

DHC 9/20/99

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
AUG 30 1999 OIL CONSERVATION DIVISION
2040 S. Pacheco
Santa Fe, New Mexico 87505-6429
OIL CONSERVATION APPLICATION FOR DOWNHOLE COMMINGLING

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

MEWBOURNE OIL COMPANY P.O. Box 7698 Tyler, Texas 75711
Operator Address
Chalk Bluff 36 State 1 M-36-T17S-R27E Eddy
Lease Well No. Unit Ltr. Sec Twp Rge County
Spacing Unit Lease Types: (check 1 or more)
OGRID NO. 14744 Property Code API NO. 30-015-27286 Federal State ☒ (and/or) Fee

The following facts are submitted in support of downhole commingling: 1. Pool Name and Pool Code	Upper Zone Atoka - Wildcat	Intermediate Zone	Lower Zone Illinois Camp Morrow/North #78890
2. Top and Bottom of Pay Section (Perforations)	9466' - 9470' 9476' - 9484'		9842' - 9856' 9864' - 9886'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) Unknown	a.	a. 244 psig
	b. (Original) 4165 psig (est)	b.	b. 2823 psig
6. Oil Gravity (°API) or Gas BTU Content	1,085 BTU (est)		1,164 BTU
7. Producing or Shut-In?	Shut-In		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)	Unknown		Yes
	Date: Rates:	Date: Rates:	Date: Rates:
	Date: See Rates: Attachment	Date: Rates:	Date: 8/11/99 Rates: 110 MCFD 0 BO, 0 BW
8. Fixed Percentage Allocation Formula - % for each zone (total of %s to equal 100%)	Oil: 100 % Gas: 73 %	Oil: % Gas: %	Oil: 0 % Gas: 27 %

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 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. NMOC 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 8/25/99
TYPE OR PRINT NAME K.M. Calvert TELEPHONE NO. (903) 561-2900

2447-9-18-27

2447-9-18-27

EXHIBIT I

Schlumberger **SIMULTANEOUS DUAL LATEROLOG MICRO-SFL**

COMPANY HONDO OIL AND GAS CO.

WELL HONDO MANN FED NO. 1

FIELD RED LAKE PENN

COUNTY EDDY STATE NEW MEXICO

1780' FNL & 1980' FNL

Other Services
CNL/LDI

Permanent Datum: G.L. (Elev. 3563.3)
Log Measured From K.B. 14.7 Ft. Above Perm. Datum
Drilling Measured From K.B. (Elev. 3578)
D.F. GI 3563.3

Time	9-17-85				
Run In	ONE				
Depth - Driller	9800				
Depth - Logger (Schl)	9779				
Bot. Log Interval	9778				
Top Log Interval	2101				
Casing - Driller	8 5/8" @ 2100				
Casing - Logger	2102				
Bit Size	7 7/8				
Type Fluid in Hole	DRISPAK				
Dens. / Visc	9.5 / 36				
pH / Fluid Loss	10 / 10.64				
Source of Sample	CJRC				
Run @ Meas. Temp.	117 @ 80 F				
Rec @ Meas. Temp.	108 @ 80 F				
Source: Ref / Time					
Run @ BHT	1067 @ 149				
Circulation Stopped	1230				
Logger on Bottom	2100				
Max. Rec. Temp.	144				
Equip. Location	8185 / RSML				
Recorded by	FRIGON				

Schlumberger **COMPENSATED NEUTRON LITHO DENSITY**

COMPANY HONDO OIL AND GAS CO.

