ENRON Oil & Gas Company

P. O. Box 2267 Midland, Texas 79702 (915) 686-3600

January 28, 1994

State of New Mexico Energy and Minerals Department Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87504

RE: Application to Downhole Commingle Atoka and Morrow Gas Producing Zones in the Pure Gold "B" Federal No. 2, BHL: 660' FNL & 1,980' FEL Section(20, T23S, (R34E) Eddy County, New Mexico

Gentlemen:

It is proposed to downhole commingle the Morrow and Atoka gas zones in the above captioned well to maximize the efficient and effective recovery of gas at this location. Economic evaluation of this well as both a dual and a single completion has shown that only as a single completion can reserve and economic waste be eliminated.

This well was drilled and originally completed in the Morrow "C" sands in March 1993. After acid treatment the "C" flowed 1,800 MCFD with a FTP of 335 psig. A pressure buildup survey indicated the initial reservoir pressure of the Morrow to be 5,920 psig. A sand plug was spotted over the "C" and the Morrow "A" sand was perforated. After fracture treatment of the "A" and removal of the sand plug in April 1993, the "A" and "C" combined initially flowed 7,500 MCFD with a FTP of 2,600, but by August 1993 the rate had declined to 3,500 MCFD with 1,000 psig FTP. Both the Morrow "A" and "C" qualify for the tight gas sand tax credit (TGS).

In August 1993, a workover was begun to test the Atoka "A-3" sand (non-TGS). At the time a dual completion was planned, as it was believed the Atoka would be a prolific zone. A pressure buildup survey indicated the Atoka reservoir pressure to be 7,500 psig. After acid treatment, however, this sand flowed only 300 MCFD and 40 BWPD with a FTP of 800 psig. In November 1993 the Atoka was fracture treated, but the rate rapidly fell off and the well again began experiencing fluid loading problems. Current production is only 560 MCFD and 100 BWPD, with the rate still falling.

The Morrow "A" and "C" zones need to be restored to production in order to regain competitive position in the reservoir. A dual completion cannot be justified for the following reasons: 1) the cost to dually complete this well is estimated at \$183,900 (see Exhibit K), and the low producing rates and remaining reserves in the Atoka will not justify such an expenditure, and 2) a dual completion would require killing the Atoka with at least 10 lb./gal. brine (or a heavier fluid - see Exhibit L), which would jeopardize remaining Atoka reserves due to the fact that this is a water sensitive formation. To commingle the two formations will eliminate both reserve and economic waste and will be relatively simple and inexpensive: the sand and gel over the existing packer @ 13,700' will be jetted out with coiled tubing, and a jet cut will be made in the tailpipe below, allowing the CIBP to fall to bottom (see Exhibit J). The comparative economics are shown in Exhibit K.

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Page 2 State of New Mexico Energy and Minerals Department Oil Conservation Division January 28, 1994

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All the attached data support the feasibility of commingling the two horizons. Additionally, in the James Ranch Unit, located approximately 3 miles NW, the Morrow, Atoka, and Wolfcamp are not infrequently commingled.

The following attachments are submitted in support of this application:

- 1. EXHIBIT A is a plat highlighting the subject well and the Pure Gold area, showing all offset operators.
- 2. EXHIBIT B shows the production data and decline curves for both the Morrow and Atoka.
- 3. EXHIBIT C is the bottom hole pressure data obtained for both the Morrow and Atoka formations, showing the two horizons are well within 50% of each other. This exhibit also shows the flowing bottom hole pressures of both zones, indicating there will be no crossflow.
- 4. WI, RI, and ORRI ownerships are identical for both horizons.
- 5. EXHIBIT D contains gas analyses for the Morrow and Atoka, respectively.
- 6. EXHIBIT E is a letter from Martin Water Labs stating the two waters are compatible.
- 7. EXHIBIT F is a comparison between the cost to dually complete the Atoka and Morrow and to commingle.
- 8. EXHIBIT G is a procedure to dually complete in the Atoka and Morrow, showing the involved and complicated nature of the procedure, and the reserve risk to the Atoka formation.
- 9. EXHIBIT H contains 3 wellbore diagrams: 1) shows existing configuration, 2) dual installation (not recommended), and 3) proposed commingling arrangement.
- 10. Allocation percentages based on production history of the two formations are suggested as follows:

	Gas,	Oil	Water
Atoka	14	20	93
Morrow	86	80	7

After both zones have stabilized, a production survey will be run and allocations will be reassigned accordingly.

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11. Copies of this application were sent by certified mail to each offset operator, as identified by EXHIBIT I.

Sincerely,

ENRON OIL & GAS COMPANY

Hal Crabb, III

CC: OIL CONSERVATION DIVISION DISTRICT OFFICE P. O. DRAWER DD ARTESIA, N.M. 88210 ATTN: MARK ASHLEY

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EXHIBIT B

PURE GOLD "B" FEDERAL NO. 2 PRODUCTION HISTORY FOR MORROW AND ATOKA

March 1993	Morrow "C": 1,800 MCFD @ 335 psig FTP. Initial BHP: 5,920 psig.
April 1993	Morrow "A" & "C" initial production: 7,500 MCFD @ 2,600 psig FTP.
August 1993	Morrow "A" & "C" 3,500 MCFD @ 750 psig FTP.
October 1993	Atoka "A-3": 350 MCFD @ 800 psig. Initial BHP: 7,500 psig.
November 1993	Atoka "A-3" post frac: 560 MCFD @ 850 psig.

