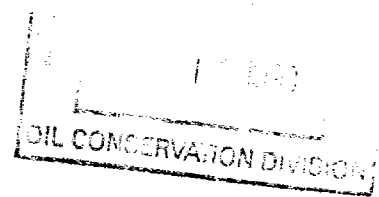


STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF
PHILLIPS PETROLEUM COMPANY FOR APPROVAL
OF A WATERFLOOD PROJECT FOR ITS
VACUUM GLORIETA EAST UNIT AND TO QUALIFY
SAID PROJECT FOR THE RECOVERED OIL TAX RATE
PURSUANT TO THE "NEW MEXICO ENHANCED
OIL RECOVERY ACT," LEA COUNTY, NEW MEXICO



CASE NO 10376

A P P L I C A T I O N

Comes now PHILLIPS PETROLEUM COMPANY, by its attorneys, Kellahin & Kellahin, and pursuant to the New Mexico "Enhanced Oil Recovery Act" and Division Rule 701 applies to the New Mexico Oil Conservation Division for authority to institute a waterflood project in its Vacuum-Glorieta East Unit by the injection of water into the Glorieta and Paddock formations, Vacuum Glorieta Pool, Lea County, New Mexico and to qualify said project for the recovered oil tax rate for enhanced oil recovery projects and in support states:

(1) Phillips Petroleum Company ("Phillips") is the proposed operator of the Vacuum Glorieta East Unit ("Unit"), a secondary recovery project for an area comprising 4239.80 acres, more or less, being located in portions of Sections 26-34, T17S, R35E and in part of Section 5, T18S, R35E, NMPM., Lea County, New Mexico as shown on Exhibit "A"

(2) Within the Unit, the initial waterflood project area will consist of 3,080 acres, more or less.

(3) The working interest owners within the Unit have voluntarily agreed upon a waterflood plan the objective of which is to successfully recover an estimated additional 16.4 million barrels of oil from the Vacuum Glorieta Pool.

(4) The remaining secondary oil potential from the pool within the Unit area will not be recovered in the absence of waterflood operations on a unit basis.

(5) The Vacuum Glorieta East Unit Waterflood Project will be developed on a 40-acre five spot injection pattern involving 8 new producing wells, 33 new injection wells, the conversion of 15 existing wells to water injection and the reactivation of 9 shut-in producers all as shown on Exhibit "B".

(6) The Forty-Eight (48) existing or new injection wells are all identified and located as set forth on Exhibit "C".

(7) Phillips anticipates that the success of the waterflood project will require that the Division provide administrative procedures to authorize Phillips to exceed the 0.2 psi per foot of depth Division guideline.

(8) Phillips requests an administrative procedure be established for the waterflood project area to allow for the amendment of the location of either injection or producing wells in the event such changes in location, either standard or unorthodox, are deemed necessary by the operator.

(9) Enclosed with this application is the completed Division Form C-108 with attachments for this project.

(10) As of April, 1993, the cumulative primary oil recovery from the Project has been 38,292 MBBL.

(11) The Project is currently producing at a rate of 1863 BOPD and 4401 BWPD from 63 active producers. Approximately 4,440 MBBL of recoverable primary oil reserves remain under the current mode of operations.

(12) Phillips Petroleum Company seeks to recover additional oil from the Project Area by expanding the geologic area and by means of a significant change in the process used for the displacement of crude oil by a 20-acre infill drilling, reworking, establishment of water injection and initiation of 40-acre, 5-spot patterns for the Unit.

(13) The estimated amount of recoverable oil attributable to a Positive Production Response from the Expanded Use of enhanced oil recovery technology for this EOR Project is 16.4 million barrels of additional oil.

(14) In accordance with Division Order R-9708, the following is submitted:

a. Operator's name and address:

Phillips Petroleum Company
4001 Penbrook
Suite 401
Odessa, Texas 79762

b. Description of the Project Area:

(1) Within the Unit boundary is an initial Project Area as outlined on Exhibit "B"

(2) Description of the Project Area:

T17S, R35E

Sec 27: W/2

Sec 28: E/2, SW/4, E/2NW/4, SW/NW4

Sec 29: S/2, S/2N/2

Sec 30: SE/4, S/2NE/4, E/2SW/4,
SE/4NW/4

Sec 31: N/2NE/4, E/2NW/4, E/2SW/4,
S/2SE/4

Sec 32: NE/4, NW/4, N/2SE/4, SW/4SW/4

Sec 33: N/2, N/2S/2

T18S, R35E

Sec 5: W/2NW/4

(3) Total acres in the Project Area:

3080 acres, more or less

(4) Name of the subject Pool and formation:

Glorieta and Paddock formations of
the Vacuum Glorieta Pool

c. Status of operations in the project area:

(1) unit name:

Vacuum Glorieta East Unit

(2) September 13, 1993

(3) N/A

d. Method of recovery to be used:

- (1) injected fluids: water
- (2) Pending OCD hearing.
- (3) September 13, 1993

e. Description of the Project Area:

- (1) a list of producing wells:
See Exhibit "C"
- (2) a list of injection wells:
See Exhibit "C"
- (3) Capital cost of additional facilities:
\$24,935,150.
- (4) Total Project Costs:
\$112,615,000.
- (5) Estimated total net value (after recovery of project investments, operating costs, taxes and expenses) of the additional production that will be recovered as a result of this Project:

An additional 16.4 million barrels of oil with an undiscounted net present value of \$109.8 million dollars
- (6) Anticipated date of commencement of injection:

as soon as practicable after OCD approval, if granted.