WELL HONDO MANN FED NO. 1

FIELD RED LAKE PENN

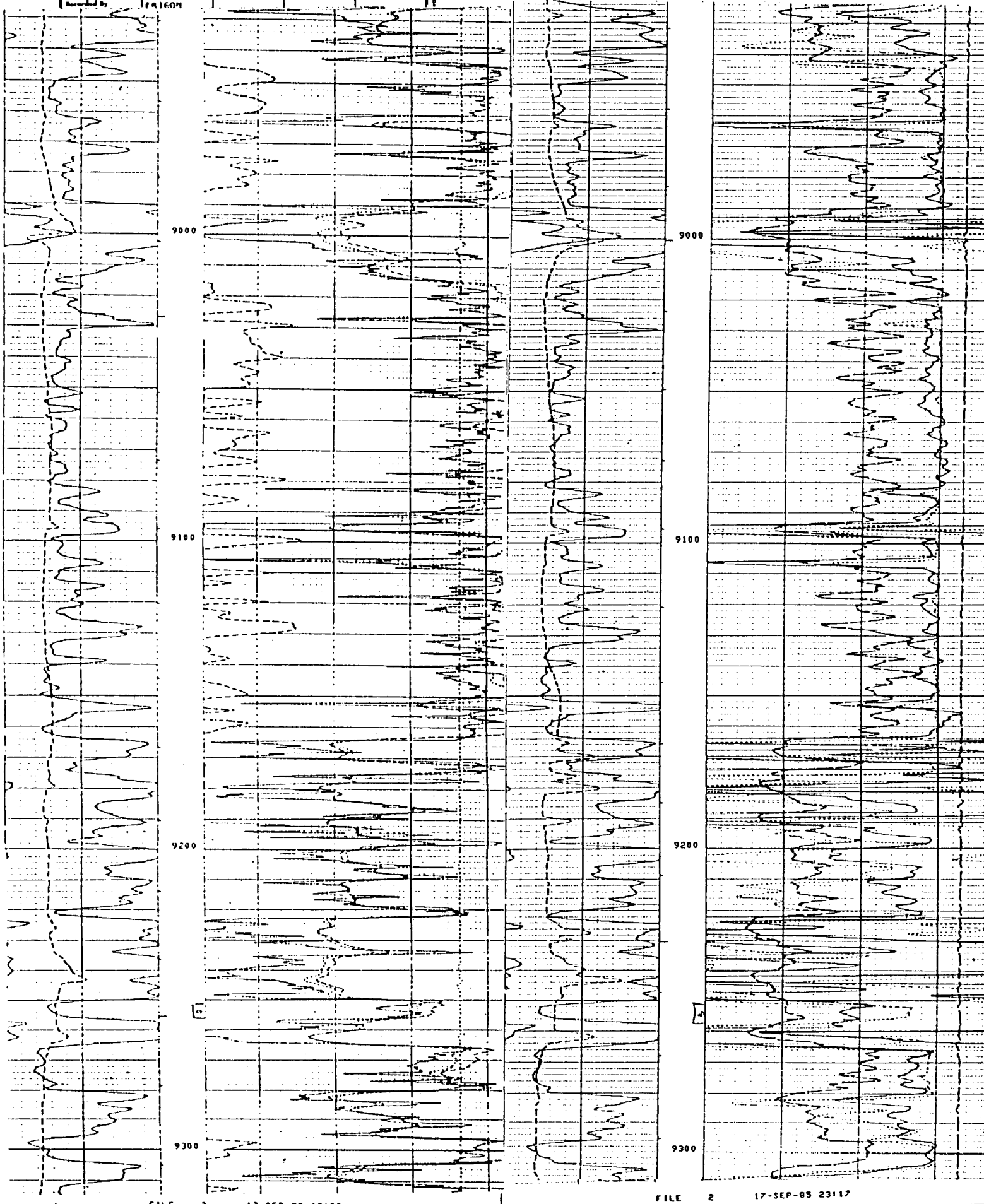
COUNTY EDDY STATE NEW MEXICO

1780' FNL & 1980' FNL

Other Services
DLL/MSFL

Permanent Datum: G.L. (Elev. 3563.3)
Log Measured From K.B. 14.7 Ft. Above Perm. Datum
Drilling Measured From K.B. (Elev. 3578)
D.F. GI 3563.3

Date	9-17-85				
Run No.	ONE				
Depth - Driller	9800				
Depth - Logger	9773				
Bot. Log Interval	9773				
Top Log Interval	SURFACE				
Casing - Driller	8 5/8" @ 2100				
Casing - Logger	2102				
Bit Size	7 7/8				
Type Fluid in Hole	DRISPAK				
Dens. / Visc	9.5 / 36				
pH / Fluid Loss	10 / 10.64				
Source of Sample	CJRC				
Run @ Meas. Temp.	117 @ 80 F				
Rec @ Meas. Temp.	108 @ 80 F				
Source: Ref / Time					
Run @ BHT	1067 @ 149				
Circulation Stopped	1230				
Logger on Bottom	2100				
Max. Rec. Temp.	144				
Equip. Location	8185 / RSML				
Recorded by	FRIGON				
Winward by	NORTHINGTON				



