

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

TELEPHONE (505) 982-4285

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JASON KELLAHIN (RETIRED 1991)

December 11, 1992

Mr. William J. LeMay
Oil Conservation Division
310 Old Santa Fe Trail, Room 219
Santa Fe, New Mexico 87504

HAND DELIVERED

Re: Application of Warrior, Inc.
for an Unorthodox Oil
Well Location, Eumont Oil Pool,
Lea County, New Mexico
Federal "D" Well No. 13

10684

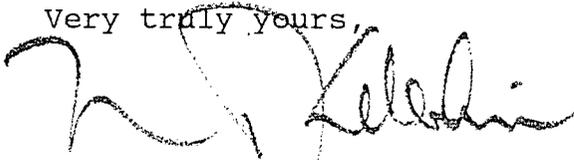
Dear Mr. LeMay:

On behalf of Warrior, Inc., please find enclosed our Application for An Unorthodox Oil Well Location for the Federal "D" Well No. 13 which we request be set for hearing on the next available Examiner's docket now scheduled for January 7, 1993.

Also enclosed is our proposed notification for this case.

By copy of this letter, including the Application to all parties, we are notifying them by certified mail return-receipt requested, that they have the right to appear at the hearing, to make a statement to the Division, to present evidence and cross-examiner witnesses either in support of or in opposition to the Application.

Very truly yours,



W. Thomas Kellahin

WTK/jcl

cc: Warrior, Inc. (Hobbs)

CERTIFIED MAIL-RETURN RECEIPT REQUESTED:

All parties shown Paragraph 12 of the Application

10654

PROPOSED NOTIFICATION

CASE _____: Application of Warrior, Inc. for an unorthodox oil well location, Eumont Oil Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order approving the drilling of its Federal "D" Well No. 13 in the Eumont Oil Pool at an unorthodox oil well location 1300 feet from West and South lines (Unit M) Section 26, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico. Said well is to be dedicated to a standard 40-acre oil proration and spacing unit consisting of the SW/4SW/4 of said Section 26. Said unit is located approximately 7 miles southwest from Monument, New Mexico.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION
OF WARRIOR, INC. FOR APPROVAL OF
AN UNORTHODOX OIL WELL LOCATION,
EUMONT OIL POOL,
LEA COUNTY, NEW MEXICO

RECEIVED
DEC 11 1992
OIL CONSERVATION DIVISION

CASE: 10654

A P P L I C A T I O N

Comes now WARRIOR INC., by and through its attorneys, KELLAHIN and KELLAHIN, and applies to the New Mexico Oil Conservation Division for approval of an unorthodox oil well location for its Federal "D" Well No. 13 in the Eumont Oil Pool, Lea County, New Mexico to be drilled at an unorthodox location 1300 feet FWL and 1300 feet FSL (Unit M) Section 26, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico and to be dedicated to a standard 40-acre oil proration and spacing unit consisting of the SW/4SW/4 of said Section 26.

In support thereof, Applicant states:

1. Applicant, Warrior, Inc., is the operator of a waterflood pilot project approved by Division Order R-9556 and has the right to drill and test for Eumont oil

Application of Warrior, Inc.

Page 2

production in the W/2 of Section 26, T20S, R36E, NMPM, Lea County, New Mexico. (Order R-9556 is attached as Exhibit A).

2. Applicant proposes to test for additional oil production by locating a well in the approximate center of the SW/4 of said Section 26 in the middle of four existing Eumont oil producing wells. See Exhibit B, attached hereto.

3. While the proposed well will be located within the current boundaries of approved pilot waterflood project, the subject well location is not eligible for administrative approval under Division Rule 104-F (I) because it does not complete a production and injection pattern within the project.

4. The ownership of the SW/4 of said Section 26 is common and no interest owner within that are is adversely affected by this application.

5. The proposed location encroaches only towards acreage which has common ownership to the 40-acre spacing unit on which the well is located.

6. The location of the subject well is governed by General Rule 104(C) which requires standard well

locations to be not closer than 330 feet to any outer boundary of its governmental quarter-quarter section line nor closer than 330 feet to the nearest well in the same pool.

7. The proposed well would be at an unorthodox location because it is 20 feet from the east and north side of SW/4SW/4 rather than the required 330 feet and requires an exception after notice and hearing.

8. A well at the proposed unorthodox location should penetrate the productive interval of the Eumont Oil Pool at the most favorable point in the reservoir in order to recover any oil not recoverable by the existing wells in the SW/4 of said Section 26.

9. A well drilled at the closest standard location would not have the potential to increase oil recovery to the degree expected from the proposed unorthodox well location.

10. Should the subject well be uneconomic upon completion or when depleted, then said well will be located at the optimum location for use as an injection well.

11. Approval of the application will afford the applicant the opportunity to produce its just and equitable share of the oil in the Eumont Oil Pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells and will otherwise prevent waste and protect correlative rights.

12. Applicant has notified those offsetting operators adjacent to the SW/4 of said Section 26, with the names and addresses of those parties set forth as

follows: Yarbrough Oil
P. O. Box 1001
Eunice, New Mexico 88231

Zia Energy, Inc
Box 2219
Hobbs, New Mexico 88240

E. L. Hegwer
Box 1637
Hobbs, New Mexico 88240

Exxon USA
Box 1600
Midland, Texas 79702
Attn: Mr. William C. Duncan

Chevron USA
Box 1150
Midland, Texas 79705
Attn: Mr. Al Bohling

Application of Warrior, Inc.
Page 5

WHEREFORE, Applicant requests that, after notice and hearing, this Application be approved as requested.

