

OIL CONSERVATION DIVISION

CF 10932

R-10094

October 24, 1995

The Wiser Oil Company
c/o Shahara Oil Corporation
P.O. Box 3232
Carlsbad, New Mexico 88221-3232

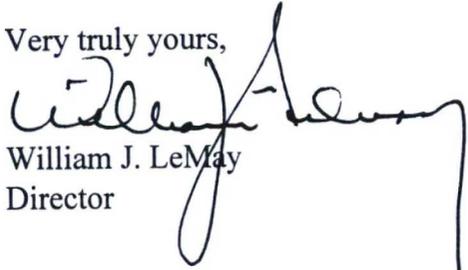
Attn: Mr. Perry L. Hughes

Re: Step Rate Tests Substitutions in the Caprock Maljamar Unit

Dear Mr. Hughes:

Reference is made to your recent request dated September 27, 1995, to substitute 5 wells to be step rate tested in place of 5 wells previously request to be tested by the Division. Your request is hereby approved pursuant to your request which documents the 5 substitute wells.

Very truly yours,


William J. LeMay
Director

/BES

cc: Oil Conservation Division - Hobbs
file

SHAHARA OIL CORPORATION

PSI. x N/R

OIL CONSERVATION DIVISION
RECEIVED

'95 OCT 2 AM 8 52

September 27, 1995

Mr. David Catanach
Oil Conservation Division
P.O. Box 6429
Santa Fe, NM 87505-6429

Re: The Wiser Oil Company
Injection Pressure Increase
Caprock Maljamar Unit Waterflood Project
Lea County, New Mexico

Dear Mr. Catanach:

Reference is made to Mr. William LeMay's letter of September 15, 1995 requesting step rate test data on 14 wells in the Caprock Maljamar Unit. We began running the step rate tests September 26, 1995.

Two of the wells requested to be tested are plugged and abandoned wells that we plan to re-enter during the redevelopment program. Two of the wells requested to be tested are currently producing wells that we plan to convert to injection during the redevelopment program. On September 26, we attempted to perform a step rate test on the Caprock Maljamar Unit Well No. 1. The tool would not go past 1650'.

The Wiser Oil Company requests permission to substitute step rate tests on the following five wells in place of the above mentioned wells:

Caprock Maljamar Unit Well No. 3
660' FNL & 660' FWL, Unit D
Section 17, T17S, R33E

Caprock Maljamar Unit Well No. 5
660' FNL & 1980' FEL, Unit B
Section 17, T17S, R33E

Caprock Maljamar Unit Well No. 37
660' FNL & 694' FWL, Unit D
Section 19, T17S, R33E

Caprock Maljamar Unit Well No. 40
660' FNL & 660' FEL, Unit A
Section 19, T17S, R33E

Caprock Maljamar Unit Well No. 70
1980' FSL & 1980' FEL, Unit J
Section 20, T17S, R33E

Mr. David Catanach
September 27, 1995
Page 2

Attached is a map showing the wells for which we are requesting increased pressures, wells scheduled for step rate tests and wells proposed for step rate tests. Also enclosed is a list showing current status of wells for which we are requesting increased pressures.

If you need further information, please call me at 505-885-5433.

Sincerely,

A handwritten signature in cursive script that reads "Perry L. Hughes".