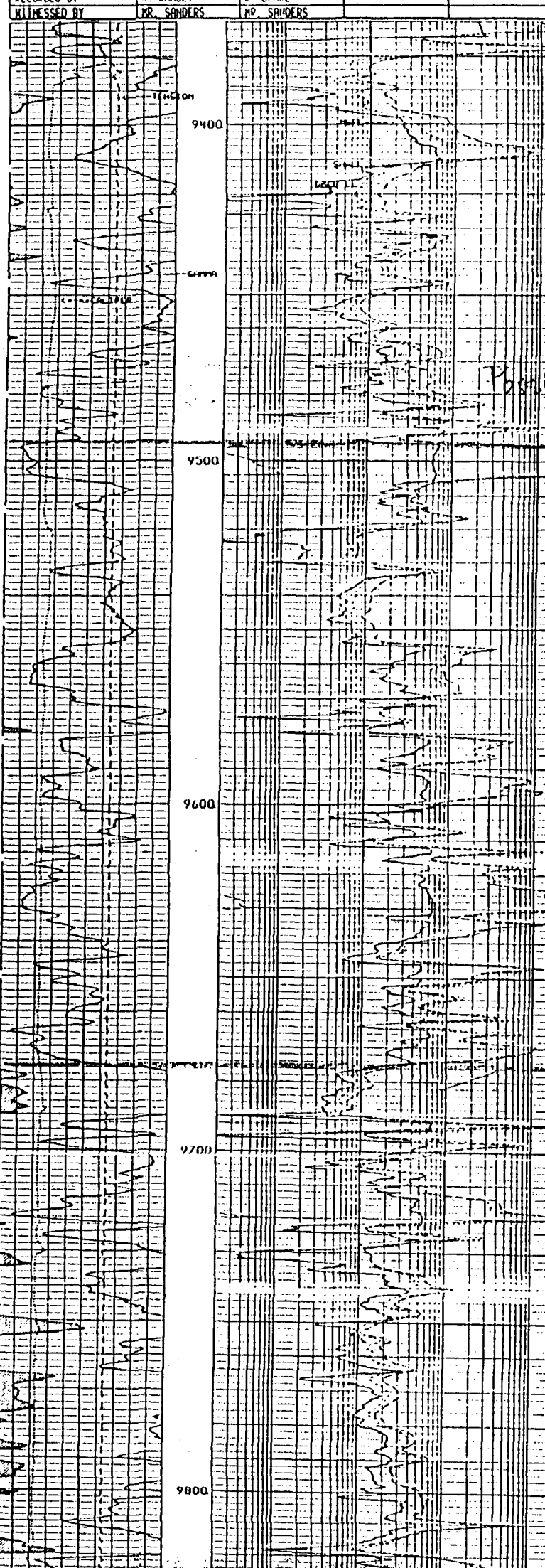
FILE 2 17-SEP-85 18100

FILE 2 17-SEP-85 23117

GR (GAPI)		LCP (OHMM)		TENS (LB)	
100.00	200.00	2000.0	20000.0	10000.	0.0
CAL (IN)		MSL (OHMM)		PEF	
6.0000	16.000	20000	20000	0.0	10.0
GR (GAPI)		LLS (OHMM)		NPH	
0.0	100.00	20000	20000	0.0	10.0
		LLD (OHMM)		DPH	
		20000	20000	0.0	10.0
SENSOR MEASURE POINT TO TOOL ZERO					
CAL 3.0 FEET	GR 34.8 FEET				
D190 15.0 FEET	DV90 15.0 FEET				
S190 15.0 FEET	SV90 15.0 FEET				
D10 15.0 FEET	DV0 15.0 FEET				

GR (GAPI)		LCP (OHMM)		TENS (LB)	
100.00	200.00	2000.0	20000.0	10000.	0.0
CAL (IN)		MSL (OHMM)		PEF	
6.0000	16.000	20000	20000	0.0	10.0
GR (GAPI)		LLS (OHMM)		NPH	
0.0	100.00	20000	20000	0.0	10.0
		LLD (OHMM)		DPH	
		20000	20000	0.0	10.0
SENSOR MEASURE POINT TO TOOL ZERO					
STSG 27.6 FEET	GR 32.2 FEET				
NCML 23.2 FEET	SCML 23.2 FEET				
SS2 2.0 FEET	FCML 23.2 FEET				
LLTH 2.3 FEET	SSI 2.0 FEET				
LU 2.3 FEET	LS 2.3 FEET				
CAL 2.6 FEET	LL 2.3 FEET				
HRAT 23.2 FEET	TENS -9 FEET				