Respectfully submitted:

KELLAHIN and KELLAHIN,

BY:



W. Thomas Kellahin
P. O. Box 2265
Santa Fe, New Mexico 87504
(505) 982-4285
ATTORNEY FOR APPLICANT

EXHIBIT "A"
FOUR PAGES

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 10347
ORDER NO. R-9556

**APPLICATION OF WARRIOR, INC. FOR A
WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on July 25, 1991 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 7th day of August, 1991 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Warrior, Inc., seeks authority to institute a one well waterflood pilot project on a portion of its Federal "D" Lease underlying the W/2 of Section 26 and the NE/4 of Section 27, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico, by the injection of produced water into the Upper Queen interval of the Eumont Oil Pool through the perforated interval from approximately 3804 feet to 3964 feet in its Federal "D" Well No. 2 located 1980 feet from the North line and 660 feet from the West line (Unit E) of said Section 26.
- (3) The wells in the proposed project area are in an advanced state of depletion and should therefore be properly classified as "stripper wells."

EXHIBIT "A"
FOUR PAGES

(4) At the hearing, the applicant demonstrated that an incremental secondary recovery of oil of 418 MSTBU could be obtained by institution of the proposed pilot waterflood project, resulting in the recovery of additional oil which would not otherwise be recovered, and the waste of oil would thereby be prevented.

(5) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape into other formations or onto the surface from injection, production or plugged and abandoned wells.

(6) Injection should be accomplished through 2 7/8-inch internally cement-lined tubing installed in a packer set at approximately 100 feet above the uppermost perforated interval; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.

(7) Prior to commencing injection operations, the casing of the subject well should be pressure-tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.

(8) The injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 750 psi.

(9) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the Queen formation.

(10) The operator should give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(11) The subject application should be approved and the project should be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Warrior, Inc., is hereby authorized to institute a one well waterflood pilot project on a portion of its Federal "D" Lease, underlying the following described lands, by the injection of produced water into the Upper Queen interval of the Eumont Oil Pool through its existing Federal "D" Well No. 2 located 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 26, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico:

FEDERAL "D" LEASE PILOT WATERFLOOD PROJECT AREA
LEA COUNTY, NEW MEXICO

TOWNSHIP 20 SOUTH, RANGE 36 EAST, NMPM,

Section 26: W/2

Section 27: NE/4

(2) Injection into said well shall be accomplished through 2 7/8-inch internally cement-lined tubing installed in a packer set at approximately 100 feet above the uppermost perforated interval, with injection into the perforated interval from approximately 3804 feet to 3964 feet;

PROVIDED HOWEVER THAT, the casing-tubing annulus shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak-detection device in order to determine leakage in the casing, tubing or packer.

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's Hobbs District Office.

(3) The injection well or system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 750 psi.

(4) The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Queen formation.

(5) The operator shall notify the supervisor of the Hobbs District Office of the Division in advance of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

Case No. 10347
Order No. R-9556
Page No. 4

(6) The operator shall immediately notify the supervisor of the Division's Hobbs District Office of the failure of the tubing, casing or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

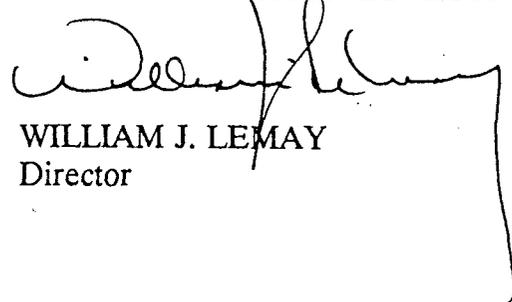
(7) The subject waterflood project is hereby designated the Eumont Federal "D" Lease Pilot Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(8) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

(9) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

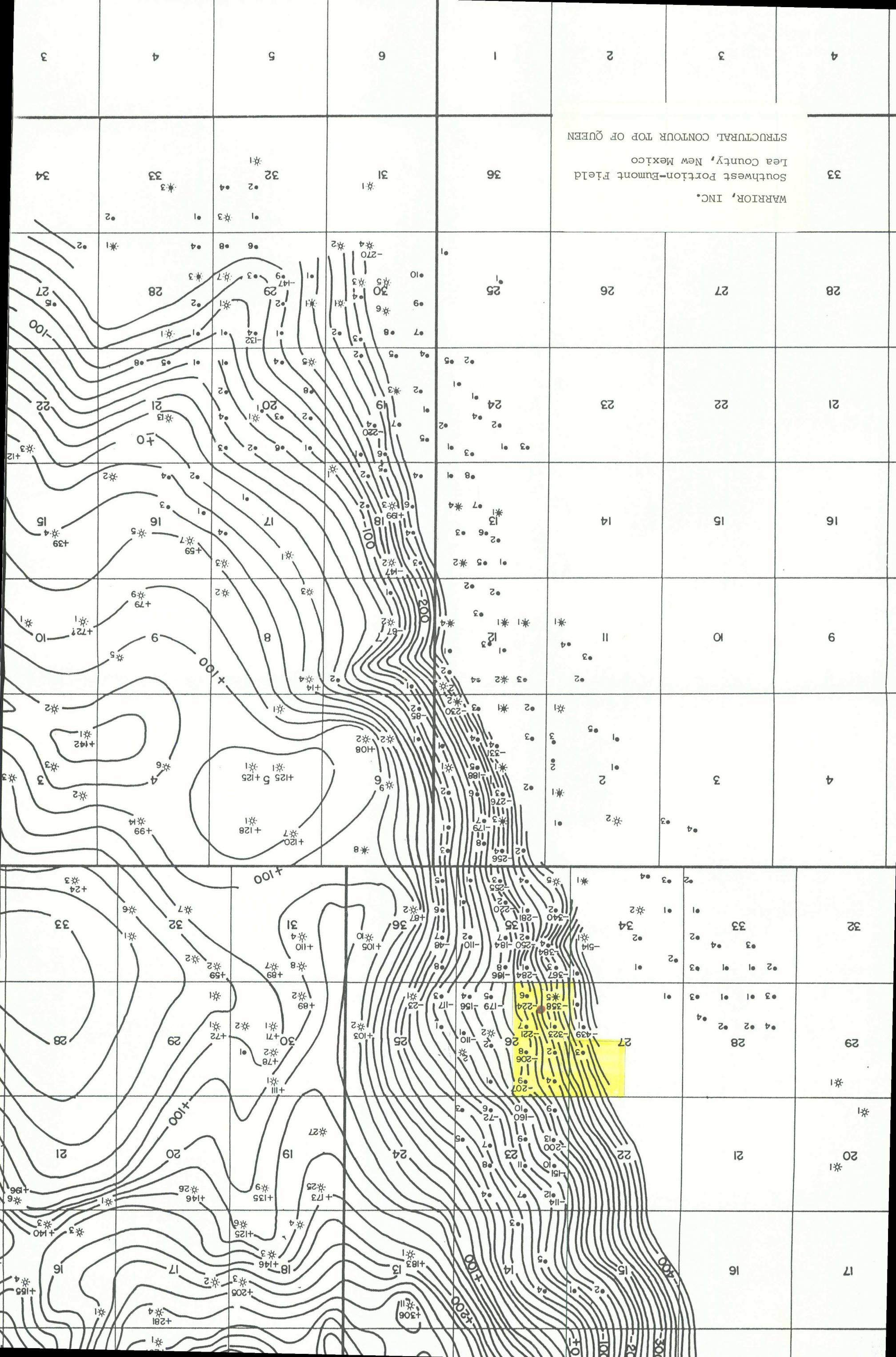
STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



