

EXHIBIT "B" - CASE NO. 11353, ORDER NO. R-10470-A

DISTRICT I

3. Box 1980, Hobbs, NM 88240

DISTRICT II

811 South First St., Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd. Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☐ YES ☒ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Mallon Oil Company Address 999-18th Street, Suite 1700, Denver, CO 80202

Lease Jicarilla 435G No. 3 Well No. Unit D, Sec. 8-T22N-R4W County Sandoval

OGRID NO. 13925 Property Code 6249 API NO. 30-043-20942 Spacing Unit Lease Types: (check 1 or more)
Federal ☒ State ☐ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone Fruitland	Intermediate Zones PC, Mesaverde, Gallup	Lower Zone Dakota
1. Pool Name and Pool Code	SEE ATTACHMENT A		
2. Top and Bottom of Pay Section (Perforations)	1730 - 1855	1855-1930(PC), 3370-4180(MV), 4180-6080(G)	6080 - 6390
3. Type of production (Oil or Gas)	Gas	Oil & Gas	Oil & Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing	Flow	Pump
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) Current pressures in all zones should be close to original. b. (Original) 590 est	a. b. 1260 est	a. b. 2050 est
6. Oil Gravity (°API) or Gas BTU Content	1187 BTU est	1200 BTU 38-46 API	1270 BTU 41-46 API
7. Producing or Shut-In?			
Production Marginal? (yes or no)	Yes	Yes	Yes
* If Shut-In, give date and oil/gas/water rates of last production Note: For new zones with no production	Date: Rates:	Date: Rates: RECEIVED	Date: Rates:

ATTACHMENT A

Pools (shallowest to deepest):

Basin-Fruitland Coal Gas Pool

Undesignated Ballard-Pictured Cliffs Gas Pool

Mesaverde (Wildcat)

Undesignated Otero-Sanostee (Oil) Pool

Undesignated South Lindrith Gallup-Dakota (Oil) Pool

ATTACHMENT B

Proposed Allocation of Production

	<u>Fruitland</u>	<u>Pictured Cliffs</u>	<u>Mesaverde</u>	<u>Gallup</u>	<u>Dakota</u>
Gas:	5%	72%	1%	17%	5%
Oil:	0%	0%	23%	72%	5%

This proposed allocation is based upon the following factors: (1) although there has been no production from the Fruitland in the immediate area, Mallon believes it may be productive of gas in marginal amounts, and it was arbitrarily assigned 5% of gas production until production data is obtained; (2) there has been no single-zone production from the Dakota in the immediate area, but several wells have been completed as Gallup-Dakota wells, and it is estimated that the Gallup zones contribute the bulk of production in these wells, which have produced both oil and gas. As a result, the Dakota has been assigned 5% of oil and gas production; and (3) the remaining zones have been assigned production based upon average recoveries from 49 wells in the immediate area (see Attachment C for recovery figures).

Production Performance

All zones are tight formations that must be stimulated to produce. Hydraulic fracturing is the most common method of stimulation and is planned for this well and these zones. All zones will therefore behave in a similar manner as dictated by a hydraulic fracture completion. The initial rates will be on a steep hyperbolic decline represented by a Arp's n value of 2.0. The production will become exponential in 2 to 4 years with exponential declines in the range of 5 to 20 percent per year expected.

As each zone will have similarly shaped production decline curve, the relative production produced from each zone will be reasonably consistent throughout the well life and a set production allocation percentage for each zone is appropriate. The final well allocation for each zone

The cumulative production values for 49 area wells were reviewed for relative zone performance and for economic evaluation of the proposed commingling. The results are as follows:

Fruitland:	There are no known Fruitland completions in the immediate area.
Pictured Cliffs:	Cumulative production for 29 PC completions has ranged from 1 to 519 MMCF gas and has averaged 181 MMCF gas with no oil.
Mesaverde:	Average cumulative production for 3 Mesaverde completions has been 8 MBBLS oil and 2 MMCF gas.
Gallup:	Average cumulative production for 20 Dakota-Mancos completions has been 25 MBBLS oil and 44 MMCF gas.
Dakota:	There are no known Dakota completions in the immediate area.

Economic Performance

Example economic evaluations were performed for the average production recoveries detailed. Cases were run for each individual zone, a three zone commingled case and a case with individual zone production and recompletion from zone to zone as each becomes uneconomic. The results are summarized below and clearly show that single zones or consecutive re-completions are not economically viable for the average production streams used. Initial commingling is necessary for these marginally productive zones.

Case	Net Oil (MBBLS)	Net Gas (MMCF)	INV (M\$)	CF (M\$)
PC Only	0	188	250	-125
Gallup	25	45	419	-192
Mesaverde	8	2	335	-285
Commingling	33	229	454	86
3 Zones	33	234	519	-119

PF:COMMINGL
EVAL #: 1
ALTKEY:USA

MALLON OIL COMPANY

DATE: 05/21/97
TIME: 15:23:17

AS OF JAN 1, 1997

ID CODE : 1PDP-NM-39-NM003-0000-XXXXXXXXXX-

-GAS-NO-OM-SEC-TWNS-RANG-????

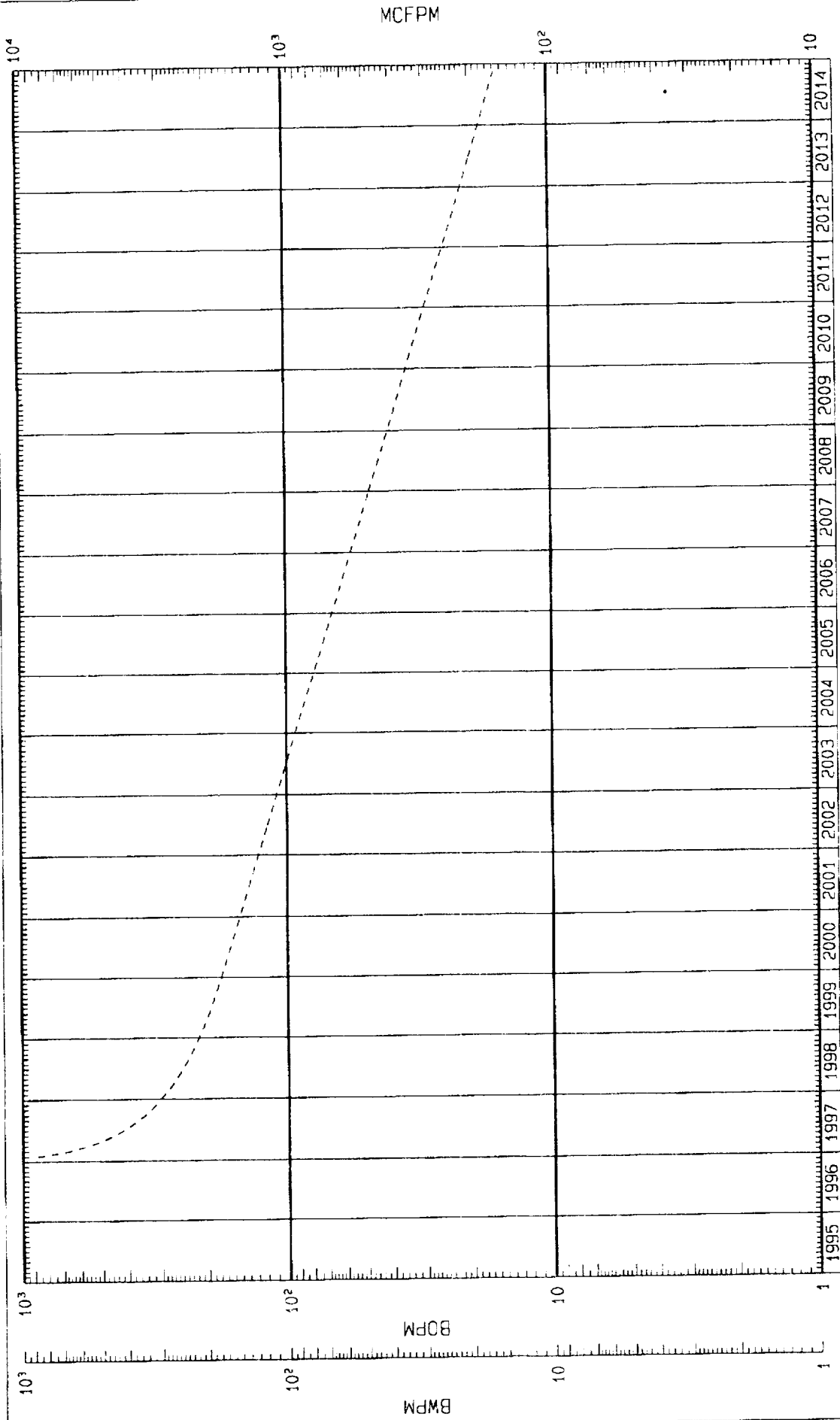
NAME : EXAMPLE ECON. - PICTURED CLIFF
FIELD : BLANCO EAST AREA
CNTY, STATE: RIO ARriba CO., NEW MEXICO
FORMATION : PICTURED CLIFFS (FLOWING) CASE
OPERATOR : MALLON OIL COMPANY

