# Mobil Exploration & Producing U.S. Inc.

April 9, 1991

P ) BOX 633

M DLAND, TEXAS 79702-0633

State of New Mexico
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87501

SNYDER ASSET TEAM

 ${\tt EGVIRONMENTAL}, {\tt REGULATORY}~\&$ 

LHSS PREVENTION

Attention: Mr. W. J. LeMay

PHONE (915) 688-1753 FINCSIMILE (915) 688-2050

INJECTION PRESSURE INCREASE REQUEST NORTH VACUUM ABO FIELD NORTH VACUUM ABO UNIT WELL NO'S. 95, 137, 139, 142, 143, 146, 149, 156, 158, 163, 201, 203, 210
LEA COUNTY, NEW MEXICO

### Gentlemen:

Under the provisions of Order No. PMX-138 dated November 12, 1985; Order No. WFX-557 dated February 11, 1986, and Order No. PMX-140 dated March 7, 1986, permission was granted to inject water into the Abo formation for the subject wells. The order limited the pressure on the injection wells to no more than 0.2 psi. per foot to the uppermost injection interval. A step-rate test for these wells has been completed which shows that higher pressure will not result in migration of the injected fluid from the Abo formation. Permission is requested to increase the injection pressure as follows:

	INJECTION INTERVALS		REQUESTED SURFACE INJECTION PRESSURE LIMIT
WELL NO. 95 UNIT P, SEC. 26 T-17-S, R-34-E ORDER NO. R-4430	8360-8520′	3540 PSIG	3905 PSIG
WELL NO. 137 UNIT B, SEC. 26 T-17-S, R-34-E ORDER NO. PMX-138	8458-8580′	3975 PSIG	4190 PSIG
WELL NO. 139 UNIT L, SEC. 14 T-17-S, R-34-E ORDER NO. WFX-557	8585-8662	3750 PSIG	4020 PSIG
WELL NO. 142 UNIT J, SEC. 14 T-17-S, R-34-E ORDER NO. WFX-557	8532-8609′	3790 PSIG	4000 PSIG

### NORTH VACUUM ABO UNIT WELL NOS. 95,137,139,142,143,146 149,156,158,163,201,203,210

LEA COUNTY, NEW MEXICO

WELL NO. 143 UNIT B, SEC. 27 T-17-S, R-34-E ORDER NO. WFX-557	8605-8680	4050 PSIG	4170 PSIG
WELL NO. 146 UNIT B, SEC. 14 T-17-S, R-34-E ORDER NO. PMX-140	8516-8590	3850 PSIG	4030 PSIG
UNIT NO. 149 UNIT J, SEC. 27 T-17-S, R-34-E ORDER NO. WFX-557	8577-8681	3900 PSIG	4025 PSIG
WELL NO. 156 UNIT J, SEC. 23 T-17-S, R-34-E ORDER NO. PMX-138	8472-8650'	3625 PSIG	3930 PSIG
WELL NO. 158 UNIT J, SEC. 12 T-17-S, R-34-E ORDER NO. PMX-140	8531-8602′	3910 PSIG	4115 PSIG
WELL NO. 163 UNIT J, SEC. 15 T-17-S, R-34-E ORDER NO. WFX-557	<b>8704-</b> 8756′	4000 PSIG	4120 PSIG
WELL NO. 201 UNIT J, SEC. 10 T-17-S, R-34-E ORDER NO. PMX-140	8670-8733′	3450 PSIG	3830 PSIG

NORTH VACUUM ABO UNIT
WELLS NOS. 95, 137,139,142,143,146
149,156,158,163,201,203,210

LEA COUNTY, NEW MEXICO

WELL NO. 203

UNIT B, SEC. 22 8692-8764' 3920 PSIG 4260 PSIG

T-17-S, R-34-E

ORDER NO. WFX-557

WELL NO. 210

UNIT L, SEC. 23 8533-8717' 3950 PSIG 4130 PSIG

T-17-S, R-34-E

ORDER NO. PMX-138

Enclosed are copies of the Step-rate test.

Yours very truly

JUDY DIXON

ENVIRONMENTAL/REGULATORY TECHNICIAN

JWDixon

Attachments

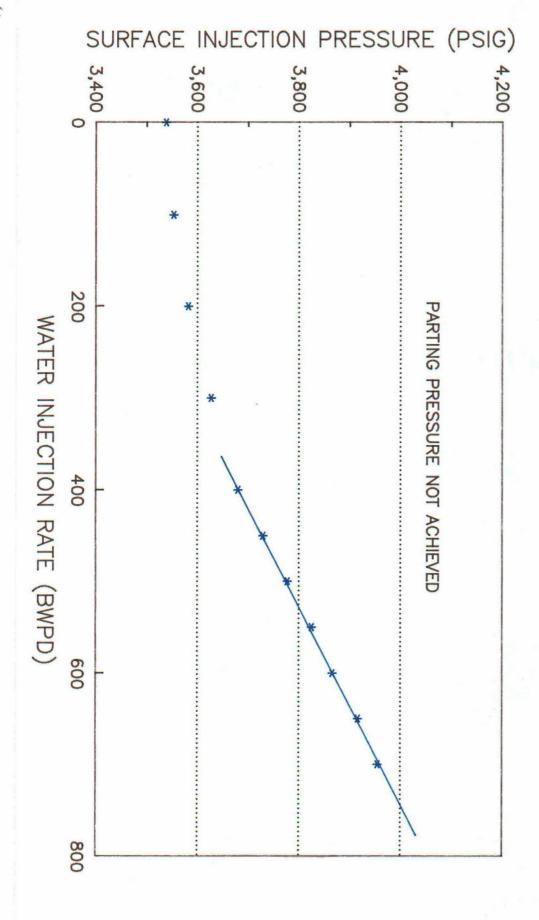
cc: District Director OCD - Hobbs

Central Files Regulatory Files Proration Acct.