Perry L. Hughes
Agent for
The Wiser Oil Company

PLH/mp

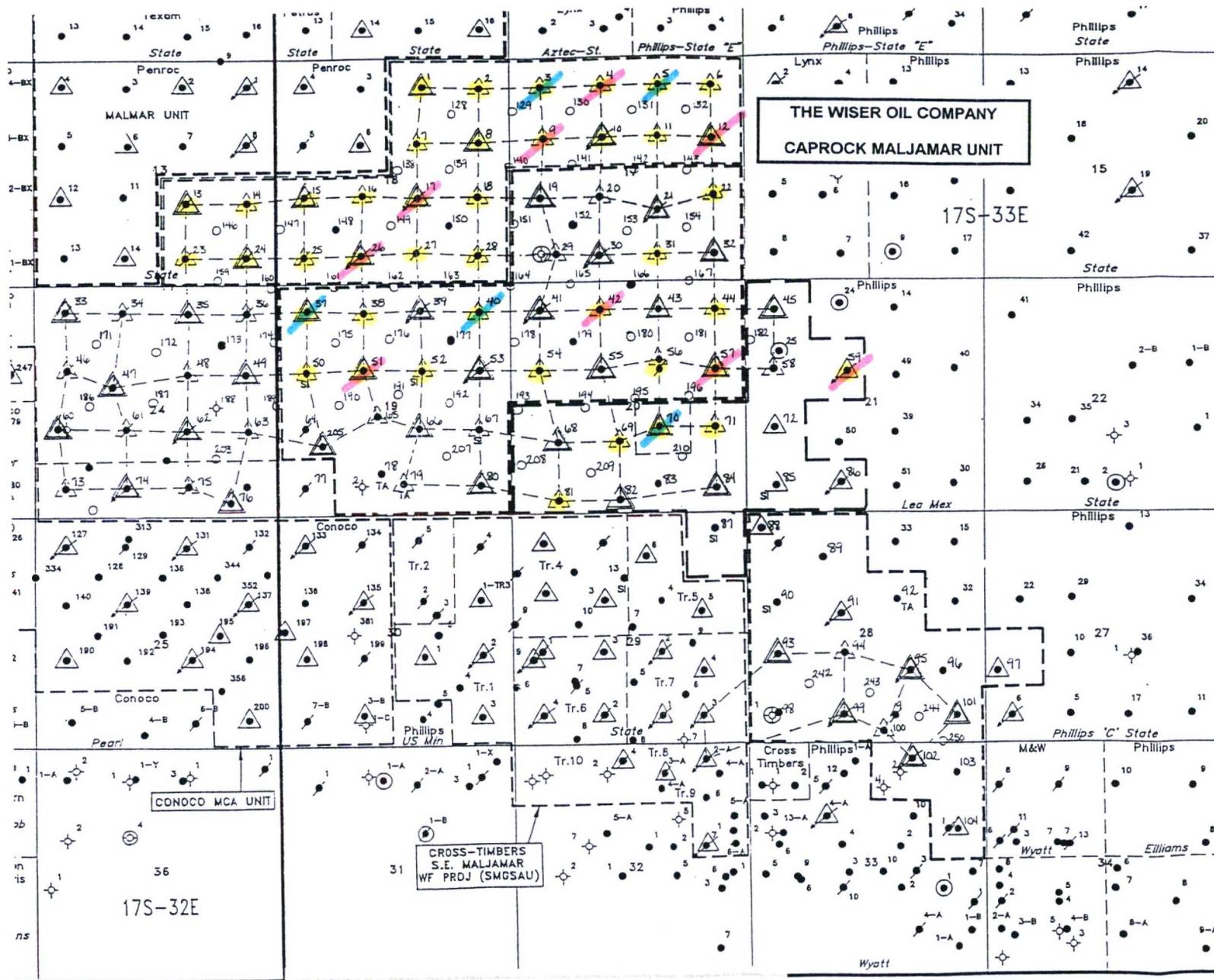
Enclosures

cc: Jerry Sexton
Hobbs OCD

THE WISER OIL COMPANY
CAPROCK MALJAMAR UNIT

Status of Wells
In Which Injection Pressure
Increase is Requested

<u>Well No.</u>	<u>Status</u>
1	SI
2	P
3	I
4	I
5	I
6	P
7	P
8	P & A
9	I
10	I
11	P
12	I
13	P & A
14	P
15	P & A
16	P
17	I
18	P
22	I
23	P & A
24	P & A
25	P & A
26	I
27	P & A
28	P & A
31	I
37	I
38	I
40	I
42	I
44	I
50	SI
51	I
52	I
54	I
56	I
57	I
59	I
69	P
70	I
71	P
81	P & A



THE WISER OIL COMPANY
CAPROCK MALJAMAR UNIT

17S-33E

CONOCO MCA UNIT

CROSS-TIMBERS
S.E. MALJAMAR
WF PRD'J (SMGSAU)

17S-32E

**REDEVELOPMENT PLAN
WISER - CAPROCK MALJAMAR UNIT**
MALJAMAR (GRAYBURG-SAN ANDRES) FIELD
LEA CO., NEW MEXICO

PHASE 1	PHASE 2	PHASE 3
● Producer	○ Proposed Producer Location	
▲ Shut-in Injector	▲ Proposed Injector Conversion	
▲ Active Injector	● Former Injector	

0 2000' 4000'

- WELLS IN WHICH PRESSURE INCREASE IS REQUESTED
- WELLS SCHEDULED FOR STEP RATE TESTS
- WELLS PROPOSED FOR STEP RATE TESTS

OIL CONSERVATION DIVISION

September 15, 1995

The Wiser Oil Company
 P.O. Box 3232
 Carlsbad, New Mexico 88221-3232

Attn: Mr. Perry L. Hughes

RE: Injection Pressure Increase Caprock Maljamar Unit Waterflood Project Lea County, New Mexico