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07	64.0	930	0	0		28.	66	7331.28	3 11.6	7
08	64.0	900	0	0		17.	47	7215.82	2 5.8	3
09	64.0	900	0	0		22.	13	7165.54	<u>5.8</u>	4
10	64.0	900	0	0		22.	99	6967.13	5.8	3
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14	64.0	850	0	0		27.	98	7003.20) 11.6	7
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16	64.0	830	0	0		31.	02	6805.88	3 7.0	2
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19	64.0	800	0	0		24.	42	6436.65	5 12.8	6
20	64.0	830	0	0		23.	28	6294.84	4.6	7
21	64.0	830	0	0		15.	21	6349.08	3 7.0	3
22	64.0	820	0	0		10.	01	6166.79	25.1	3
23	64.0	820	0	0		18.	68	6069.56	5 32.0	9
24	64.0	820	0	0		28.	56	6048.00) 5.2	5
25	64.0	820	0	0		9.	30	6091.05	5 2.3	4
26	64.0	815	0	0		25.	59	5960.19) 11.7	0
27	64.0	815	0	0		24.	40	5925.65	5 12.8	7
28	64.0	815	0	0		17.	42	5890.11	11.1	1
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18	64.0	800	0	0		18.6	51 651	1.60	5.85				
19	64.0	800	0	0		24.4	2 643	6.65	12.86				
20	64.0	830	0	0		23.2	8 629	4.84	4.67				
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01	64.0	800	0	0		26.8	565	9.04	-72.92				
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03	64.0	710	0	0		12	.81	3652.89	5.84	1	
04	64.0	710	0	0		15	.19	3652.89	2.93	1	
05	64.0	750	0	0		3	.72	3790.78	2.92	2	
06	64.0	720	0	0		11	.70	3736.24	5.83	3	
07	64.0	750	0	0		17	.48	3736.24	14.59	9	
08	64.0	750	0	0		11	.64	3790.78	2.93	1	
09	64.0	750	0	0		9	.32	3560.40	0.00	C	
10	64.0	780	0	0		10	.48	3691.01	8.75	5	
11	64.0	750	0	0		9	.32	3562.36	2.92	2	
12	64.0	750	0	0		10	.48	3453.30	5.83	3	
13	64.0	750	0	0		10	.48	3465.44	8.75	5	
14	64.0	920	0	0		18	.64	3332.28	5.84	1	
15	64.0	920	0	0		9	.32	3229.90	5.83	3	
16	64.0	800	0	0		15	.14	3346.26	2.92	2	
17	64.0	900	0	0		8	.15	3312.63	5.83	3	
18	64.0	700	0	0		13	.98	3482.90	2.92	2	
19	64.0	800	0	0		6	.98	3525.50	5.83	3	
20	0.0	1600	0	24	64	0	.00	0.00	0.00)	
21	64.0	800	0	4	64	14	.92	2751.12	5.83	3	
22	64.0	800	0	0		12	.86	3301.34	2.92	2	
23	64.0	790	0	0		12	.82	3255.80	5.83	3	
24	64.0	770	0	0		15	.14	3186.28	5.83	3	
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30	0.0	0	0	24	49	Ō	.00	0.00	0.00		- 3
31	0.0	0	0	24	49	Ó	.00	0.00	0.00	5 recomple	tion
01	0.0	0	0	24	49	Č	.00	0.00	0.00		01073
	-	-	2							- •	
				205	•	259	.70	77454.40	113.74	- 1	

.

FORI ROUT LEAS WELI	EMAN FE SE NAME L NAME	: SCHAT : LEWEI : PURE : PURE	rz, r: LLEN, GOLD GOLD	ICK RANI "B" "B"	DY FED FED	#2 #2	01000 05000			PAGE NO AS OF PROD DATE	: 0 : 1 : 1	1 0/14/93 0/01/93
DAY	CHK/ SPM	TUB PSI	CAS PSI	DOI HRS	NN RS	PROD OIL	PROD GAS		PROD WATER		ndri	13
BEG	TEST					0.0	0 0.	00	0.00)		
02	0.0	0	0	24	49	0.0	0 0.	00	-24.58			
03	0.0	Õ	Ō	24	49	0.0	0 0.	00	0.00	t		
04	0.0	õ	Ō	24	49	0.0	0 0.	.00	0.00	I		
05	0.0	Õ	Ō	24	49	0.0	0 0.	00	0.00	l .		
06	0.0	Ō	Ō	24	49	0.0	0 0.	00	0.00)		
07	0.0	Ō	Ō	24	49	0.0	0 0.	00	0.00)		
08	0.0	0	0	24	49	0.0	0 0.	00	0.00	1		
09	0.0	4600	0	24	49	0.0	0 0.	00	0.00	•		
10	0.0	4600	0	24	49	0.0	0 0.	00	0.00	l		
11	0.0	4600	0	24	49	0.0	0 0.	00	0.00	•		
12	0.0	4600	0	24	49	0.0	00.	00	0.00	l		
13	0.0	4650	0	24	49	0.0	0 0.	00	0.00	•		
14	0.0	4650	0	24	49	0.0	0 0.	00	0.00)		
15	0.0	4650	0	24	49	0.0	0 0.	00	0.00	ł		
16	64.0	650	0	8	49	5.8	2 972.	40	32.09			
17	64.0	650	0	0		11.5	1 735.	67	64.83			
18	64.0	650	0	0		3.5	0 484.	92	43.75			
19	0.0	4600	0	16	37	0.0	0 161.	64	8.76			
20	8.0	4600	0	0		2.3	3 407.	78	-0.01			
21	11.0	1440	0	0		6.9	9 556.	89	32.09	i i i i i i i i i i i i i i i i i i i		
22	11.0	1000	0	0		4.6	7 425.	94	35.57	,		
23	11.0	1000	0	0		1.1	6 377.	83	40.84			
24	12.0	875	. 0	0		1.1	6 382.	10	23.33			
25	12.0	850	0	0		2.3	3 354.	58	52.49	I		
26	12.0	840	0	0		1.1	7 366.	21	40.84	1		
27	12.0	820	0	0		2.3	3 358.	84	35.00	1		
28	12.0	800	0	0		1.1	6 356.	00	32.09			
29	12.0	800	0	0		2.3	3 355.	72	37.92			
30	12.0	800	0	0		2.3	3 348.	81	37.91			
01	12.0	800	0	0		1.1	7 360.	25	32.09	i i i i i i i i i i i i i i i i i i i		
				360		49.9	 6 7005.	58	525.01			