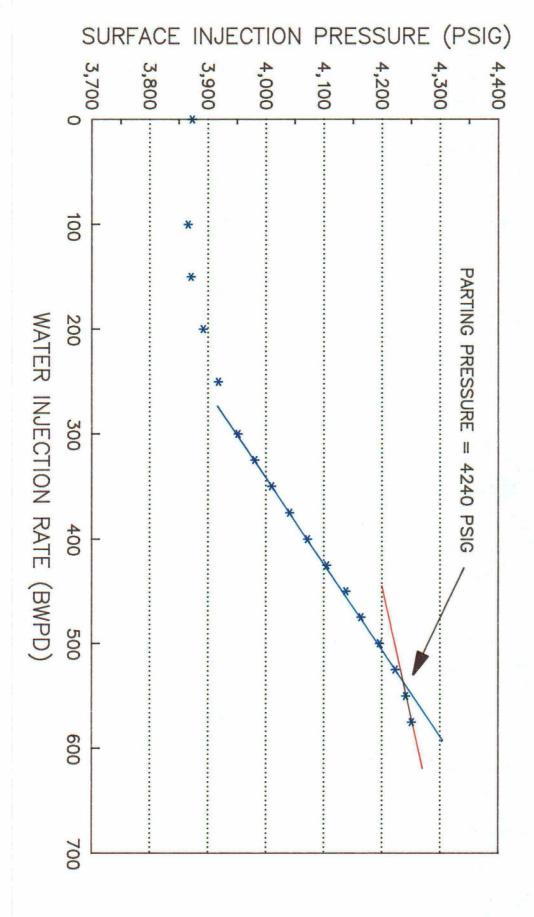
Resv. Engr - M. Jimenez- 1142 TCB

Production Foremen - Buckeye

# NVAU NO. 95 NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO STEP RATE TEST

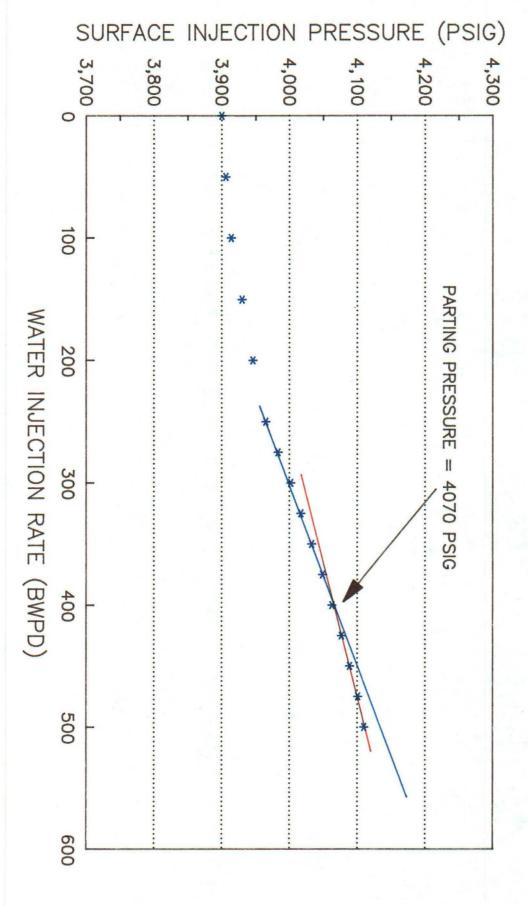


NVAU NO. 137 NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO STEP RATE TEST

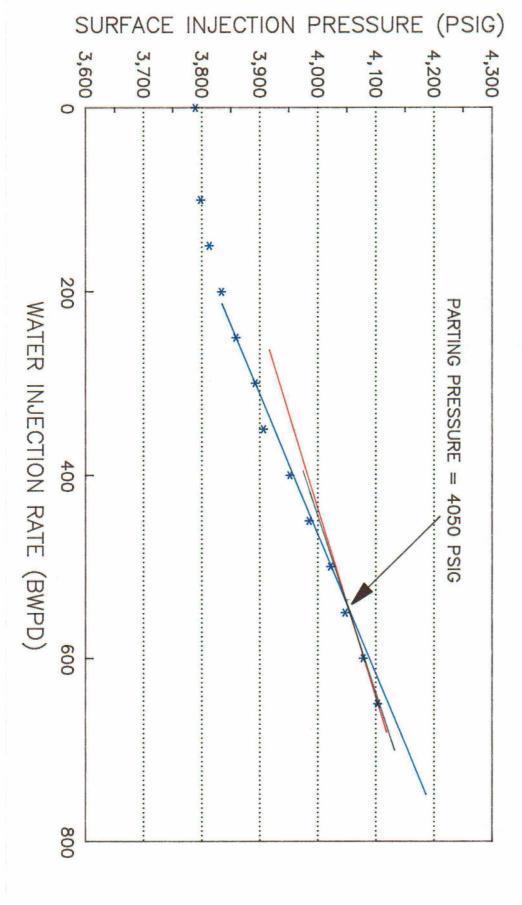


DATE OF TEST: 3-11-91

NVAU NO. 139 NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO STEP RATE TEST