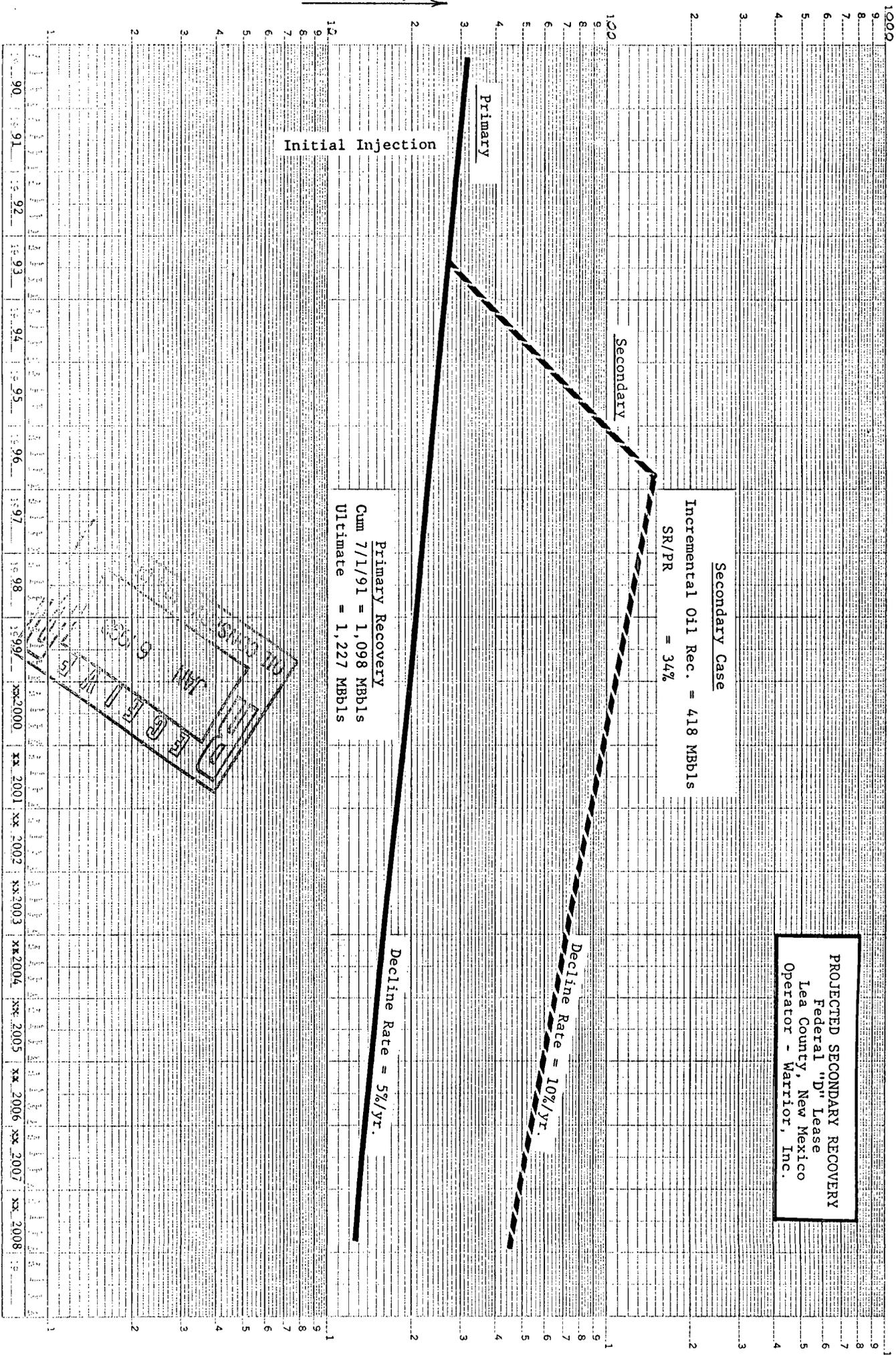
WILLIAM J. LEMAY
Director

SEAL

WARRIOR, INC.
Southwest Portion-Eumont Field
Lea County, New Mexico
STRUCTURAL CONTOUR TOP OF QUEEN



Bbls. Oil/Day



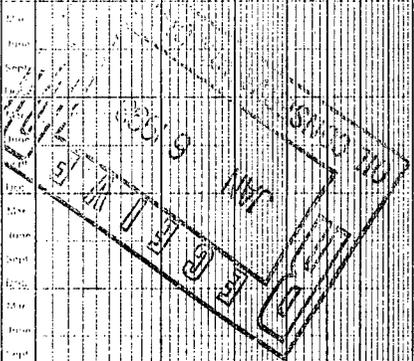
PROJECTED SECONDARY RECOVERY
 Federal "D" Lease
 Lea County, New Mexico
 Operator - Warrior, Inc.