FORI ROUT LEAS WELI	EMAN FE SE NAME L NAME	: SCHAT : LEWEI : PURE : PURE	rz, r: LLEN, GOLD GOLD	ICK RANDY "B" FE "B" FE	D #2 D #2	01000 05000		PAGE NO : 01 AS OF : 11/30/93 PROD DATE : 11/01/93
								October 97
DAY	CHK/ SPM	TUB PSI	CAS PSI	DOWN HRS RS	PROD OIL	PROD GAS	PROD WATER	
BEG	TEST				0.0	0.00	0.00)
02	12.0	850	0	0	2.3	33 357.43	59.01	_
03	12.0	850	0	0	1.1	L6 360.25	35.00)
04	12.0	830	0	0	1.1	L6 343.10	32.08	3
05	12.0	820	0	0	1.1	L7 361.75	29.17	7
06	12.0	800	0	0	1.1	L6 350.26	26.25	5
07	12.0	800	0	0	3.5	50 354.58	43.75	5
08	12.0	800	0	0	1.1	LG 354.58	37.92	2
09	12.0	800	0	0	1.1	L7 354.58	37.92	2
10	12.0	790	0	0	1.1	L6 351.71	32.08	3
11	12.0	790	0	0	0.0	0 351.71	40.83	5
12	12.0	780	0	0	4.6	56 348.81	29.17	7
13	12.0	780	0	0	1.1	L7 347.21	35.00)
14	12.0	780	0	0	0.0	347.21	32.09)
15	12.0	750	0	0	4.6	55 350.02	32.08	}
16	12.0	750	0	0	1.1	L7 338.39	32.08	3
17	12.0	750	0	0	2.3	33 347.21	26.25	5
18	12.0	750	0	0	1.3	L6 350.74	29.17	7
19	12.0	750	0	0	2.3	33 357.43	37.92	
20	12.0	750	0	0	1.1	L7 354.58	37.91	L
21	12.0	720	0	0	1.1	L6 360.25	14.59)
22	12.0	710	0	0	1.1	L7 354.58	46.67	7
23	12.0	710	0	0	1.1	L6 351.71	23.33	}
24	12.0	700	0	0	2.3	33 348.62	40.83	3
25	12.0	700	0	0	2.3	33 350.02	32.09)
26	12.0	700	0	0	0.0	360.44	29.16	
27	12.0	700	0	0	1.1	L6 356.00	29.17	7
28	12.0	900	0	0	5.8	33 358.75	20.42	2
29	12.0	700	0	0	1.1	LG 368.60	37.91	
30	12.0	3650	0	5 64	. 2.4	1 7 292.24	41.29)
31	12.0	1500	0	0	1.1	L7 412.88	17.50)
01	12.0	700	0	0	1.1	LG 336.98	29.16	5
								· .
				5	53.7	71 10932.62	1027.80	-)

FORI ROUT LEAS WELI	EMAN FE SE NAME L NAME	: SCHAT : LEWEJ : PURE : PURE	IZ, R LLEN, GOLD GOLD	ICK RANDY "B" FED "B" FED	(() #2 #2	01000 05000		PAGE NO : AS OF : PROD DATE :	01 01/18/94 01/01/94
DAY	CHK/ SPM	TUB PSI	CAS PSI	DO WN HRS RS	PROD OIL	PROD GAS	PROD WATER	December	73
BEG	TEST				0.00	0.00	0.00)	
02	64.0	630	50	0	4.66	5 1402.27	109.70)	
03	64.0	650	50	0	11.65	5 1455.20	43.75	5	
04	64.0	730	50	0	9.32	1369.93	29.17	7	
05	64.0	730	50	0	5.82	1309.29	87.50)	
06	64.0	710	50	0	4.66	5 1206.88	90.42	2	
07	64.0	670	50	0	6.99	9 1197.56	110.83	3	
08	64.0	700	50	0	4.66	5 1197.56	90.42	2	
09	64.0	720	50	0	10.54	1216.12	116.67	7	
10	64.0	720	50	0	11.71	1146.17	43.75	5	
11	64.0	700	50	0	1.58	3 1133.26	148.75	5	
12	64.0	700	50	0	7.03	3 1146.17	110.83	}	
13	64.0	750	50	0	4.66	1092.36	102.09)	
14	64.0	750	50	0	4.66	5 1092.36	107.91	<u> </u>	
15	64.0	770	50	0	4.66	5 1018.03	87.50)	
16	64.0	770	50	0	3.50) 955.00	96.25	5	
17	64.0	760	50	0	4.65	678.29	128.75	5	
18	64.0	725	50	0	4.66	5 900.97	93.34	Ł	
19	64.0	745	50	0	3.50	913.94	99.16	5	
20	64.0	720	50	0	4.66	879.26	105.00)	
21	64.0	730	50	0	3.49	885.61	79.48	}	
22	64.0	725	50	0	4.66	879.26	140.00)	
23	64.0	680	50	0	6.99	931.84	119.58	}	
24	64.0	660	50	0	2.33	826.72	75.84		
25	64.0	660	50	0	4.65	826.72	81.66		
26	64.0	680	50	0	2.33	853.39	116.67	1	
27	64.0	660	50	0	3.50) 840.16	116.66		
28	64.0	650	50	0	4.66	833.46	96.25		
29	64.0	650	50	0	2.33	833.46	84.59		
30	64.0	640	50	0	3.49	799.15	99.16		
31	64.0	640	50	0	2.33	799.15	105.01		
01	64.0	630	50	0	3.49	771.33	78.75	,	
					·				
				0	157.82	31390.87	2995.44	-	

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FORE ROUT LEAS WELI	EMAN FE SE NAME L NAME	: SCHAT : LEWEI : PURE : PURE	IZ, R LLEN, GOLD GOLD	ICK RANDY "B" FED "B" FED	0 0 #2 #2	1000 5000		PAGE NO : 01 AS OF : 01/17/94 PROD DATE : 01/16/94 Current Prod
DAY	CHK/ SPM	TUB PSI	CAS PSI	DOWN HRS RS	PROD OIL	PROD GAS	PROD WATER	12/17/93 to 12/16/941
BEG	TEST				0.00	0.00	0.00	
17	64.0	760	50	0	0.00	678.29	120.00)
18	64.0	725	50	0	4.66	900.97	93.34	
19	64.0	745	50	0	3.50	913.94	99.16	
20	64.0	720	50	0	4.66	879.26	105.00)
21	64.0	730	50	0	3.49	885.61	79.48	I
22	64.0	725	50	0	4.66	879.26	140.00	
23	64.0	680	50	0	6.99	931.84	119.58	1
24	64.0	660	50	0	2.33	826.72	75.84	
25	64.0	660	50	0	4.65	826.72	81.66	5
26	64.0	680	50	0	2.33	853.39	116.67	7
27	64.0	660	50	0	3.50	840.16	116.66	
28	64.0	650	50	0	4.66	833.46	96.25	
29	64.0	650	50	0	2.33	833.46	84.59)
30	64.0	640	50	0	3.49	799.15	99.16	
31	64.0	640	50	0	2.33	799.15	105.01	
01	64.0	630	50	0	3.49	771.33	78.75	
02	64.0	635	50	0	3.50	759.06	107.92	
03	64.0	635	50	0	4.66	819.91	119.58	5
04	64.0	630	50	0	3.49	771.33	78.75	5
05	64.0	620	50	0	2.33	721.03	81.67	7
06	64.0	610	50	0	2.33	701.13	105.00)
07	64.0	600	50	0	2.33	665.68	107.92	
08	64.0	600	50	0	1.16	665.68	102.08	3
09	64.0	600	50	0	2.33	619.02	116.67	1
10	64.0	590	50	0	1.17	595.26	40.83	l i
11	64.0	590	50	0	6.99	619.02	131.25	
12	64.0	590	50	0	2.32	565.09	93.13	1
13	64.0	590	50	0	2.33	565.09	99.17	,
14	64.0	750	50	0	-104.82	1092.36	93.33	i de la constante de
15	64.0	640	50	0	107.15	495.07	84.59	
16	64.0	770	50	0	-98.99	955.00	-2.92	2
				0	-4.65	24062.44	2970.12	