- (7) the type of fluid to be injected and the anticipated volumes:

water injected at forecasted rates presented on Exhibit "D"

- (8) Explanation of changes in technology:

- (a) See Exhibit "C" for proposed well status
- (b) See Exhibit "E" for summary of changes in technology and the process to be used for displacement of oil

f. Production data:

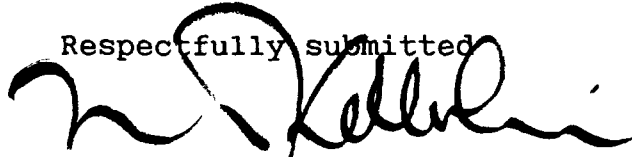
See Exhibits "F" & "G" attached which includes graphs, charts and supporting data to show the production history and production forecast of oil, gas, casinghead gas and water from the project area.

(15) In accordance with Division notice requirements, copies of the application have been sent to those parties listed on Exhibit "H" notifying them of this application and of the Applicant's requests that this matter be set on the Division Examiner's docket now scheduled for October 7, 1993.

Application of Phillips Petroleum Company
NMOCD
Page 7

Wherefore, Applicant requests that this application be set for hearing and that after said hearing, the Division enter its order approving this application.

Respectfully submitted

A handwritten signature in black ink, appearing to read 'W. Thomas Kellahin', written over the typed name and address.

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

Elizabeth Harris, Esq.
Phillips Petroleum Company
401 Penbrook
Odessa, Texas 79762

ATTORNEYS FOR APPLICANT

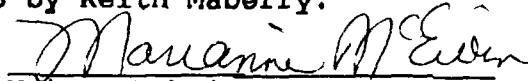
CERTIFICATION

STATE OF TEXAS)
) SS.
COUNTY OF MIDLAND)

I, Keith Maberry, having been first duly sworn, state that I am a petroleum engineer, a duly authorized representative of Phillips Petroleum Company, have knowledge of the facts herein and therefor certify that the facts set forth in this Application are true and accurate to the best of my own knowledge and belief.


Keith Maberry

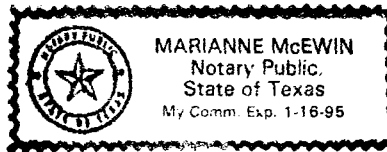
The foregoing certificate was acknowledged before me this 10th day of September, 1993 by Keith Maberry.


Notary Public

My Commission Expires:

1-16-95

SEAL



R 35 E

EXHIBIT A

VACUUM GLORIETA EAST UNIT
VACUUM GLORIETA FIELD
LEA COUNTY, NEW MEXICO

REVISED
JULY 27, 1993

LEGEND

- Current Glorieta Completions (74)
- Shut-In (18) ○ 31 Tract Number
- ◆ T & A (8) 8-2073 State Lease Number
- ◆ P & A (15)