Secondary Case
 Incremental Oil Rec. = 418 MBbls
 SR/PR = 34%

Primary Recovery
 Cum 7/1/91 = 1,098 MBbls
 Ultimate = 1,227 MBbls

Decline Rate = 10%/yr.

Decline Rate = 5%/yr.



1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

AS OF DATE: JUL91

NAME: FEDERAL D LEASE
 FIELD: EUMONT
 LOCATION: LEA COUNTY, NEW MEXICO
 FORMATION:
 OPERATOR: WARRIOR

PRIMARY RECOVERY CASE
 \$20.00 OIL
 \$1.30 GAS

NPV 5.0% 860.706 BFIT
 NPV 10.0% 692.829 BFIT
 NPV 15.0% 578.503 BFIT
 NPV 20.0% 496.860 BFIT
 NPV 25.0% 436.201 BFIT
 IRR >100% BFIT

==INTERESTS AND EFFECTIVE DATE==

===== PRICES =====

===== GROSS RESERVES =====

COST	REVENUE	DATE	BEGINNING	ENDING	AVERAGE	CUMULATIVE	REMAINING	ULTIMATE	%REMAINING	
1.000000	0.875000	JAN91	OIL 20.00	20.00	20.00	0.000	131.440	131.440	100.00	OIL
			GAS 1.30	1.30	1.30	0.000	584.176	584.176	100.00	GAS
			COND 0.00	0.00	0.00	0.000	0.000	0.000	0.00	COND

YEAR	GROSS WELLCOUNT	AVERAGE OIL PRICE	GROSS OIL PRODUCTION	NET OIL PRODUCTION	NET OIL SALES	AVERAGE GOR	AVERAGE GAS PRICE	NET GAS PRODUCTION	NET GAS SALES	NET TOTAL REVENUE
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1991(6 Mo)	11.000	20.000	5.331	4.665	93.298	4444.455	1.300	20.733	26.953	120.251
1992	11.000	20.000	10.261	8.978	179.570	4444.441	1.300	39.904	51.876	231.445
1993	11.000	20.000	9.748	8.530	170.591	4444.442	1.300	37.909	49.282	219.873
1994	11.000	20.000	9.261	8.103	162.062	4444.440	1.300	36.014	46.818	208.880
1995	11.000	20.000	8.798	7.698	153.958	4444.448	1.300	34.213	44.477	198.435
1996	11.000	20.000	8.358	7.313	146.261	4444.446	1.300	32.502	42.253	188.514
1997	11.000	20.000	7.940	6.947	138.948	4444.444	1.300	30.877	40.140	179.088
1998	11.000	20.000	7.543	6.600	132.001	4444.444	1.300	29.333	38.134	170.134
1999	11.000	20.000	7.166	6.270	125.400	4444.444	1.300	27.867	36.227	161.627
2000	11.000	20.000	6.807	5.957	119.130	4444.442	1.300	26.473	34.415	153.546
2001	11.000	20.000	6.467	5.659	113.174	4444.448	1.300	25.150	32.695	145.868
2002	11.000	20.000	6.144	5.376	107.515	4444.439	1.300	23.892	31.060	138.575
2003	11.000	20.000	5.837	5.107	102.139	4444.442	1.300	22.698	29.507	131.646
2004	11.000	20.000	5.545	4.852	97.032	4444.451	1.300	21.563	28.032	125.064
2005	11.000	20.000	5.267	4.609	92.181	4444.449	1.300	20.485	26.630	118.811
SUBTOTAL	11.000	20.000	110.472	96.663	1933.261	4444.445	1.300	429.613	558.498	2491.758
REMAINING	11.000	20.000	20.968	18.347	366.932	4444.443	1.300	81.541	106.003	472.935
TOT 19.1Yr	11.000	20.000	131.440	115.010	2300.193	4444.445	1.300	511.154	664.500	2964.693

YEAR	AVG LOE --WELL--	NET TOTAL LOE	NET TOTAL PROD TAX	NET TOTAL OPER EXP	NET OPER REVENUE	NET TOTAL INVESTMENTS	NET BFIT CASHFLOW	CUM BFIT CASHFLOW	BFIT CF DISC @ 10%	CUM BFIT CF DISC @ 10%
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1991(6 Mo)	0.000	42.000	9.740	51.740	68.511	0.000	68.511	68.511	66.650	66.650
1992	0.000	84.000	18.747	102.747	128.698	0.000	128.698	197.209	116.656	183.306
1993	0.000	84.000	17.810	101.810	118.064	0.000	118.064	315.273	97.290	280.596
1994	0.000	84.000	16.919	100.919	107.960	0.000	107.960	423.233	80.879	361.476
1995	0.000	84.000	16.073	100.073	98.362	0.000	98.362	521.595	66.992	428.467
1996	0.000	84.000	15.270	99.270	89.244	0.000	89.244	610.839	55.258	483.725
1997	0.000	84.000	14.506	98.506	80.582	0.000	80.582	691.421	45.361	529.086
1998	0.000	84.000	13.781	97.781	72.353	0.000	72.353	763.775	37.028	566.114
1999	0.000	84.000	13.092	97.092	64.535	0.000	64.535	828.310	30.026	596.140
2000	0.000	84.000	12.437	96.437	57.109	0.000	57.109	885.418	24.157	620.297
2001	0.000	84.000	11.815	95.815	50.053	0.000	50.053	935.471	19.249	639.546
2002	0.000	84.000	11.225	95.225	43.351	0.000	43.351	978.822	15.158	654.703
2003	0.000	84.000	10.663	94.663	36.983	0.000	36.983	1015.805	11.757	666.460
2004	0.000	84.000	10.130	94.130	30.934	0.000	30.934	1046.739	8.942	675.402
2005	0.000	84.000	9.624	93.624	25.187	0.000	25.187	1071.926	6.620	682.022
SUBTOTAL	0.000	1218.000	201.832	1419.832	1071.926	0.000	1071.926	1071.926	682.022	682.022
REMAINING	0.000	385.000	38.308	423.308	49.627	0.000	49.627	1121.553	10.807	692.829
TOT 19.1Yr	0.000	1603.000	240.140	1843.140	1121.553	0.000	1121.553	1121.553	692.829	692.829