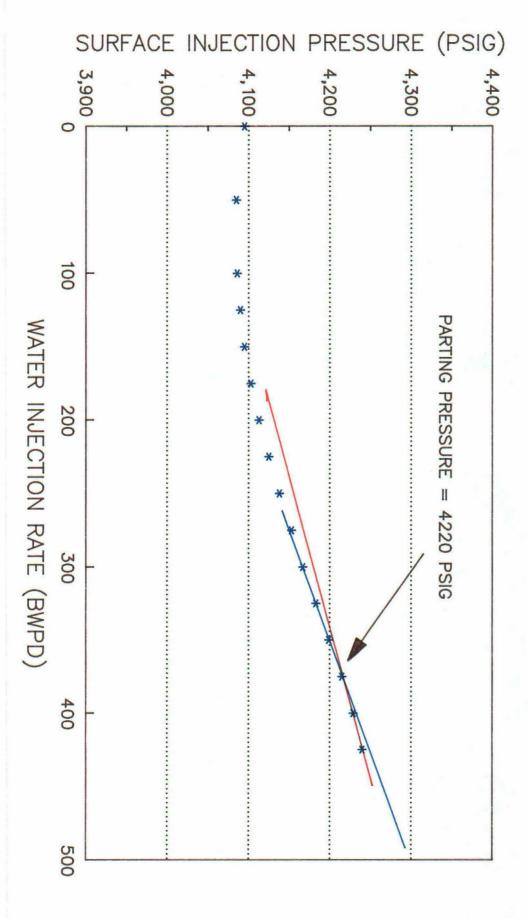


# NVAU NO. 142 STEP RATION NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO STEP RATE TEST

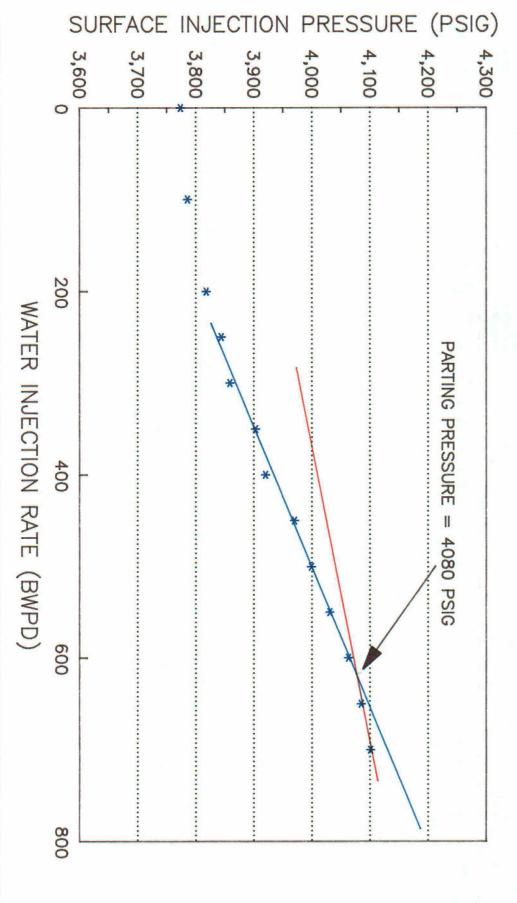


DATE OF TEST: 2-11-91

# NVAU NO. 143 STEP RATIONAL NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO STEP RATE TEST



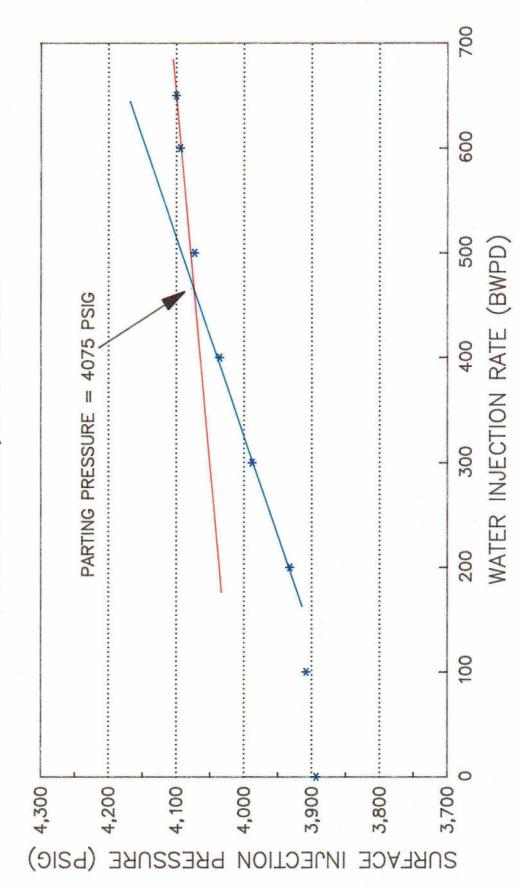
# NVAU NO. 146 NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO STEP RATE TEST



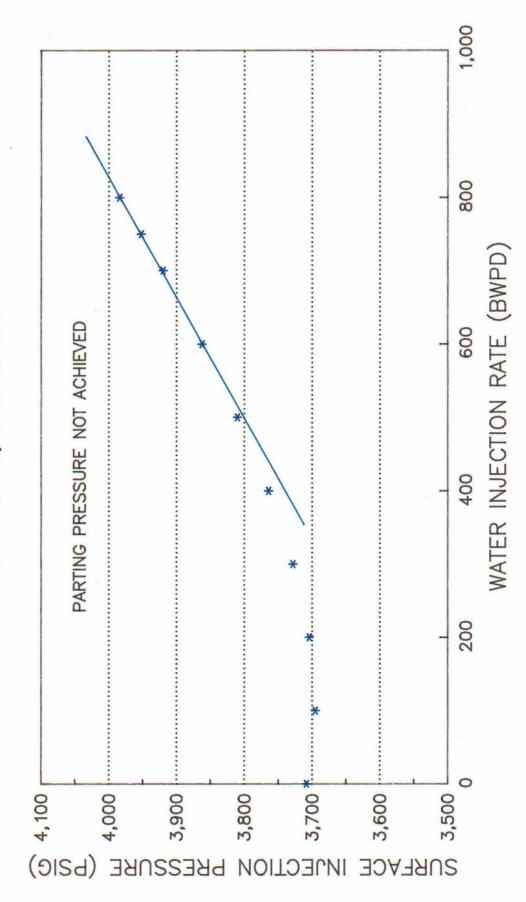
DATE OF TEST: 2-13-91

DATE OF TEST: 2-5-91

TEST STEP RATE NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO NVAU NO. 149