26 T 17 S

34

29 28

30

33

32 02

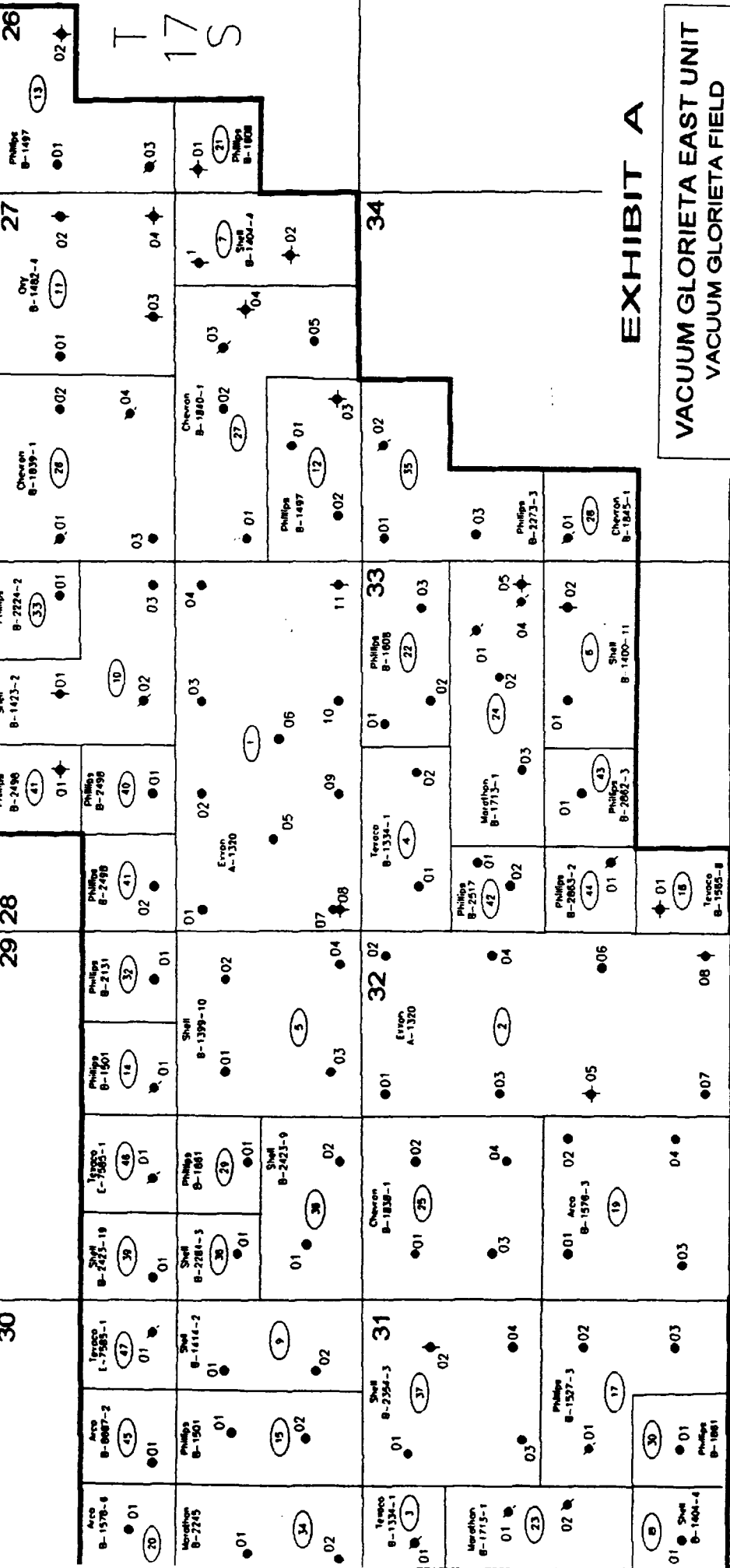
31

5

6

R 35 E

T 18 S



4

R 35 E

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27

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T 17 S

R 35 E

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6

T 18 S

EXHIBIT B

VACUUM GLORIETA EAST UNIT
 LEA COUNTY, NEW MEXICO
WATERFLOOD PROJECT AREA
 JULY 27, 1993

LEGEND

- Current Glorieta Completions (74)
- Shut-In (20) ○ 31 Tract Number
- T & A (6) ● 8-2073 State Lease Number
- P & A (15)
- Phillips Lease Line Injectors (6)
- Texaco Lease Line Injectors (6)
- 1993 Development
- 1994 Development
- 1995 Development
- 1996 Development
- Waterflood Project Area
- Injection Patterns