COMPANY	MEMBOURNE OIL COMPANY		
WELL	CHALK BLUFF -36- STA		
FIELD	NORTH ILLINOIS CAMP		
COUNTY	EDDY	STATE	TX
API NO	N/A	OTHER SERVICES	
LOCATION	990 FM. AND 660 FSL		
SDI-DSN-CR			
SECT 36	TWP 17-S	RGE 27-E	
PERMANENT DATUM	C. L.	ELEV. 3635	ELEV. : K. B. 3650
LOG MEASURED FROM	K. B. OR IS	FT. ABOVE PERM DATUM	O.F. 3649
DRILLING MEASURED FROM	KELLY BUSHING		C.L. 3635
DATE	03/03/93	03/17/93	
RUN NO	ONE	TWO	
DEPTH-DRILLER	9289	10060	
DEPTH-LOGGER	9277	10061	
BTM. LOG INTER	9275	10059	
TOP LOG INTER	2598	9310	
CASING DRILLER	9 625* 2600	7 00 * 9289	
CASING-LOGGER	2598	NOT LOGGED	
BIT SIZE	8.75	6.00	
TYPE FLUID IN HOLE	SALT MUD	SALT MUD	
DENS. : VISC	9.2 : 33	9.4 : 32	
PH : FLUID LOSS	10.0 : MC	10.0 : 8.0	
SOURCE OF SAMPLE	CIRCULATED	CIRCULATED	
RH : MEAS. TEMP.	0.21 * 69	0.24 * 72	
RMC : MEAS. TEMP.	0.18 * 70	0.20 * 72	
RMC : MEAS. TEMP.	0.29 * 70	0.33 * 72	
SOURCE RMC : RMC	MEAS. : MEAS.	MEAS. : MEAS.	
RH : RMT	0.12 * 123	0.13 * 135	
TIME SINCE CIRC.	8.5 HOURS	10.5 HOURS	
TIME ON BOTTOM	17:30	22:00	
MAX. REC TEMP.	123 * 8 H.	135 * 1 D	
EQUIP : LOCATION	7670 110885	52555 110885	
RECORDED BY	R. RAMSEY	K. DRAKE	
WITNESSED BY	MR. SANDERS	MR. SANDERS	



COMPANY	MEMBOURNE OIL COMPANY		
WELL	CHALK BLUFF -36- STA		
FIELD	NORTH ILLINOIS CAMP		
COUNTY	EDDY	STATE	TX
API NO	N/A	OTHER SERVICES	
LOCATION	990 FM. AND 660 FSL		
SDI-DSN-CR			
SECT 36	TWP 17-S	RGE 27-E	
PERMANENT DATUM	C. L.	ELEV. 3635	ELEV. : K. B. 3650
LOG MEASURED FROM	K. B. OR IS	FT. ABOVE PERM DATUM	O.F. 3649
DRILLING MEASURED FROM	KELLY BUSHING		C.L. 3635
DATE	03/03/93	03/17/93	
RUN NO	ONE	TWO	
DEPTH-DRILLER	9289	10060	
DEPTH-LOGGER	9277	10061	
BTM. LOG INTER	9242	10059	
TOP LOG INTER	SURFACE	9370	
CASING DRILLER	9 625* 2600	7 00 * 9289	
CASING-LOGGER	2598	NOT LOGGED	
BIT SIZE	8.75	6.00	
TYPE FLUID IN HOLE	SALT MUD	SALT MUD	
DENS. : VISC	9.2 : 33	9.4 : 32	
PH : FLUID LOSS	10.0 : MC	10.0 : 8.0	
SOURCE OF SAMPLE	CIRCULATED	CIRCULATED	
RH : MEAS. TEMP.	0.21 * 69	0.24 * 72	
RMC : MEAS. TEMP.	0.18 * 70	0.20 * 72	
RMC : MEAS. TEMP.	0.29 * 70	0.33 * 72	
SOURCE RMC : RMC	MEAS. : MEAS.	MEAS. : MEAS.	
RH : RMT	0.12 * 123	0.13 * 135	
TIME SINCE CIRC.	8.5 HOURS	7.5 HOURS	
TIME ON BOTTOM	17:30	19:06	
MAX. REC TEMP.	123 * 8 H.	135 * 1 D	
EQUIP : LOCATION	7670 110885	52555 110885	
RECORDED BY	R. RAMSEY	K. DRAKE	
WITNESSED BY	MR. SANDERS	MR. SANDERS	