PW 5.0% -135.758 BTAX
PW 15.0% -150.735 BTAX
PW 20.0% -156.131 BTAX
PW 25.0% -160.566 BTAX
PW 30.0% -164.253 BTAX

WI	ORI	GRI	DATE	WELL COUNT		BEG-PRICES		END-PRICES		AVG-PRICES		GROSS RESERVES	
				GROSS	NET	OIL	GAS	OIL	GAS	OIL (MBBLS)	GAS (MMCF)	CUMULATIVE	REMAINING
100.00000	80.60000	80.60000	JAN 1997	0	0.0	0.00	1.70	0.00	1.70	0.00	1.70	0.000	0.000
				6	1.0							0.000	187.608

	NUMBER GROSS WELLS 30)-----	GROSS PROD OIL + COND 5)MMBLS--	GROSS GAS PRODUCTION 7)MMCF---	WORKING INTEREST 34)-X-----	REVENUE INTEREST 35)-X-----	NET VOLUME OIL + COND 18)MMBLS--	NET GAS VOLUME 20)MMCF---	EFFECTIVE O+C PRICE 31)\$/BBL--	EFFECTIVE GAS PRICE 32)\$/MCF--	NET TOTAL REVENUE 60)-M\$----
1997	1.0	0.000	55.650	100.00000	80.60000	0.000	44.854	0.00	1.70	76.252
1998	1.0	0.000	29.851	100.00000	80.60000	0.000	24.060	0.00	1.70	40.902
1999	1.0	0.000	23.185	100.00000	80.60000	0.000	18.687	0.00	1.70	31.767
2000	1.0	0.000	19.496	100.00000	80.60000	0.000	15.714	0.00	1.70	26.714
2001	1.0	0.000	16.572	100.00000	80.60000	0.000	13.357	0.00	1.70	22.706
2002	1.0	0.000	14.086	100.00000	80.60000	0.000	11.353	0.00	1.70	19.301
2003	1.0	0.000	11.973	100.00000	80.60000	0.000	9.650	0.00	1.70	16.405
2004	1.0	0.000	10.177	100.00000	80.60000	0.000	8.203	0.00	1.70	13.945
(9MO)2005	1.0	0.000	6.618	100.00000	80.60000	0.000	5.334	0.00	1.70	9.068
2006										
2007										
2008										
2009										
2010										
2011										
SUB TOTAL	1.0	0.000	187.608	100.00000	80.60000	0.000	151.212	0.00	1.70	257.060
REMAINDER	0.0	0.000	0.000	0.00000	0.00000	0.000	0.000	0.00	0.00	0.000
TOT 8.8 YR	1.0	0.000	187.608	100.00000	80.60000	0.000	151.212	0.00	1.70	257.060

	NET LOE (FIX + VAR) 111)-M\$----	NET SEV TAXES 96)-M\$----	NET ADVAL TAXES 102)-M\$----	NET TOTAL EXP + TAXES 223)-M\$----	NET OPER REVENUE 156)-M\$----	NET TOTAL INVESTMENT 143)-M\$----	BTAX CASHFLOW 163)-M\$----	CUM BTAX CASHFLOW 164)-M\$----	BTAX CF DISC 10.00% 165)-M\$----	CUM BTAX CF DISC 10.00% 166)-M\$----
1997	9.000	6.047	9.814	24.860	51.391	250.000	-198.609	-198.609	-198.688	-198.688
1998	9.000	3.244	5.264	17.508	23.395	0.000	23.395	-175.214	20.277	-178.412
1999	9.000	2.519	4.088	15.608	16.160	0.000	16.160	-159.054	12.718	-165.693
2000	9.000	2.118	3.438	14.556	12.157	0.000	12.157	-146.897	8.697	-156.996
2001	9.000	1.801	2.922	13.723	8.984	0.000	8.984	-137.914	5.844	-151.152
2002	9.000	1.531	2.484	13.015	6.286	0.000	6.286	-131.628	3.720	-147.432
2003	9.000	1.301	2.111	12.412	3.993	0.000	3.993	-127.635	2.150	-145.282
2004	9.000	1.106	1.795	11.900	2.044	0.000	2.044	-125.590	1.003	-144.279
(9MO)2005	6.750	0.719	1.167	8.636	0.432	0.000	0.432	-125.159	0.196	-144.083
2006										
2007										
2008										
2009										
2010										
2011										
SUB TOTAL	78.750	20.385	33.084	132.218	124.841	250.000	-125.159	-125.159	-144.083	-144.083
REMAINDER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-125.159	0.000	-144.083
TOT 8.8 YR	78.750	20.385	33.084	132.218	124.841	250.000	-125.159	-125.159	-144.083	-144.083



BLANCO EAST AREA

EXAMPLE ECON. - PICTURED CLIFF
 RIO ARRIBA CO., NEW MEXICO
 GAS-PICTURED CLIFFS (FLOWING) CASE
 1PDP NM0300 XXXXXXXXXX EV: 1

FILE: 5-MSA2MP.WP DATE: 21-MAY-97
 SOURCE: TIME: 14.06

--- GAS
 . WATER

PF:COMMINGL
EVAL #: 5
ALTKEY:USA

MALLON OIL COMPANY

DATE: 05/21/97
TIME: 15:48:27

AS OF JAN 1, 1997

ID CODE : 1PDP-NM-39-NM003-0000-XXXXXXXXXX-

-GAS-NO-OM-SEC-TWNS-RANG-????