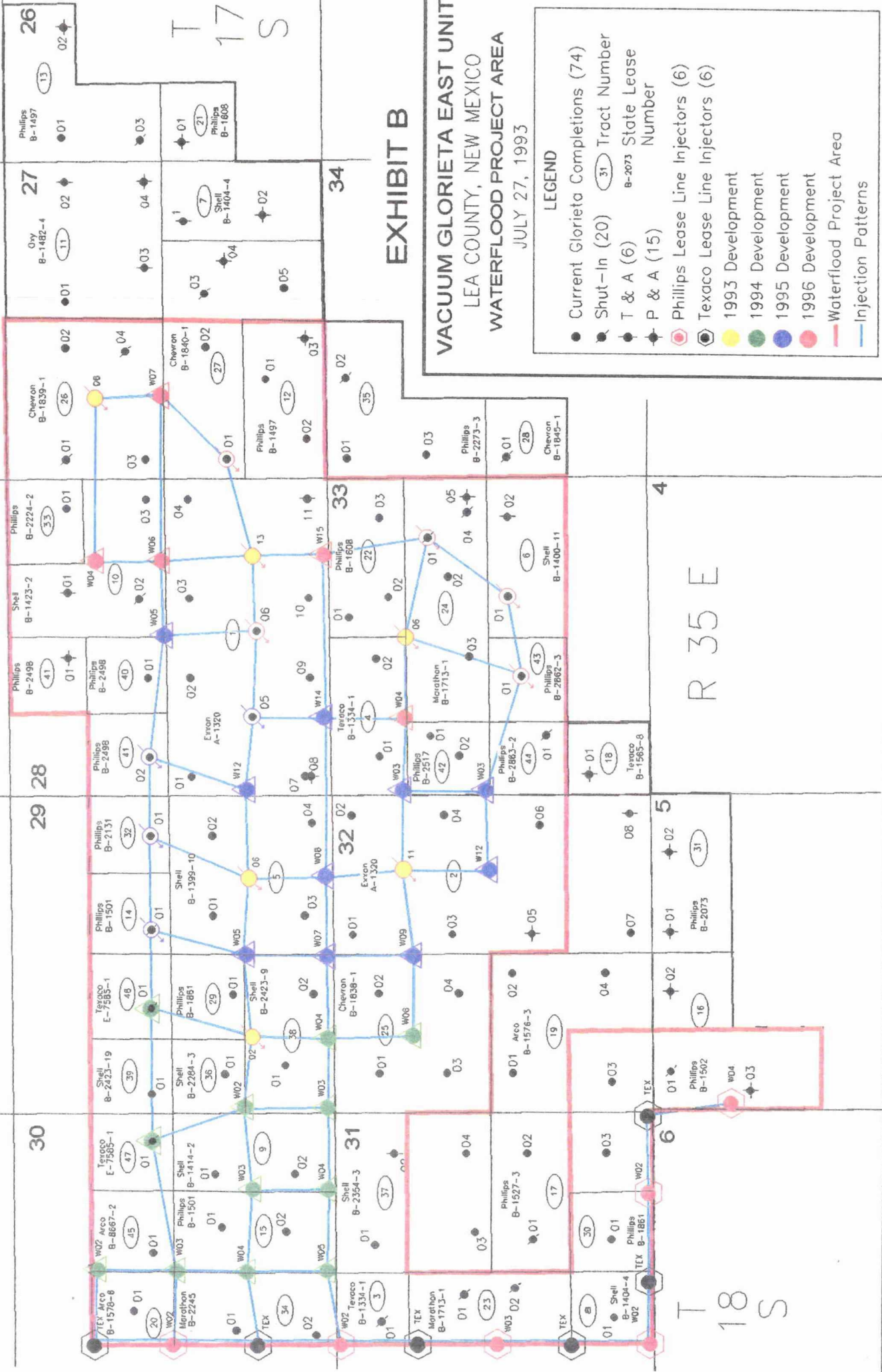


EXHIBIT C

VACUUM GLORIETA EAST UNIT

WATERFLOOD PROJECT AREA

TABULATION OF PROPOSED WELLS

<u>New Well Designation</u>	<u>Former Lease Name & Well No.</u>	<u>API Number</u>	<u>Unit</u>	<u>Sec-Tn-Rg</u>	<u>Footage *</u>	<u>Former Operator</u>	<u>Proposed Well Status</u>	
VGEU 01-01	New Mexico K State	31	3002520721	L	28 17S 35E	2310 FS, 330 FW	Exxon	GLOR PROD
VGEU 01-02	New Mexico K State	29	3002520719	K	28 17S 35E	2310 FS, 1981 FW	Exxon	GLOR PROD
VGEU 01-03	New Mexico K State	25	3002520715	J	28 17S 35E	2310 FS, 1981 FE	Exxon	GLOR PROD
VGEU 01-04	New Mexico K State	23	3002520714	I	28 17S 35E	2310 FS, 330 FE	Exxon	GLOR PROD
VGEU 01W05	New Mexico K State	34	3002530436	L	28 17S 35E	1286 FS, 1333 FW	Exxon	CONV TO INJ
VGEU 01W06	New Mexico K State	35	3002530437	O	28 17S 35E	1195 FS, 2518 FE	Exxon	CONV TO INJ
VGEU 01-07	New Mexico K State	36	3002530805	M	28 17S 35E	430 FS, 330 FW	Exxon	GLOR PROD
VGEU 01-08	New Mexico K State	32	3002520722	M	28 17S 35E	330 FS, 330 FW	Exxon	P&A GLOR PROD
VGEU 01-09	New Mexico K State	27	3002520717	N	28 17S 35E	330 FS, 1980 FW	Exxon	GLOR PROD
VGEU 01-10	New Mexico K State	21	3002520712	O	28 17S 35E	330 FS, 1980 FE	Exxon	GLOR PROD
VGEU 01-11	New Mexico K State	19	3002520710	P	28 17S 35E	330 FS, 330 FE	Exxon	TA GLOR PROD
VGEU 01-13				P	28 17S 35E	1320 FS, 1320 FE		NEW DRILL PROD
VGEU 01W12				L	28 17S 35E	1320 FS, 100 FW		NEW DRILL INJ
VGEU 01W14				M	28 17S 35E	100 FS, 1320 FW		NEW DRILL INJ
VGEU 01W15				P	28 17S 35E	100 FS, 1320 FE		NEW DRILL INJ
VGEU 02-01	New Mexico K State	30	3002520720	B	32 17S 35E	330 FN, 2306 FE	Exxon	GLOR PROD
VGEU 02-02	New Mexico K State	28	3002520718	A	32 17S 35E	330 FN, 330 FE	Exxon	GLOR PROD
VGEU 02-03	New Mexico K State	26	3002520716	G	32 17S 35E	1980 FN, 2306 FE	Exxon	GLOR PROD
VGEU 02-04	New Mexico K State	24	3002521008	H	32 17S 35E	1865 FN, 330 FE	Exxon	GLOR PROD
VGEU 02-05	New Mexico K State	22	3002520713	J	32 17S 35E	1980 FS, 2307 FE	Exxon	P&A GLOR PROD
VGEU 02-06	New Mexico K State	18	3002520709	I	32 17S 35E	1830 FS, 510 FE	Exxon	GLOR PROD
VGEU 02-11				A	32 17S 35E	1200 FN, 1320 FE		NEW DRILL PROD
VGEU 02W09				B	32 17S 35E	1320 FN, 2650 FW		NEW DRILL INJ
VGEU 02W12				H	32 17S 35E	2640 FN, 1320 FE		NEW DRILL INJ
VGEU 03-01	Skelly J State	2	3002520854	C	31 17S 35E	760 FN, 1790 FW	Texaco	SI GLOR PROD
VGEU 03W02				C	31 17S 35E	100 FN, 1320 FW		NEW LL INJ
VGEU 04-01	Skelly P State	4	3002520856	D	33 17S 35E	810 FN, 660 FW	Texaco	GLOR PROD
VGEU 04-02	Skelly P State	3	3002520855	C	33 17S 35E	779 FN, 2285 FW	Texaco	GLOR PROD
VGEU 04W03				D	33 17S 35E	1200 FN, 100 FW		NEW DRILL INJ
VGEU 04W04				C	33 17S 35E	1310 FN, 1320 FW		NEW DRILL INJ
VGEU 05-01	State M	1	3002520828	J	29 17S 35E	1980 FS, 1980 FE	Shell	GLOR PROD
VGEU 05-02	State M	3	3002520830	I	29 17S 35E	1980 FS, 660 FE	Shell	GLOR PROD
VGEU 05-03	State M	2	3002520829	O	29 17S 35E	460 FS, 1980 FE	Shell	GLOR PROD
VGEU 05-04	State M	4	3002520831	P	29 17S 35E	330 FS, 450 FE	Shell	GLOR PROD
VGEU 05-06				O	29 17S 35E	1330 FS, 1330 FE		NEW DRILL PROD
VGEU 05W05				J	29 17S 35E	1320 FS, 2650 FW		NEW DRILL INJ
VGEU 05W07				O	29 17S 35E	100 FS, 2650 FW		NEW DRILL INJ
VGEU 05W08				P	29 17S 35E	100 FS, 1320 FE		NEW DRILL INJ
VGEU 06W01	State T	10	3002520232	J	33 17S 35E	2310 FS, 1980 FE	Shell	CONV TO INJ
VGEU 06-02	State T	9	3002520330	I	33 17S 35E	2310 FS, 660 FE	Shell	TA GLOR PROD
VGEU 08-01	State E	2	3002520823	N	31 17S 35E	660 FS, 1700 FW	Shell	GLOR PROD
VGEU 08W02				N	31 17S 35E	300 FS, 1320 FW		NEW LL INJ