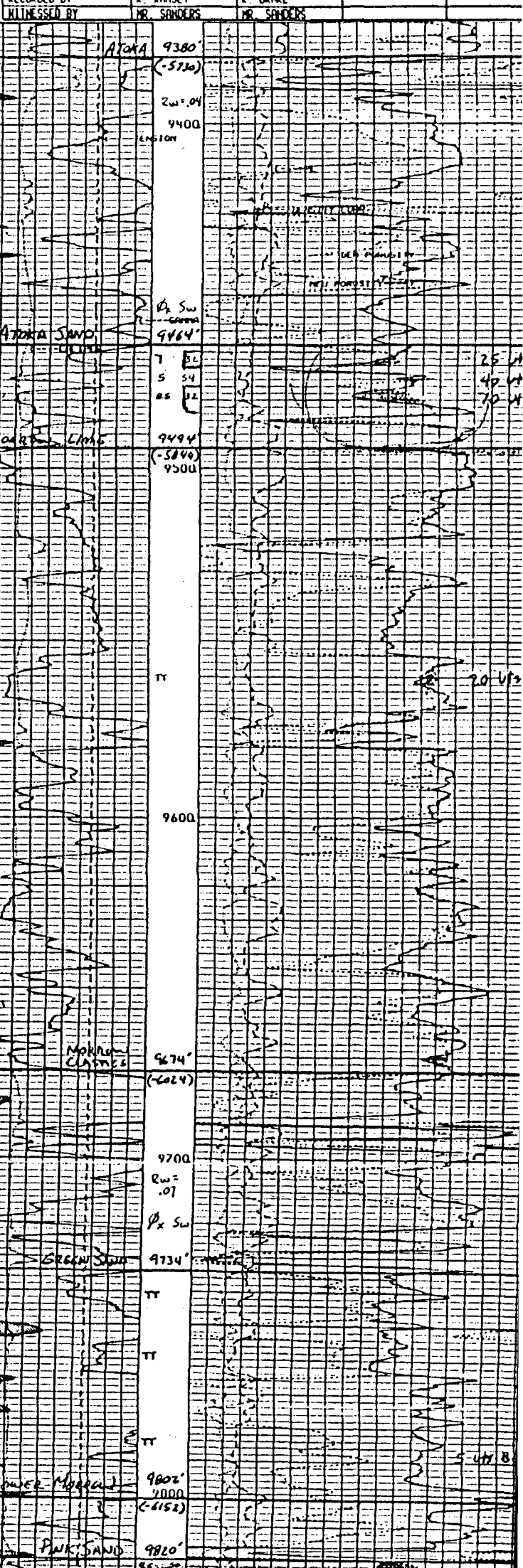
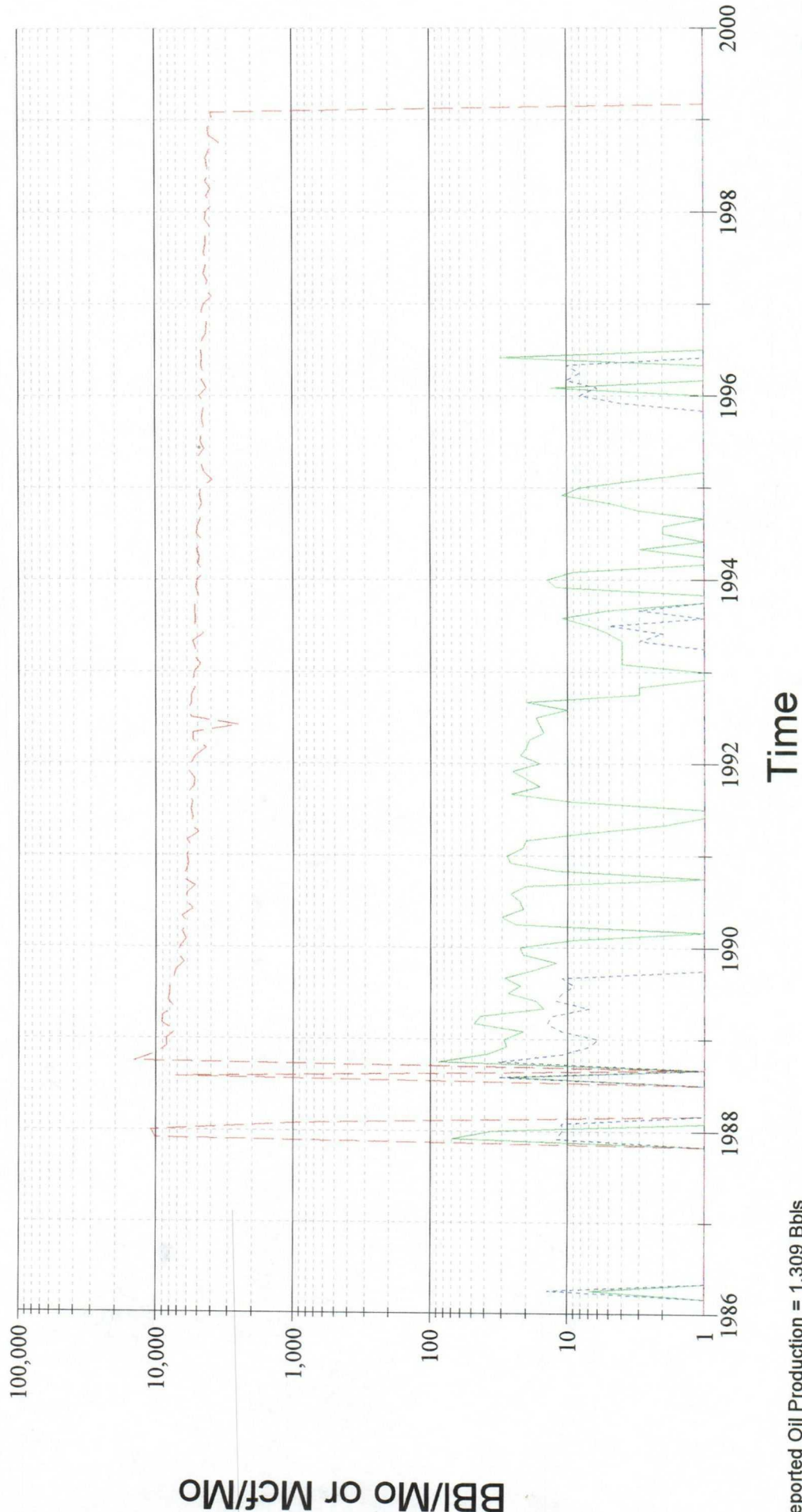
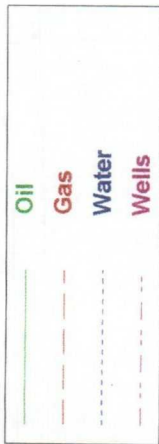