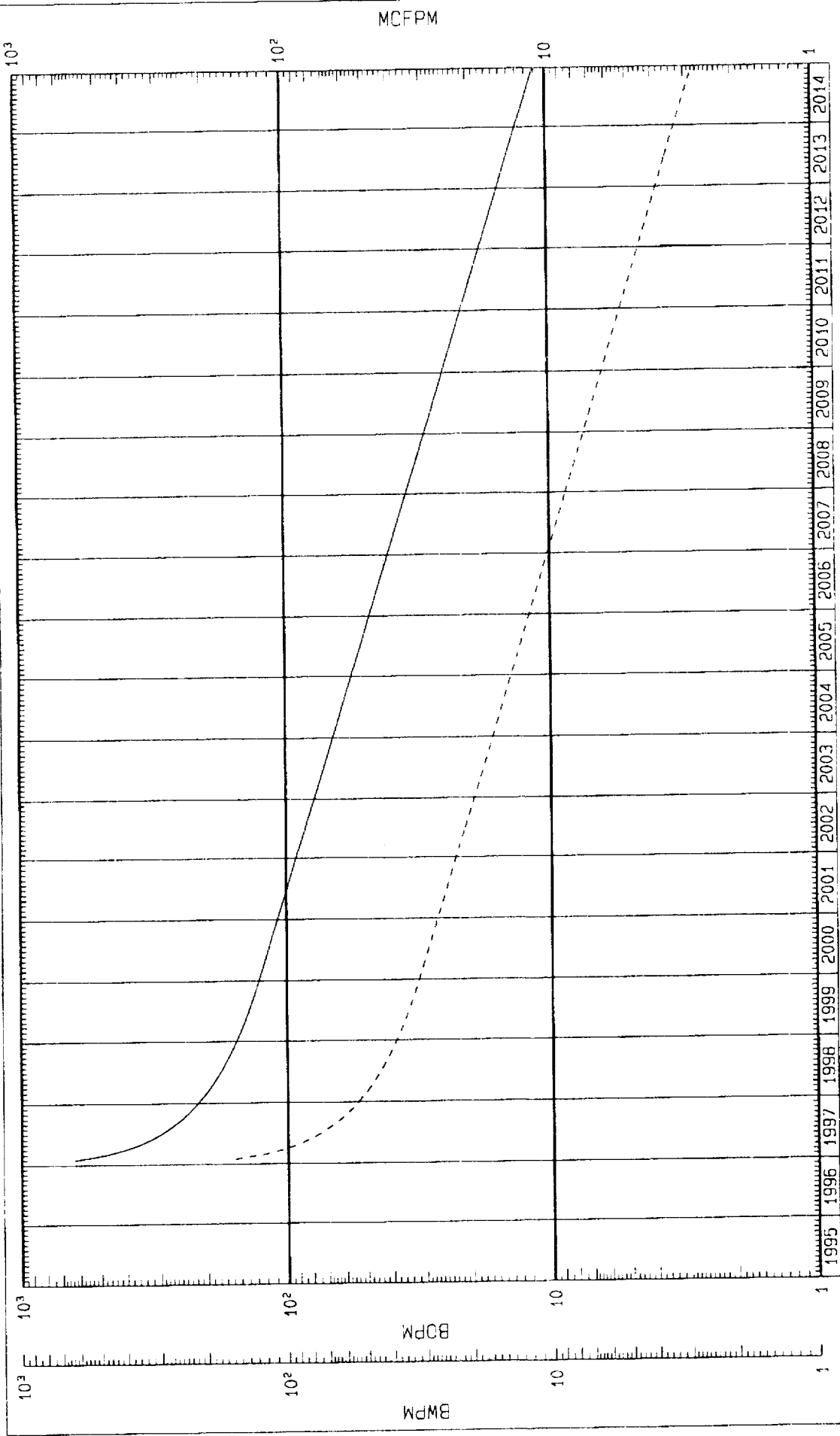
NAME : EXAMPLE ECON. - MESA VERDE
FIELD : BLANCO EAST AREA
CNTY, STATE: RIO ARriba CO., NEW MEXICO
FORMATION : MESA VERDE (FLOWING) CASE
OPERATOR : MALLON OIL COMPANY

PW 5.0% -286.262 BTAX
PW 15.0% -286.937 BTAX
PW 20.0% -287.123 BTAX
PW 25.0% -287.232 BTAX
PW 30.0% -287.278 BTAX

WI	ORI	GRI	DATE	WELL COUNT		BEG-PRICES		END-PRICES		AVG-PRICES		GROSS RESERVES	
				GROSS	NET	OIL	GAS	OIL	GAS	OIL	GAS	CUMULATIVE	REMAINING
100.00000	80.60000	80.60000	JAN 1997	0	0.0	20.00	1.70	20.00	20.00	20.00	1.70	0.000	8.749
				G	1.0							0.000	2.187

	NUMBER GROSS WELLS 30)-----	GROSS PROD OIL + COND 5)MMBLS--	GROSS GAS PRODUCTION 7)MMCF---	WORKING INTEREST 34)-X-----	REVENUE INTEREST 35)-X-----	NET VOLUME OIL + COND 18)MMBLS--	NET GAS VOLUME 20)MMCF---	EFFECTIVE O+C PRICE 31)\$/BBL--	EFFECTIVE GAS PRICE 32)\$/MCF--	NET TOTAL REVENUE 60)-M\$----
1997	1.0	3.990	0.997	100.00000	80.60000	3.216	0.804	20.00	1.70	65.686
1998	1.0	2.140	0.535	100.00000	80.60000	1.725	0.431	20.00	1.70	35.235
1999	1.0	1.662	0.416	100.00000	80.60000	1.340	0.335	20.00	1.70	27.365
(8MO)2000	1.0	0.957	0.239	100.00000	80.60000	0.771	0.193	20.00	1.70	15.733
2001										
2002										
2003										
2004										
2005										
2006										
2007										
2008										
2009										
2010										
2011										
SUB TOTAL	1.0	8.749	2.187	100.00000	80.60000	7.052	1.763	20.00	1.70	144.039
REMAINDER	0.0	0.000	0.000	0.00000	0.00000	0.000	0.000	0.00	0.00	0.000
TOT 3.7 YR	1.0	8.749	2.187	100.00000	80.60000	7.052	1.763	20.00	1.70	144.039

	NET LOE (FIX + VAR) 111)-M\$----	NET SEV TAXES 96)-M\$----	NET ADVAL TAXES 102)-M\$----	NET TOTAL EXP + TAXES 223)-M\$----	NET OPER REVENUE 156)-M\$----	NET TOTAL INVESTMENT 143)-M\$----	BTAX CASHFLOW 163)-M\$----	CUM BTAX CASHFLOW 164)-M\$----	BTAX CF DISC 10.00% 165)-M\$----	CUM BTAX CF DISC 10.00% 166)-M\$----
1997	18.000	4.662	8.454	31.116	34.570	335.000	-300.430	-300.430	-299.063	-299.063
1998	18.000	2.501	4.535	25.036	10.199	0.000	10.199	-290.231	8.871	-290.192
1999	18.000	1.942	3.522	23.464	3.901	0.000	3.901	-286.330	3.090	-287.103
(8MO)2000	12.000	1.118	2.027	15.145	0.607	0.000	0.607	-285.723	0.446	-286.657
2001										
2002										
2003										
2004										
2005										
2006										
2007										
2008										
2009										
2010										
2011										
SUB TOTAL	66.000	10.223	18.538	94.761	49.277	335.000	-285.723	-285.723	-286.657	-286.657
REMAINDER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-285.723	0.000	-286.657
TOT 3.7 YR	66.000	10.223	18.538	94.761	49.277	335.000	-285.723	-285.723	-286.657	-286.657