REPORT NO. 125379	0	STAR [™] [©]	Schlumberger
PAGE NO. 1	A Schlumberger Tr	ansient Analysis Report	, childrinder ger
TEST DATE 31-MAR-1993	Based on Model V Conventiona	I BHPBU Morrow "C"	
COMPANY: ENRON OIL	& GAS CO.	WELL: PURE GOLD "B" #2	
TEST IDENTIFICATION Test Type Test No Formation Test Interval Field Service Order	Conventional 1 MORROW "C" 14412 - 14448 133079	WELL LOCATION Field WILDC County EDDY State NEW M Location	AT EXICO
COMPLETION CONFIGURATI Total Depth (MD/TVD) Casing/Liner I.D. (in) Wellbore Radius (ft) Perforated Interval (ft) Shot Density (spf) Perforation Diameter (in)	ON 14525 7" Csg. 0.35417 36 12	TEST STRING CONFIGURATIONTubing Length/I.D. (ft/in) 13750Tubing Length/I.D. (ft/in)/-Packer Depth (ft) 13750Gauge Depth & Type 14430Downhole Valve N	/1.995 / #20297
Net Pay (ft) INTERPRETATION RESULTS Model of Behavior	23	TEST CONDITION Tbg/Wellhead Pressure (psig) Separator Pressure (psig)	
Fluid Type for Analysis . Reservoir Pressure (psia) Transmissibility (md-ft/c Effective Permeability (m Skin Factor DPskin (psi) DPtotal (psi) Storativity Ratio Interporosity Flow Coeff. Distance to an Anomaly (1 Radius of Investigation	Gas 5920 5920 5920 5920 1982.63 7542 29.734 	ROCK/FLUID/WELLBORE PROPERTIES 0il Density (deg API) Water Saturation (%) Gas Gravity Gas Gravity Water Saturation (%) Water Saturation (%) Water Saturation (%) Water Cut (%) Water Cut (%) Viscosity (cp) O.020 Total Compressibility (1/psi) Porosity (%) Reservoir Temp. (deg F) Form. Vol. Factor (vol/vol)	35 13 24

FINAL PRODUCTION RATE DURING TEST: 1800 MSCF/D

The results listed above were obtained from a Model Verified Log-Log analysis of the buildup data obtained on the Pure Gold "B" #2 well on 31-MAR-1993. The test consisted of a flow period of about 66 hours from the Morrow "C" sand with a final rate of 1800 mscf/d, followed by a 60 hour buildup period. The data was modeled as a homogeneous reservoir with decreasing wellbore storage and skin effects. Late-time behavior was modeled with a mixed angle boundary as shown in the schematic below. The complete affects of the boundaries are not seen during the test, therefore, the possibility of other boundary configurations are possible. Even with other outer boundary conditions, the distance should still be relatatively close to the wellbore.

A Semi-Log analysis was performed using superposition analysis techniques to account for the variable rate prior to the shutin period. This analysis produces results somewhat different to those obtained from the Model Verified analysis. This is believed due to the fact that the semi-log analysis does not account for the changing storage.

As a check of the interpretation procedure the verification plots (page 4) were generated that show how the simulated data from the model compare to the actual test data.

The gas depedent plots show a slight deviation from linear behavior of the fluid properties across the test range, therefore pseudo-pressure was used in the interpretation.

-theta,= 97 L= 50 -theta= 6

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FLOW RATE HISTORY

5379	
PAGE NO. 11	
TEST DATE 31-MAR-1993	

FLOW HISTORY

Reference Date: 31-MAR-1993 14:36:00

	Time	Elapsed	
Date	of Day	Time	Flowrate
DD-MMM-YYYY	HH:MM:SS	HR	MCF/d
28-MAR-1993	22:59:24	-63.6100	1500.9524
29-MAR-1993	08:29:24	-54.1100	1681.0667
30-MAR-1993	05:29:24	-33.1100	1711.0857
31-MAR-1993	05:29:24	-9.1100	1801.1428
31-MAR-1993	17:29:24	2.8900	0.0000

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COMPANY: Enron Oil & Gas Co. WELL: Fure Gold "B" #2

FIELD REPORT NO. 125379 INSTRUMENT NO. 20297

RECORDER CAPACITY: 10014 PSI PORT OPENING: OUTSIDE DEPTH: 14430 FT

LABEL POINT INFORMATION

	TIME	ጉልጥፑ		FLAPSED	BOT HOLE	BOT HOLE TEMP	DEPTH
#	HH:MM:SS	DD-MMM	EXPLANATION	TIME, HR	PSIA	DEG F	FT
1	15:10:00	31-MAR	GRADIENT STOP	0.567	400.09	/9.04	2000.0
2	15:24:30	31-MAR	GRADIENT STOP	0.808	465.72	80.98	2000.0
3	15:40:00	31-MAR	GRADIENT STOP	1.067	499.25	92.52	4000.0
4	15:54:00	31-MAR	GRADIENT STOP	1.300	563.99	108.76	6000.0
5	16:10:30	31-MAR	GRADIENT STOP	1.575	60 6. 92	129.57	8000.0
6	16:22:00	31-MAR	GRADIENT STOP	1.767	650.52	146.62	10000.0
7	16:41:00	31-MAR	GRADIENT STOP	2.083	695.94	178.16	12400.0
8	16:53:30	31-MAR	GRADIENT STOP	2.292	744.68	164.34	14430.0
9	17:06:00	31-MAR	START FLOW	2.500	753.40	201.67	
10	17:29:24	31-MAR	END FLOW & START SHUT-IN	2.890	742.72	211.17	
11	5:30:00	3-APR	END SHUT-IN	62.900	5777.67	212.92	
12	6:04:00	3-APR	GRADIENT STOP	63.467	5555.65	185.13	12400.0
13	6:20:00	3-APR	GRADIENT STOP	63.733	5325.95	158.65	10000.0
14	6:34:00	3-APR	GRADIENT STOP	63.967	5146.06	134.96	80 00. 0
15	6:46:00	3-APR	GRADIENT STOP	64.167	4966.89	116.48	6000.0
16	7:02:00	3-APR	GRADIENT STOP	64.433	4772.00	96.00	4000.0
17	7:16:00	3-APR	GRADIENT STOP	64.667	4574.86	84.26	2000.0
18	7:30:00	3-APR	GRADIENT STOP	64.900	4379.16	69.57	0.0