EXHIBIT III

Field: SCOGGIN DRAW
 Lease: MANN FEDERAL | Well #1
 Operator: DEVON ENERGY (NEVADA)
 Production Rate vs Time
 For the Period 01/1986 to 12/1999 | API: 30015253570000



Reported Oil Production = 1,309 Bbls
 Reported Gas Production = 689,355 Mcf
 Reported Water Production = 283 Bbls

Attachment
Mewbourne Oil Company
Chalk Bluff 36 State No. 1 (CB 36 #1)
Unit M. Section 36, T-17S, R-27E
Eddy County, New Mexico

New Zone

1. Production Estimates:

300 MCF/D, no fluid. The Hondo Oil & Gas - Hondo Mann Fed No. 1 is the key Atoka formation evaluation standard in the area. (Location - Unit F, Sec 9, T-18-S, R-27-E, Eddy County). The Atoka interval at 9251' - 57' (See Exhibit I) is geologically correlative to the Atoka interval 9466' - 70' and 9476' - 84' in the CB 36 #1 (See Exhibit II). The attached decline curve of the Hondo Mann Fed No. 1 (Exhibit III) shows the well to be currently producing approximately 130 MCF/D with no fluid. Upon initial completion and after stabilization production averaged 300 MCF/D with little fluid.

2. Allocation Formula:

The Atoka formation in the CB 36 #1 is expected to perform in much the same way as the Hondo Mann Fed #1. The attached log sections from the two wells exhibit high similarity as to reservoir quality. Initial producing characteristics in the CB 36 #1 should also be similar to initial producing characteristics of the Hondo Mann Fed #1.

Gas:	Atoka	73%
	Morrow	27%
Condensate:	Atoka	100%
	Morrow	0

Attachments

1. Original C-102 dated 10/27/92. C-102 showing spacing units for Illinois Camp (Morrow, North) and Atoka (Wildcat).
2. Production curve for CB 36#1 from initial delivery to date.
3. Estimated production: See New Zone item 1.
4. Allocation formula: See New Zone items 1 and 2.
5. Offset operators - Not applicable.
6. No uncommon interest.

7. The Morrow formation as shown by the attached decline curve is approaching the economic limit to continue production. Both the Morrow and Atoka are and will be perforated inside a 4 ½" od liner. To perform conventional dual completion inside the 4 ½" liner would be cost prohibitive as to the Morrow interval. Special clearance small diameter tubing would be required, whereas commingling with the existing equipment can be done economically. Both zones can then share in the operating expense to extend the economic limit to both zones thereby recovering additional gas that would not be otherwise recovered and preventing waste.