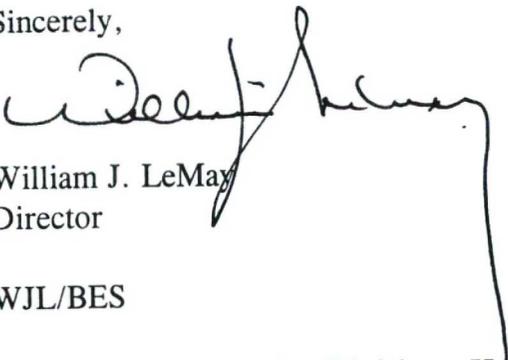
Dear Mr. Hughes:

Reference is made to your request dated August 25, 1995 to increase the surface injection pressure on 44 wells. This request is based on 6 previously run step rate tests conducted on other wells in the project. My staff has reviewed your request and we feel that an increase in injection pressure on 2 of the wells is justified at this time. You are therefore authorized to increase injection pressure on the following 2 wells:

<i>Well and Location</i>	<i>Pressure</i>
Caprock Maljamar Unit Well No.90 Unit E, 28-T17S-R33E	2310 PSIG
Caprock Maljamar Unit Well No.101 Unit P, 28-T17S-R33E	2310 PSIG
Both located in 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/BES

cc: Oil Conservation Division - Hobbs
 File: 1st Quarter 96 PSI-X; Case File No.10932

OIL CONSERVATION DIVISION

September 15, 1995

The Wiser Oil Company
 P.O. Box 3232
 Carlsbad, New Mexico 88221-3232

Attn: Mr. Perry L. Hughes

RE: Injection Pressure Increase Caprock Maljamar Unit Waterflood Project Lea County, New Mexico

Dear Mr. Hughes:

Reference is made to your request dated August 25, 1995 to increase the surface injection pressure on 44 wells and to base this increase on six step rate tests run previously in the project. My staff has review the request and we do not feel that a field-wide increase is justified at this time. However, an increase in injection pressure has been issued on 2 wells included in the request. To authorize a possible field-wide increase in injection pressures (for the remaining 42 wells), we would request to evaluate step rate test data on the following 14 wells:

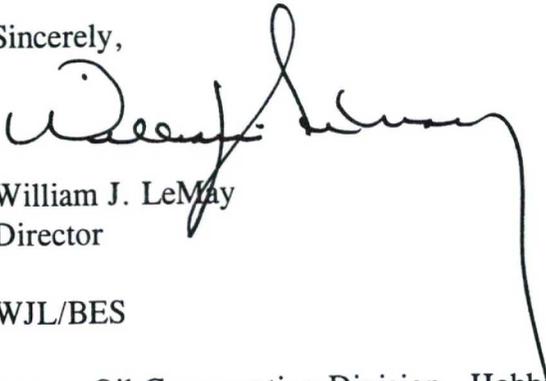
<i>Well Name & Number</i>	<i>Location</i>
Caprock Maljamar Unit Well No.1	Unit B, 18-T17S-R33E
Caprock Maljamar Unit Well No.4	Unit C, 17-T17S-R33E
Caprock Maljamar Unit Well No.6	Unit A, 17-T17S-R33E
Caprock Maljamar Unit Well No.9	Unit E, 17-T17S-R33E
Caprock Maljamar Unit Well No.12	Unit H, 17-T17S-R33E
Caprock Maljamar Unit Well No.13	Unit I, 13-T17S-R32E
Caprock Maljamar Unit Well No.15	Unit L, 18-T17S-R33E
Caprock Maljamar Unit Well No.17	Unit J, 18-T17S-R33E
Caprock Maljamar Unit Well No.26	Unit N, 18-T17S-R33E
Caprock Maljamar Unit Well No.42	Unit C, 20-T17S-R33E
Caprock Maljamar Unit Well No.51	Unit F, 19-T17S-R33E

Injection Pressure Increase
The Wiser Oil Company
September 15, 1995
Page 2

<i>Well Name & Number</i>	<i>Location</i>
Caprock Maljamar Unit Well No.57	Unit H, 20-T17S-R33E
Caprock Maljamar Unit Well No.59	Unit F, 21-T17S-R33E
Caprock Maljamar Unit Well No.69	Unit K, 20-T17S-R33E
All located in Lea County, New Mexico.	

Should your company decide to conduct such tests, we will expedite the approval of a field-wide increase in injection pressures, dependent upon the results of such tests.