— OIL
 - - - GAS
 • WATER

BLANCO EAST AREA

EXAMPLE ECON. - MESA VERDE
 RIO ARRIBA CO., NEW MEXICO
 GAS-MESA VERDE (FLOWING) CASE
 1PDP NM0300 XXXXXXXXXX EV: 5

FILE: 1-MSA2MP MP DATE: 21-MAY-97
 SOURCE: TIME: 14:05

Mailon Oil Company

PF:COMMINGL
EVAL #: 2
ALTKEY:USA

MALLON OIL COMPANY

DATE: 05/21/97
TIME: 15:23:16

AS OF JAN 1, 1997

ID CODE : 1PDP-NM-39-NM003-0000-XXXXXXXXXX-

-GAS-NO-OM-SEC-TWMS-RANG-7777

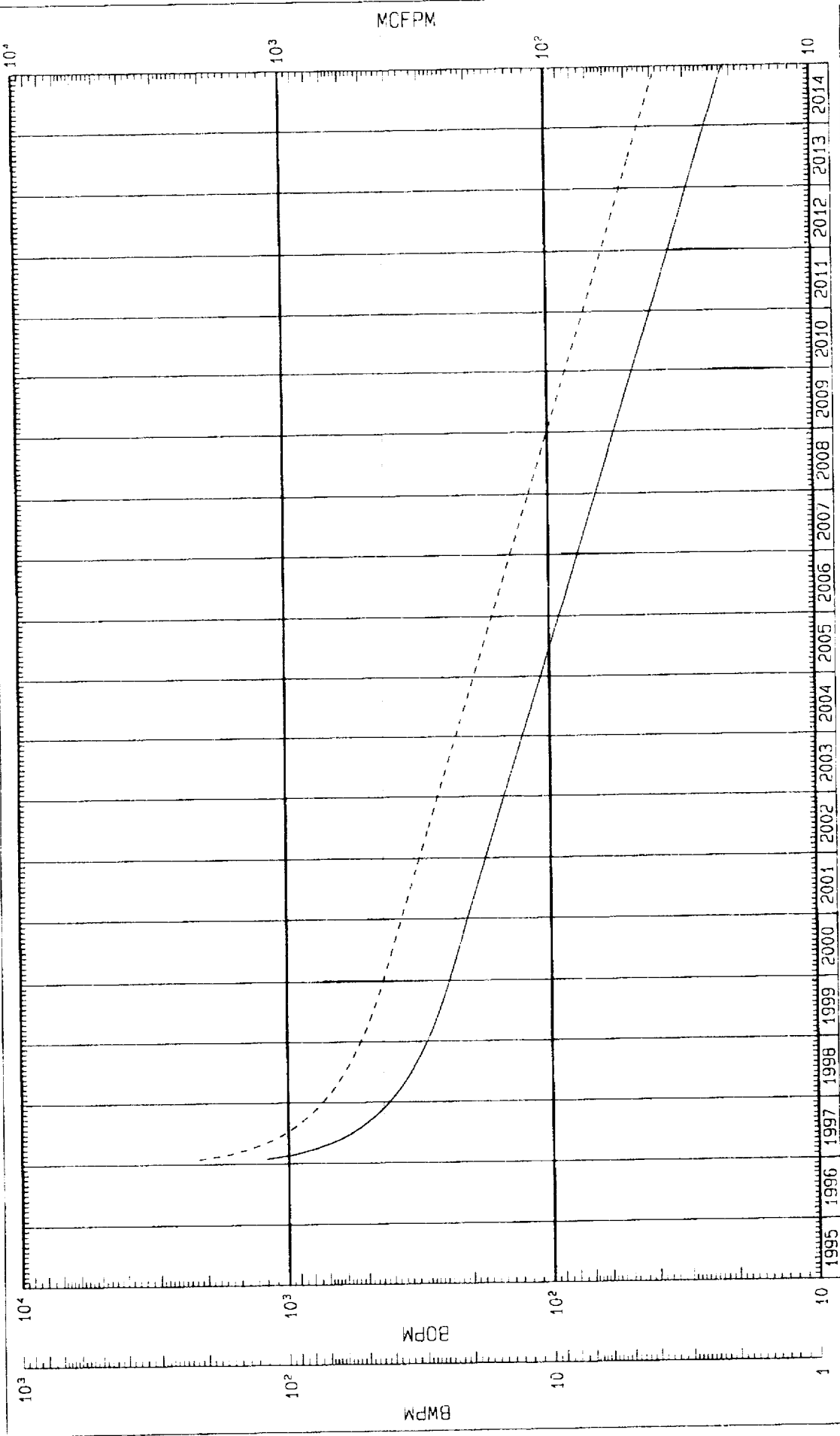
NAME : EXAMPLE ECON. - GALLUP
FIELD : BLANCO EAST AREA
CNTY, STATE: RIO ARriba CO., NEW MEXICO
FORMATION : GALLUP (PUMPING) CASE
OPERATOR : MALLON OIL COMPANY

PW 5.0% -212.217 BTAX
PW 15.0% -238.528 BTAX
PW 20.0% -248.118 BTAX
PW 25.0% -256.053 BTAX
PW 30.0% -262.693 BTAX

WI	ORI	GRI	DATE	WELL COUNT		BEG-PRICES		END-PRICES		AVG-PRICES		GROSS RESERVES	
				GROSS	NET	OIL	20.00	20.00	20.00	CUMULATIVE	REMAINING		
100.00000	80.60000	80.60000	JAN 1997	0	0.0	0.0	1.70	1.70	1.70	OIL (MBBLS)	0.000	25.278	
				G	1.0	1.0				GAS (MMCF)	0.000	45.140	

	NUMBER GROSS WELLS 30)-----	GROSS PROD OIL + COND 5)MMBLS--	GROSS GAS PRODUCTION 7)MMCF---	WORKING INTEREST 34)-%-	REVENUE INTEREST 35)-%-	NET VOLUME OIL + COND 18)MMBLS--	NET GAS VOLUME 20)MMCF---	EFFECTIVE O+C PRICE 31)\$/BBL--	EFFECTIVE GAS PRICE 32)\$/MCF--	NET TOTAL REVENUE 60)-M\$----
1997	1.0	7.644	13.650	100.00000	80.60000	6.161	11.002	20.00	1.70	141.925
1998	1.0	4.100	7.322	100.00000	80.60000	3.305	5.902	20.00	1.70	76.130
1999	1.0	3.185	5.687	100.00000	80.60000	2.567	4.584	20.00	1.70	59.128
2000	1.0	2.678	4.782	100.00000	80.60000	2.158	3.854	20.00	1.70	49.721
2001	1.0	2.276	4.065	100.00000	80.60000	1.835	3.276	20.00	1.70	42.263
2002	1.0	1.935	3.455	100.00000	80.60000	1.559	2.785	20.00	1.70	35.923
2003	1.0	1.645	2.937	100.00000	80.60000	1.326	2.367	20.00	1.70	30.535
2004	1.0	1.398	2.496	100.00000	80.60000	1.127	2.012	20.00	1.70	25.955
(4MO)2005	1.0	0.418	0.746	100.00000	80.60000	0.337	0.601	20.00	1.70	7.756
2006										
2007										
2008										
2009										
2010										
2011										
SUB TOTAL	1.0	25.278	45.140	100.00000	80.60000	20.374	36.383	20.00	1.70	469.334
REMAINDER	0.0	0.000	0.000	0.00000	0.00000	0.000	0.000	0.00	0.00	0.000
TOT 8.3 YR	1.0	25.278	45.140	100.00000	80.60000	20.374	36.383	20.00	1.70	469.334