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator MEWBOURNE OIL COMPANY			Lease CHALK BLUFF 36 STATE		Well No. 1
Unit Letter M	Section 36	Township 17 SOUTH	Range 27 EAST	County NMPM	EDDY
Actual Footage Location of Well: 990 feet from the WEST line and 660 feet from the SOUTH line					
Ground level Elev. 3635	Producing Formation Morrow	Pool Illinois Camp Morrow North			Dedicated Acreage: 320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

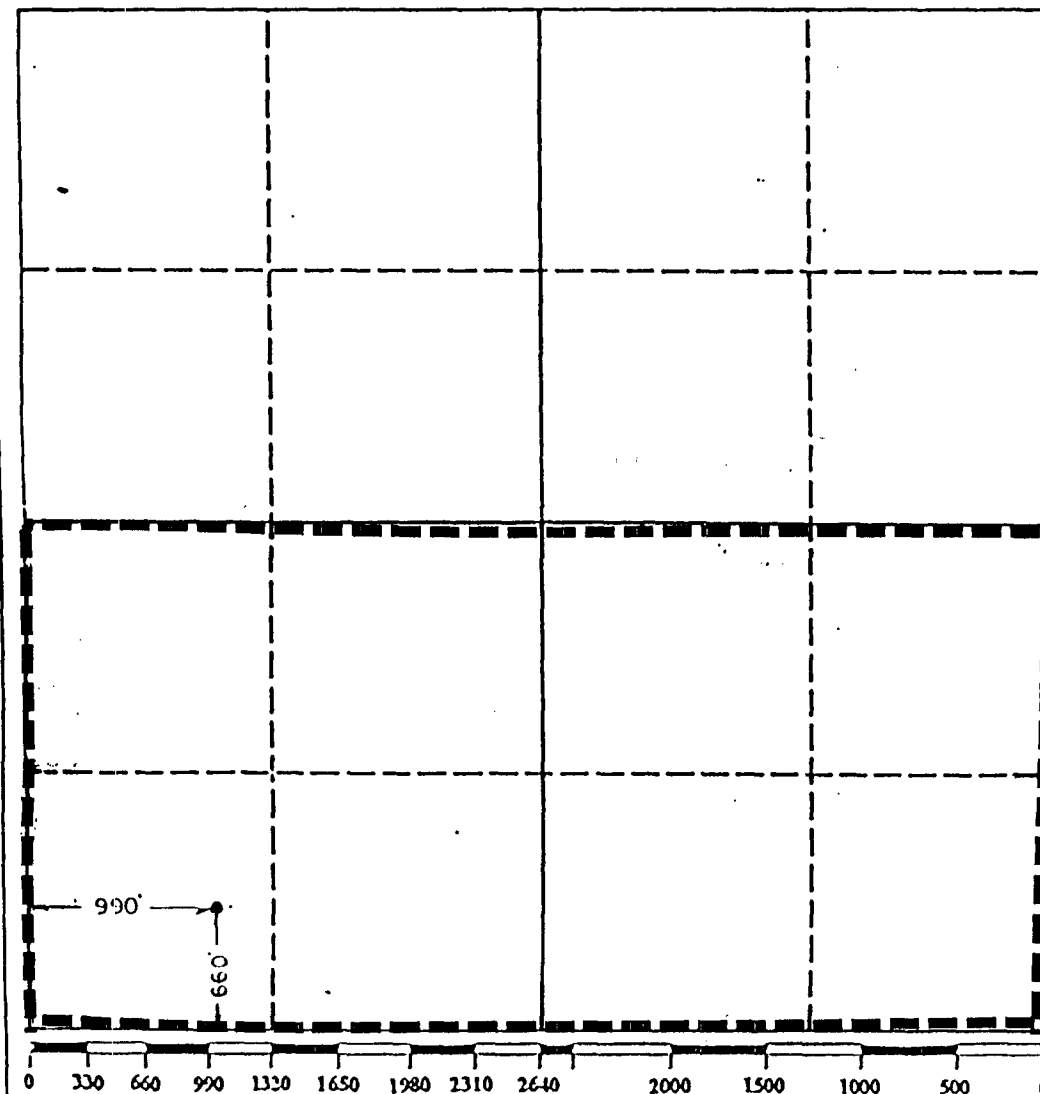
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

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

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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature

Bill Pierce

Printed Name

Bill Pierce

Position

Drilling Superintendent

Company

Mewbourne Oil Company

Date

October 27, 1992

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 knowledge and belief.

Date Surveyed

10/19/92

Signature & Seal of
Professional Surveyor

[Signature]

Certificate No.