EXHIBIT C

VACUUM GLORIETA EAST UNIT

WATERFLOOD PROJECT AREA

TABULATION OF PROPOSED WELLS

<u>New Well Designation</u>	<u>Former Lease Name & Well No.</u>	<u>API Number</u>	<u>Unit</u>	<u>Sec--Tn--</u>	<u>Rg</u>	<u>Footage *</u>	<u>Former Operator</u>	<u>Proposed Well Status</u>	
VGEU 09-01	State B	3	3002520821	I	30	17S 35E	1980 FS, 860 FE	Shell	GLOR PROD
VGEU 09-02	State B	4	3002520822	P	30	17S 35E	660 FS, 990 FE	Shell	GLOR PROD
VGEU 09W03				P	30	17S 35E	1320 FS, 1310 FE		NEW DRILL INJ
VGEU 09W04				P	30	17S 35E	100 FS, 1310 FE		NEW DRILL INJ
VGEU 10-01	State N	6	3002520834	B	28	17S 35E	990 FN, 1880 FE	Shell	TA GLOR PROD
VGEU 10-02	State N	4	3002520832	G	28	17S 35E	2180 FN, 1980 FE	Shell	SI GLOR PROD
VGEU 10-03	State N	5	3002520833	H	28	17S 35E	2310 FN, 330FE	Shell	GLOR PROD
VGEU 10W04				H	28	17S 35E	1500 FN, 1320 FE		NEW DRILL INJ
VGEU 10W05				G	28	17S 35E	2630 FN, 2650 FW		NEW DRILL INJ
VGEU 10W06				H	28	17S 35E	2630 FN, 1320 FE		NEW DRILL INJ
VGEU 12-01	Santa Fe	117	3002523700	N	27	17S 35E	990 FS, 1650 FW	Phillips	GLOR PROD
VGEU 12-02	Santa Fe	90	3002520582	M	27	17S 35E	330 FS, 660 FW	Phillips	GLOR PROD
VGEU 14W01	Santa Fe	109	3002520802	G	29	17S 35E	2323 FN, 2213 FE	Phillips	CONV TO INJ
VGEU 15-01	Santa Fe	101	3002520795	J	30	17S 35E	1880 FS, 1880 FE	Phillips	GLOR PROD
VGEU 15-02	Santa Fe	100	3002520794	O	30	17S 35E	810 FS, 1955 FE	Phillips	GLOR PROD
VGEU 15W03				J	30	17S 35E	2650 FN, 2650 FW		NEW DRILL INJ
VGEU 15W04				O	30	17S 35E	1320 FS, 2650 FW		NEW DRILL INJ
VGEU 15W05				O	30	17S 35E	100 FS, 2650 FW		NEW DRILL INJ
VGEU 16-01	Santa Fe	99	3002520793	D	5	18S 35E	330 FN, 660 FW	Phillips	SI GLOR PROD
VGEU 16W04				E	5	18S 35E	1320 FN, 100 FW		NEW LL INJ
VGEU 17-03	State K	8	3002520865	P	31	17S 35E	760 FS, 660 FE	Phillips	GLOR PROD
VGEU 19-03	State B1576	8	3002520847	M	32	17S 35E	660 FS, 500 FW	ARCO	GLOR PROD
VGEU 20-01	State B1578	3	3002521352	F	30	17S 35E	1980 FN, 1800 FW	ARCO	GLOR PROD
VGEU 20W02				F	30	17S 35E	2640 FN, 1320 FW		NEW LL INJ
VGEU 22-01	Santa Fe	132	3002530506	B	33	17S 35E	330 FN, 2310 FE	Phillips	GLOR PROD
VGEU 22-02	Santa Fe	95	3002520789	B	33	17S 35E	990 FN, 1980 FE	Phillips	GLOR PROD
VGEU 22-03	Santa Fe	91	3002520785	A	33	17S 35E	860 FN, 660 FE	Phillips	GLOR PROD
VGEU 23-01	Warn State AC 1	5	3002520750	F	31	17S 35E	2122 FN, 2227 FW	Marathon	SI GLOR PROD
VGEU 23-02	Warn State AC 1	4	3002520749	K	31	17S 35E	2311 FS, 2226 FW	Marathon	SI GLOR PROD
VGEU 23W03				K	31	17S 35E	2640 FN, 1320 FW		NEW LL INJ
VGEU 24W01	Warn State AC 3	8	3002524806	H	33	17S 35E	1650 FN, 990 FE	Marathon	CONV TO INJ
VGEU 24-02	Warn State AC 3	6	3002520751	G	33	17S 35E	1980 FN, 1650 FE	Marathon	GLOR PROD
VGEU 24-03	Warn State AC 3	7	3002520752	F	33	17S 35E	2310 FN, 2310 FW	Marathon	GLOR PROD
VGEU 24-04	Warn State AC 3	9	3002528039	H	33	17S 35E	2310 FN, 580 FW	Marathon	SI GLOR PROD
VGEU 24-06				K	33	17S 35E	1330 FN, 2640 FW		NEW DRILL PROD
VGEU 25-01	State 3 32	8	3002521012	D	32	17S 35E	760 FN, 660 FW	Chevron	GLOR PROD
VGEU 25-02	State 3 32	7	3002520886	C	32	17S 35E	760 FN, 1980 FW	Chevron	GLOR PROD
VGEU 25-03	State 3 32	6	3002520885	E	32	17S 35E	1880 FN, 660 FW	Chevron	GLOR PROD
VGEU 25-04	State 3 32	5	3002520884	F	32	17S 35E	2080 FN, 1980 FW	Chevron	GLOR PROD
VGEU 25W06				C	32	17S 35E	1320 FN, 1320 FW		NEW DRILL INJ