	NET LOE (FIX + VAR) 111)-M\$----	NET SEV TAXES 96)-M\$----	NET ADVAL TAXES 102)-M\$----	NET TOTAL EXP + TAXES 223)-M\$----	NET OPER REVENUE 156)-M\$----	NET TOTAL INVESTMENT 143)-M\$----	BTAX CASHFLOW 163)-M\$----	CUM BTAX CASHFLOW 164)-M\$----	BTAX CF DISC 10.00% 165)-M\$----	CUM BTAX CF DISC 10.00% 166)-M\$----
1997	18.000	10.207	18.266	46.473	95.452	419.000	-323.548	-323.548	-324.044	-324.044
1998	18.000	5.475	9.798	33.273	42.857	0.000	42.857	-280.691	37.149	-286.895
1999	18.000	4.252	7.610	29.862	29.265	0.000	29.265	-251.426	23.035	-263.860
2000	18.000	3.576	6.399	27.975	21.746	0.000	21.746	-229.680	15.558	-248.302
2001	18.000	3.040	5.439	26.479	15.784	0.000	15.784	-213.896	10.270	-238.032
2002	18.000	2.584	4.623	25.207	10.716	0.000	10.716	-203.180	6.343	-231.689
2003	18.000	2.196	3.930	24.126	6.409	0.000	6.409	-196.771	3.454	-228.235
2004	18.000	1.867	3.340	23.207	2.748	0.000	2.748	-194.023	1.352	-226.883
(4MO)2005	6.000	0.558	0.998	7.556	0.200	0.000	0.200	-193.824	0.092	-226.791
2006										
2007										
2008										
2009										
2010										
2011										
SUB TOTAL	150.000	33.755	60.403	244.158	225.177	419.000	-193.824	-193.824	-226.791	-226.791
REMAINDER	0.000	0.000	0.000	0.000	0.000	0.000	-193.824	-193.824	0.000	-226.791
TOT 8.3 YR	150.000	33.755	60.403	244.158	225.177	419.000	-193.824	-193.824	-226.791	-226.791



BLANCO EAST AREA

EXAMPLE ECON. - GALLUP
 RIO ARRIBA CO., NEW MEXICO
 GAS-GALLUP (PUMPING) CASE
 1PDP NM0300 XXXXXXXXXX EV: 2

FILE: 4-MSA2MP.MP DATE: 21-MAY-97
 SOURCE: TIME: 14:06

Mallon Oil Company

OIL
 • WATER
 - - - GAS

PF:COMMINGL
EVAL #: 3
ALTKEY:USA

MALLON OIL COMPANY

DATE: 05/21/97
TIME: 15:23:14

AS OF JAN 1, 1997

ID CODE : 1PDP-NM-39-NM003-0000-XXXXXXXXXX-

-GAS-NO-OM-SEC-TWNS-RANG-????

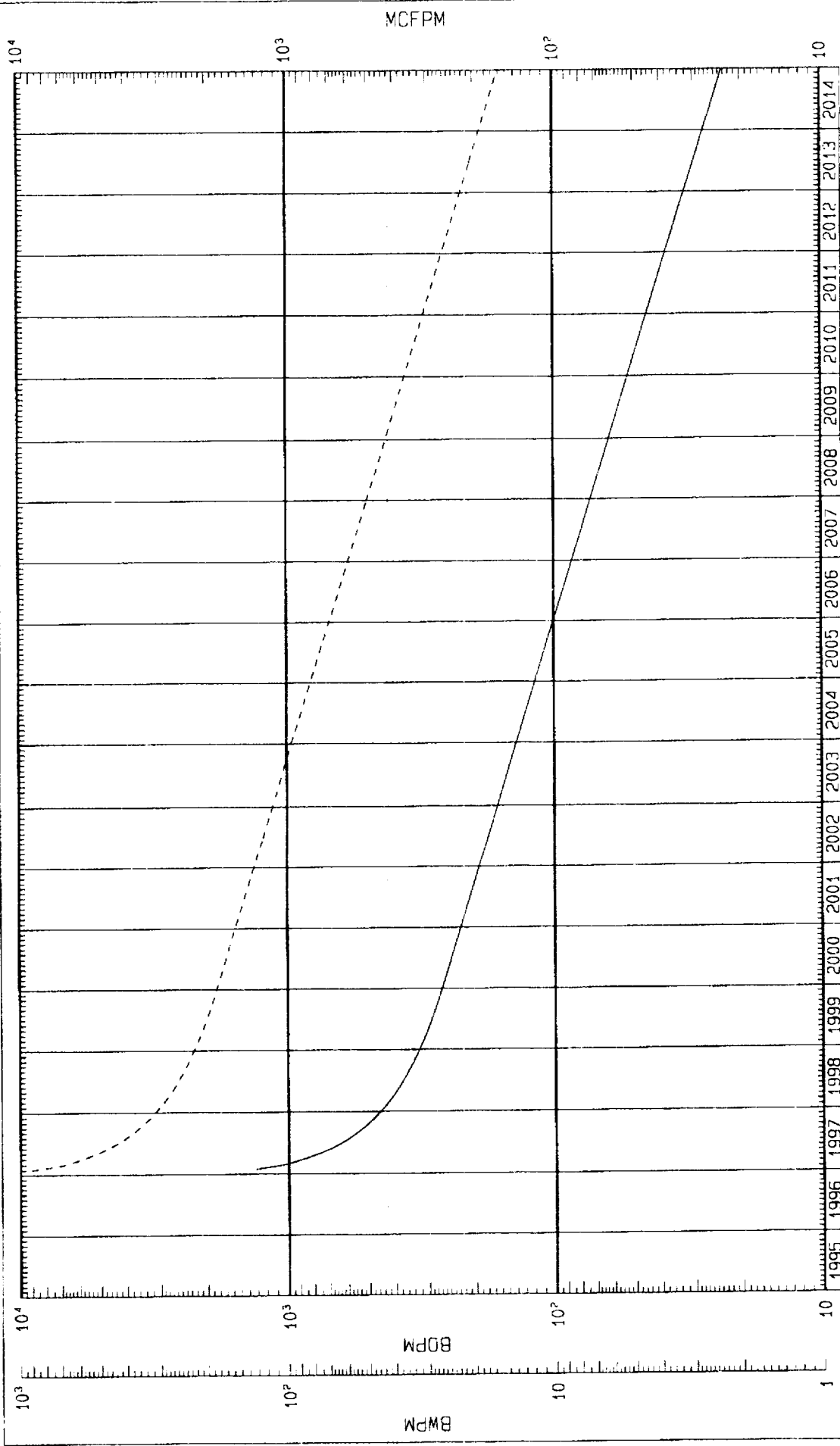
NAME : EXAMPLE ECON. - COMMINGLING
FIELD : BLANCO EAST AREA
CNTY, STATE: RIO ARriba CO., NEW MEXICO
FORMATION : GL, MV, & PC COMMINGLING CASE
OPERATOR : MALLON OIL COMPANY