Sincerely,



William J. LeMay
Director

WJL/BES

cc: Oil Conservation Division - Hobbs
File: 1st Quarter 96 PSI-X; Case File No.10932

SHAHARA OIL CORPORATION

PSI-X N/R

OIL CONSERVATION DIVISION
RECEIVED

55 AUG 28 AM 8 52

August 25, 1995

Need MORE
INFO FOR
THIS MANY
WELLS
WRITE LETTER (B)

Mr. David Catanach
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

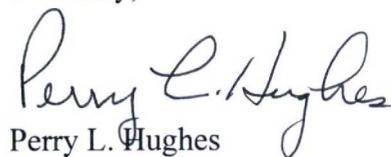
Re: The Wiser Oil Company
Injection Pressure Increase
Caprock Maljamar Unit Waterflood Project
Lea County, New Mexico

Dear Mr. Catanach:

Reference is made to the attached letters from William LeMay dated November 14, 1994 authorizing the increase of surface injection pressure on nine wells to 2310 psig, based on the results of step-rate tests conducted on six wells in the Unit area. The Wiser Oil Company requests that that same maximum surface injection pressure of 2310 psig be assigned to each of the Caprock Maljamar Unit wells listed on the attached Exhibit "A".

Please contact me in Carlsbad at 885-5433 if additional information is required.

Sincerely,



Perry L. Hughes
Agent for
The Wiser Oil Company

PLH/mp

Attachments

cc: Mr. Jerry Sexton
Hobbs OCD

Exhibit "A"

The Wiser Oil Company
 Caprock Maljamar Waterflood Project
 Request For Increase In Maximum Surface Injection Pressure

Caprock Maljamar Unit Well No.	Location Footage	Unit	Section	Township	Range	Current Max. Inj. Pressure
1	660' FNL & 1980' FEL	B	18	17S	33E	814
2	660' FNL & 660' FEL	A	18	17S	33E	814
3	660' FNL & 660' FWL	D	17	17S	33E	814
4	660' FNL & 1980' FWL	C	17	17S	33E	814
5	660' FNL & 1980' FEL	B	17	17S	33E	814
6	660' FNL & 660' FEL	A	17	17S	33E	814
7	1980' FSL & 2080' FEL	G	18	17S	33E	814
8	1980' FNL & 660' FEL	H	18	17S	33E	814
9	1980' FNL & 660' FWL	E	17	17S	33E	814
10	1980' FNL & 1980' FWL	F	17	17S	33E	814
11	1980' FNL & 1980' FEL	G	17	17S	33E	814
12	1980' FNL & 660' FEL	H	17	17S	33E	814
13	1980' FSL & 1980' FEL	I	13	17S	32E	814
14	1980' FSL & 660' FEL	I	13	17S	32E	814
15	1980' FSL & 693.65' FWL	L	18	17S	33E	814
16	1980' FSL & 2047' FWL	K	18	17S	33E	814
17	1980' FSL & 1980' FEL	J	18	17S	33E	814
18	1980' FSL & 660' FWL	I	18	17S	33E	814
22	1980' FSL & 660' FEL	I	17	17S	33E	814
23	660' FSL & 1980' FEL	O	13	17S	32E	814
24	660' FSL & 660' FEL	P	13	17S	32E	814
25	660' FSL & 693.55' FWL	M	18	17S	33E	814
26	660' FSL & 2047' FWL	N	18	17S	33E	814
27	760' FSL & 190' FEL	O	18	17S	33E	814
28	660' FSL & 660' FEL	P	18	17S	33E	814
31	660' FSL & 1980' FEL	O	17	17S	33E	814
37	660' FNL & 694' FWL	D	19	17S	33E	814
38	660' FNL & 2047' FWL	C	19	17S	33E	814
40	660' FNL & 660' FEL	A	19	17S	33E	814
42	660' FNL & 1980' FWL	C	20	17S	33E	814
44	660' FNL & 660' FEL	A	20	17S	33E	814
50	1980' FNL & 694' FWL	E	19	17S	33E	814
51	1980' FNL & 2048' FWL	F	19	17S	33E	804
52	1980' FNL & 1980' FEL	G	19	17S	33E	814
54	1980' FNL & 660' FWL	E	20	17S	33E	814
56	1880' FNL & 1980' FEL	G	20	17S	33E	814
57	1980' FNL & 660' FEL	H	20	17S	33E	814
59	1980' FNL & 1980' FWL	F	21	17S	33E	869
69	1650' FSL & 2310' FWL	K	20	17S	33E	814
70	1980' FSL & 1980' FEL	J	20	17S	33E	819
71	1980' FSL & 660' FEL	I	20	17S	33E	814
81	330' FSL & 990' FWL	M	20	17S	33E	814
90	1980' FNL & 660' FWL	E	28	17S	33E	814
101	660' FSL & 660' FEL	P	28	17S	33E	814