HARCOR ENERGY INC
 FEDERAL D LEASE-SEC REC EVALU.
 LEA COUNTY, NEW MEXICO

AS OF DATE: JUL91

NAME: FEDERAL D LEASE
 FIELD: BUMONT
 LOCATION: LEA COUNTY, NEW MEXICO
 FORMATION:
 OPERATOR: WARRIOR

SECONDARY RECOVERY CASE
 \$20.00 OIL
 \$1.30 GAS

NPV 5.0% 3532.809 BFIT
 NPV 10.0% 2342.930 BFIT
 NPV 15.0% 1601.093 BFIT
 NPV 20.0% 1115.036 BFIT
 NPV 25.0% 783.276 BFIT
 IRR 57% BFIT

==INTERESTS AND EFFECTIVE DATE==

COST REVENUE DATE
 1.000000 0.875000 JAN91

===== PRICES =====

	BEGINNING	ENDING	AVERAGE
OIL	20.00	20.00	20.00
GAS	1.30	1.30	1.30
COND	0.00	0.00	0.00

===== GROSS RESERVES =====

	CUMULATIVE	REMAINING	ULTIMATE	%REMAINING	
OIL	0.000	548.844	548.844	100.00	OIL
GAS	0.000	355.502	355.502	100.00	GAS
COND	0.000	0.000	0.000	0.00	COND

YEAR	GROSS WELLCOUNT	AVERAGE OIL PRICE	GROSS OIL PRODUCTION	NET OIL PRODUCTION	NET OIL SALES	AVERAGE GOR	AVERAGE GAS PRICE	NET GAS PRODUCTION	NET GAS SALES	NET TOTAL REVENUE
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1991(6 Mo)	12.000	20.000	5.118	4.478	89.565	4005.862	1.300	17.939	23.321	112.886
1992	12.000	20.000	9.730	8.514	170.275	2980.473	1.300	25.375	32.987	203.262
1993	12.000	20.000	10.095	8.833	176.663	1981.179	1.300	17.500	22.750	199.412
1994	12.000	20.000	17.250	15.094	301.875	1043.478	1.300	15.750	20.475	322.350
1995	12.000	20.000	29.200	25.550	511.000	993.151	1.300	25.375	32.987	543.987
1996	12.000	20.000	47.450	41.519	830.375	505.796	1.300	21.000	27.300	857.675
1997	12.000	20.000	51.253	44.846	896.921	500.000	1.300	22.423	29.150	926.071
1998	12.000	20.000	46.127	40.361	807.228	500.000	1.300	20.181	26.235	833.463
1999	12.000	20.000	41.515	36.325	726.506	500.000	1.300	18.163	23.611	750.117
2000	12.000	20.000	37.363	32.693	653.855	500.000	1.300	16.346	21.250	675.105
2001	12.000	20.000	33.627	29.423	588.469	500.000	1.300	14.712	19.125	607.594
2002	12.000	20.000	30.264	26.481	529.623	500.000	1.300	13.241	17.213	546.835
2003	12.000	20.000	27.238	23.833	476.660	500.000	1.300	11.916	15.491	492.151
2004	12.000	20.000	24.514	21.450	428.994	500.000	1.300	10.725	13.942	442.936
2005	12.000	20.000	22.063	19.305	386.095	500.000	1.300	9.652	12.548	398.643
SUBTOTAL	12.000	20.000	432.806	378.705	7574.102	687.337	1.300	260.298	338.387	7912.429
REMAINING	12.000	20.000	116.038	101.533	2030.663	500.000	1.300	50.767	65.997	2096.660
TOT 22.8Yr	12.000	20.000	548.844	480.238	9604.765	647.730	1.300	311.065	404.384	10009.148

YEAR	AVG LOE	NET TOTAL LOE	NET TOTAL PROD TAX	NET TOTAL OPER EXP	NET OPER REVENUE	NET TOTAL INVESTMENTS	NET BFIT CASHFLOW	CUM BFIT CASHFLOW	BFIT CF DISC @ 10%	CUM BFIT CF DISC @ 10%
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1991(6 Mo)	0.000	72.000	9.144	81.144	31.742	350.000	-318.258	-318.258	-316.356	-316.356
1992	0.000	144.000	16.464	160.464	42.798	0.000	42.798	-275.460	38.768	-277.588
1993	0.000	144.000	16.152	160.152	39.260	0.000	39.260	-236.199	32.330	-245.258
1994	0.000	144.000	26.110	170.110	152.240	0.000	152.240	-83.960	113.969	-131.289
1995	0.000	144.000	44.063	188.063	355.924	0.000	355.924	271.965	242.229	110.940
1996	0.000	144.000	69.472	213.472	644.203	0.000	644.203	916.168	398.564	509.504
1997	0.000	144.000	75.012	219.012	707.059	0.000	707.059	1623.227	398.082	907.585
1998	0.000	144.000	67.510	211.510	621.952	0.000	621.952	2245.179	318.340	1225.925
1999	0.000	144.000	60.759	204.759	545.357	0.000	545.357	2790.536	253.766	1479.691
2000	0.000	144.000	54.684	198.684	476.422	0.000	476.422	3266.958	201.542	1681.233
2001	0.000	144.000	49.215	193.215	414.379	0.000	414.379	3681.337	159.366	1840.599
2002	0.000	144.000	44.294	188.294	358.542	0.000	358.542	4039.878	125.361	1965.960
2003	0.000	144.000	39.864	183.864	308.287	0.000	308.287	4348.166	97.997	2063.957
2004	0.000	144.000	35.878	179.878	263.059	0.000	263.059	4611.224	76.023	2139.980
2005	0.000	144.000	32.290	176.290	222.353	0.000	222.353	4833.577	58.422	2198.402
SUBTOTAL	0.000	2088.000	640.912	2728.912	5183.577	350.000	4833.577	4833.577	2198.402	2198.402
REMAINING	0.000	1200.000	169.829	1369.829	726.830	0.000	726.830	5560.407	144.528	2342.929
TOT 22.8Yr	0.000	3288.000	810.741	4098.741	5910.407	350.000	5560.407	5560.407	2342.929	2342.929