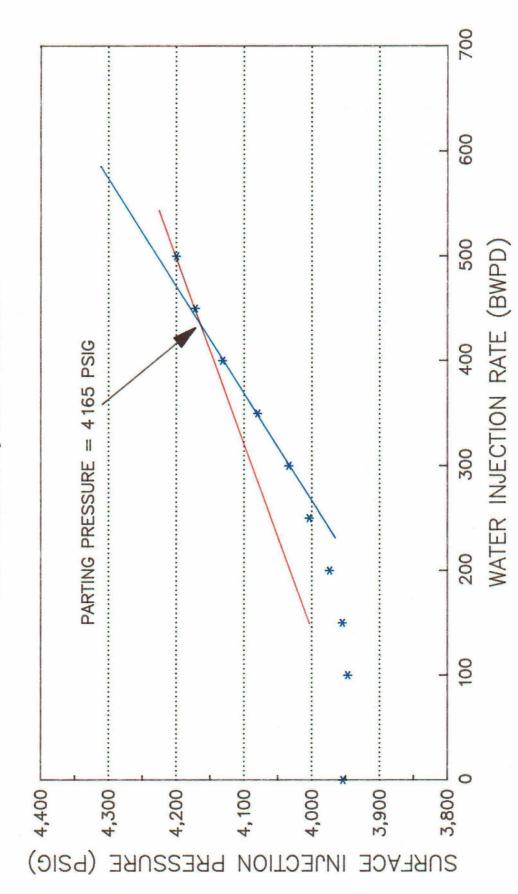


# TEST STEP RATE NVAU NO. 156 STEP RATIONAL NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO



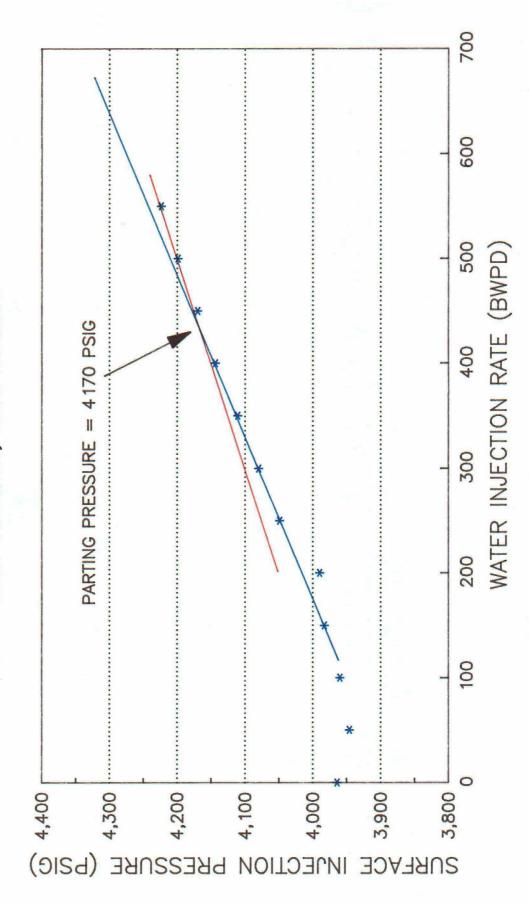
DATE OF TEST: 2-14-91

STEP RATE TEST NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO NVAU NO. 158



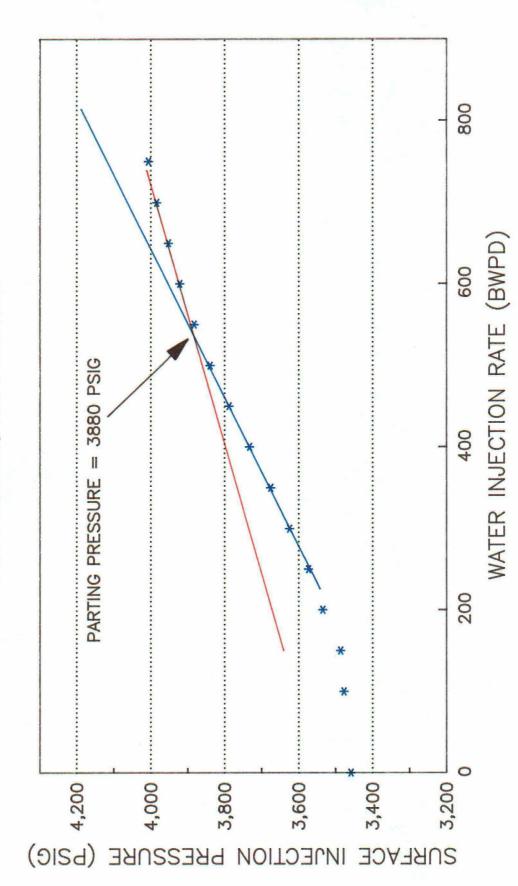
DATE OF TEST: 2-18-91

TEST STEP RATE NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO NVAU NO. 163



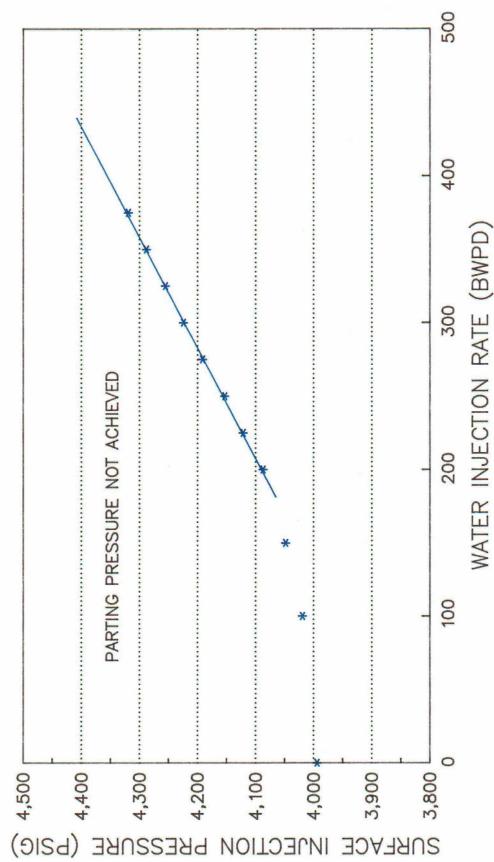
DATE OF TEST: 2-20-91

STEP RATE TEST NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO NVAU NO. 201