EXHIBIT C

VACUUM GLORIETA EAST UNIT

WATERFLOOD PROJECT AREA

TABULATION OF PROPOSED WELLS

<u>New Well Designation</u>	<u>Former Lease Name & Well No.</u>	<u>API Number</u>	<u>Unit</u>	<u>Sec--Tn--</u>	<u>Rg</u>	<u>Footage *</u>	<u>Former Operator</u>	<u>Proposed Well Status</u>	
VGEU 26-01	State 5 27	8	3002520883	D	27	17S 35E	990 FN, 330 FW	Chevron	SI GLOR PROD
VGEU 26-02	State 5 27	7	3002521011	C	27	17S 35E	990 FN, 2173 FW	Chevron	GLOR PROD
VGEU 26-03	State 5 27	6	3002520882	E	27	17S 35E	2310 FN, 330 FW	Chevron	GLOR PROD
VGEU 26-04	State 5 27	5	3002520881	F	27	17S 35E	1980 FN, 2110 FW	Chevron	SI GLOR PROD
VGEU 26-06				F	27	17S 35E	1500 FN, 1320 FW		NEW DRILL PROD
VGEU 26W07				F	27	17S 35E	2630 FN, 1320 FW		NEW DRILL INJ
VGEU 27W01	State 4 27	10	3002520880	L	27	17S 35E	1650 FS, 330 FW	Chevron	CONV TO INJ
VGEU 27-02	State 4 27	7	3002502901	K	27	17S 35E	1980 FS, 2180 FW	Chevron	GLOR PROD
VGEU 29-01	Santa Fe	103	3002520797	K	29	17S 35E	1655 FS, 1980 FW	Phillips	GLOR PROD
VGEU 29-02				K	29	17S 35E	1320 FS, 1330 FW		NEW DRILL PROD
VGEU 30-01	Santa Fe	102	3002520796	O	31	17S 35E	690 FS, 2110 FE	Phillips	GLOR PROD
VGEU 30W02				O	31	17S 35E	100 FS, 1320 FE		NEW LL INJ
VGEU 32W01	Santa Fe	106	3002520799	H	29	17S 35E	2323 FN, 660 FE	Phillips	CONV TO INJ
VGEU 33-01	Santa Fe	108	3002520801	A	28	17S 35E	990 FN, 431 FE	Phillips	GLOR PROD
VGEU 34-01	Staplin State AC 1	4	3002520746	K	30	17S 35E	1650 FS, 1650 FW	Marathon	GLOR PROD
VGEU 34-02	Staplin State AC 1	3	3002521009	N	30	17S 35E	330 FS, 1576 FW	Marathon	GLOR PROD
VGEU 36-01	State H	2	3002520826	L	29	17S 35E	1800 FS, 660 FW	Shell	GLOR PROD
VGEU 36W02				L	29	17S 35E	1330 FS, 100 FW		NEW DRILL INJ
VGEU 37-01	State A	7	3002520819	B	31	17S 35E	660 FN, 2180 FE	Shell	GLOR PROD
VGEU 37-02	State A	5	3002520370	A	31	17S 35E	990 FN, 660 FE	Shell	TA GLOR PROD
VGEU 38-01	State F	3	3002520824	M	29	17S 35E	800 FS, 800 FW	Shell	GLOR PROD
VGEU 38-02	State F	4	3002520825	N	29	17S 35E	330 FS, 1980 FW	Shell	GLOR PROD
VGEU 38W03				M	29	17S 35E	100 FS, 100 FW		NEW DRILL INJ
VGEU 38W04				N	29	17S 35E	100 FS, 1320 FW		NEW DRILL INJ
VGEU 39-01	State I	2	3002502938	E	29	17S 35E	2310 FN, 330 FW	Shell	GLOR PROD
VGEU 40-01	Santa Fe	104	3002520798	F	28	17S 35E	2130 FN, 1980 FW	Phillips	GLOR PROD
VGEU 41-01	Santa Fe	107	3002520800	C	28	17S 35E	990 FN, 2310 FW	Phillips	P&A GLOR PROD
VGEU 41W02	Santa Fe	105	3002521080	E	28	17S 35E	2322 FN, 660 FW	Phillips	CONV TO INJ
VGEU 42-01	Santa Fe	131	3002530505	E	33	17S 35E	1655 FN, 990 FW	Phillips	GLOR PROD
VGEU 42-02	Santa Fe	96	3002520790	E	33	17S 35E	2180 FN, 660 FW	Phillips	GLOR PROD
VGEU 42W03				E	33	17S 35E	2640 FN, 100 FW		NEW DRILL INJ
VGEU 43W01	Santa Fe	92	3002520786	K	33	17S 35E	2105 FS, 1980 FW	Phillips	CONV TO INJ
VGEU 44-01	State O	2	3002520869	L	33	17S 35E	1700FS, 990 FW	Phillips	SI GLOR PROD
VGEU 45-01	State L DE	2	3002521353	G	30	17S 35E	2310 FN, 2310 FE	ARCO	GLOR PROD
VGEU 45W02				G	30	17S 35E	1330 FN, 2650 FW		NEW DRILL INJ
VGEU 46-01	State CG NCT 2	1	3002520957	F	29	17S 35E	2310 FN, 1750 FW	Texaco	REPLACE INJ
VGEU 47-01	State CG NCT 1	2	3002520958	H	30	17S 35E	2310 FN, 400 FE	Texaco	REPLACE INJ

* Approximate footage given for new wells

EXHIBIT D**VACUUM GLORIETA EAST UNIT****INJECTED WATER FORECAST**

DATE	ANNUAL WATER INJECTED (BBLs)	AVERAGE MONTHLY INJECTED (BWPM)	AVERAGE DAILY INJECTED (BWPD)
1993	0	0	0
1994	1,049,340	87,445	2,876
1995	4,428,705	369,059	12,140
1996	7,832,576	652,715	21,471
1997	11,278,403	939,867	30,917
1998	11,161,616	930,135	30,597
1999	10,882,782	906,899	29,832
2000	10,445,589	870,466	28,634
2001	10,076,200	839,683	27,621
2002	9,835,943	819,662	26,963
2003	9,546,937	795,578	26,170
2004	9,198,290	766,524	25,215
2005	8,979,287	748,274	24,614
2006	8,879,973	739,998	24,342
2007	8,831,244	735,937	24,208
2008	8,807,180	733,932	24,142
2009	8,795,706	732,976	24,111
2010	8,790,407	732,534	24,097
2011	8,788,344	732,362	24,091
2012	8,787,495	732,291	24,089
2013	8,787,495	732,291	24,089
2014	8,787,495	732,291	24,089
2015	8,787,495	732,291	24,089
2016	8,787,495	732,291	24,089
2017	8,787,495	732,291	24,089
2018	8,787,495	732,291	24,089
2019	8,787,495	732,291	24,089
2020	8,787,495	732,291	24,089

EXHIBIT E

VACUUM GLORIETA EAST UNIT

SUMMARY OF CHANGES IN TECHNOLOGY AND PROCESS TO DISPLACE ADDITIONAL OIL

The Vacuum Glorieta East Unit Waterflood Project Area is described in **Exhibit B**. The proposed project is predicted to recover 16,400,000 barrels of additional oil. The additional oil recovery is attributed to the implementation of two significant changes that enhance the movement of oil in the reservoir. These changes are the injection of pressured water to displace oil to the producing wells, and the increase of reservoir area swept by the pressured water through infill drilling. Both of these changes are necessary in order to recover the predicted 16.4 MMBO of additional oil.