AS OF DATE: JUL91

INCREMENTAL SECONDARY RECOVERY
ECONOMICS

NPV 5.0% 2672.103 BFIT
NPV 10.0% 1650.100 BFIT
NPV 15.0% 1022.590 BFIT
NPV 20.0% 618.176 BFIT
NPV 25.0% 347.075 BFIT
IRR 36% BFIT

===== PRICES =====				===== GROSS RESERVES =====			
	BEGINING	ENDING	AVERAGE	CUMULATIVE	REMAINING	ULTIMATE	%REMAINING
OIL	20.00	20.00	20.00	0.000	417.404	417.404	100.00
GAS	1.30	1.30	1.30	0.000	-228.674	-228.674	100.00
COND	0.00	0.00	0.00	0.000	0.000	0.000	0.00

YEAR	GROSS WELLCOUNT	AVERAGE OIL PRICE	GROSS OIL PRODUCTION	NET OIL PRODUCTION	NET OIL SALES	AVERAGE GOR	AVERAGE GAS PRICE	NET GAS PRODUCTION	NET GAS SALES	NET TOTAL REVENUE
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1991(6 Mo)	1.000	20.000	-0.213	-0.187	-3.733	14966.160	1.300	-2.794	-3.632	-7.365
1992	1.000	20.000	-0.531	-0.465	-9.295	31263.613	1.300	-14.529	-18.888	-28.183
1993	1.000	20.000	0.347	0.304	6.071	-67233.117	1.300	-20.409	-26.532	-20.461
1994	1.000	20.000	7.989	6.991	139.813	-2898.681	1.300	-20.264	-26.343	113.470
1995	1.000	20.000	20.402	17.852	357.042	-495.067	1.300	-8.838	-11.489	345.552
1996	1.000	20.000	39.092	34.206	684.114	-336.272	1.300	-11.502	-14.953	669.161
1997	1.000	20.000	43.313	37.899	757.973	-223.075	1.300	-8.454	-10.991	746.982
1998	1.000	20.000	38.584	33.761	675.227	-271.102	1.300	-9.153	-11.899	663.328
1999	1.000	20.000	34.349	30.055	601.105	-322.874	1.300	-9.704	-12.615	588.490
2000	1.000	20.000	30.556	26.736	534.725	-378.775	1.300	-10.127	-13.165	521.560
2001	1.000	20.000	27.160	23.765	475.295	-439.223	1.300	-10.438	-13.569	461.725
2002	1.000	20.000	24.120	21.105	422.107	-504.690	1.300	-10.652	-13.847	408.260
2003	1.000	20.000	21.401	18.726	374.521	-575.730	1.300	-10.781	-14.015	360.505
2004	1.000	20.000	18.969	16.598	331.962	-652.963	1.300	-10.838	-14.089	317.872
2005	1.000	20.000	16.795	14.696	293.914	-737.105	1.300	-10.832	-14.082	279.832
SUBTOTAL	1.000	20.000	322.334	282.042	5640.841	-600.320	1.300	-169.315	-220.110	5420.730
REMAINING	1.000	20.000	95.070	83.187	1663.730	-369.939	1.300	-30.774	-40.006	1623.725
TOT 22.8Yr	2.807	20.000	417.404	365.229	7304.571	-547.848	1.300	-200.089	-260.116	7044.455

YEAR	AVG LOB --WELL--	NET TOTAL LOB	NET TOTAL PROD TAX	NET TOTAL OPER EXP	NET OPER REVENUE	NET TOTAL INVESTMENTS	NET BFIT CASHFLOW	CUM BFIT CASHFLOW	BRIT CF DISC @ 10%	CUM BFIT CF DISC @ 10%
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1991(6 Mo)	0.000	30.000	-0.597	29.403	-36.769	350.000	-386.769	-386.769	-383.006	-383.006
1992	0.000	60.000	-2.283	57.717	-85.900	0.000	-85.900	-472.669	-77.889	-460.894
1993	0.000	60.000	-1.657	58.343	-78.803	0.000	-78.803	-551.472	-64.960	-525.855
1994	0.000	60.000	9.191	69.191	44.279	0.000	44.279	-507.193	33.090	-492.765
1995	0.000	60.000	27.990	87.990	257.563	0.000	257.563	-249.630	175.237	-317.528
1996	0.000	60.000	54.202	114.202	554.959	0.000	554.959	305.328	343.306	25.778
1997	0.000	60.000	60.506	120.506	626.477	0.000	626.477	931.805	352.721	378.499
1998	0.000	60.000	53.730	113.730	549.599	0.000	549.599	1481.404	281.312	659.811
1999	0.000	60.000	47.668	107.668	480.822	0.000	480.822	1962.226	223.740	883.551
2000	0.000	60.000	42.246	102.246	419.313	0.000	419.313	2381.540	177.385	1060.937
2001	0.000	60.000	37.400	97.400	364.326	0.000	364.326	2745.865	140.117	1201.053
2002	0.000	60.000	33.069	93.069	315.191	0.000	315.191	3061.056	110.204	1311.257
2003	0.000	60.000	29.201	89.201	271.304	0.000	271.304	3332.361	86.239	1397.497
2004	0.000	60.000	25.748	85.748	232.125	0.000	232.125	3564.485	67.081	1464.578
2005	0.000	60.000	22.666	82.666	197.165	0.000	197.165	3761.651	51.802	1516.379
SUBTOTAL	0.000	870.000	439.079	1309.079	4111.651	350.000	3761.651	3761.651	1516.379	1516.379
REMAINING	0.000	815.000	131.522	946.522	677.203	0.000	677.203	4438.854	133.721	1650.100
TOT 22.8Yr	0.000	1685.000	570.601	2255.601	4788.854	350.000	4438.854	4438.854	1650.100	1650.100

CASE 10574: (Continued from December 17, 1992, Examiner Hearing.)