SUMMARY OF FLOW PERIODS

	START	END		START	END	INITIAL
	ELAPSED	ELAPSED	DURATION	PRESSURE	PRESSURE	PRESSURE
PERIOD	TIME, HR	TIME, HR	HR	PSIA	PSIA	PSIA
1	2.500	2.890	0.390	753.40	742.72	753.40

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME, HR	END ELAPSED TIME, HR	DURATION HR	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, HR
1	2.890	62.900	60.010	742.72	5777.67	742.72	0.390

· · · · ·		5	WF
REPORT NO. 135027	ST	AR	Coblumboor op
PAGE NO. 1	Schlumberger Transi	ent Analysis Heport	Schröniber ger
TEST DATE:	Based on Model Veri	fied Interpretation	
07-Sep-1993	L Conventional	BAP BU Atoka	
COMPANT: Enron	Oil & Gas Co.	WELL: Pure Gold "B" Fe	deral #2
TEST IDENTIFIC Test Type Test No Formation Test Interval (ft)	ATION S/L Build-up One Atoka Sand 	WELL LOCATION Field County State	Sand Dunes Eddy New Mexico
COMPLETION CONF Total Depth (MD/T) Casing/Liner I.D. Hole Size (in) Perforated Interva Shot Density (sho	IGURATION (D) (ft) (in) (in) 6.13 al (ft) (st) (in)	TEST STRING CONFIGURAT Tubing Length (ft)/I.D. (ir Tubing Length (ft)/I.D. (ir Packer Depth (ft) Gauge Depth (ft) /Type Downhole Valve (Y/N)/Type .	ION 11409 / 2.441 13200/SB-20354
Net Pay (ft)	ter (in) 10	TEST CONDITIONS Tbg/Wellhead Pressure (psi) Separator Pressure (psi)	••••
INTERPRETATION Model of Behavior Fluid Type Used for Reservoir Pressure Transmissibility Effective Permeab Skin Factor Radius of Investig	RESULTS Homogeneous or Analysis Gas e (psi) 7500 (md.ft/cp) 725.1 ility (md) 0.195 	ROCK/FLUID/WELLBORE PR Oil Density (deg. API) Basic Solids (%) Gas Gravity GLR (stb/mmsdfd) Water Cut (%) Viscosity (cp) Total Compressibility (1/ps Porosity (%) Reservoir Temperature (F) Form.Vol.Factor (mcf/mcf)	OPERTIES 60 0.604 118.18 96 0.032 si) 4.43e-5 13 143 0.00271
	LAST BATE DUBING T	EST: 550 metd + 65 build	+ 3 bood

COMMENTS:

This Model Verified(tm) test of a 115 hour build-up with downhole electronic memory gauges, indicates a formation with fair permeability to gas with some wellbore damage and good formation pressure. No reservoir anomalies are seen for the radius of investigation of this test. Pages three and four are rate predictions for this interval with the existing completion and a hydraulic fracture. Note that these predictions assume the GLR stays constant and make no prediction about the effect of the treatment on the production of water.

There is a difference between the calculated permeabilities on this test and the MWPT run just after perforating. This test indicates a much lower (factor of 10) permeability. Also there is one unexplained anomaly on the data from the MWPT test. The pressure derviative turned down. indicative of a constant pressure boundary (such as a water drive). This was ignored on the MWPT analysis because due to the type of test, the radius of investigation is small and rarely are boundary conditions seen. We now know in fact, this is water. If the water has invaded the pore space of the gas where previously it was not, then the water has reduced the effective permeability to gas of this formation and the two test results make sense. Thank you for using Schlumberger. For questions about this report call Gil Hilsman (915) 694-1986.



PAGE NO. 13

Schlumberger

FLOW HISTORY

Reference Date: 07-SEP-1993 08:20:00

	Time	Elapsed	
Date	of Day	Time	Flowrate
DD~MMM-YYYY	HH: MM: SS	HR	MCF/d
04-SEP-1993	05: 56: 00	-74.4000	610.3873
06-SEP-1993	05 : 56: 00	-26.4000	550. 3492
07-SEP-1993	12:57:45	4.6292	0.0000

****** ** WELL TEST DATA PRINTOUT ** ******

COMPANY: Enron Oil & Gas Company WELL: Pure Gold "B" Federal #2

1

FIELD REPORT NO. 135027 INSTRUMENT NO. 20354

RECORDER CAPACITY: 10014 PSI PORT OPENING: OUTSIDE DEPTH: 13200 FT

LABEL POINT INFORMATION *****

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#	TIME OF DAY HH:MM:SS	DATE DD-MMM	EXPLANATION	ELAPSED TIME, HR	BOT HOLE PRESSURE PSIA	BOT HOLE TEMP. DEG F	DEPTH FT
1	8:56:00	7-SEP	GRADIENT STOP	0,600	103.44	76.51	0.0
$\overline{2}$	9:17:30	7-SEP	GRADIENT STOP	0.958	224.00	82.94	3000.0
3	9:32:00	7-SEP	GRADIENT STOP	1.200	526.33	105.14	6000.0
4	9:52:00	7-SEP	GRADIENT STOP	1.533	1038.07	139.58	9000.0
5	10:02:00	7-SEP	GRADIENT STOP	1.700	1146.78	152.87	10000.0
6	10:10:15	7-SEP	GRADIENT STOP	1.837	1194.18	160.86	11000.0
7	10:23:15	7-SEP	GRADIENT STOP	2.054	1162.53	173.71	12000.0
8	10:32:00	7-SEP	GRADIENT STOP	2.200	1106.70	177.93	12500.0
9	10:39:45	7-SEP	GRADIENT STOP	2.329	1066.32	179.35	13000.0
10	10:50:45	7-SEP	GRADIENT STOP	2.513	980.47	177.62	13200.0
11	10:53:15	7-SEP	START FLOW	2.554	960.20	177.42	
12	12:57:45	7-SEP	END FLOW & START SHUT-IN	4.629	1152.77	174.19	
13	7:26:00	12-SEP	END SHUT-IN	119.100	7330.62	192.53	
14	7:35:00	12-SEP	GRADIENT STOP	119.250	7234.26	191.60	13000.0
15	7:46:00	12-SEP	GRADIENT STOP	119.433	7008.97	186.88	12500.0
16	7:53:00	12-SEP	GRADIENT STOP	119.550	6784.36	181.25	12000.0
17	8:02:15	12-SEP	GRADIENT STOP	119.704	6332.35	171.18	11000.0
18	8:11:30	12-SEP	GRADIENT STOP	119.858	5907.24	160.87	10000.0
19	8:20:15	12-SEP	GRADIENT STOP	120.004	5802.15	149.95	9000.0
20	8:32:00	12-SEP	GRADIENT STOP	120.200	5475.06	122.46	6000.0
21	8:44:00	12-SEP	GRADIENT STOP	120.400	5142.63	95.69	3000.0
22	8:56:00	12-SEP	GRADIENT STOP	120.600	4791.11	79.01	0.0