The first change is the injection of pressured water to displace and move oil. To date, oil produced from the proposed Project Area has been predominantly displaced by solution gas drive. This drive mechanism is nearly depleted, and without assistance, will leave significant volumes of oil in place. Pressured water will be injected into the Paddock formation in select wells as outlined in **Exhibit C**. The pressured water will assist oil production by displacing the otherwise immovable oil from the reservoir rock, and by providing the energy needed to drive this oil to the producing wells.

The pressured water, however, can only displace oil from the reservoir layers that are interconnected between the injection well and the producing well. Oil trapped in unconnected layers will be bypassed, creating profound waste. The new injection wells will be drilled on twenty acre spaces in between the existing forty acre producing wells. These infill wells will significantly increase the number of layers connected between the injection wells and their producers. Pressured water will sweep through a larger portion of the reservoir displacing a large volume of oil than would otherwise be bypassed and not produced.

EXHIBIT 'F'
VACUUM GLORIETA EAST UNIT
WATERFLOOD PROJECT AREA
PRODUCTION HISTORY

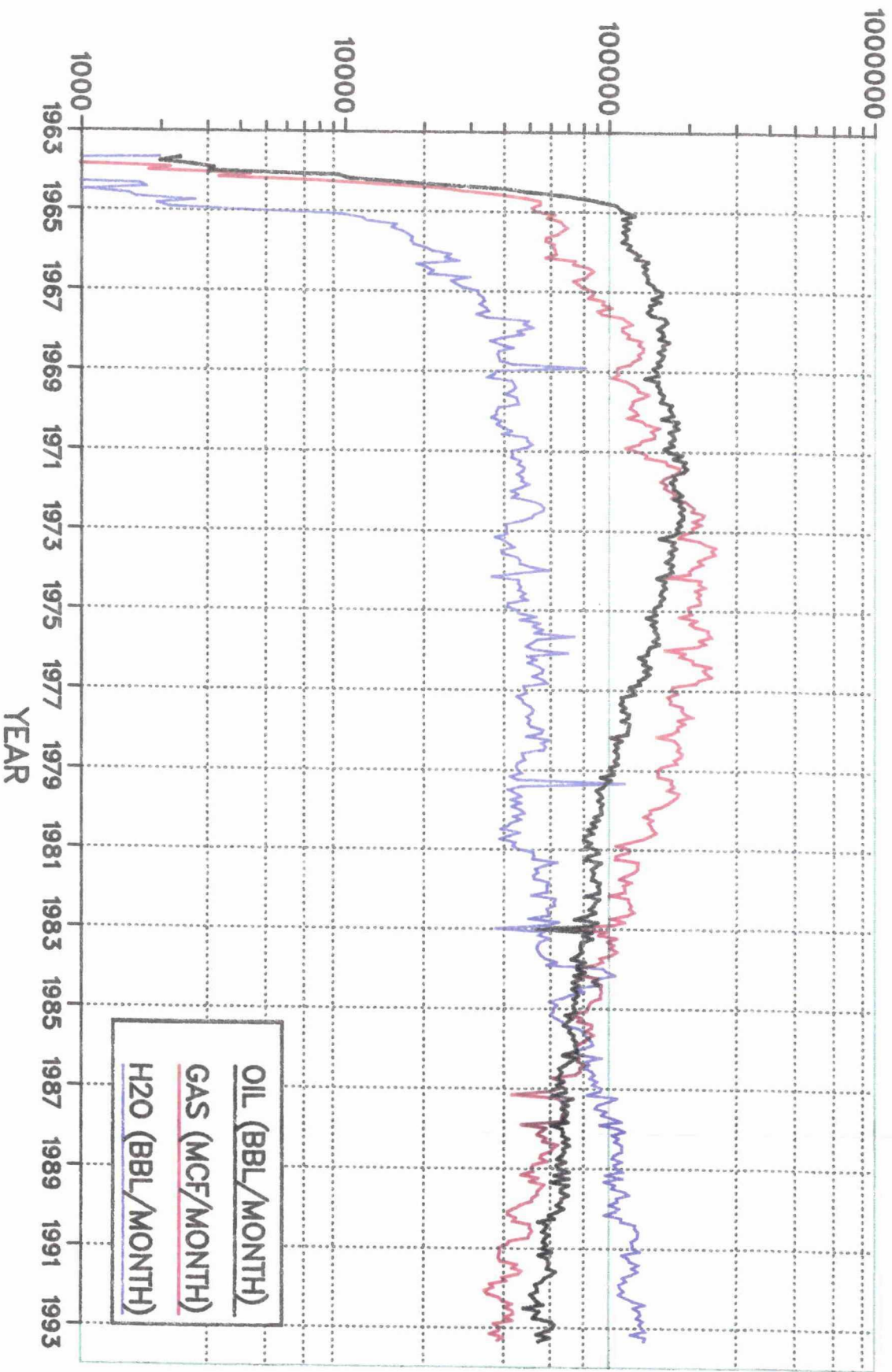


EXHIBIT 'G'
VACUUM GLORIETA EAST UNIT
WATERFLOOD PROJECT AREA
PRODUCTION FORECAST