Application of Yates Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Canyon formation, at approximately 8,200 feet, underlying the following described acreage in Section 14, Township 20 South, Range 24 East, and in the following described manner: the N/2 to form a single standard 320-acre spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing within said vertical extent (which presently includes but is not necessarily limited to the South Dagger Draw-Upper Pennsylvanian Associated Pool); the NE/4 and NW/4 to form two standard 160-acre gas spacing and proration units for any and all formations and/or pools developed on 160-acre spacing within said vertical extent; and the NW/4 NE/4 and SW/4 NW/4 to form two standard 40-acre oil spacing and proration units for any and all formations and/or pools developed on 40-acre spacing within said vertical extent. The proposed 320-acre unit is to be dedicated to either a single well to be drilled at a standard location in Unit B or Unit E or to both wells to be simultaneously dedicated to the 320-acre unit. Further the 160-acre gas unit comprising the NE/4 and the 40-acre oil unit comprising the NW/4 NE/4 are to be dedicated to the proposed well to be drilled in Unit B. The 160-acre gas unit comprising the NW/4 and the 40-acre oil unit comprising the SW/4 NW/4 are to be dedicated to the proposed well to be drilled in Unit E. Also to be considered will be the cost of drilling and completing said well or wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of each well and a charge for risk involved in drilling said well or wells. The subject area in this matter is located approximately 7.5 miles west by south of Seven Rivers, New Mexico.

CASE 10626: (Continued from December 17, 1992, Examiner Hearing.)

Application of Yates Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Abo formation underlying the NW/4 of Section 32, Township 6 South, Range 26 East, forming a standard 160-acre gas spacing and proration unit for any and all formations and/or pools developed on 160-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated Pecos Slope-Abo Gas Pool. Said unit is to be dedicated to a well to be drilled at a standard gas well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well. Said area is located approximately 16 miles west by north of Elkins, New Mexico.

CASE 10654: **Application of Warrior, Inc. for an unorthodox oil well location, Eumont Oil Pool, Lea County, New Mexico.** Applicant seeks an order approving the drilling of its Federal "D" Well No. 13 in the Eumont Oil Pool at an unorthodox oil well location 1300 feet from the South and West lines (Unit M) of Section 26, Township 20 South, Range 36 East. Said well is to be dedicated to a standard 40-acre oil proration and spacing unit consisting of the SW/4 SW/4 of said Section 26. Said unit is located approximately 7 miles southwest of Monument, New Mexico.

CASE 10655: **Application of Meridian Oil Inc. for compulsory pooling, Lea County, New Mexico.** Applicant seeks an order pooling all mineral interests in the Eumont Gas Pool underlying the S/2 of Section 36, Township 21 South, Range 36 East, to be dedicated to its proposed Shell State Com "D" Well No. 13 to be drilled at a previously approved unorthodox gas well location 1780 feet from the South line and 760 feet from the West line (Unit L) of said Section 36 and dedicated to a previously approved non-standard 320-acre gas spacing and proration unit consisting of the S/2 of said Section 36 and to simultaneously dedicate production with the Shell State Com "D" Well No. 12. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 3 miles west of Eunice, New Mexico.

CASE 10656: **Application of Mitchell Energy Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico.** Applicant seeks an order pooling all mineral interests from the top of the Wolfcamp formation to the base of the Pennsylvanian formation underlying the W/2 of Section 28, Township 20 South, Range 33 East, forming a standard 320-acre gas spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the South Salt Lake-Morrow Gas Pool. Said unit is to be dedicated to its Tomahawk "28" Federal Com Well No. 1 to be drilled and completed at an unorthodox gas well location 1650 feet from the North line and 1980 feet from the West line (Unit F) of said Section 28. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 22 miles southeast of Maljamar, New Mexico.

(WARREN-BLINEBRY TUBB OIL & GAS (CONOCO WARREN-BLINEBRY TUBB WATERFLOOD EXPANSION) POOL - Cont'd.)

EUMONT OIL POOL
(Warrior Federal "D" Lease Pilot Waterflood Project)
Lea County, New Mexico

(9) The applicant shall immediately notify the Supervisor of the Hobbs district office of the Division of the failure of the tubing or packer in any of the injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area, and shall take such timely steps as may be necessary or required to correct such failure or leakage.

Order No. R-9556, Authorizing Warrior, Inc. to Institute a Pilot Waterflood Project on its Federal "D" Lease in the Eumont Oil Pool, Lea County, New Mexico, August 7, 1991.

(10) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 704 and 1120 of the Division Rules and Regulations.

Application of Warrior, Inc. for a Waterflood Project, Lea County, New Mexico.

(11) This order is being approved concurrently with Order No. R-9467 in Case No. 10245 which creates and designates the Warren Blinebry-Tubb Oil and Gas Pool.

CASE NO. 10347
Order No. R-9556

(12) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

ORDER OF THE DIVISION

(13) This order shall become effective March 1, 1991.