PW 5.0% 10.741 BTAX
PW 15.0% -83.829 BTAX
PW 20.0% -114.715 BTAX
PW 25.0% -139.000 BTAX
PW 30.0% -158.519 BTAX

WI	ORI	GRI	DATE	WELL COUNT	BEG-PRICES	END-PRICES	AVG-PRICES	GROSS RESERVES
				GROSS NET	OIL 20.00	20.00	20.00	CUMULATIVE REMAINING
100.00000	80.60000	80.60000	JAN 1997	0 0.0 0.0	OIL 20.00	20.00	20.00	0.000 33.204
				G 1.0 1.0	GAS 1.70	1.70	1.70	0.000 228.993

NUMBER	GROSS PROD	GROSS GAS	WORKING	REVENUE	NET VOLUME	NET GAS	EFFECTIVE	EFFECTIVE	NET TOTAL
GROSS WELLS	OIL + COND	PRODUCTION	INTEREST	INTEREST	OIL + COND	VOLUME	O+C PRICE	GAS PRICE	REVENUE
30)-M\$----	5)MMBLS--	7)MMCF----	34)-%-----	35)-%-----	18)MMBLS--	20)MMCF----	31)\$/BBL--	32)\$/MCF--	60)-M\$----
1997	1.0	8.374	57.750	100.00000	80.60000	6.749	20.00	1.70	214.114
1998	1.0	4.492	30.978	100.00000	80.60000	3.620	20.00	1.70	114.854
1999	1.0	3.489	24.059	100.00000	80.60000	2.812	20.00	1.70	89.203
2000	1.0	2.934	20.232	100.00000	80.60000	2.364	20.00	1.70	75.011
2001	1.0	2.494	17.197	100.00000	80.60000	2.010	20.00	1.70	63.760
2002	1.0	2.120	14.617	100.00000	80.60000	1.708	20.00	1.70	54.196
2003	1.0	1.802	12.425	100.00000	80.60000	1.452	20.00	1.70	46.066
2004	1.0	1.531	10.561	100.00000	80.60000	1.234	20.00	1.70	39.156
2005	1.0	1.302	8.977	100.00000	80.60000	1.049	20.00	1.70	33.283
2006	1.0	1.106	7.630	100.00000	80.60000	0.892	20.00	1.70	28.291
2007	1.0	0.940	6.486	100.00000	80.60000	0.758	20.00	1.70	24.047
2008	1.0	0.799	5.513	100.00000	80.60000	0.644	20.00	1.70	20.440
2009	1.0	0.679	4.686	100.00000	80.60000	0.548	20.00	1.70	17.374
2010	1.0	0.578	3.983	100.00000	80.60000	0.466	20.00	1.70	14.768
2011	1.0	0.491	3.386	100.00000	80.60000	0.396	20.00	1.70	12.553
SUB TOTAL	1.0	33.130	228.481	100.00000	80.60000	26.703	20.00	1.70	847.114
REMAINDER	1.0	0.074	0.513	100.00000	80.60000	0.060	20.00	1.70	1.901
TOT 15.2 YR	1.0	33.204	228.993	100.00000	80.60000	26.762	20.00	1.70	849.015

NET LOE	NET SEV	NET ADVAL	NET TOTAL	NET OPER	NET TOTAL	BTAX	CUM BTAX	BTAX CF	CUM BTAX CF
(FIX + VAR)	TAXES	TAXES	EXP + TAXES	REVENUE	INVESTMENT	CASHFLOW	CASHFLOW	DISC 10.00%	DISC 10.00%
111)-M\$----	96)-M\$----	102)-M\$----	223)-M\$----	156)-M\$----	143)-M\$----	163)-M\$----	164)-M\$----	165)-M\$----	166)-M\$----
1997	9.000	15.832	27.556	52.388	161.726	454.000	-292.274	-292.274	-295.321
1998	9.000	8.492	14.782	32.274	82.580	0.000	82.580	-209.695	-223.797
1999	9.000	6.596	11.480	27.076	62.126	0.000	62.126	-147.568	-174.931
2000	9.000	5.546	9.654	24.200	50.811	0.000	50.811	-96.757	-138.609
2001	9.000	4.714	8.206	21.920	41.839	0.000	41.839	-54.918	-111.418
2002	9.000	4.007	6.975	19.982	34.213	0.000	34.213	-20.705	-91.202
2003	9.000	3.406	5.929	18.335	27.731	0.000	27.731	7.027	-76.305
2004	9.000	2.895	5.039	16.935	22.222	0.000	22.222	29.248	-65.452
2005	9.000	2.461	4.284	15.745	17.538	0.000	17.538	46.787	-57.664
2006	9.000	2.092	3.641	14.733	13.558	0.000	13.558	60.345	-52.190
2007	9.000	1.778	3.095	13.873	10.174	0.000	10.174	70.519	-48.455
2008	9.000	1.511	2.631	13.142	7.298	0.000	7.298	77.817	-46.017
2009	9.000	1.285	2.236	12.521	4.853	0.000	4.853	82.670	-44.543
2010	9.000	1.092	1.901	11.993	2.775	0.000	2.775	85.445	-43.775
2011	9.000	0.928	1.616	11.544	1.009	0.000	1.009	86.454	-43.519
SUB TOTAL	135.000	62.637	109.024	306.660	540.454	454.000	86.454	86.454	-43.519
REMAINDER	1.500	0.141	0.245	1.885	0.016	0.000	0.016	86.470	-43.516
TOT 15.2 YR	136.500	62.777	109.268	308.546	540.470	454.000	86.470	86.470	-43.516