3640

OIL CONSERVATION DIVISION

P.O. Box 2088

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1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator MEWBOURNE OIL COMPANY			Lease CHALK BLUFF 36 STATE		Well No. 1
Unit Letter M	Section 36	Township 17 SOUTH	Range 27 EAST	County NMPM EDDY	
Actual Footage Location of Well: 990 feet from the WEST line and 660 feet from the SOUTH line					
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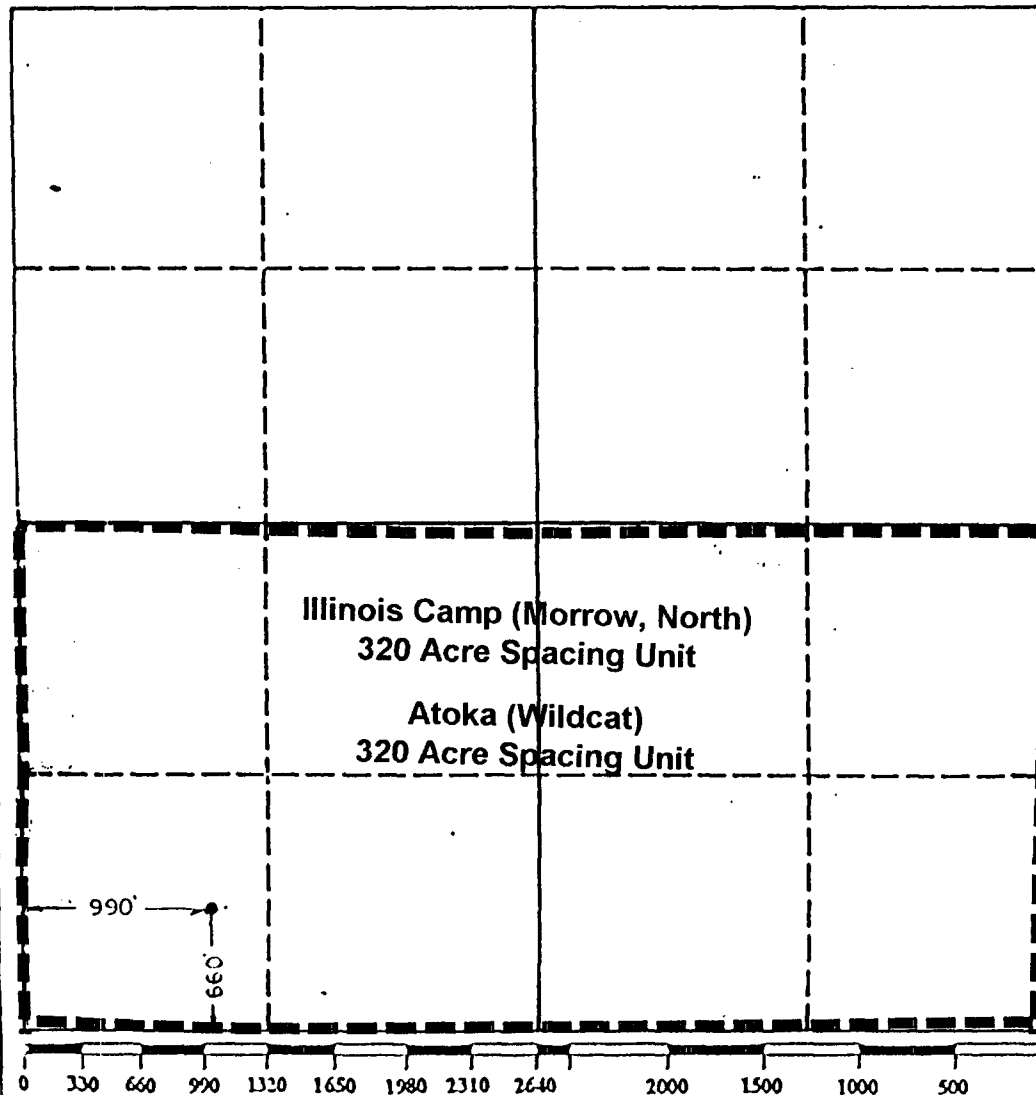
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

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

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

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

Signature

Bill Pierce

Printed Name

Bill Pierce

Position

Drilling Superintendent

Company

Mewbourne Oil Company

Date

October 27, 1992

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 knowledge and belief.

Date Surveyed

10/19/92

Signature & Seal of Professional Surveyor

[Signature]

Certificate No.

3640

GAS-M/MO-0-0
 Ref= 07/99
 Cum=1612.060
 OIL-B/MO-0-0
 Ref= 07/99
 Cum= 7.334
 WAT-B/M-0-0
 Ref= 07/99
 Cum= .843
 GASO-0-0
 Gal=DEFAULT
 Ref= 04/99
 Cum=1604.229
 Rem= 72.466
 EUR=1675.695
 Yrs= 4.167
 Qi= 3292.3
 De= 37.053
 n= .000
 Qab= 497.1

LEASE : CHALK BLUFF 36 STATE #1
 LOCATION : SEC 36-17S-27E
 RESERVOIR : LOWER MORROW BROWN & ORANGE
 FIELD : ILLINOIS CAMP NORTH
 COUNTY : EDDY
 STATE : NM