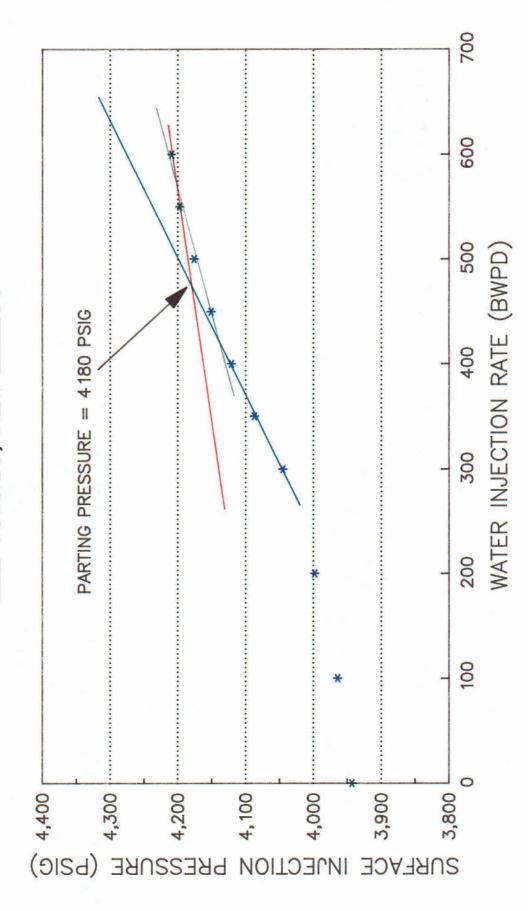


DATE OF TEST: 3-11-91





STEP RATE TEST NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO NVAU NO. 210



DATE OF TEST: 2-6-91



# ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE October 21, 1985-

TONEY ANAYA

POST OFFICE BOX 1980

GO√EP¹ICR	THE CHARLE WAS TO DIVISION	HOBBS NEW MEXICO 88240 (505) 393-6161
OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501	FILE CONTRACTOR FOR	
RE: Proposed:  MC DHC NSL NSP SWD WFX PMX		~
Gentlemen:	_	
I have examined the application	on for the:	
Mobil Prod.Tx.& N.M.Inc. Nor Operator L	ease & Well No. Unit S-T-R	36, 138, 156, 205, 210 & 211
and my recommendations are as	follows:	
0.KJ.S.		

Yours very truly,

verry Sexton

Supervisor, District 1

/mc

# BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 4831 Order No. R-4430

APPLICATION OF MOBIL OIL CORPORATION FOR A PRESSURE MAINTENANCE PROJECT, LEA COUNTY, NEW MEXICO. also su R-4430-A

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 27, 1972, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 27th day of October, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Mobil Oil Corporation, seeks authority to institute a pressure maintenance project in the North Vacuum-Abo Pool in its North Vacuum-Abo Unit Area, Lea County, New Mexico, by the injection of gas and water into the Abo formation through 34 wells located in Sections 3, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, and 27, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.
- (3) That the applicant further seeks the designation of the project area and the promulgation of special rules and regulations governing said project including a provision for administrative approval for unorthodox locations for injection wells and producing wells.
- (4) That initially the project area should comprise only the following-described area:

LEA COUNTY, NEW MEXICO

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM Section 2: SW/4
Section 3: SE/4
Section 10: E/2
Section 11: S/2
Section 12: NE/4 and S/2
Section 13: N/2 and SW/4
Section 14: All
Section 15: E/2
Section 22: E/2
Sections 23 and 24: All
Section 25: NW/4 and N/2 NE/4
Section 26: All
Section 27: E/2

# TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM Section 19: W/2 NW/4

- (5) That a pressure maintenance project, designated the Mobil North Vacuum-Abo Pressure Maintenance Project, comprising the above-described area is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.
- (6) That an administrative procedure should be established whereby said project area may be expanded for good cause shown and whereby additional injection wells and producing wells at orthodox and unorthodox locations in the project area may be approved without the necessity of notice and hearing.
- (7) That special rules and regulations for the operation of the Mobil North Vacuum-Abo Pressure Maintenance Project should be promulgated and, for operational convenience, such rules should provide certain flexibility in authorizing the production of the project allowable from any well or wells in the project area in any proportion, provided that no well in the project area which directly or diagonally offsets a well on another lease producing from the same common source of supply should be allowed to produce in excess of top unit allowable for the North Vacuum-Abo Pool until such time as the well has experienced a substantial response to water injection. When such a response has occurred, the well should be permitted to produce up to two times top unit allowable for the North Vacuum-Abo Pool. Production of such well at a higher rate should be authorized only after notice and hearing.

### IT IS THEREFORE ORDERED:

(1) That the applicant, Mobil Oil Corporation, is hereby authorized to institute a pressure maintenance project in the

North Vacuum-Abo Pool in its North Vacuum-Abo Unit Area, Lea County, New Mexico, to be designated the Mobil North Vacuum Abo Pressure Maintenance Project, by the injection of gas and water into the Abo formation, through the following-described wells:

LEA COUNTY, NEW MEXICO
TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM

		· · · · · · · · · · · · · · · · · · ·		<del></del>
OPERATOR	LEASE	WELL NO.	SECTION	LOCATION
Mobil	Bridges State	172	3	P
Mobil	11 11	166	10	H
Shell	State "VH"	1	10	P
Mobil	Bridges State			
MODII	bridges state	130 (a dual completion)	15	Н
Mobil	11	144	15	P
Mobil	State "J"	9	22	H
Shell	Location	to be drilled	22	P
Mobil	Bridges State	157	27	H
Mobil	" "	145	27	P
Mobil	11 11	148	11	N
Mobil	11 11	173	14	F
Mobil	11 11			
		171	14	N
Mobil		151 (a dual completion)	23	F
Mobil	State "KK"	1.	23	N
Mobil	Bridges State	118	26	F
Mobil	" "	153	26	N
Mobil	11 11	140	11	P
Mobil	11 11	125 (a dual	14	
		completion)	14	Н
Mobil	11 11	124 (a dual	14	P
Mobil	11 11	completion)	2.2	••
Mobil	11 11	128	23	H
MODIT		117 (a dual	23	P
	11 11	completion)		
Mobil		96	26	H
Mobil	11 11	95 (a dual completion)	26	P
Mobil	11 11	150	12	AT.
Mobil	11 11			N
MODII		147 (a dual completion)	13	F
Mobil	11 11	<del></del>	1 2	3.7
MODIL		•	13	N
Mobil	11 11	completion)	0.4	_
MODII		119 (a triple	24	F
. 1 ! 2	11 11	completion)		
Mobil	" "	109 (a triple	24	N
		completion)		
Mobil	" "	108 (a triple	25	F
M = 1, 2, 3	11 31	completion)	7.0	
Mobil	H H	161	12	H
Mobil	H H	159	12	P
Mobil		169	13	H
Pennzoil	Mobil State	1	24	H
Shell	State "C"	2	24	8

(2) That Special Rules and Regulations governing the operation of the Mobil North Vacuum-Abo Pressure Maintenance Project, Lea County, New Mexico, are hereby promulgated as follows:

# SPECIAL RULES AND REGULATIONS FOR THE

### MOBIL NORTH VACUUM-ABO PRESSURE MAINTENANCE PROJECT

RULE 1. The project area of the Mobil North Vacuum-Abo Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise the area described as follows:

### LEA COUNTY, NEW MEXICO

LEA COUNTY, NEW PLEATCO				
	SOUTH, RANGE 34 EAST, NMPM			
Section 2:	SW/4			
Section 3:	SE/4			
Section 10:	E/2			
Section 11:	S/2			
Section 12:	NE/4 and S/2			
Section 13:	N/2 and $SW/4$			
Section 14:	All			
Section 15:	E/2			
Section 22:	E/2			
Sections 23	and 24: All			
Section 25:	NW/4 and $N/2$ $NE/4$			
Section 26:	All			
Section 27:	E/2			

# TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM Section 19: W/2 NW/4

- RULE 2. The allowable for the Project shall be the sum of the allowables of the several wells within the project area, including those wells which are shut-in, curtailed, or used as injection wells. Allowables for all wells shall be determined in a manner hereinafter prescribed.
- RULE 3. Allowables for injection wells may be transferred to producing wells within the project area, as may the allowables for producing wells which, in the interest of more efficient operation of the Project, are shut-in or curtailed because of high gas-oil ratio or are shut-in for any of the following reasons: pressure regulation, control of pattern or sweep efficiencies, or to observe changes in pressures or changes in characteristics of reservoir liquids or progress of sweep.
- RULE 4. The allowable assigned to any well which is shutin or which is curtailed in accordance with the provisions of Rule 3 which allowable is to be transferred to any well or wells in the project area for production, shall in no event be greater than its ability to produce during the test prescribed by Rule 6,

-5-Case No. 4831 Order No. R-4430

below, or greater than the current top unit allowable for the pool during the month of transfer, whichever is less.

- RULE 5. The allowable assigned to any injection well on an 80-acre proration unit shall be top unit allowable for the North Vacuum-Abo Pool.
- RULE 6. The allowable assigned to any well which is shutin or curtailed in accordance with Rule 3, shall be determined
  by a 24-hour test at a stabilized rate of production, which
  shall be the final 24-hour period of a 72-hour test throughout
  which the well should be produced in the same manner and at a
  constant rate. The daily tolerance limitation set forth in
  Commission Rule 502 I (a) and the limiting gas-oil ratio
  (2,000 to 1) for the pool shall be waived during such tests.
  The project operator shall notify all operators offsetting the
  well, as well as the Commission, of the exact time such tests
  are to be conducted. Tests may be witnessed by representatives
  of the offsetting operators and the Commission, if they so desire.
- RULE 7. The basic allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or to top unit allowable for the pool, whichever is less. Wells capable of producing more than top unit allowable may also receive transfer allowable, provided however, that no producing well in the project area which directly or diagonally offsets a well on another lease producing from the same common source of supply shall receive an allowable or produce in excess of two times top unit allowable for the pool. Each producing well shall be subject to the limiting gas-oil ratio (2,000 to 1) for the pool.
- RULE 8. Each month the project operator shall submit to the Commission a Pressure Maintenance Project Operator's Report, on a form prescribed by the Commission, outlining thereon the data required, and requesting allowables for each of the several wells in the Project as well as the total project allowable based upon the pool's depth bracket allowable and the market demand percentage factor in effect. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form C-120 for the Project.
- RULE 9. The Commission shall, upon review of the report and after any adjustments deemed necessary, calculate the allowable for each well in the Project for the next succeeding month in accordance with these rules. The sum of the allowables so calculated shall be assigned to the Project and may be produced from the wells in the Project in any proportion except that no well in the Project which directly or diagonally offsets a well on another lease producing from the same common source of supply shall produce in excess of two times top unit allowable for the pool.

- RULE 10. The Secretary-Director of the Commission is hereby authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of the North Vacuum-Abo Unit Area as may be necessary to complete an efficient production and injection pattern, provided said wells are drilled no closer than 660 feet to the outer boundary of said unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary. To obtain such approval, the project operator shall file proper application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional production or injection wells shall include the following:
- (1) A plat showing the location of proposed well, all wells within the project area, and offset operators, locating wells which offset the project area.
- (2) A schematic drawing of the proposed well which fully describes the casing, tubing, perforated interval, and depth.
- (3) A letter stating that all offset operators to the proposed well have been furnished a complete copy of the application and the date of notification.

