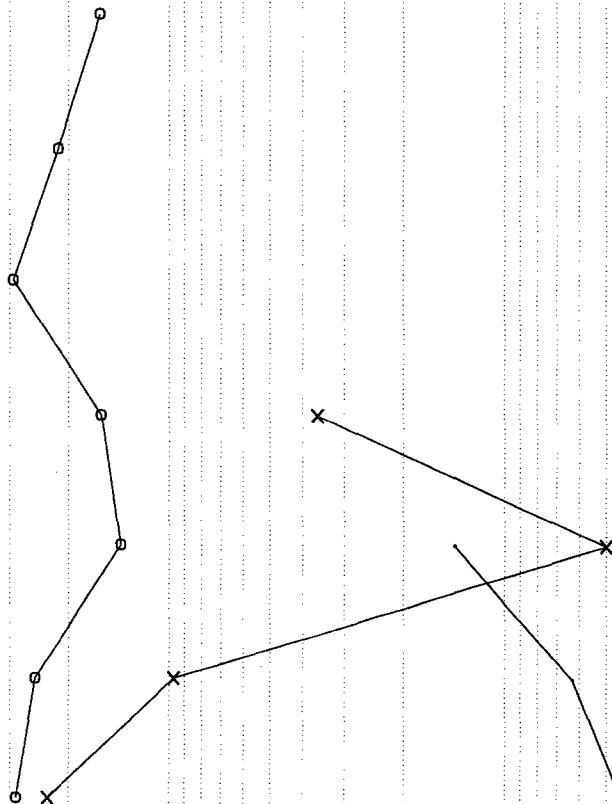
WTR-B/M
 GAS-M/M
 OIL-B/M

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Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

1999

DATE