SUMMARY OF FLOW PERIODS *****

	START	END		START	END	INITIAL
	ELAPSED	ELAPSED	DURATION	PRESSURE	PRESSURE	PRESSURE
PERIOD	TIME, HR	TIME, HR	HR	PSIA	PSIA	PSIA
			~~~~~~			
1	2.554	4.629	2.075	960.20	1152.77	960.20

SUMMARY OF SHUTIN PERIODS ******

PERIOD	START ELAPSED TIME, HR	END ELAPSED TIME, HR	DURATION HR	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, HR
1	4.629	119.100	114.471	1152.77	7330.62	1152.77	114.20

# Laboratory Services

1331 Tasker Drive Hobbs, New Mexico 88240

Telephone: (505) 397-3713

MORROW "A"

EXHIBIT D

FOR:

**REMARKS:** 

Jarrel Services, Inc. Attention: Mr. Donnie Dickerson P. O. Box 1230 LEASE: Hobbs, New Mexico 88240

# SAMPLE COMPANY: PLANT:

IDENTIFICATION: Pure Gold "B" Federal #2 Enron Oil & Gas

SAMPLE DATA: DATE SAMPLED: 05-11-93 ANALYSIS DATE: SAMPLE TEMP. *F ATMOS. TEMP. *F

GAS (XX)
SAMPLED BY:
44147 VOID DV/

LIQUID ( ) Jarrel Services HALLA MATION

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM	
Hydrogen Sulfide	(H2S)			
Nitrogen	(N2)	0.75		
Carbon Dioxide	(CO2)	0.73		
Methane	(C1)	95.71		
Ethane	(C2)	2.01	0.535	
Propane	(C3)	0.37	0.102	
I-Butane	(IC4)	0.07	0.022	
N-Butane	(NC4)	0.07	0.021	
I-Pentane	(1C5)	0.02	0.007	·
N-Pentane	(NC5)	0.01	0.004	
Hexane	(C6)	0.26	0.112	
Heptanes Plus	(07+)	0.00	0.000	
•	•	100.00	0.803	
BTU/CU.FT.				•
AT 14.696 DR	<b>Y</b>	1030	MOLECULAR WT.	16.9749
AT 14.650 DRY		1026		
AT 14.650 WET		1005	26# GASOLINE -	0.130
AT 15.025 DRY		1053		
AT 15.025 WET		1058		• •
SPECIFIC GRAVITY	' <b>_</b>			
	)	0.586		

**#**-

Laboratory Services

1331 Tasker Drive Hobbs, New Mexico 88240

Telephone: (505) 397-3713

ATOKA

27

FOR:

Enron Oil & Gas Company Attention: Mr. Rick Schotz P. O. Box 3229 Carlsbad, New Mexico 88220 SAMPLE IDENTIFICATION: Pure Gold Fed. B #2 COMPANY: Enron Oil & Gas LEASE: PLANT:

SAMPLE DATA:	DATE SAMPLED: ANALYSIS DATE: PRESSURE - PSIG SAMPLE TEMP. °F ATMOS. TEMP. °F	11-13-93 2:00 11-15-93 680.00 74.00	PM	GAS (XX) SAMPLED BY: ANALYSIS BY:	LIQUID ( ) Ray Gallagher-Pro Well Vickie Walker
REMARKS:	Sample Taken & M	Meter Run.			

### COMPONENT ANALYSIS

COMPONENT		MOL	CPM	
COMPONENT		PERCENT	Qr M	
Hydrogen Sulfide	(H2S)		• • • • • • • • • • • • • • • • • • •	
Nitrogen	(N2)	0.73		
Carbon Dioxide	(CO2)	3.26		
Methane	(C1)	90.88		
Ethane	(C2)	3.41	0.908	
Propane	(C3)	0.78	0.214	
I-Butane	(IC4)	0.15	0.050	
N-Butane	(NC4)	0.17	0.055	
I-Pentane	(IC5)	0.11	0.038	
N-Pentane	(NC5)	0.07	0.025	
Hexane	(C6)	0.44	0.190	
Heptanes Plus	(C7+)	0.00	0.000	
		100.00	1.480	
BTU/CU.FT DRY	(	1036	MOLECULAR WT.	18.2810
AT 14.650 DRY	1 -	1033		
AT 14.650 WE	г	1015	26# GASOLINE -	0.271
AT 15.025 DRY	1	1060		
AT 15.025 WE	т	1041		
SPECIFIC GRAVIT	Y -			
CALCULATE	Ð	0.631		
MEASURE	Ð			

EXTRA PAGE 001

# EXHIBITE

Martin Water Laboratories, Inc. WATER CONSULTANTS SINCE 1953 BACTERIAL AND CHEMICAL ANALYSES

709 W. INDIANA MIDLAND, TEXAS 79701 PHONE 683-4821

P.O. BOX 1468 MONAHANS, TEXAS 79756 PH. 743-3234 or 563-1040

January 4, 1994

Mr. Hal Crabb Enron Oil & Gas Company P.O. Box 2267 Midland, TX 79702

Dear Mr. Crabb:

The objective herein is to provide an evaluation of compatibility of Atoka and Morrow waters from Pure Gold "B" Federal #2. Our Atoka record is recorded on laboratory #119388 (11-15-93), and the Morrow is recorded on laboratory #99319 (9-7-93).

In regard to the above objective, the results reveal no evidence of any incompatibility resulting from combining the Atoka and Morrow waters in this well. However, it should be clarified that both waters showed to be mildly supersaturated with barium sulfate, but mixing of the waters would not be expected to significantly alter the condition in either water. The magnitude of the supersaturation in the individual waters is insufficient to be completely confident that barium sulfate deposits can be expected from producing of each of these waters individually or a combination of the waters. However, it does have sufficient potential to maintain close observation over this possibility.

Yours very tru

Waylan C. Martin

WCM/mo

### EXHIBIT F

## PURE GOLD "B" FEDERAL NO. 2 COMPARATIVE ECONOMICS - DUAL vs. SINGLE COMPLETION

## DUAL

## Intangible:

Well Service Unit-14 days @ \$1,350/day	\$18,900
Supervision-14 days @ \$500/day	. 7,000
Coiled tubing unit	.30,000
Rentals-BOP, frac tanks, etc	.10,000
Transportation	.10,000
Completion fluids	.12,000
Hydrotesting	9,000
Other expense	.10,000
SUBTOTAL	106,900

## Tangible:

11,500' 2-3/8" 4.7 lb/ft P-110 tubing	32,000
Stinger redress for Otis packer	.1,000
Dual flow assembly, HLT packer, etc	35,000
Dual wellhead	.5,000
Gas Production Unit	10,000**
Tank	.6,000**
Flow line & misc	.2,000**
Construction cost	.6,000**
Miscellaneous	.4,000
SUBTOTAL	77,000
<b>TOTAL</b>	83,900

### COMMINGLE

TOTAL						•			•		•						•			•					•		1	8,	50	00