The Secretary-Director may approve the proposed well if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

SEAL

A. L. PORTER, Jr., Member & Secretary

# BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

APPLICATION OF MOBIL OIL CORPORATION FOR A PRESSURE MAINTENANCE PROJECT, LEA COUNTY, NEW MEXICO.

CASE NO. 48°1 Order No. R-4430-A

### NUNC PRO TUNC

### BY THE COMMISSION:

It appearing to the Commission that due to clerical error Order No. R-4430, dated October 27, 1972, does not correctly state the intended order of the Commission,

### IT IS THEREFORE ORDERED:

(1) That Rule 10 on Page 6 of Order No. R-4430 should read in its entirety as follows:

"RULE 10. The Secretary-Director of the Commission is hereby authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of the North Vacuum-Abo Unit Area as may be necessary to complete an efficient production and injection pattern, provided said wells are drilled no closer than 460 feet to the outer boundary of said unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary. To obtain such approval, the project operator shall file proper application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional production or injection wells shall include the following:"

(2) That this order shall be effective nunc pro tunc as of October 27, 1972.

DONE at Santa Fe, New Mexico, this 30th day of November, 1973.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

I.R. TRUJILLO, Chairman

ARN JA ARMANO. Member

SEAT.

A. L. PORTER, Jr., Member & Secretary

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JA DIVISION

### ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION 191 APR 22 AM 10 47 HOBBS DISTRICT OFFICE

BRUCE KING

April 12, 1991

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON P.O. BOX 2088 SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. North Vac Abo Unit #95-P

26-17-34

Operator

Lease & Well No.

Unit

and my recommendations are as follows:

Very truly yours

Jerry Sexton Supervisor, District I



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### STATE OF NEW MEXICO

# ENERGY AND MINERALS DEPARTMENT

# OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

April 12, 1991 BRUCE KING

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

and my recommendations are as follows:

Very truly yours

Jerry Sexton

Supervisor, District I

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### STATE OF NEW MEXICO

# ENERGY AND MINERALS DEPARTMENT AND 10 47

# OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

April 12, 1991 BRUCE KING GOVERNOH

POST OFFICE BOX 1980 HOBBS. NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. No Vac Abo Ut #139-L

14-17-34

Operator

Lease & Well No.

Unit

S-T-R

and my recommendations are as follows:

Very truly yours

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Jerry Sexton Supervisor, District I



### ENERGY AND MINERALS DEPARTMENT 22 11/11/10 47

# OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

April 12, 1991

BRUCE KING

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. No Vac Abo Ut #142-J 14-17-34

Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

Very truly yours

Jerry Sexton

Supervisor, District I



# ENERGY AND MINERALS DEPARTMENT 191 6FR 22 10 10 47

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

April 12, 1991

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

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BRUCE KING

OIL CONSERVATION DIVISON
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. No Vac Abo Ut #143-B 27-17-34

Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

Very truly yours

Jerry Sexton Supervisor, District I

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## STATE OF NEW MEXICO DEL GENSER . - A DIVISION

# ENERGY AND MINERALS DEPARTMENT

# OIL CONSERVATION DIVISION APR 22 FM 10 47 HOBBS DISTRICT OFFICE

April 12, 1991

BRUCE KING

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. No Vac Abo Ut #146-B

14-17-34

Operator

Lease & Well No.

Unit

S-T-R

and my recommendations are as follows:

Very truly yours

Jerry Sexton

Supervisor, District I



# 191 ENERGY AND MINERALS DEPARTMENT

### OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

BRUCE KING GOVERNUM

April 12, 1991

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON P.O. BOX 2088 SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. No Vac Abo Ut #149-J

27-17-34

Operator

Lease & Well No.

Unit

and my recommendations are as follows:

Very truly yours

Jerry Sexton

Supervisor, District I



# ENERGY AND MINERALS DEPARTMENT

# OIL CONSERVATION DIVISION 22 AM 10 47 HOBBS DISTRICT OFFICE

April 12, 1991

BRUCE KING

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. No Vac Abo Ut #156-J

23-17-34

Operator

Lease & Well No.

Unit

S-T-R

IN HIVISION

and my recommendations are as follows:

Very truly yours

Jerry Sexton

Supervisor, District I

## STATE OF NEW MEXICO OF GORSER - 1/4 DIVISION

# ENERGY AND MINERALS DEPARTMENT

# OIL CONSERVATION DIVISION APR 22 APR 10 47 HOBBS DISTRICT OFFICE

April 12, 1991

BRUCE KING

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. No Vac Abo Ut #158-J

12-17-34

Operator

Lease & Well No.

Uni

S\_T\_R

and my recommendations are as follows:

Very truly yours

Jerry Sexton

Supervisor, District I

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# ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

April 12, 1991 BRUCE KING

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. No Vac Abo Ut #163-J 15-17-34

Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

Very truly yours

Jerry Sexton
Supervisor, District I



GOVERNUH

### STATE OF NEW MEXICO

# ENERGY AND MINERALS DEPARTMENT 10 47

### OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

BRUCE KING

April 12, 1991

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON P.O. BOX 2088 SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. No Vac Abo Ut #201-J10-17-34 Operator Unit S-T-R

and my recommendations are as follows:

Very truly yours

Jerry Sexton Supervisor, District I



### ENERGY AND MINERALS DEPARTMENIO 47

# OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

April 12, 1991

BRUCE KING

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. No Vac Abo Ut #203-B 22-17-34

Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

Very truly yours

Jerry Sexton Supervisor, District I



DIE CONSERT ON DIVISION

ENERGY AND MINERALS DEPARTMENT RECUESO

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

'91 APR 22 AM 10 47

April 12, 1991

BRUCE KING GOVERNUM

POST OFFICE BOX 1980 HOBBS. NEW MEXICO 88240 (505) 393-6161

OIL CONSERVATION DIVISON P.O. BOX 2088 SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. No Vac Abo Ut 210-L

Operator

Lease & Well No. Unit

and my recommendations are as follows:

Very truly yours

Jerry Sexton

Supervisor, District I

programme

### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT





May 24, 1991

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FEINEW MEXICO 87504 (505) 827-5800

Mobil Exploration & Producing U.S., Inc. P.O. Box 633
Midland, TX 79702

Attention: Judy Dixon

RE: Injection Pressure Increase

N. Vacuum Abo Unit Lea County, New Mexico

Dear Ms. Dixon:

Reference is made to your request dated April 9, 1991, to increase the surface injection pressure on thirteen wells within the N. Vacuum Abo Unit Pressure Maintenance Project. This request is based on step rate tests conducted on these wells during February and March, 1991. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the wells shown on Exhibit "A" attached hereto.