BY THE DIVISION: This cause came on for hearing at 8:15 a.m. on July 25, 1991 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

NOW, on this 7th day of August, 1991 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

EXHIBIT "A"
CASE NO. 10220 - ORDER NO. R-6906-B
Warren Blinebry-Tubb Waterflood Project
Conoco Inc.-Warren Unit Injection Wells,
Township 20 South, Range 38 East, NMPM, Lea County, New Mexico

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

WELL NO.	LOCATION	SECTION
70	660' FSL and 660' FEL, Unit P	22
56	660' FSL and 1980' FEL, Unit B	26
57	660' FNL and 660' FWL, Unit D	26
48	2030' FNL and 1980' FWL, Unit F	26
103	1980' FNL and 660' FEL, Unit H	26
49	1980' FSL and 1980' FEL, Unit J	26
59	1980' FSL and 660' FWL, Unit L	26
45	660' FSL and 1980' FWL, Unit N	26
104	660' FNL and 1980' FEL, Unit B	27
33	1980' FNL and 1980' FWL, Unit P	27
105	1980' FNL and 660' FEL, Unit H	27
37	1980' FSL and 1980' FEL, Unit J	27
41	660' FSL and 1980' FWL, Unit N	27
32	660' FSL and 660' FEL, Unit P	27
108	Footage Location Unavailable, Unit A	33
84	660' FNL and 1920' FWL, Unit C	33
80	1980' FNL and 1980' FEL, Unit G	33
17	1980' FSL and 660' FEL, Unit I	33
107	1980' FSL and 1980' FWL, Unit K	33
16	660' FSL and 1980' FEL, Unit O	33
39	660' FNL and 1980' FEL, Unit B	34
20	1980' FNL and 660' FWL, Unit E	34
102	1980' FNL and 1980' FEL, Unit G	34
109	1980' FSL and 660' FEL, Unit I	34
75	1980' FSL and 1980' FWL, Unit K	34
14	660' FSL and 660' FWL, Unit M	34
13	660' FSL and 1980' FEL, Unit O	34
79	660' FNL and 660' FWL, Unit D	35

(2) The applicant, Warrior, Inc., seeks authority to institute a one well waterflood pilot project on a portion of its Federal "D" Lease underlying the W/2 of Section 26 and the NE/4 of Section 27, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico, by the injection of produced water into the Upper Queen interval of the Eumont Oil Pool through the perforated interval from approximately 3804 feet to 3964 feet in its Federal "D" Well No. 2 located 1980 feet from the North line and 660 feet from the West line (Unit E) of said Section 26.

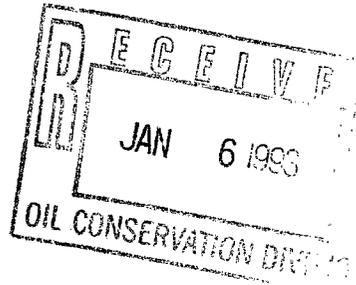
(3) The wells in the proposed project area are in an advanced state of depletion and should therefore be properly classified as "stripper wells."

(4) At the hearing, the applicant demonstrated that an incremental secondary recovery of oil of 418 MSTBU could be obtained by institution of the proposed pilot waterflood project, resulting in the recovery of additional oil which would not otherwise be recovered, and the waste of oil would thereby be prevented.

(5) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape into other formations or onto the surface from injection, production or plugged and abandoned wells.

(6) Injection should be accomplished through 2 7/8-inch internally cement-lined tubing installed in a packer set at approximately 100 feet above the uppermost perforated interval; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.

(7) Prior to commencing injection operations, the casing of the subject well should be pressure-tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.



CL - to 10654
and Tom Kellahan

(EUMONT OIL (WARRIOR FEDERAL "D" LEASE PILOT WATER-FLOOD PROJECT) POOL - Cont'd.)

(8) The injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 750 psi.

(9) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the Queen formation.

(10) The operator should give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(11) The subject application should be approved and the project should be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Warrior, Inc., is hereby authorized to institute a one well waterflood pilot project on a portion of its Federal "D" Lease, underlying the following described lands, by the injection of produced water into the Upper Queen interval of the Eumont Oil Pool through its existing Federal "D" Well No. 2 located 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 26, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico:

**FEDERAL "D" LEASE PILOT WATERFLOOD PROJECT AREA
LEA COUNTY, NEW MEXICO**

TOWNSHIP 20 SOUTH, RANGE 36 EAST, NMPM

Section 26: W/2
Section 27: NE/4

(2) Injection into said well shall be accomplished through 2 7/8-inch internally cement lined tubing installed in a packer set at approximately 100 feet above the uppermost perforated interval, with injection into the perforated interval from approximately 3804 feet to 3964 feet;

PROVIDED HOWEVER THAT, the casing-tubing annulus shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak-detection device in order to determine leakage in the casing, tubing or packer.

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's Hobbs District Office.

(3) The injection well or system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 750 psi.

(4) The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Queen formation.

(5) The operator shall notify the supervisor of the Hobbs District Office of the Division in advance of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(6) The operator shall immediately notify the supervisor of the Division's Hobbs District Office of the failure of the tubing, casing or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(7) The subject waterflood project is hereby designated the Eumont Federal "D" Lease Pilot Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(8) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

(9) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

**SHUGART YATES-SEVEN RIVERS-QUEEN-GRAYBURG POOL
(Siete Scottsdale Federal Lease Pilot Waterflood Project)
Eddy County, New Mexico**

Order No. R-9550, Authorizing Siete Oil and Gas Corporation to Institute a Pilot Waterflood Project on its Scottsdale Federal Lease in the Shugart Yates-Seven Rivers-Queen-Grayburg Pool, Eddy County, New Mexico, July 22, 1991.

Application of Siete Oil and Gas Corporation for a Waterflood Project, Eddy County, New Mexico.

CASE NO. 9896
Order No. R-9550

ORDER OF THE DIVISION

BY THE DIVISION: This cause came on for hearing at 8:15 a.m. on March 21, 1990 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 22nd day of July, 1991, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Siete Oil and Gas Corporation, seeks authority to institute a pilot waterflood project on its Scottsdale Federal Lease comprising the NE/4 of Section 27, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico, by the injection of produced water into the Penrose interval of the Shugart Yates-Seven Rivers-Queen-Grayburg Pool through the perforated interval from approximately 3639 feet to 3707 feet in its Scottsdale Federal Well No. 2 located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 27.

(3) The wells in the proposed project area are in an advanced state of depletion and should therefore be properly classified as "stripper wells."

(4) The proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.