Jet cut Supervi	sion.	•••	•••	•••	•••	•	••	•	• •	•	•••	•	•••	••	•	•	•••	•	•	•••	•	•	•••	•	•	•••	, .	2, 1,	5( 0(	00 00
Coiled	tubing	g	• •	••	•••	•		•	•	•	•••	•	• •	•	•	•	•••	•	•	•••	•	•		•	•	• •	. 1	5,	00	00

Hal Crabb, III m:\wpdocs\letters\exhibitj 01/18/94

### EXHIBIT G

#### PROCEDURE TO DUALLY COMPLETE ATOKA AND MORROW

1) Kill Atoka w/10# brine w/additives.

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- 2) MIRU Well Service Unit. Install BPV if necessary. ND tree, NU 10,000 psig BOP w/2-7/8", 2-3/8", blind rams, accumulator.
- 3) Pick up on tubing and unseat Lindsay seal assembly from PBR @ 11,532'. Circulate hole w/10# brine to ensure well is dead. POH w/2-7/8" and 2-3/8" tubing. LD seal assembly, stand back tubing.
- RIH w/liner top dressing mill on 2-7/8" tubing. Dress off tieback sleeve @ 11,532'. POH.
- 5) RIH w/notched collar, 2-7/8" x 2-3/8" tapered tubing string. Wash out sand, Temblock over packer @ 13,700'. Circulate hole clean and POH.
- 6) PU HLT packer, setting tool, and RIH w/same on 2-7/8" tubing. RIH very slowly due to close tolerances. Set packer in tieback sleeve and POH w/setting tool and tubing.
- 7) RIH w/long string as follows, hydrotesting in hole: seal assembly to sting into Otis packer Blast joint across Atoka 2,200' 2-3/8" tubing Lindsay dual flow assembly 11,530' 2-7/8" tubing
- 8) Space out, circulate hole w/10 lb./gal. packer fluid, and sting into lower packer and HLT packer.
- Rig up Cudd coiled tubing unit. Jet long string dry w/nitrogen.
- 10) Rig up Jarrel Service's electric line, lubricator. Jet cut tailpipe in packer @ 13,700' immediately above CIBP.
- 11) Open Morrow to sales and flow test. Ensure long string is performing properly. SI and proceed to next step.
- 12) RIH w/short string as follows, hydrotesting in hole: seal assembly for dual flow assembly 11,532' 2-3/8", 4.7# P-105 tubing.
- 13) Space out and sting into dual flow assembly.
- 14) Set Atoka gas production unit, tank, meter run, surface piping and valves.

- 15) Rig up Cudd coiled tubing unit. Jet short string fluid level down w/nitrogen.
- 16) Open Atoka to sales and flow test. Ensure short string is performing properly.

Hal Crabb, III m:\wpdocs\wo\exhibitl 01/18/94







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# EXHIBIT " I " Pure Gold "B" Federal No. 2 Offset Lease Ownership

Santa Fe Energy Operating Partners, L.P. 550 W. Texas, Suite 1330 Midland, Texas 79701 Attn: Gary Green

Pogo Producing Company P. O. Box 10340 Midland, Texas 79702-7340 Attn: R. Scott McDaniel

Kaiser-Francis Oil Company 6733 South Yale Ave. (74136) P. O. Box 35528 Tulsa, Oklahoma 74135 Attn: Jim Wakefield

Perry R. Bass, Inc. Lee M. Bass, Inc. Thru Line, Inc. Sid R. Bass, Inc. Keystone, Inc. %Bass Enterprises Production Co. 201 Main Street Fort Worth, Texas 76102-3105 Attn: Jens Hansen

Perry R. Bass, Inc. Lee M. Bass, Inc. Thru Line, Inc. Sid R. Bass, Inc. Keystone, Inc. %Bass Enterprises Production Co. P. O. Box 2760 Midland, Texas 79702 Attn: John Smitherman

Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Attn: Mr. Randy G. Patterson

Shell Western E&P Inc. P. O. Box 576 Houston, Texas 77001 Attn: Prod. Dept. Comanche Oil & Gas Co. 1031 Andrews Highway, Suite 101 Midland, Texas 79701

Phillips Petroleum Company 4001 Penbrook Odessa, Texas 79762 Attn: James S. Welin

Meridian Oil Prod. Inc. 21 Desta Dr. (79701) P. O. Box 51810 Midland, Texas 79710

### Royalty Ownership:

Bureau of Land management Roswell District Office 1717 West Second Street Roswell, N.M. 88201-2019

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P. O. Box 2267 Midland, Texas 79702 (915) 686-3600

January 28, 1994

CERTIFIED MAIL - RETURN RECEIPT

SEE ATTACHED ADDRESSEE LIST

RE: Application For Downhole Commingling Pure Gold "B" Federal No. 2 660' FNL, 1980' FEL Section 20-T23S-R31E Eddy County, New Mexico

Gentlemen:

Enclosed please find Enron Oil & Gas Company's application to the New Mexico Oil Conservation Division for Administrative approval for downhole commingling of production from the Morrow and Atoka formations in its Pure Gold "B" Federal No. 2 well.

It is requested that your company waive objection to this application by executing and returning the enclosed waiver letters to the undersigned and to the Division. Any objections to this application should be filed with the Division within twenty (20) days of the filing of this application. Failure to object will preclude you from challenging this application at a later date.

Enron has also filed an application for hearing on this matter in the event administrative approval is not granted. This hearing date has been requested for February 17, 1994. A separate notice concerning this hearing has already been sent to your company. In the event this matter is approved administratively, the hearing will be dismissed.

