



DEC 11 1963

December 5, 1963

WFX-161  
New Dec 26

R. C. TUCKER, Pres.

PHONE MU 2-5241  
ADDRESS REPLY TO:  
BOX 1659  
MIDLAND, TEXAS

Oil Conservation Commission  
Box 871  
Santa Fe, New Mexico

Re: Application for Administrative  
Approval for Conversion of Two  
Unit Wells to Water Injection  
Wells, Malmar Unit, Lea County,  
New Mexico

Gentlemen:

As provided in the Oil Conservation Commission Order No. R-2155, Great Western Drilling Company, as operator of the Malmar Unit, requests administrative approval for the conversion of the following Unit wells to water injection wells:

<u>Unit Well No.</u>	<u>Location</u>
13-4	NW/4 of NW/4 of Sec. 13, T-17-S, R-32-E
13-6	SW/4 of NW/4 of Sec. 13, T-17-S, R-32-E

Well 13-3 an offset to each of the above wells has received response to the water injection in this Unit. In November well 13-3 tested 4 barrels of oil per day. In tests this month production has increased to 8 barrels per day. No remedial or mechanical changes were made in this interval.

We respectfully submit that the ultimate recoverable oil from the Malmar Unit reservoir will be decreased and that waste will occur due to an unbalanced condition in the pattern flooding system if the Unit wells 13-4 and 13-6 are not converted to water injection at this time.



Attached to this application are: The C-116 of the Great Western Drilling Company' well 13-3, before and after stimulation; a plat of the area showing present well status and offset operators.

Waivers from offset operators are being requested at this time.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By   
O. H. Crews

OHC/bl  
Attachments

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Great Western Drilling Company POOL Maljamar  
 ADDRESS Box 1659, Midland, Texas MONTH OF December, 19 63  
 SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST X..... (Check One)  
 (See Instructions on Reverse Side)

Lease	Well No.	Date of Test	Producing Method	Choke Size	Test Hours	Daily Allowable Bbls.	Production During Test			GOR Cu. Ft. Per Bbl.
							Water Bbls.	Oil Bbls.	Gas MCF	
Malmar Unit	13-3	12-2	P		24	6	0	8		TSTM
Test after stimulation by waterflood.										

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60 degrees F. Specific gravity base will be 0.60.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission. In accordance with Rule 301 and Appropriate Pool Rules.

(I certify that the information given is true and complete to the best of my knowledge.)

Date December 5, 1963

GREAT WESTERN DRILLING COMPANY  
Company

By *O.H. Crews* O.H. Crews

Administrative Coordinator  
Title



NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Great Western Drilling Company POOL Maljamar  
 ADDRESS Box 1659, Midland, Texas MONTH OF November, 1963  
 SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST X.....(Check One)  
 (Sec Instructions on Reverse Side)

Lease	Well No.	Date of Test	Producing Method	Choke Size	Test Hours	Daily Allowable Bbls.	Production During Test			GOR Cu. Ft. Per Bbl.
							Water Bbls.	Oil Bbls.	Gas MCF	
Malmar Unit	13-3	11-5	P		24	6	0	4		TSTM
	13-3	11-22	P		24	6	0	4		TSTM
			Test Before Stimulation							

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60 degrees F. Specific gravity base will be 0.60.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission. In accordance with Rule 301 and Appropriate Pool Rules.

(I certify that the information given is true and complete to the best of my knowledge.)

Date December 5, 1963

Great Western Drilling Company  
Company

By *O.H. Crews* O.H. Crews

Administrative Coordinator  
Title

1963 DEC -6 AM 1:22



*Irby*  
*OK if program set forth below is followed -*

STATE ENGINEER OFFICE  
MIDLAND, TEXAS

December 5, 1963

R. C. TUCKER, PRES.

PHONE MU 2-5241  
ADDRESS REPLY TO  
BOX 1659  
MIDLAND, TEXAS

State Water Rights Division  
State Engineers Office  
Santa Fe, New Mexico

Attn: Mr. Frank Irby

Re: Great Western Drilling Co. Application to Convert Wells 13-4 and 13-6 to Water Injection. Malmar Unit

Dear Sir:

Well 13-4 was formerly the Santiago, Darlington State #6. It was completed 1/25/60 at 4371'. Cement was circulated on the 8 5/8" surface pipe (250 sacks @310'). Top of the 300 sacks of cement placed outside the 5 1/2" new 14# casing is calculated at 1710'. Perforations are from 4040' to 4270'. Injection is proposed through 2" tubing under a packer to be set at about 4000'.

Well 13-6 was formerly the Santiago Darlington State #4. It was completed December 28, 1959 at 4388'. Cement was circulated on the 8 5/8" surface pipe (250 sacks @306'). Top of the 300 sacks of cement placed outside the new 5 1/2" 14# casing is calculated at 1780'. Perforations are from 4140-4386'. Injection is proposed through 2" tubing under a packer to be set at about 4000'.

Tests will be made to insure that injection is confined to the above intervals. Please make your recommendations to the commission so that Great Western Drilling Company can complete the required work and get the flood in balance.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By *O. H. Crews*  
O. H. Crews

OHC/bl





MAIL ROOM 000

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS  
STATE ENGINEER

December 10, 1963

ADDRESS CORRESPONDENCE TO:  
STATE CAPITOL  
SANTA FE, N. M.

Mr. A. L. Porter, Jr.  
Secretary-Director  
Oil Conservation Commission  
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Great Western Drilling Company which seeks administrative approval for the conversion of wells 13-4 and 13-6 to water injection wells, which was submitted on December 5, 1963.

In view of the statements in Mr. Crews' letter to me, a copy of which is enclosed, that injection will be down tubing and under a packer to be set at about 4000' and the packer will be well below the top of the cement surrounding the casing in each well, this office offers no objection to the granting of the application.

*My letter returned to  
applicant for additional data*

Very truly yours,

S. E. Reynolds  
State Engineer

By: *Frank E. Irby*  
Frank E. Irby  
Chief  
Water Rights Division

ma  
cc-Great Western Drilling Co.  
F. H. Hennighausen