BLANCO EAST AREA

EXAMPLE ECON. - COMMINGLING
 RIO ARRIBA CO., NEW MEXICO
 GAS-GL, MV. & PC COMMINGLING CASE
 1PDP NM0300 XXXXXXXXXX EV: 3

FILE: 3-MSA2WP_MP DATE: 21-MAY-97
 SOURCE: TIME: 14.06

--- OIL
 --- GAS
 . WATER

PF:COMMINGL
EVAL #: 4
ALTKEY:USA

MALLON OIL COMPANY

DATE: 05/21/97
TIME: 15:23:13

AS OF JAN 1, 1997

ID CODE : 1PDP-NM-39-NM003-0000-XXXXXXXXXX-

-GAS-NO-OM-SEC-TWNS-RANG-7777

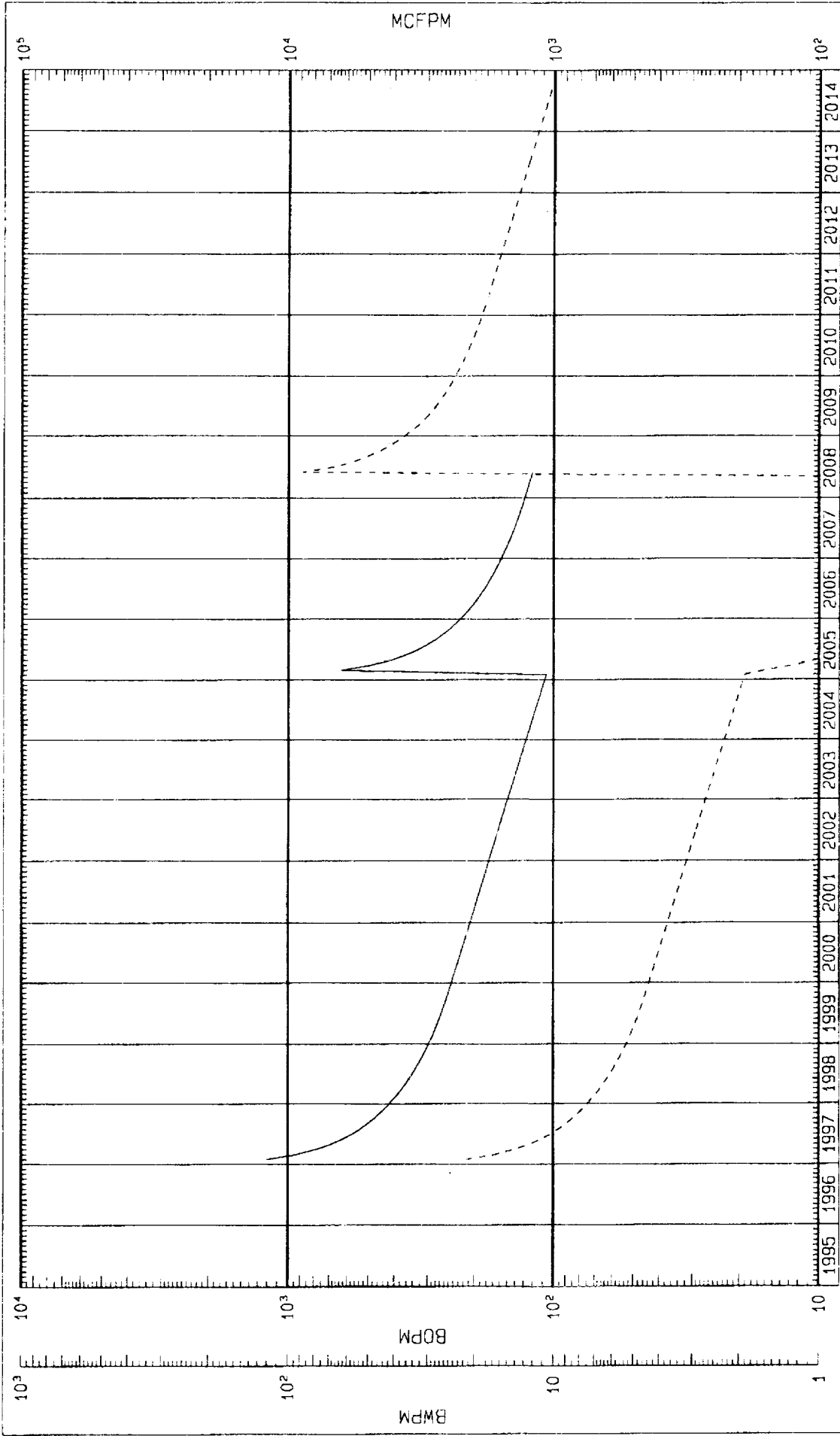
NAME : EXAMPLE ECON. - SEP. COMPL.
FIELD : BLANCO EAST AREA
CNTY, STATE: RIO ARriba CO., NEW MEXICO
FORMATION : GL, MV, & PC SEP. COMPLETIONS
OPERATOR : MALLON OIL COMPANY

PW 5.0% -177.662 BTAX
PW 15.0% -230.763 BTAX
PW 20.0% -244.535 BTAX
PW 25.0% -254.516 BTAX
PW 30.0% -262.154 BTAX

WI	ORI	GRI	DATE	WELL COUNT		BEG-PRICES	END-PRICES	AVG-PRICES	GROSS RESERVES	
100.00000	80.60000	80.60000	JAN 1997	GROSS	NET	OIL 20.00	20.00	20.00	CUMULATIVE	REMAINING
				O	0.0	GAS 1.70	1.70	1.70	0.000	33.251
				G	1.0				0.000	234.262

	NUMBER GROSS WELLS 30)-----	GROSS PROD OIL + COND 5)MMBLS--	GROSS GAS PRODUCTION 7)MMCF---	WORKING INTEREST 34)-X-----	REVENUE INTEREST 35)-X-----	NET VOLUME OIL + COND 18)MMBLS--	NET GAS VOLUME 20)MMCF---	EFFECTIVE O+C PRICE 31)\$/BBL--	EFFECTIVE GAS PRICE 32)\$/MCF--	NET TOTAL REVENUE 60)-M\$----
1997	1.0	7.644	13.650	100.00000	80.60000	6.161	11.002	20.00	1.70	141.925
1998	1.0	4.100	7.322	100.00000	80.60000	3.305	5.902	20.00	1.70	76.130
1999	1.0	3.185	5.687	100.00000	80.60000	2.567	4.584	20.00	1.70	59.128
2000	1.0	2.678	4.782	100.00000	80.60000	2.158	3.854	20.00	1.70	49.721
2001	1.0	2.276	4.065	100.00000	80.60000	1.835	3.276	20.00	1.70	42.263
2002	1.0	1.935	3.455	100.00000	80.60000	1.559	2.785	20.00	1.70	35.923
2003	1.0	1.645	2.937	100.00000	80.60000	1.326	2.367	20.00	1.70	30.535
2004	1.0	1.398	2.496	100.00000	80.60000	1.127	2.012	20.00	1.70	25.955
2005	1.0	3.880	1.134	100.00000	80.60000	3.127	0.914	20.00	1.70	64.091
2006	1.0	2.202	0.551	100.00000	80.60000	1.775	0.444	20.00	1.70	36.255
2007	1.0	1.690	0.423	100.00000	80.60000	1.362	0.341	20.00	1.70	27.827
2008	1.0	0.618	39.176	100.00000	80.60000	0.498	31.576	20.00	1.70	63.648
2009	1.0	0.000	35.179	100.00000	80.60000	0.000	28.354	0.00	1.70	48.202
2010	1.0	0.000	25.366	100.00000	80.60000	0.000	20.445	0.00	1.70	34.756
2011	1.0	0.000	20.876	100.00000	80.60000	0.000	16.826	0.00	1.70	28.604
SUB TOTAL	1.0	33.251	167.097	100.00000	80.60000	26.800	134.680	20.00	1.70	764.962
REMAINDER	1.0	0.000	67.166	100.00000	80.60000	0.000	54.136	0.00	1.70	92.031
TOT 20.2 YR	1.0	33.251	234.263	100.00000	80.60000	26.800	188.816	20.00	1.70	856.992