Your timely response is most appreciated.

Sincerely,

ENRON OIL & GAS COMPANY

Crub 11101

Patrick J. Tower Project Landman

PJT/ms enclosures

cc: William Carr Campbell, Carr, Berge & Sheridan P. O. Box 2208 Santa Fe, New Mexico 87504-2208 Addressee List Letter dated January 28, 1994 Page 2

Santa Fe Energy Operating Partners, L.P. 550 W. Texas, Suite 1330 Midland, Texas 79701 Attention: Gary Green

Pogo Producing Company P. O. Box 10340 Midland, Texas 79702-7340 Attention: R. Scott McDaniel

Kaiser-Francis Oil Company 6733 South Yale Avenue P. O. Box 35528 Tulsa, Oklahoma 74135 Attention: Jim Wakefield

Perry R. Bass, Inc. Lee M. Bass, Inc. Thru Line, Inc. Sid R. Bass, Inc. Keystone, Inc. % Bass Enterprises Production Co. 201 Main Street Fort Worth, Texas 76102-3105 Attention: Jens Hansen

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Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Attention: Randy G. Patterson

Shell Western E&P Inc. P. O. Box 576 Houston, Texas 77001 Attention: Production Dept. Comanche Oil & Gas Co. 1031 Andrews Highway, Suite 101 Midland, Texas 79701

Phillips Petroleum Company 4001 Penbrook Odessa, Texas 79762 Attention: James S. Welin

Meridian Oil Prod. Inc. 21 Desta Drive P. O. Box 51810 Midland, Texas 79710

State of New Mexico Energy & Mineral Management Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

Royalty Ownership: Bureau of Land Management Roswell District Office 1717 West Second Street Roswell, New Mexico 88201-2019 January 28, 1994

Mr. William J. LeMay New Mexico Oil Conservation Division 310 Old Santa Fe Trail, Room 206 Santa Fe, New Mexico 87503

> RE: Enron Oil & Gas Company's Application for Downhole Commingling of Production from the Morrow and Atoka formations in the wellbore of its Pure Gold "B" Federal No. 2 Well located 660' FNL and 1980' FEL of Section 20, T-23-S, R-31-E, Eddy County, N. M., Morrow formation, West Sand Dunes-Morrow Gas Pool and Atoka formation, West Sand Dunes-Atoka Gas Pool

Gentlemen:

Please be advised that ______ does not object to the Downhole Commingling application referenced above.

Very truly yours,

By:_____

CC: ENRON OIL & GAS COMPANY P.O. BOX 2267 MIDLAND, TX 79702 ATTN: PATRICK J. TOWER



DHE QQ2

OIL CONSERVE ON DIVISION RECEIVED

January 28, 1994

Mr. William J. LeMay New Mexico Oil Conservation Division 310 Old Santa Fe Trail, Room 206 Santa Fe, New Mexico 87503

> RE: Enron Oil & Gas Company's Application for Downhole Commingling of Production from the Morrow and Atoka formations in the wellbore of its Pure Gold "B" Federal No. 2 Well located 660' FNL and 1980' FEL of Section 20, T-23-S, R-31-E, Eddy County, N.M., Morrow formation, West Sand Dunes-Morrow Gas Pool and Atoka formation, West Sand Dunes-Atoka Gas Pool

Gentlemen:

Please be advised that Pogo Producing Company does not object to the Downhole Commingling application referenced above.

Very truly yours,

POGO PRODUCING COMPANY

erry A. Cooper

Vice President

cc: Enron Oil & Gas Company P. O. Box 2267 Midland, Texas 79702 Attention: Patrick J. Tower

### RECEIVED

JAN 31 1994

PROD. SERV.

January 28, 1994

Mr. William J. LeMay New Mexico Oil Conservation Division 310 Old Santa Fe Trail, Room 206 Santa Fe, New Mexico 87503

> RE: Enron Oil & Gas Company's Application for Downhole Commingling of Production from the Morrow and Atoka formations in the wellbore of its Pure Gold "B" Federal No. 2 Well located 660' FNL and 1980' FEL of Section 20, T-23-S, R-31-E, Eddy County, N. M., Morrow formation, West Sand Dunes-Morrow Gas Pool and Atoka formation, West Sand Dunes-Atoka Gas Pool

Gentlemen:

PERIPIAN C. Please be advised that

does not object to the Downhole Commingling application referenced above.

Very truly yours,

L. Malik Connie. By: Regulatory ompliance Reis

CC: ENRON OIL & GAS COMPANY P.O. BOX 2267 MIDLAND, TX 79702 ATTN: PATRICK J. TOWER

SAL CONSERVE ON DIVISION RECEIVED 194 FER TH AM 8 35

January 28, 1994

Mr. William J. LeMay New Mexico Oil Conservation Division 310 Old Santa Fe Trail, Room 206 Santa Fe, New Mexico 87503

> RE: Enron Oil & Gas Company's Application for Downhole Commingling of Production from the Morrow and Atoka formations in the wellbore of its Pure Gold "B" Federal No. 2 Well located 660' FNL and 1980' FEL of Section 20, T-23-S, R-31-E, Eddy County, N. M., Morrow formation, West Sand Dunes-Morrow Gas Pool and Atoka formation, West Sand Dunes-Atoka Gas Pool

Gentlemen:

Please be advised that  $\underline{Comanch} = O_1 \overline{\ell} \in \underline{Cas} \quad \underline{Company}$  does not object to the Downhole Commingling application referenced above.

Very truly yours,

Comanche Dil & Gas Company By: art 2

CC: ENRON OIL & GAS COMPANY P.O. BOX 2267 MIDLAND, TX 79702 ATTN: PATRICK J. TOWER