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

William J. LeMay

Director

cc: Oil Conservation Division - Hobbs

Files: PMX-138, WFX-557, PMX-140

R.Brown D. Catanach

### EXHIBIT "A"

WELL & LOCATION	MAXIMUM INJECTION SURFACE PRESSURE
NVAU Well No. 95 Unit P, Section 26	3905 PSIG
NVAU Well No. 137 Unit B, Section 26	4190 PSIG
NVAU Well No. 139 Unit L, Section 14	4020 PSIG
NVAU Well No. 142 Unit J, Section 14	4000 PSIG
NVAU Well No. 143 Unit B, Section 27	4170 PSIG
NVAU Well No. 146 Unit B, Section 14	4030 PSIG
NVAU Well No. 149 Unit J, Section 27	4025 PSIG
NVAU Well No. 156 Unit J, Section 23	3930 PSIG
NVAU Well No. 158 Unit J, Section 12	4115 PSIG
NVAU Well No. 163 Unit J, Section 15	4120 PSIG
NVAU Well No. 201 Unit J, Section 10	3830 PSIG
NVAU Well No. 203 Unit B, Section 22	4260 PSIG
NVAU Well No. 210 Unit L, Section 23	4095 PSIG

All in Township 17 South, Range 34 East, NMPM Lea County, New Mexico

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COMPANY:	Albu Extension 1	a the control of the	
ADDRESS:	Albert Expression 1		
CITY, STATE,	ZIP;	1 - Marian	<u> </u>
ATTENTION:	Jody Dixon		
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		<u> </u>	County, New Mexico
Dear Sir:			
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Well &	Location		Surface Pressure
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xc: T. GALL		FILE-	OCD- <u>/-&amp;///</u>



### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING SOVERNOR

April 14, 1992

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FEINEW MEXICO 87504 (505) 827-5800

Mobil Exploration & Producing U.S. Inc. P.O. Box 633
Midland, Texas 79702-0633

Attention: Judy Dixon

RE: Injection Pressure Increase
North Vacuum Abo Unit
Pressure Maintenance Project
Lea County, New Mexico

Dear Ms. Dixon:

Reference is made to your request dated April 6, 1992, to increase the surface injection pressure on twelve wells within the North Vacuum Abo Unit Pressure Maintenance Project. This request is based on step rate tests conducted on these wells during February, 1992. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells:

WELL AND LOCATION	MAXIMUM INJECTION SURFACE PRESSURE
NVAU No. 95 Unit P, Section 26	4040 PSIG
NVAU No. 98 Unit J, Section 26	4140 PSIG
NVAU No. 112 Unit D, Section 25	4170 PSIG

WELL AND LOCATION	MAXIMUM INJECTION SURFACE PRESSURE
NVAU No. 116 Unit L, Section 24	4245 PSIG
NVAU No. 136 Unit D, Section 26	4050 PSIG
NVAU No. 138 Unit I, Section 26	4365 PSIG
NVAU No. 143 Unit B, Section 27	4280 PSIG
NVAU No. 149 Unit J, Section 27	4215 PSIG
NVAU No. 152 Unit B, Section 13	4035 PSIG
NVAU No. 156 Unit J, Section 23	4200 PSIG
NVAU, No. 206 Unit D, Section 19	3100 PSIG
NVAU No. 211 Unit J, Section 24	4270 PSIG

All in Township 17 South, Range 34 East, NMPM Lea County, New Mexico.

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

William J. LeMay

Director

WJL/DC/jc

cc: Oil Conservation Division - Hobbs

File: PMX-138

PMX-140

WFX-557

D. Catanach

R. Brown

# State of New Mexico ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT Santa Fe, New Mexico 87505





July 6, 1995

Mobil Exploration & Production P.O. Box 633 Midland, Texas 79702-0633

Attention: Regulatory Affairs

Re: North Vacuum Abo Unit

Well No. 112

Unit D, Section 25, T-17S, R-34E

Lea County, New Mexico

Dear Sir:

This letter will confirm that by agreement between Mr. Larry McCrimmon, Maintenance Tech/Mobil-Buckeye and Mr. Jerry Sexton, District Supervisor-Hobbs OCD, a injection tracer survey will be required to be run on the North Vacuum Abo Unit Well No. 112 on an annual basis in order to assure the integrity of the casing and tubulars.

This test shall be coordinated with the Hobbs OCD and copies of the test shall be sent to the Santa Fe office of the Division upon completion. If you have any questions, please contact me at (505) 827-8184.

Sincerely,

David Catanach

Engineer

xc: OCD-Hobbs

Mobil Exploration & Production

P.O. Box 1800

Hobbs, New Mexico 88240

PMK- 138

VILLAGRA BUILDING - 408 Galisteo

Forestry and Resources Conservation Division P.O. Box 1948 87504-1948 827-5830 Park and Recreation Division P.O. Roy 1147 87504-1147

Park and Recreation Division P.O. Box 1147 87504-1147 827-7465 2040 South Pacheco

Office of the Secretary 827-5950

Administrative Services 827-5925

Energy Conservation & Management 827-5900

Mining and Minerals 827-5970

Oil Conservation