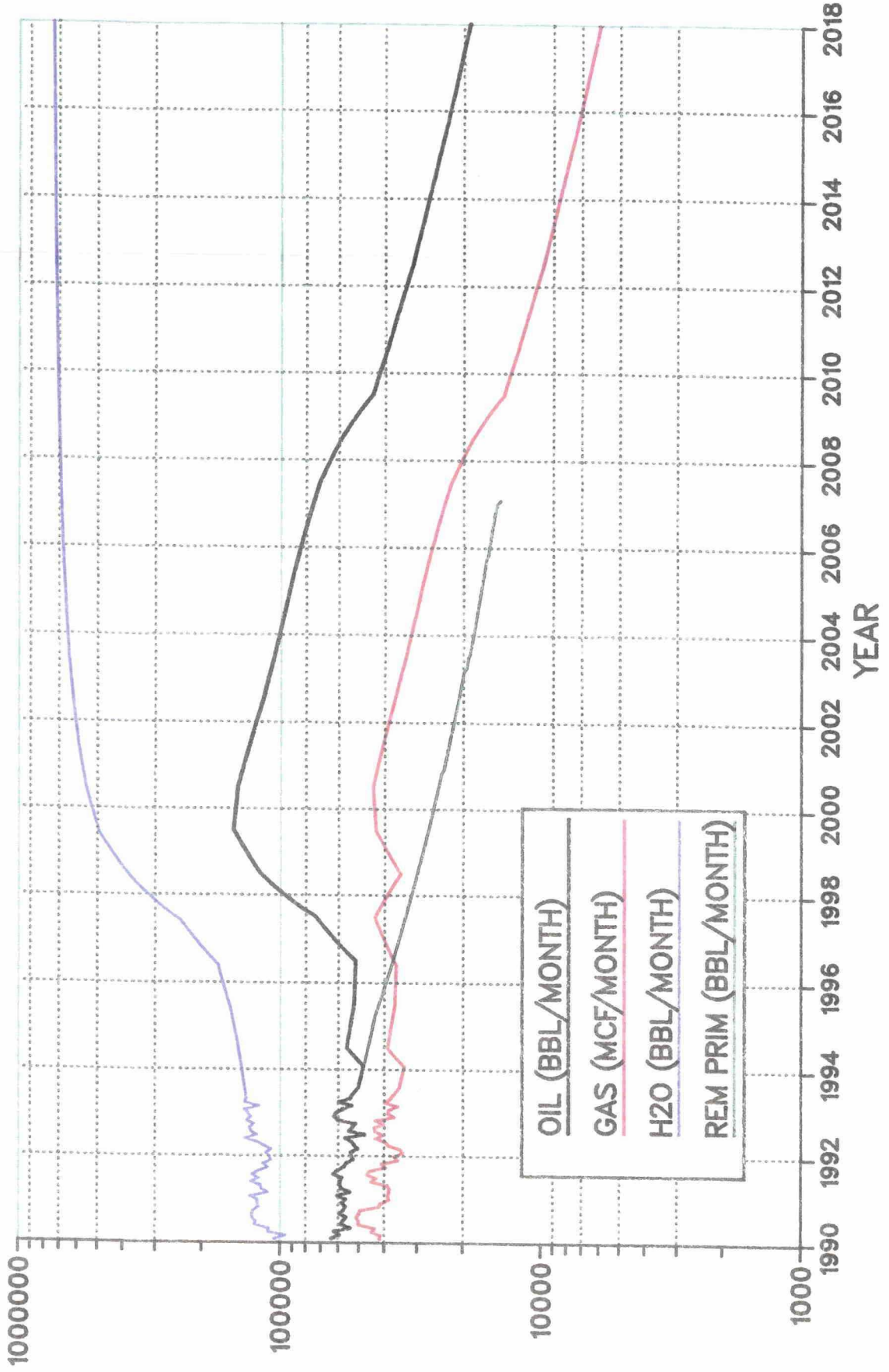


EXHIBIT "H"

**Commissioner of Public Lands
Floyd O. Prando
P.O. Box 1148
Santa Fe, New Mexico 87504-1148**

**Amoco Production Company
P.O. Box 3092
Houston, Texas 77253**

**Arco Oil & Gas Company
P.O. Box 1610
Midland, Texas 79702**

**Asher Oil Company
P.O. Box 423
Artesia, New Mexico 86210**

**Chevron USA, Inc.
P.O. Box 1150
Midland, Texas 79702**

**Cross Timbers Operation
810 Houston St. Suite 2000
Fort Worth, Texas 76102-6298**

**Devon Energy Partners
20 North Broadway Suite 1500
Oklahoma City, Ok 73102**

**ENAQ, Inc.
8552 Katy Freeway Suite 300
Houston, Texas 77024**

**Exxon Corporation
P.O. Box 1600
Midland, Texas 79702**

**Marthon Oil Company
P.O. Box 552
Midland, Texas 79702**

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EXHIBIT "H"

Matador Petroleum
8340 Meadow Road Suite 158
Pecan Creek
Dallas, Texas 72531

The McBee Company
3738 Oaklawn Avenue
L.B. 200
Dallas, Texas 75219

Mobil Producing Inc.
P.O. Box 633
Midland, Texas 79702

Oxy USA, Inc.
P.O. Box 50250
Midland, Texas 79702

Phillips Petroleum
4001 Penbrook
Odessa, Texas 79762

Rice Engineering Corp.
122 West Taylor
Hobbs, NM 88240

RWK Resources, Inc.
120 Birmingham Dr. Suite 210
Cardiff, Ca 92007

Patricia Penrose Schieffer
c/o 1st National Bank, Fort Worth
Fort Worth, Texas

Shell Western Inc.
P.O. Box 576
Houston, Texas 77001

Texaco Exploration
P.O. Box 730
Hobbs, NM 88240-2528