	NET LOE (FIX + VAR) 111)-M\$-----	NET SEV TAXES 96)-M\$-----	NET ADVAL TAXES 102)-M\$-----	NET TOTAL EXP + TAXES 223)-M\$-----	NET OPER REVENUE 156)-M\$-----	NET TOTAL INVESTMENT 143)-M\$-----	BTAX CASHFLOW 163)-M\$-----	CUM BTAX CASHFLOW 164)-M\$-----	BTAX CF DISC 10.00% 165)-M\$-----	CUM BTAX CF DISC 10.00% 166)-M\$-----
1997	18.000	10.207	18.266	46.473	95.452	419.000	-323.548	-323.548	-324.044	-324.044
1998	18.000	5.475	9.798	33.273	42.857	0.000	42.857	-280.691	37.149	-286.895
1999	18.000	4.252	7.610	29.862	29.265	0.000	29.265	-251.426	23.035	-263.860
2000	18.000	3.576	6.399	27.975	21.746	0.000	21.746	-229.680	15.558	-248.302
2001	18.000	3.040	5.439	26.479	15.784	0.000	15.784	-213.896	10.270	-238.032
2002	18.000	2.584	4.623	25.207	10.716	0.000	10.716	-203.180	6.343	-231.689
2003	18.000	2.196	3.930	24.126	6.409	0.000	6.409	-196.771	3.454	-228.235
2004	18.000	1.867	3.340	23.207	2.748	0.000	2.748	-194.023	1.352	-226.883
2005	18.000	4.551	8.248	30.799	33.292	50.000	-16.709	-210.732	-8.087	-234.969
2006	18.000	2.573	4.666	25.239	11.016	0.000	11.016	-199.716	4.470	-230.499
2007	18.000	1.975	3.581	23.556	4.270	0.000	4.270	-195.446	1.577	-228.922
2008	12.750	4.963	8.192	25.904	37.744	50.000	-12.256	-207.702	-4.321	-233.243
2009	9.000	3.822	6.204	19.026	29.176	0.000	29.176	-178.526	8.873	-224.370
2010	9.000	2.756	4.473	16.229	18.527	0.000	18.527	-159.999	5.112	-219.257
2011	9.000	2.268	3.681	14.950	13.654	0.000	13.654	-146.344	3.423	-215.834
SUB TOTAL	237.750	56.105	98.451	392.306	372.656	519.000	-146.344	-146.344	-215.834	-215.834
REMAINDER	46.500	7.298	11.844	65.642	26.388	0.000	26.388	-119.956	5.437	-210.397
TOT 20.2 YR	284.250	63.403	110.295	457.948	399.044	519.000	-119.956	-119.956	-210.397	-210.397



BLANCO EAST AREA

EXAMPLE ECON. - SEP. COMPL.
 RIO ARRIBA CO., NEW MEXICO
 GAS-GL. MV. & PC SEP. COMPLETIONS
 1PDP NM0300 XXXXXXXXXX EV: 4

FILE: 2-MSA2MP.MP DATE: 21-MAY-97
 SOURCE: TIME: 14:05

--- OIL
 . . . WATER
 --- GAS

DISTRICT I
P.O. Box 1000, Hobbs, N.M. 88241-1000

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-10

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P.O. Drawer 22, Artesia, N.M. 88211-0719

DISTRICT III
1000 Rio Grande Rd., Alamo, N.M. 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088

☐ AMENDED REPORT

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number		*Pool Code		*Well Name <i>Basin-Fruitland Calves Pool</i>	
*Property Code	*Property Name JICARILLA 435 G				*Well Number 3
*Lease No.	*Operator Name MALLON OIL COMPANY				*Shut-in 6800

10 Surface Location

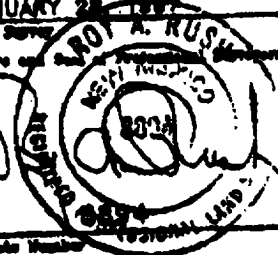
UL or lot no.	Section	Township	Range	Lot 1/4	Feet from the	North/South Line	Feet from the	East/West Line	County
0	8	22-N	4-W		810	NORTH	889	WEST	SANDOVAL

11 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 Drill *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

18 1" PUGH PIPE W/CAP 889' 810' 3278.4' 3 60-19.5'						17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>[Signature]</i> Signature Duane C. Winkler Printed Name Operations Manager Title Feb. 3, 1997 Date
						19 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by or under my supervision, and that the same is true and correct to the best of my belief. JANUARY 28, 1997 Date of Survey <i>[Signature]</i> Signature and Seal of Surveyor  Certificate Number

DISTRICT I
P.O. Box 1580, Hobbs, N.M. 88241-1580

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Energy, Minerals & Natural Resources Department

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DISTRICT IV
P.O. Box 3088, Santa Fe, NM 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code		Pool Name <i>Ballard-Pictured Cliffs Gas Pool</i>	
Property Code		Property Name JICARILLA 435 G		Well Number 3	
Owner No.		Operator Name MALLON OIL COMPANY		Serial 5800	

10 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	8	22-N	4-W		510	NORTH	589	WEST	SANDOVAL

11 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	Unit or Well	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

	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>[Signature]</i> Signature Dennis C. Winkler Printed Name Operations Manager Title Feb. 3, 1997 Date			
	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by or under my supervision, and that the same is true and correct to the best of my belief. JANUARY 28, 1997 Date of Survey Signature of Surveyor ROY A. RUSH Professional Surveyor New Mexico 8324 Certificate Number			

DISTRICT I
P.O. Box 1300, Hobbs, N.M. 88241-1300State of New Mexico
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1000 Rio Grande Rd., Alamo, N.M. 87410DISTRICT IV
P.O. Box 3000, Santa Fe, NM 87504-3000OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504-2088☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Well Name <i>Wildcat Mesavende</i>
Property Code	Property Name VICARILLA 435 G	Well Number 3
Field No.	Operator Name MALLON OIL COMPANY	Service 6500

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	8	22-N	4-W		810	NORTH	889	WEST	SANDOVAL

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 Well	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

	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>[Signature]</i> Operator Name Operations Manager Date: 3, 1997		
	18 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. JANUARY 28, 1997 Date of Survey Signature of Surveyor Surveyor's Seal Certificate Number		
	[Empty grid area for surveyor's signature and seal]		
	[Empty grid area for surveyor's signature and seal]		

DISTRICT I
P.O. Box 1500, Ruidoso, N.M. 88341-1500

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OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088

☐ AMENDED REPORT

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number	*Pool Code	*Pool Name <i>Otero-Sanostee (Oil) Pool</i>
*Property Code	*Property Name JICARILLA 435 G	*Well Number 3
*Owner No.	*Operator Name MALLON OIL COMPANY	*Section 6800

10 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	8	22-N	4-W		810	NORTH	889	WEST	SANDOVAL

11 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 *Tract or BLM *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

	17 OPERATOR CERTIFICATION			
	I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.			
	Signature: <i>Dwight C. Winkler</i> Name: <u>Dwight C. Winkler</u> Operations Manager Date: <u>Feb. 3, 1997</u>			
	18 SURVEYOR CERTIFICATION			
	I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me under my supervision, and that the same is true and correct to the best of my belief.			
	Date of Survey: <u>JANUARY 28, 1997</u> Signature and Seal of Registered Surveyor: <i>ROBERT A. RUSSELL</i> Certificate Number: <u>103104</u>			

DISTRICT I
P.O. Box 1080, Hobbs, N.M. 88241-1080

State of New Mexico

Energy, Minerals & Natural Resources Department

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DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name <i>South Lincoln Gallup-Dakota Oil Pool</i>
Property Code	Property Name JICARILLA 435 G	Well Number 3
Record No.	Operator Name MALLON OIL COMPANY	Revisions 6800

10 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	8	22-N	4-W		810	NORTH	889	WEST	SANDOVAL

11 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

1" IRON PIPE W/CAP 810' 889' 5280' S 01-07 E	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature: <i>Don C. Winkler</i> Don C. Winkler Operations Manager Title Date: Feb. 3, 1997			
	18 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. Date of Survey: JANUARY 28, 1997 Signature and Seal of Professional Surveyor: <i>ROY A. RUSSELL</i> Certificate Number: 8301A			