CMU #35
11/28

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



BRUCE KING
GOVERNOR

2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

ANITA LOCKWOOD
CABINET SECRETARY

November 14, 1994

The Wiser Oil Company
c/o Shahara Oil Corporation
P.O. Box 3232
Carlsbad, New Mexico 88221-3232

Attn: Mr. Perry L. Hughes

RE: Explanation of Calculations for Injection Pressure Increase

Dear Mr. Hughes,

Reference is made to the enclosed approved injection pressure increases on 15 wells in your Caprock Maljamar Unit. The increase is based on step rate tests conducted on six of these wells. In a previous injection pressure increase (July 1, 1994), my staff used the average of actual tests to increase the pressure on wells which were not actually tested. In this case, the differential of the low and high pressures was approximately 685 psig and the figures averaged 2306 psig. However, in the recently tested group, the differential is 850 psig. We are concerned that an average in this case (2443 psig), may not be representative of all nine additional wells which were not tested. My staff instead used a median figure of 2310 psig for the maximum allowed surface injection pressure on these wells. This is very close to the average figure used previously. We hope this will sufficiently benefit your injection program in the Caprock Maljamar Unit.

Very truly yours,

William J. LeMay
Director

WJL/BES

cc: Oil Conservation Division - Hobbs

RECEIVED NOV 23 1994



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



BRUCE KING
 GOVERNOR

ANITA LOCKWOOD
 CABINET SECRETARY

2040 S. PACHECO
 SANTA FE, NEW MEXICO 87505
 (505) 827-7131

November 14, 1994

The Wiser Oil Company
 P.O. Box 3232
 Carlsbad, New Mexico 88221-3232

Attn: Mr. Perry L. Hughes

*RE: Injection Pressure Increase Caprock Maljamar Unit Waterflood
 Project Lea County, New Mexico*

Dear Mr. Hughes:

Reference is made to your request dated October 10, 1994 to increase the surface injection pressure on 15 wells. This request is based on step rate tests conducted on 6 of these wells between September 20 and 28, 1994. 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 six wells:

Well and Location	Maximum Injection Surface Pressure
Caprock Maljamar Unit Well No.35 Unit B, 24-T17S-R32E	1910 PSIG
Caprock Maljamar Unit Well No.36 Unit A, 24-T17S-R32E	2200 PSIG
Caprock Maljamar Unit Well No.49 Unit H, 24-T17S-R32E	2550 PSIG
Caprock Maljamar Unit Well No.80 Unit P, 19-T17S-R33E	2480 PSIG
Caprock Maljamar Unit Well No.91 Unit F, 28-T17S-R33E	2760 PSIG

Well and Location	Maximum Injection Surface Pressure
Caprock Maljamar Unit Well No.95 Unit J, 28-T17S-R33E	2755 PSIG
All wells located in Lea County, New Mexico.	

Additionally, based on representative data, you are authorized to increase the surface injection pressure on the following nine wells:

Well and Location	Maximum Injection Surface Pressure
Caprock Maljamar Unit Well No.48 Unit G, 24-T17S-R32E	2310 PSIG
Caprock Maljamar Unit Well No.95 Unit F, 21-T17S-R33E	2310 PSIG
Caprock Maljamar Unit Well No.62 Unit J, 24-T17S-R32E	2310 PSIG
Caprock Maljamar Unit Well No.66 Unit G, 19-T17S-R33E	2310 PSIG
Caprock Maljamar Unit Well No.74 Unit N, 24-T17S-R32E	2310 PSIG
Caprock Maljamar Unit Well No.86 Unit D, 21-T17S-R33E	2310 PSIG
Caprock Maljamar Unit Well No.97 Unit L, 27-T17S-R33E	2310 PSIG
Caprock Maljamar Unit Well No.99 Unit N, 28-T17S-R33E	2310 PSIG
Caprock Maljamar Unit Well No.102 Unit B, 33-T17S-R33E	2310 PSIG
All wells located in Lea County, New Mexico.	

Injection Pressure Increase
The Wiser Oil Company
November 14, 1994
Page 3

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/BES

cc: Oil Conservation Division - Hobbs
File: 4th Quarter PSI-X; Case File No.10932

